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ABSTRACTS

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Selected Videos (20) *

ES23-0217
Video Session 1: Other Benign Gynaecology

LAPAROSCOPIC MANAGEMENT OF AN 11-WEEK RUDIMENTARY UTERINE HORN PREGNANCY USING EXTRA-CORPOREAL ROEDER KNOTS TO SECURE DILATED VASCULAR PEDICLES

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OBJECTIVES
Pregnancy in a uterine rudimentary horn presents with an incidence of 1:100,000 pregnancies and carries a high risk of uterine rupture with severe and potentially lethal intra-abdominal haemorrhage. Accurate pre-operative diagnosis can be difficult. Limited published evidence suggests that such cases may be managed successfully by laparoscopy. A number of authors have used destructive techniques to the fetus following excision of the rudimentary horn, to extract the tissues laparoscopically. Pre-operative feticide is recommended in cases where morcellation of the fetus is planned. We encountered a live unruptured 11-week rudimentary horn pregnancy in a woman with one previous normal delivery at term. We aimed to excise the pregnant rudimentary horn laparoscopically and avoid destructive techniques to ease the patient's concerns. At laparoscopy a particularly dilated vascular infundibulopelvic ligament was seen at the side of the pregnant horn.
METHODS
We demonstrate the laparoscopic management of the case with the use of extracorporeal Roeder knots to secure the unusually dilated left infundibulopelvic ligament. We have performed a literature review using PubMed, Embase and Cochrane Database of Systematic Reviews to identify relevant cases and draw conclusions with regards to their management.
RESULTS
The procedure was completed successfully by laparoscopy. The pregnant rudimentary horn was excised and haemostasis was secured by using a combination of LigaSure™ and extracorporeal Roeder knots. We extended our suprapubic port to 3 cm to extract the fetus and thus avoided the use of destructive techniques. The estimated blood loss was minimal. The patient's recovery period was uneventful and she was discharged home on day 1 post-operatively. At the time this abstract was written the woman was pregnant following natural conception, with an estimated delivery date 16 May 2014.
CONLCUSIONS
There exists a growing body of evidence of rudimentary horn pregnancies successfully managed by laparoscopy (20 cases in total, including the present case). These include second trimester pregnancies as well as a case of a ruptured horn. We suggest that when encountered with large dilated vascular pedicles, securing them by extracorporeal Roeder knots is a safe alternative. In advanced gestations, patients must be counselled pre-operatively about the potential need for destructive techniques. In such cases, feticide may need to be performed. We found that the patient's anxiety was alleviated by the knowledge that the fetus was extracted intact and for this purpose we recommend a small extension to the suprapubic port. The possibility of uncommon presentations such as duplicated or absent ureter should be taken into account pre-operatively, and the ureter must be identified intra-operatively. When the expertise is available, laparoscopy appears to be at least as safe as and potentially superior to laparotomy for the management of rudimentary horn pregnancies.

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ES23-0326
Video Session 1: Other Benign Gynaecology

REVERSE ROBOTIC HYSTERECTOMY WITH PARADOXICAL CAMERA PLACEMENT
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Objectives:
This video will demonstrate a novel approach to robotic assisted laparoscopic hysterectomy for a large uterus. After having utilized this approach several times, it has been further refined to allow for simplified access to uterine and utero-ovarian vasculature utilizing a paradoxical camera placement below the uterine fundus and a reverse approach to the hysterectomy procedure. This allows for safe control of vasculature to prevent bleeding during the procedure utilizing and umbilical site for camera placement.
Methods:
This versatile approach was utilized in a 40 year old African American patient with a history of menorrhagia, pelvic pain, dysmenorrhea, and two prior cesarean sections who was found to have a 22 week sized fibroid uterus. She desired definitive management with a minimally invasive approach to hysterectomy.
Results:
Large uteri often pose a challenge for the gynecologic surgeon performing a hysterectomy whether approached laparoscopically or via robotic assistance. The classic robotic camera placement in the supra-umbilical region often decreases visibility of the lower uterine segment, potentially decreasing success in the very large uterus and increasing the risk of ureteral or bladder injury and bleeding. Creative utilization of the robot can open up new venues for optimizing access and visualization to the most vital structures involved in performing a hysterectomy. By utilizing a 30 degree scope and placing the camera intra-umbilically below the level of the uterine fundus, the surgeon was able to effectively focus cephalad to secure ovarian vasculature as well as clearly visualize the region of the uterine vasculature, ureter and bladder flap by opening up the anterior and posterior leaflets of the broad ligament and dissecting the retro-peritoneal anatomy. This allowed for safe and adequate control of uterine blood supply. Once uterine vessels are sealed by then continuing the dissection upwards along the ascending uterine vessels in a reverse approach the utero-ovarian ligaments were then sealed and cut and uterus was separated from the broad and round ligaments. Culpotomy could then be easily performed thus completing the hysterectomy safely and efficiently with minimal blood loss.
Conclusion:
Paradoxical camera placement may be utilized for large uteri with narrow lower uterine segments and the absence of cul de sac pathology by starting the hysterectomy inferiorly and working in the caudad direction.

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ES23-0440
Video Session 2: Operative Risk Management

AN UNUSUAL (AND LIFE-THREATENING) COMPLICATION DURING RTLH – UTERUS JAMMING BETWEEN RIGHT EXTERNAL ILIAC VESSELS FOLLOWING A FALSE MANOEUVRE
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Surgeons: B.P.Siekierski, MD, PhD; G.Stokluska, MD; M.Pliszkiewicz, MD; Anaesthetist: M.Golebiowska; scrub nurse: K.Falkiewicz. Location: St Sophia Ob/Gyn hospital, Warsaw, Poland.

This presentation is a warning against uncontrolled movements of instruments outside the visualised surgical area in laparoscopy, particularly when instruments are being switched. Their movements should be visually followed from insertion until they reach the working area. Even experienced surgeons should follow fundamental rules of manipulation in the surgical area.

The patient was a 32-year-old multipara with IB cervical carcinoma, undergoing RTLH. Surgical setting included Storz laparoscopy equipment and instruments, a Hohl uterine manipulator without screw and bar, an Erbe Vio 300D electrosurgcial unit with BiClamp® and BiSect® instruments. The patient was stabilised in a 20o Trendelenburg position. The working intra-abdominal pressure was 12 mmHg. Trocar positioning: right upper abdomen trocar (10 mm, optics), umbilibal trocar (10 mm), two lateral lower abdomen trocars (5 mm). Due to the anatomy of the patient, the optical trocar was placed to the right and above the umbilical trocar to provide sufficient working space.

The event presented in this video occurred following bilateral iliac and obturator lymphadenectomy, when the uterus was moved to the right for dissection of the left ureteric canal. The video helps understand why the complication occurred and shows how the problem was solved.
Fundamental principles of endoscopy surgery should be observed at all times, and instruments should never be used if their movement is not sufficiently visualised. This potentially fatal incident was solved without detriment to the patient, and no major damage occurred within the vessels exposed to uncontrolled forces, apart from limited damage to vasa vasorum of the external and common iliac arteries. The postoperative course was uneventful.

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ES23-0050
Video Session 3: Urogynaecology

SYSTEMATICS IN LAPAROSCOPIC SACROCOLPOPEXY

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Objectives
Within the last few years, laparoscopic sacrocolpopexy (SCP) has established itself as gold standard in therapy of the apical pelvic floor defect. Increasingly, this procedure is performed laparoscopically (LSCP). Current data show it is safe and objective and subjective cure rates are high. Until today, no widely accepted standard how to perform LSCP exists. Which is the ideal material for the suture? What comprises the ideal mesh? How should it be composed? What points and depth are ideal for fixation? Is it possible to leave the uterus, performing a sacrohysteropexy or should a supracervical hysterectomy be performed simultaneously? To all these important questions, there are yet no evidence based answers.

Methods
This video demonstrates our standard LSCP technique as it is done at our institution for 10 years. It is based upon the experience of more than 600 procedures and a prospective study including 100 patients and a 5 year follow up.
Results and Conclusion
Available study data relating to LSCP hardly ever includes an exact detailed description of the procedure itself. Our video presentation should encourage discussion about our own, established method.

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ES23-0245
Video Session 3: Urogynaecology

THE PUDENDAL LION PROCEDURE FOR TREATMENT FOR OVERACTIVE BLADDER AND INCONTINENCE
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Objectives: to report about the pudendal LION procedure for treatment for overactive bladder and incontinence
Methodes: The technique of laparoscopic implantation of an electrode to the pudendal by retroperitoneal approach is presented.
Results: Overactive bladder especially with urinary incontinence but also urinary and feacal incontinence affect millions of women worldwide. First-line conservative treatments do not always lead to sufficient improvement of the complaints and are often associated with disabling adverse effects leading to treatment failure. Electrical stimulation of the pelvic nerves has emerged as an alternative treatment for refractory cases. A novel technique of implantation an electrode to the pudendal nerve - the key player nerve in bladder and sphincters functions - has been developed. The laparoscopic approach is the only technique that enable a placement of an electrode in direct contact to the endopelvic portion of the nerve within the protection of the pelvis.
Conclusions: The pudendal LION procedure is an effective, safe and reproducible day-procedure for treatment OAB and incontinence.

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ES23-0443
Video Session 3: Urogynaecology

VESICOVAGINAL FISTULA AFTER COLPOSACROPEXY. MANAGEMENT AND LAPAROSCOPIC REPAIR
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INTRODUCTION

Colposacropexy is the gold standard procedure in pelvic organes prolapse (POP) surgery. Endoscopic approach is recomended rather than laparotomy. The patient benefits and the power of endoscopic

vision in deep disections are clear. However, this surgical procedure demands high skills to perform the prolapse repair but also to manage the possible complications.

OBJECTIVES

Vesicovaginal fistulae are late onset complications often difficult to manage. The surgeon has to choose the adequate surgical approach but also the right moment to perform the repair. This video aims to show the feasability of laparoscopical approach to the fistula.

The video illustrates the case of a 61 year old woman who underwent a laparoscopic subtotal histerectomy with colposacropexy. During the procedure, an unintended vaginal opening was made at the posterior fornix. It was closed with interrupted 2/0 resorbable stiches. Patient recovery was uneventful and she was discharged on day two.

Two weeks later, the patient complained of white vaginal discharge. The vaginal exam showed a dehiscent scar with extrusion of the posterior branch of the mesh. The edges of the scar showed clear signs of inflamation. An MRI was performed showing no signs on intraabdominal infection. Therefore, she was put under antibiotics and local vaginal treatment to promote the healing. In two weeks time the defect was almost closed and the discharge significantly reduced. An expectant treatment was proposed.

However, a few weeks later she complained of heavy liquid discharge who turned out to be urine. On the CT scan a 5mm vesicovaginal fistula was showned. The communication did not close after a month of bladder catheterisation. A surgical repair was proposed.

The cistoscopy showed a small fistula in the posterior bladder wall, 2cm away from the left ureteral meatus, almost at the level of the fundus. Laparoscopic approach seemed to be feasable.

Left ureter was stented intraoperatively, and a thin rigid catheter was introduced through the fistula coming out from the vagina. At laparoscopy, no adhesions were present. The bladder was filled with 250cc of serum and methilene blue. A cleavage plane was developped between the bladder, the mesh and the cervical stump. The rigid catheter was easily found allowing the surgeon to identify the vesical and vaginal holes. Both of them were slightly enlarged until healthy bleeding borders appeared. They were closed with interrupted 2/0 resorbable sutures. Bladder was filled again to assess its integrity. An omentoplasty was made and placed between both sutures.

Two weeks later a retrograde cistography was perfomed showing a complete healing of the fistula. The catheter was removed.

CONCLUSION

Laparoscopic approach is feasable even in late onset urinary tract injuries. Skilled gynecological surgeons with pelvic surgery training should be able to deal with this type of complications.
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ES23-0459
Video Session 4: Innovations

HYSTEROSCOPIC TREATMENT OF CYSTIC ADENOMYOSIS: THE DEVELOPMENT OF A NEW TECHNIQUE
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Introduction: Adenomyosis has been recently associated with a detrimental impact in IVF-patients outcomes. Considering women are trying to conceive later and the incidence of adenomyosis increases with age, probably gynecologist will be faced with a higher incidence of this disease in patients referred for fertility treatments. There are not evidence-based surgical treatments demonstrating reproductive improvement in this subset of patients. Nevertheless, the use of hysteroscopy seems an attractive alternative in cases of focal presentations of adenomyosis. The objective of this video is to present the hysteroscopic approach for the treatment of adenomyosis cysts (AC).

Material and methods: Compilation of hysteroscopic surgical videos were adenomyotic cysts were treated. Surgeries were performed at the Gynaecological Department of the Heilig Hart Regionaal Ziekenhuis, Leuven and Ziekenhuis Oost-Limburg, Genk - Belgium.

Results: Three techniques of hysteroscopic treatment of AC are presented. Special emphasis is made in technical aspects. The use of cold scissors and bipolar energy with mini-hysteroscope and resectoscope is demonstrated. An interesting use of the Spirotome to allow access to deep AC is presented as well.
Discussion: Hysteroscopic treatment of AC is feasible and safe in expert hands. Patients benefits from all the advantages of a minimal invasive approach. They are managed in an ambulatory setting and discharged within one hour of the procedure. Contrary to the abdominal approach, the outer myometrium remains intact avoiding the possibility of adhesions, while at the same time there is not abdominal scar. Hysteroscopy permits a thorough dissection of the cyst from the surrounding myometrium allowing its complete resection and spontaneous healing of the inner myometrium. In cases of AC localized deep in the myometrium the use of ablative treatment is feasibly and should be considered. Future research in this line should be encouraged, but special attention must be paid in assuring the optimal surgical quality.

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ES23-0062
Video Session 4: Innovations

VAGINOSCOPY: A NEW ENDOSCOPIC APPROACH TO TREAT MESH-RELATED COMPLICATIONS
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Objectives

The most frequent complications for surgical mesh for pelvic organ prolapse repair include mesh vaginal erosion, pain, bleeding, dyspareunia, organ perforation, and urinary tract infection. Many of these complications require surgical treatment and mesh removal. Erosion is one of the most common adverse event (6% after sacrocolpopexy, 18-19% after transvaginal repair).1 Although rare, this condition is often challenging to manage.2 We present a step-by-step video demonstration of vaginoscopy. It is essentially an innovative minimally invasive procedure combining the use of

standard laparoscopic instruments through a single-port device, for transvaginal mesh excision. We report the clinical application of this technique and present preliminary data showing its effectiveness.

Methods

Over a 2-year period (2012/2014), five patients with vaginal erosion of permanent mesh underwent vaginoscopic excision. To perform vaginoscopy, a single-incision laparoscopic surgery port (SILS™Port, Covidien) is introduced into the vagina. This device is a soft-foam port with two 5-mm cannulas for ordinary laparoscopic instruments and one 10-mm cannula for the camera. The SILS™Port was connected to CO_2 insufflation, with the setting of 15mmHg. A vaginal purse-string suture is performed before placement of the SILS™ Port, to prevent its dislodgement and maintain pneumovagina during the procedure. Visible exposed mesh is tractioned with laparoscopic graspers and then excised with laparoscopic scissors. Finally, the vaginal epithelium was closed using laparoscopic needle holders and knot-pusher with absorbable monofilament sutures.

Results

All the patients referred a painless postoperative course, with complete resolution of symptoms.

Conclusions

This procedure allows a perfect exposition, the clear identification and a more extensive and complete excision of the eroded mesh, in order to improve the cure rate. In opposition to conventional transvaginal procedures, where traction has the main role, with our innovative technique the surgeon is able to easily reach the vaginal fundus, especially in deep and narrow sinus tract containing the mesh.

References

Weidner AC, Wu JM, Kawasaki A, Myers ER. Computer modeling informs study design: vaginal estrogen to prevent mesh erosion after different routes of prolapse surgery. Int Urogynecol J. 2013;24(3):441-5.

South MT, Foster RT, Webster GD, Weidner AC, Amundsen CL. Surgical excision of eroded mesh after prior abdominal sacrocolpopexy. Am J Obstet Gynecol. 2007;197(6):615.e1-5.

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ES23-0078
Video Session 4: Innovations

LAPARASCOPIC HYSTERECTOMY, MORCELATION IN BAG

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Objective

The ability to offer lessinvasive surgery to women often requires the removal of large tissue specimensthrough small incisions, which may be facilitated by morcellation,
Disadvantageof morcelation is dissemination of tumor or uterine fragments benign or malignant, throughout theintraperitoneal cavity may necessitate further surgical interventions or othertreatment and may worsen prognosis
Methods
Laparoscopic hysterectomy in a 41year old women due to fibroids bleeding and pain. Morcelation performed in bagoand controlled with the optical view through a occluding troacar through the bag

Results.
75 minutes surgery, no spillageof fibroid tissue 450 gram of specimen. Patient discharge after 22 hours
Conclusion.
Successful safe surgery withmorcelation of fibroids in a bag eliminates the criticism of the disadvantageof morcelation

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ES23-0364
Video Session 5: Oncology

RETROPERITONEOSCOPIC TOTAL RETROPERITONEAL LYMPHADENECTOMY
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Objectives:One of the major difficulties in surgery in the retroperitoneal space is the invasion of the bowel into the operative field. We have developed an ultra-minimally invasive retroperitoneal lymphadenectomy using the extraperitoneal approach which has a number of advantages, including a good operative field as the peritoneum acts as a natural retractor.
We will present cases who underwent endoscopic extraperitoneal paraaortic and pelvic lymphadenectomy for endometrial cancer.
Methods:20 Women who underwent endoscopic extraperitoneal paraaortic and pelvic lymphadenectomy for endometrial cancer from Jan 2001 to Dec2013.
We access the retroperitoneal space with an Endotip visual access cannula. This cannula makes extraperitoneal access and peritoneal tenting easier. We place the four trocars in the left flank, suprainguinal, subcostal, iliac and the supra-iliac ports. After expanding the extraperitoneal space by blunt dissections with forceps, carbon dioxide is infused. The supra-ingual port is initially used as the camera port with the assistant's forceps in the iliac port and the leading surgeon using the supra-iliac and subcostal ports for dissection. The upper limit of our paraaortic lymphadenectomy is the renal artery and vein. After paraaortic dissection, we move to the pelvic lymphadenectomy. At this stage, the subcostal port is used as the camera port, and the lower two ports are used by the leading surgeon. The right pelvic lymphadenectomy was performed via the space between the rectum and the sacrum. The lower limit is the circumflex vein.
Results:We can achieve a total retroperitoneal dissection via our extraperitoneal approach.The mean number of retrieved lymph nodes was 42 in the paraaortic area and 38 at the pelvic area. Mean surgical time was 180min and the mean estimated blood loss was 50ml for paraaortic dissection and 120ml for pelvic dissection.

Concusions:This procedure is focused on the barrier-free nature of working in the retroperitoneal space; meaning, a space which is not hindered by the invasion of the bowel or other intraperitoneal structures. This technique has been developed to make oncologic surgery less invasive and a more patient friendly procedure.

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ES23-0054
Video Session 5: Oncology

LAYERED CONSTRUCTION OF SUBPERITONEAL FASCIA: KEY CONCEPT FOR ADVANCED LAPAROSCOPIC HYSTERECTOMY

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(Summary)

Understanding the layered construction of subperitoneal fascia makes the isolation and handling of retroperitoneal organs less invasive with minimal hemorrhage.

(Introduction)

Subperitoneal fascia of pelvis consists of loose connective tissue that surrounds and supports intrapelvic organ. Layered nature of loose connective tissue allows smooth movement of pelvic organs to expand or contract that is essential for their function. Surgical techniques for extrafascial, semi-radial and radical hysterectomy based on this concept is presented in the video.

(Methods)

Three cases are presented: a case of endometrial cancer for semi-radical hysterectomy, a case of cervical cancer for radical hysterectomy and a morbid obese case of endometrial cancer for extrafascial hysterectomy.

(Results)

Isolation of organs, vessels and nerves in retroperitoneum is shown by making pararectal, paravesical and paravaginal space in proper layer of subperitoneal fascia. Dissection of ureter and uterine artery is done by stepwise dissection of their fascia and cutting ureteric branch. Three types of hysterectomy, categorized by cutting point level of deep uterine vein, are completed.

(Coclusions)

Subperitoneal fascia is the key element that enables hollow organs in retroperitoneal space of pelvis function properly. Understanding the layered construction of fascia makes the handling of retroperitoneal organ less invasive with minimal hemorrhage. This concept is more useful in complicated or in malignant cases.

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ES23-0173
Video Session 6: Miscellaneous

HYSTEROSCOPIC MORCELLATORS: PRINCIPLE AND INDICATIONS.

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Hysteroscopic resection is today the gold standard for the treatment of intrauterine pathologies. The vision is sometimes not clear because the presence of blood, bubbles and chips. The major risks of this procedure are the TURP syndrome and the uterine perforations. A new technology is now at our disposable: the hysteroscopic morcellator.

This video shows the principle of this technology and rapidly presents the different commercialized devices. Then, different indications are presented with the morcellation of different polyps, sub-mucous myomas, remnant trophoblastic tissue and polypoid hyperplasia of the endometrium.

The discussion focused the mean advantages founded in the literature: reduction of the operative time, use of less fluid, less fluid deficit and high rate of surgeon's satisfaction. The limitations of this technique are not forgotten and are presented: difficulty to treat large pathologies, intramural myomas, fundic lesions and sometimes obscured vision by bleeding.

In conclusion, hysteroscopic morcellators are probably a great progress for the cure of the endo-uterine pathologies. They cannot yet concurrence the hysterosopic resectoscopes for the treatment of big sub mucous myoma or those with a large intramyometrial involvement. The future progress would permit the generalization of their use and the diminution of the cost, actually prohibitive for the single-used devices.

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ES23-0370
Video Session 7: Endometriosis 1

A CASE OF COEXISTING ILEOCAECAL AND RECTOSIGMOID ENDOMETRIOSIS: NOVEL TECHNIQUE USING LAPAROSCOPIC TRANS ANAL NATURAL ORIFICE SPECIMEN (NOSE) EXTRACTION

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Objective:

Endometriosis involving the small bowel is a rare entity occurring in 1-10% of patients. When present this condition may simulate bowel related disorders and women are often incorrectly diagnosed with irritable or inflammatory bowel disease resulting in an often long protracted illness. Natural orifice specimen extraction (NOSE) using laparoscopic transanal specimen extraction is a feasible technique for the surgical management of bowel endometriosis even in cases of multifocal lesions.

Methods:

We present a case of a 36 year old woman presenting with severe dysmenorrhea dyschezia and recurrent episodes of intermittent bowel obstruction. Magnetic resonance imaging (MRI) demonstrated occlusion of the small intestine with dilatation of the terminal ileal loop and thickening of the bowel wall on the antimesenteric border. In addition, narrowing of the rectosigomoid colon with significant stenosis was observed at colonoscopy.

At laparoscopy the patient was found to have coexisting endometriosis of both the small and large bowel. Diffuse involvement of the ileocaecal junction with mural thickening and stenosis was observed, in addition to significant disease infiltrating the rectosigmoid junction.

Results:

Two synchronous segmental resections were performed using trans anal natural orifice specimen extraction (NOSE). By means of video illustration we describe the technique of laparoscopic intracorporeal anastomosis for trans rectal bowel resection at both the ileocaecum and rectosigmoid junction. This technique guarantees a curative segmental resection whilst avoiding an abdominal incision, reducing immediate and late postoperative complications such as hernia formation, infection and pain.

Conclusion:

In conclusion endometriosis should be considered as a differential diagnosis in women presenting with gastrointestinal symptoms. Trans anal natural orifice specimen extraction is a feasible laparoscopic procedure in cases of severe endometriosis with coexisting lesion of both the small and large bowel. Immediate symptom relief associated with minimal abdominal scarring can also have a significant positive impact on the patient’s psychological wellbeing and subsequent recovery.

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ES23-0434
Video Session 7: Endometriosis 1

ENDOMETRIOSIS IN THE FEMORAL NERVE: A RARE CLINICAL CASE
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Leg pain can be a symptom in endometriosis but hard to relieve because its cause is difficult to recognize. There are 2 types of leg pain: referred pain and neuropathic pain. The latter is caused usually by the involvement of the nerves by endometriotic extraperitoneal implants. Neuropathic pain radiates in a specific dermatome innervated by the injured nerve. In cases of leg pain in the anterior and lateral part of the thigh, it is the invasion of the femoral nerve that is suspected.

Objective: To show a clinical case of unresectable endometriotic nodule infiltrating ileopsoas muscle and involving femoral nerve.

Methods: Video of laparoscopic approach of this clinical case.

Results: We report the case of a 38-year-old woman with severe dysmenorrhea, dyspareunia, dischezia, chronic pelvic pain with irradiation to anterior part of the left thigh and disabling left leg pain. Using a laparoscopic approach, it was removed an extra peritoneal, 5 cm, endometriotic nodule above the left ileopsoas muscle, affecting the femoral nerve. Four months latter and in the presence of persisting leg pain, pelvic MRI showed a growing endometriotic nodule, infiltrating the ileopsoas muscle and thickening the femoral nerve. It was performed the decompression of the femoral nerve between an unresectable nodule.

Conclusion: A laparoscopy was performed with a neurosurgical team trying to preserve femoral function in this rare clinical case demonstrating the limits of difficult cases in endometriosis.

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ES23-0091
Video Session 7: Endometriosis 1

LAPAROSCOPIC RESECTION OF EXTRAPELVIC CYSTIC ENDOMETRIOMA PRESENTING DEEP INSIDE LEFT GLUTEAL MUSCLES.

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Objective: To report our experience with the first case of extrapelvic cystic endometrioma which presenting deep inside pelvic wall and protrude into gluteus muscles of the left hip in a 21-year-old woman.

Study design: Case report. Followed 8 months since operation.

Setting: University affiliated hospital.

Patients: A 21-year-old nulliparous Chinese woman suffered from dysmenorrhea, cyclic leg pain and numbness. The diagnosis of hip endometrioma was aided by the history of cyclical symptoms, needle aspirate, ultrasonography scan and magnetic resonance imaging.

Interventions: We adopted both laparoscopic approach and posterior endoscopic approach. The mass was located and partly striped from the pelvis by laparoscopy. Then the patient was tuned to prone position. Operation space was formed beneath gluteus minimus and carbon dioxide pneumoperitoneum was built; Laparoscope was inserted into the space, and cystectomy was performed. The patient was followed and received gonadotropin-releasing hormone agonist treatment for 6 months.

Main Results: Laparoscopy showed the pelvis to be free of gross disease. A cystic mass about 7 cm in diameter was found deep inside the gluteus muscles and adhered to left sciatic nerve. Laparoscopy combined transgluteal endoscopic approach successfully removed the endometrioma and relieved

the sciatica nerve compression symptoms. Pathological examination of the specimen demonstrated endometrial implantation cyst. Postoperative hormonal suppression therapy proved to be efficient in preventing recurrence as well as wound implantation.

Conclusion: To our knowledge, this is the first case of a large separated endometrioma deep beneath pelvic floor and expanded into gluteus muscles that reported in literature. Laparoscopy combined posterior transgluteal endoscopic approach was an effective way to excise the extrapelvic endometrioma. Patient had benefited from the combined approach of minimally invasive operation, and results was favorable. Gluteal endometrial implantation cyst should be added to the differential diagnosis of extrapelvic endometriosis and led to our deep thought of the unsolved myth of the origin of endometriosis.

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ES23-0248
Video Session 7: Endometriosis 1

SYSTEMATIC CONSERVATIVE RADICAL EXCISION OF DEEP ENDOMETRIOSIS

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Objectives: To review laparoscopic conservative radical excision of deep endometriosis and to confirm the impact of the surgery on reproductive performance.

Methods: Patients were infertile women with severe endometriosis (revised -ASRM stage III or IV). Our surgical technique for deep endometriosis involving the recto- uterine pouch was as follows; Step1: identification of the pararectal spaces and separation of the ureters from the uterosacral ligaments. Step2: identification of the lateral region of the rectovaginal space and separation of the rectum from the uterosacral ligaments. Step3: separation of the rectum from the posterior cervix and vaginal wall and shaving of any superficial endometriosis on the anterior bowel wall. Step4: the plexus hypogastricus inferior was separated from the uterosacral ligaments in order to prevent postoperative dysuria. Step 5: The uterosacral ligaments and any remaining lesions in the posterior cervix or vaginal wall were excised as much as possible. Hence, deep endometriosis was systematically removed via an inverted U-shaped resection.

Results: Fertilization rate, blastocyst formation, clinical pregnancy rate and live-birth rate were the same degree between 29 infertile patients who underwent conservative radical excision followed by ART and 29 idiopathic infertile patients.
Conclusions: Several authors reported that conservative radical excision of deep endometriosis contributes to improve ART outcomes. Since endometriotic tissue can also arise from lesions other than ovarian endometrioma, these lesions must be removed as much as possible.

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ES23-0418
Video Session 8: Endometriosis & Miscellaneous

SURGICAL CARTOGRAPHY OF THE PELVIC INNERVATION

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TITLE: A Surgical Cartography of the Pelvic Innervation

Category: Anatomy, Education

Fernandes R, Puga M, Leblanc E, Wattiez A.

Departments of Gynecologic Surgery at Hautepierre and CMCO University Hospital, Institute de Recherche contre les Cancers de l'Appareil Digestif (IRCAD). Strasbourg, France. Department of Gynecological Oncology Centre Oscar Lambret-Lille, France

Objectives: To demonstrate the pelvic innervation by using a combination of surgical videos and designs.

Methods: Compilation of laparoscopic surgical videos from the Departments of Gynecologic Surgery of Strasbourg University Hospitals, the Institute de Recherche contre les Cancers de l'Appareil Digestif (IRCAD), and the

Department of Gynecological Oncology Centre Oscar Lambret-Lille, France.

Results: Pelvic innervation is presented throughout its systems: somatic and Autonomic (parasympathetic and sympathetic). Along the path, step by step, the relationships with other important structures are highlighted.

Conclusions: Since the first reports from the Japanese surgeons on nerve sparing procedures, numerous papers on pelvic neuroanatomy have been published. During these years the introduction of laparoscopy and its own improvement helped the surgeons to understand this delicate and complex system. This video provides an important educational tool regarding neuroanatomy.

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ES23-0047
Video Session 8: Endometriosis & Miscellaneous

RECOGNITION AND TREATMENT OF ENDOMETRIOSIS INVOLVING THE SACRAL NERVE ROOTS

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Introduction

Although reported for the first time in 1955[1], endometriosis involving the sacral plexus is still poorly understood or neglected by many surgeons[2].

Looking at that scenario, we have designed this educational video to explain and describe the symptoms suggestive of endometriotic involvement of the sacral plexus as well as the technique for the laparoscopic treatment of this condition.

Design

The video starts by reviewing the concept of nerve entrapment syndrome and highlighting the importance of knowledge on nerves dermatomes for the correct diagnosis.

The first clinical example of those concepts is that of a 38 year-old woman with chief complain of allodynia on right S2, S3 and S4 dermatomes, with no pelvic pain, primary infertility and perimenstrual urinary retention due to bladder atonia. As usual in these cases, she had already undergone 2 laparoscopies for endometriosis.

The second example is the dramatic case of a 29 year-old woman with history of three laparoscopies for endometriosis. On the last of those, a cystectomy was performed for an endometrioma, which was attached to a uterossacral nodule.

After the third laparoscopy, the symptoms were diagnosed as psychiatric in origin and the patient was referred for a morphine pump implantation.

Two years after, the patient sought our service for a second opinion complaining of severe pain on sciatic and obturator nerves dermatomes, which worsened during the perimenstrual period.

A peritoneal scar was found over the left uterossacral ligament. The exploration of the plexus revealed dense fibrotic tissue entrapping the obturator and sciatic nerves, and the sacral nerve roots.

After clearing the fibrotic tissue, a tightly stretched bifurcation of the internal iliac vein was found to be entrapping S3.

Results

Almost complete pain relief was observed on the first case and the patient fully recovered her bladder function.

Regarding the second patient, after the neurolysis, complete resolution of the sciatic and obturator neuropathic pain was observed.

This allowed for the removal of the morphine pump, which unfortunately complicated with a liquoric fistula that required two neurosurgical interventions to be resolved.

Conclusion

The signs suggestive of intrapelvic nerve involvement include perineal pain or pain irradiating to the lower limbs, lower urinary tract symptoms or Tenesmus or dischesia associated with gluteal pain[2].

Whenever deeply infiltrating lesions are present, the patient must be inquired about those symptoms and specific MRI sequences for the sacral plexus must be taken, so that equipment and team can be arranged and proper treatment performed.

References

1. DENTON RO, SHERRILL JD. Sciatic syndrome due to endometriosis of sciatic nerve. South Med J. 1955 Oct;48(10):1027-31.

2. Possover M, Schneider T, Henle KP. Laparoscopic therapy for endometriosis and vascular entrapment of sacral plexus. Fertil Steril. 2011 Feb;95(2):756-8.

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ES23-0184
Video Session 8: Endometriosis & Miscellaneous

JUVENILE CYSTIC ADENOMYOMA VS. BLIND UTERINE HORN: PROBABLY NOT IMPORTANT FOR ITS' LAPAROSCOPIC MANAGEMENT, BUT MAYBE A CASE TO CHALLENGE SAMPSON'S THEORY?
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2Pathology Department, Alexandra Hospital, Athens, Greece

Objectives: To present the case of a patient with a uterine anomaly in whom the differential diagnosis was not easy to make, and who was managed laparoscopically.

Methods: A 14 years-old patient had menarche 9 months before her present admission for surgery. She complained of excruciating dysmenorrhea dating from her 1st menstruation and leading to repeated hospital admissions for pain relief. During the last 4 months she was put on oral norethisterone 5mg x 3 daily, resulting in amenorrhea. On MRI of the lower abdomen she was diagnosed with an obstructive congenital uterine anomaly consisting of a normal right hemi-uterus with a normal endometrial cavity, and a large blind uterine horn with a distended cavity in contact with the right side. The patient was scheduled for laparoscopic management.

Results: At laparoscopy the MRI findings were confirmed. Both tubes appeared normal. Surprisingly, no signs of endometriosis were found in the pelvis. The patient was managed with laparoscopic excision of the blind left side, left salpingectomy, and uterine reconstruction. Histology of the removed part revealed the presence of extensive adenomyosis in the myometrium of the removed uterine segment. The differential diagnosis was made between a juvenile cystic adenomyoma (JCA) and a blind uterine horn (BUH). The patient made an uneventful postoperative recovery, and at her 6-months follow-up she reported considerable improvement in her dysmenorrhea.

Conclusions: Differential diagnosis between congenital uterine anomalies is not always straightforward. Clinical and radiologic clues may be found during the diagnostic workup that may assist in their formal classification. Nevertheless, doubt may still remain in some cases, such as ours.

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ES23-0158
Video Session 8: Endometriosis & Miscellaneous

SYDNEY CONTAINED IN BAG MORCELLATION OF MYOMA
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Objectives
This is a narrated video that demonstrates the Sydney Contained In Bag Morcellation technique for morcellating after laparoscopic myomectomy.
Methods
The technique involves the introduction of an Endo Catch Bag (Covidien), retrieval of the resected myomas and the extraction of the mouth of the bag onto the abdominal wall, via the umbilical trocar site. Once exteriorised, the mouth of the bag is gathered and a 12mm Hasson trocar is placed within the mouth of the Endo Catch bag, into the abdominal cavity, before creating a pseudopneumoperitoneum. A 5mm optical trocar is then placed within the bag to allow morcellation to be performed under direct vision.
Results
This novel use of an already existing product, allows a safer environment in which morcellation can be carried out. As well as minimising risk of dissemination of occult leiomyosarcomatous fragments, it creates a safe space, remote from the abdominal viscera, specifically the bowels, in which morcellation can be achieved.
Conclusions
This technique may well represent a solution to the likely sanctions surely due to be issued with regard to the use of power morcellating devices following the FDA warning.

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ES23-0182
Video Session 8: Endometriosis & Miscellaneous

OUR LEARNING CURVE IN THE CHANGES OF THE TECHNIQUE IN TOTAL LAPAROSCOPIC RADICAL HYSTERECTOMY IN THE TREATMENT OF THE EARLY STAGE CERVICAL CANCER

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Objectives: To describe the changes in the technique of laparoscopic pelvic lymphadenectomy (LPL) and total laparoscopic radical hysterectomy (TLRH) (C1) in the treatment of the early stage cervical cancer.
Methods: We describe in video format the modifications in our laparoscopic technique through our learning curve, the feasibility and the clinical outcomes. We describe a systematic procedure of laparoscopic nerve-sparing, a simplified technique for the ureteral tunnel dissection during TLRH. And we show our first cases with the new techniques for laparoscopic sentinel lymph node (SLN) detection. A retrospective review of 23 node-negative women (based upon frozen section results) treated by LPL and TLRH simultaneously, between April 2004 and May 2014. Mean age was 45.2 years.
Results: In 14 cases nerve sparing was made with two different approach. The detailed autonomic nerve structures (the hypogastric nerve, the pelvic splanchnic nerves, the inferior hypogastric plexus and the visceral afferent and efferent nerves) are identified and separated by meticulous dissection during the nerve sparing technique (10 cases). Nerve plane-sparing is characterized by integral

preservation of the autonomic nerve plane (meso-ureter and lower bladder pillars) (4 cases). The mean operating time was similar in both techniques. None pathologically positive margins were reported in both groups. None patient referred bladder dysfunction and rectal voiding dysfunction from nerve-sparing group.

In 15 patients, our surgical technique for the dissection of the ureteral tunnel during the parametrial resection in TLRH was performed. We made a dissection of the vesico-uterine space up to 4-5 cm underneath the cervico-vaginal union, after we dissected of the paraureteral tissue to both sides of vagina and released both ureters from the vagina until its entrance in back of the bladder. Dissection of medial and lateral pararrectal spaces, allows to identify and respect the hypogastric nerve. The upwards traction of parametrium allows to identify the entrance and exit of the ureter in the tunnel. With this technique, only one bladder injury was reported. In the other group, one ureteral injury and one bladder injuries was reported.

In 6 patients, SLN detection was performed using methylene blue dye. All patients underwent SLN removal with bilateral LPL. The SLN was detected in 5/6 patients (83,3%), it was detected bilaterally in 83,3% women. The median SLN count was 2,37 nodes (range2-4) and the median non-sentinel lymph node count was 23,9 nodes (range 7-48). None cases benign SLN was associated with a malignant non-sentinel node (100% negative predictive value). Obturator fossa (25%) and interiliacs (62,5%) and common iliac (12,5%) were the finding location.
Conclusions: Laparoscopic nerve-sparing and nerve-plane sparing avoids bladder and rectal dysfunction. Laparoscopic SLN detection is accurate in assessing the lymph node status.

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Video presentations (55)

ES23-0015

Video Session 1: Other Benign Gynaecology

LESS CONSERVATIVE MANAGEMENT OF HUGE OVARIAN CYST
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Objective: we present a 22 years old single patient who was referred with a huge pelvi-abdominal mass. She had conservative LESS where healthy ovarian tissue was preserved.
Methods: The exam revealed a huge pelvi-abdominal mass that was reaching till the xiphi-sternum. The mass was mobile and not tender. The patient had normal tumor markers. She had ultrasound and CT scan.
History, physical examination and radiological findings were in favour of a benign nature of the cyst. A 2.5 cm umbilical incision was made. The cyst was extending to the xiphi-sternum. The inspection of the cyst revealed a huge unilocular cyst with smooth wall. The cyst was drained laparoscopically. 8.5 litres of serous fluid was aspirated.
Results: we then performed partial salpingo-oopherectomy. There were no intra or post-operative complications and the blood loss was minimal. The patient was discharged home the next day in good condition. The histopathology report revealed a benign Serous cystadenofibroma. She was seen in the clinic 4 weeks after the surgery and she was doing very well. Follow up ultrasound revealed normal ovaries.

Conclusion: we believe that huge cysts can be safely managed using LESS. There should be no size limit to LESS. Conservative management should be attempted for huge ovarian cysts. Before aspiration of a huge cyst, the malignancy index should be very low. Proper patients selection and expertise are essential to perform these cases.
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ES23-0063
Video Session 1: Other Benign Gynaecology

LAPAROSCOPIC MANAGEMENT OF RECURRENT IPSILATERAL ECTOPIC PREGNANCY
S. Campos[1], G. Piquier Perret[1], B. Rabischong[1], M. Canis[1], R. Botchorishvili[1]
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Objectives/Introduction: Ectopic pregnancy (EP) is still the most common cause of first trimester maternal death, accounting for 73% of early pregnancy mortality, and its incidence has increased markedly over the last years. Ipsilateral EP following salpingectomy is rare, however associated with mortality rates 10-15 times higher than other EP.

Methods/Results: A 32-year-old patient gravid 6, para 3 (1 abortion, 1 vaginal delivery, 2 C-sections - median infraumbilical laparotomy - and left-sided ectopic pregnancy, managed by laparoscopic salpingectomy) presented in the ER with acute lower abdominal pain, no abnormal uterine bleeding, amenorrhoea of 4 weeks and positive urinary pregnancy test. Clinically, she presented abdominal guarding and rebound tenderness, no vaginal bleeding, no signs of haemodinamic instability. Beta-hCG 25457 U/l. Hb 12 g/dl.

With an ultrasound suspected of left-sided interstitial ectopic pregnancy with haemoperitoneum, a laparoscopic approach was decided.

Due to previous laparotomies, pneumoperitoneum was created after insertion of a Veress needle at the Palmer point, as well as the first optical 10 mm trocar. Three operative 5 mm trocars were then inserted under visual control. An important haemoperitoneum was found (aspirated over 1 l of blood and clots). A careful inspection revealed a ruptured EP within the stump of the left tube, with active bleeding. The aspiration of all products of conception was made, followed by excision of the implantation site using bipolar coagulation and progressive section. Right tube was unremarkable. The procedure was finished by D&C, without incidents.

Conclusions: Recurrent EP following ipsilateral partial salpingectomy is rare but potentially fatal, being important to maintain a high index of clinical suspicion. Surgical management can be safely performed by laparoscopic approach, even in presence of haemoperitoneum, and care should be taken to ensure that all the remaing part of the tube is excised, which can be achieved with correct use of bipolar energy followed by section.

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ES23-0458
Video Session 1: Other Benign Gynaecology

ROBOTIC EXCITION OF 16 MYOMAS FROM A FULLY DEVELOPED DOUBLE UTERUS WITH CERVICAL DUPLICATION AND LONGITUDINAL VAGINAL SEPTUM.

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Objectives:

We report a case of a 37-year-old nulligravida woman who presented with severe menorrhagia due to two fully separated uterine horns with at least 16 myomas , on both sides, and desired to keep her fertility.

The patient had been operated at the age of 13 due to hematocolpos and a longitudinal vaginal septum was almost entirely removed. She was also known to have congenital urinary malformations (single kidney).

Upon clinical examination there were practically no remnants of the vaginal septum, but two fully developed cervixes were identified . Ultrasonography revealed two fully separated uterine horns with at least 16 myomas , on both sides. Most myomas were Intramural , the largest measuring 10x9 cm in the isthmus on the left side, 5 more myomas of 5x5 cm, a submucosal of 1,1 cm on the right side and 9 more. A 5x4 cm cyst was also identified on the right adnexa.

Methods:

The patient underwent hysteroscopy and robotically assisted laparoscopic myomectomy. Hysteroscopy was easy to perform on the right side and removal of submucosal myoma was successful. However , performing hysteroscopy on the left uterine cavity was copious due to the isthmic myoma. Nevertheless, the left uterine cavity was fully developed also and normally appearing.

Robotically assisted laparoscopic myomectomy was then undertaken. The Da Vinci-S robotic system was used. Side-docking and four ports, were implemented, all of them above the umbilicus (Open method Hassan, one port for the 0 degree camera, two robotic ports, and one auxiliary laparoscopic port of 5-12mm). Instruments used: tenacullum, hook, and 2 needle holders. The morcelation was laparoscopic.

Results: Myomectomy of the 15 aforementioned myomas, as well as of the ovarian cyst was uneventfully. There were no postoperative complications and the patient was discharged on the second postoperative day. Histologic examination revealed myomas with increased cellular activities and a serous ovarian cyst.

The 3D view from the robotic console in combination with the precise robotic maneuvers permitted us to identify the limits of the myomas and the corpus of the double uterus, to remove the myomas and suture easier the myometrium.

Conclusion: Robotic assistance provides good access, stereoscopic view and precise maneuvers that facilitate excision of fibroids in difficult cases, as suggested by our experience that we present elsewhere. Still to discuss the cost and prove the necessity of the robotic procedures.

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ES23-0411
Video Session 1: Other Benign Gynaecology

UTERINE FIBROIDS: COMBINATION OF CONSERVATIVE TECHNIQUES TO AVOID HISTERECTOMY
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Uterine fibroids are the most common tumors in the female reproductive tract but only the symptomatic ones may have indication of treatment. The classical treatment has been surgery (hysterectomy or myomectomy), but uterine-preservation treatments such as hormonal therapy, uterine artery embolization (UAE) or HiFU, are emerging as alternatives to surgery.

We present a case in which a combination of UAE and laparoscopic myomectomy allowed to treat successfully a woman with multiple uterine fibroids including one subserous pedunculated fibroid.

A 44 year-old nulliparous woman presented with abnormal uterine bleeding which caused severe anemia (Hb 64 g/L) and disregulations of her menstruation period. Ultrasound and MRI showed multiple transmural uterine fibroids with affectation of the endometrial cavity and a large fundal subserous pedunculated fibroid (39x34mm). The patient wanted to preserve the uterus for personal reasons. As there is contraindication for UAE in case of pedunculated subserous fibroids due to the potential risk of intraabdominal necrosis and secondary chemical peritonitis, a combination of this technique with laparoscopic myomectomy was proposed.

Bilateral UAE was performed catheterizing the left hypogastric arteria. Success of the procedure was confirmed by immediate arteriography. Laparoscopic myomectomy and intraadbominal morcellation of the subserous pedunculated fibroid was executed successfully at the same surgical act avoiding the risk of chemical peritonitis in case of necrosis of the myoma.

Six months after the procedure a MRI showed size reduction of the remaining fibroids and absence of perfusion. Clinically, the patient referred a diminished amount of uterine bleeding and an improved quality of life after the intervention. Analitics showed a complete recovery of anemia (Hb 126g/L)

Despite the initial absolute contraindication for UAE due to the presence of a pedunculated subserous fibroid, a combination of techniques allowed a conservative management of uterine fibroids which caused abnormal uterine bleeding in a patient who refused hysterectomy.

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ES23-0324
Video Session 1: Other Benign Gynaecology

LAPAROSCOPIC HYSTEROTOMY FOR HEMATOMETRA SECONDARY TO INTRACTABLE CERVICAL AND UPPER VAGINA STENOSIS
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Summary: In this video we demonstrate laparoscopic drainage of a hematometra and dilatation of a cervical stenosis in a non- communicating endometrial cavity and cervical canal.

Introduction: A 23 year-old nulliparous woman presented as emergency with severe lower abdominal pain and 8 month amenorrhea. On examination the upper vagina was stenosed and the cervix not visible. Transvaginal ultrasound and MRI revealed a large 100 x 70 mm hematometra secondary to stenosis at the internal cervical os.

Methods and Materials: Vaginal access to the cervix was not feasible. At laparoscopy an anterior midline hysterotomy was performed using harmonic scalpel to drain the hematometra. A blunt probe was then inserted thorough the hysterotomy towards the vagina attempting to dilate the endo-cervical canal through a retrograde approach. A connection with the vagina was successfully established by cutting over the retrograde probe. A size 16 Foley's catheter was advanced in to the uterine cavity andthe balloon inflated to retain the catheter's position. The hysterotomy incision was closed with sutures taking care not to avoid puncturing the balloon.

Results: The intrauterine catheter remained for 48h hours and continued to drain the hematometra. At 72 hours post-operatively a transvaginal scan confirmed complete drainage of the hematometra, however, no patent communication between the cervix and uterus was seen. Serial scans at 2 and 4 months have shown the re-accumulation of the hematometra and recurrence of pain symptoms.

Discussion: The above method of drainage was appropriate in the acute setting. However, long –term options are required to prevent recurrent hematometra and pain whilst reconciling her future fertility. Potential options include, (1) continuous ovarian suppression to conserve the uterus and IVF with transabdominal embryo transfer, (2) further reconstructive surgery, and, (3) hysterectomy with surrogacy to achieve pregnancy.

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ES23-0247
Video Session 1: Other Benign Gynaecology

HERLYN-WERNER-WUDERLICH SYNDROME: THE ROLE OF ENDOSCOPY IN RARE CONGENITAL ANOMALIES

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Summary: The Herlyn-Werner-Syndrome is a rare Mullerian anomaly consisting of uterus didelphys, obstructed hemivagina and unilateral renal agenesis. It is probably the result of embryonic arrest at 8 weeks of gestation, with the Mullerian and the adjacent metanefric ducts being simultaneously affected. The diagnosis of this situation is often challenging.

Introduction: The authors present a video case of a 15 year-old girl admitted to our Department with intermittent pelvic pain and dysmenorrhea since menarche, at the age of 13.

Material and Methods: The pelvic abdominal ultrasound showed a heterogeneous pelvic mass, with 114 mm of greater diameter. The Risk of Ovarian Malignancy Algorithm (ROMA) was 24,9%; a high-risk value for premenopausal women.

A decision was made towards performing a diagnostic laparoscopy in order to clarify this medical condition.

Results: A uterus didelphys was found, with great distension of the left hemiuterus. The left fallopian tube was also extremely distended, and its external appearance suggested chronic salpingitis with blood accumulation.

A vaginal exploration was also performed, which revealed an obstructed left hemivagina, with a longitudinal septum; and a normal right hemivagina, communicating with the normal right hemiuterus, as explored by hysteroscopy. In the same surgery a resection of the septum was performed, which allowed an abundant drainage of the accumulated bloody fluid. Hysteroscopy of the left uterine cavity was performed afterwards. The external appearance of the left fallopian tube and the distension of the left hemiuterus were related to the accumulation and backflow of menstruation since menarche.

Discussion and Conclusions: The authors present a case of Herlyn-Werner-Wunderlich Syndrome, a rare congenital Mullerian duct anomaly, which was diagnosed based on its clinical presentation, ultrasound imaging and combined laparoscopical/hysteroscopical investigation. The endoscopic surgery provides an excellent and minimally invasive approach to these rare conditions, including treatment and leading to minimal postoperative pain and consequences to these young patients.

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ES23-0490
Video Session 1: Other Benign Gynaecology

TORSION OF A PEDUNCULATED SUBSEROSAL UTERINE FIBROID - LAPAROSCOPIC APPROACH
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Introduction: Uterine fibroids are the most common benign genital tumours in reproductive age, but the existence of acute complications caused by fibroids is extremely rare. The most frequent causes of sudden and severe abdominal pain caused by uterine myomas are the degeneration of fibroids, infection, expulsion of submucosal fibroids process and torsion of a pedunculated subserosal myoma.

Methods: We present the case of a 36 years pacient, nulligravida, which went to the ER complaining of a continuous abdominal pain in the suprapubic region gradually increasing intensity, without relieving or aggravating factors or associated symptoms, with a week of evolution. We performed a transvaginal gynecological ultrasound that revealed a heterogeneous formation with 60mm, depending on the anterior surface of the uterus, apparently not vascularized, suggesting a pedunculated subserosal fibroid likely twist.

Results: It was performed a diagnostic laparoscopy that identified a pedunculated subserosal myoma, fundic, under torsion, with necrotic aspect, with 60 mm larger in diameter, adherent to the omentum and to the anterior abdominal wall. We performed laparoscopic adhesiolises, and laparoscopic myomectomy with morcellation, without complications. The patient was discharged on

the following day surgery clinically well. The pathology confirmed the diagnosis of uterine leiomyoma with ischemic necrosis.

Conclusion: Torsion of a uterine fibroid is a rare complication and most patients are asymptomatic or have nonspecific complaints of abdominal pain. Early diagnosis and treatment are essential. Laparoscopic surgery is an effective minimally invasive diagnostic and therapeutic approach.

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ES23-0367
Video Session 1: Other Benign Gynaecology

LAPAROSCOPIC MANAGEMENT OF OVARIAN TORSION AT 25 WEEKS GESTATION

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Objectives

Ovarian torsion is rare in in pregnancy but presents complex laparoscopic challenges which increase with advancing gestation. It is usually associated with ovarian hyper-stimulation for assisted conception, and is most common in the first trimester. The literature shows that laparoscopic management by skilled laparoscopists is safe and associated with better maternal and fetal outcomes than laparotomy. We present a case of ovarian torsion at 25 weeks gestation and discuss the challenges of laparoscopy at this gestation, the operative dilemmas and consideration of potential complications.

Methods

A woman presented at 25 weeks gestation in a spontaneous pregnancy, with sudden onset severe left iliac fossa pain and vomiting. She was not in labour and an ultrasound scan showed a viable pregnancy with probable torsion of the left ovary. Her pain was uncontrollable so intervention was unavoidable. A laparoscopic approach was planned to investigate and treat the torsion, considering the problems of access to the pelvis for detorsion, salpingoophorectomy and managing complications.

Results

Laparoscopy using Palmer's point insufflation and entry, revealed a necrotic mass in the left adnexa which was twisted three times on its pedicle. Secondary ports in the left flank and right hypochondrium were sited allowing good access for detorsion of the pedicle. This was then secured by bipolar diathermy and a single PDS suture. An 8cm by 7cm necrotic ovary and tube were removed in a retrieval bag through the right hypochondrium. Atosiban was infused to reduce the risk of preterm labour. The patient made an excellent post-operative recovery and was discharged two days later.

Conclusions

Laparoscopic management in the second trimester of pregnancy can be safe using a modified approach to avoid damage of, or obstruction by, the gravid uterus and careful planning of how to approach potential complications. The video presentation will show the procedure and discuss the prospective decision making.

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ES23-0480
Video Session 1: Other Benign Gynaecology

UTERINE PRESERVATION IN THE TREATMENT OF UTERINE PROLAPSE

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Uterine preservation in the treatment of uterine prolapse
Surgeons- Dr Keith Johnston, Dr David Morgan, Dr C White
Institution- Antrim Area Hospital, Antrim,Northern Ireland
It has not been proven that hysterectomy is beneficial in the management of pelvic organ prolapse, it is not the uterus per se that is the problem. Increasingly women are requesting uterine preservation when considering prolapse surgery, to maintain vaginal function and potentially maintain fertility. It is beneficial, therefore to have a surgical procedure to correct pelvic organ prolapse, while preserving the uterus, amongst ones armoury. We present a case of laparoscopic sacrohysteropexy in a 51 year old postmenopausal woman who as had three normal vaginal deliveries.
Learning objectives:
Important anatomical landmarks are identified, vessels and ureteric course displayed with attention to possible sites of injury and fastidious dissection of peritoneum is described. We then demonstrate careful placement of polypropylene mesh around the cervix secured with delayed absorbable sutures and fixation to sacral promontory with 'protacker' to suspend the uterus without tension. Strict attention is paid to ensure entire reperitonealisation of the mesh using a combination of interrupted extracorporeal sutures and a barbed 'v-lox' suture.
Subjective and objective success has been demonstrated at 4 months post operative review.
The surgical team consists of a primary surgeon, primary and secondary assistants utilising 4 port sites. A 12mm umbilical port, one 5mm port in the left iliac fossa and another 10mm port in the left side of the abdomen to facilitate suturing. A final 5mm port in the right iliac fossa allows the primary assistant to contribute. The uterus in instrumented with a peluci manipulator and traction controlled by the second assistant. The Harmonic scalpel and ERBE biclamp are used along with non fenestrated graspers, a needle holder and knot pusher.
Take home message:
Laparoscopic sacrohysteropexy is a feasible option for a women with pelvic organ prolapse, wishing to preserve her uterus and avails of lower blood loss and short hospital stay, associated with laparoscopic surgery. Follow up results are so far encouraging.

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ES23-0011
Video Session 1: Other Benign Gynaecology

LAPAROSCOPIC MYOMECTOMY OF A LARGE POSTERIOR CERVICAL MYOMA

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Objectives: to present the laparoscopic removal of a 9x9x8cm posterior cervical myoma.

Methods: A 43-year-old woman with a history of two prior caeserian sections and a BMI of 28 was diagnosed with a large posterior cervical myoma, confirmed by ultrasound and MRI, and underwent laparoscopic myomectomy. The surgery followed the classic laparoscopic technique using 30 degree camera, two 5mm and two 10mm trocars. The uterus was preserved on demand of the patient.

Results: The planned surgical procedures were successful. The operating time was 200min and the blood loss was approximately 350ml. No intra or post-operative complications occurred. The patient was discharged on day one. Histopathology revealed cellular leiomyoma.

Conclusions: This case suggests that laparoscopic removal of a large posterior cervical myoma is a feasible alternative to total hysterectomy.

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ES23-0428
Video Session 2: Operative Risk Management

THANK GOD WE MISSED IT!!!!! (TWO VIDEOS THAT SHOW THAT COMPLICATIONS DURING LAPAROSCOPIC SURGERY CAN OCCUR WHEN LEAST EXPECTED.)

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To present two potential severe complications that were avoided by chance and to discuss methods of preventing future recurrence.

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ES23-0430
Video Session 2: Operative Risk Management

USING COMBINED TECHNIQUES FOR BLEEDING CONTROL IN LAPAROSCOPIC MYOMECTOMY: VASOPRESSIN AND TEMPORARY OCCLUSION OF THE UTERINE ARTERY.

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The purpose of this video is to demonstrate the use of two combined techniques in controlling hemorrhage in laparoscopic myomectomy.

Uterine fibroids has a prevalence of 40% in women aged 35 years. The tumor resection is indicated in several situations, and abnormal uterine bleeding is the most common reason to indicate surgery. The main complication of myomectomy is excessive intraoperative bleeding. Therefore in order to maintain the clinical conditions of the patient it is necessary to control the bleeding, facilitate

suturing, preventing the appearance of bruising and minimize the use of thermal energy, thus reducing the risk of unintended hysterectomy. Some techniques described for better bleeding control are temporary occlusion of the uterine artery and intraoperative use of vasoactive drugs. Vasopressin has the advantage of a long half life of about 30 minutes when compared to the other drugs.

The technique presented in surgery begins with vasopressin application in the largest myoma, between the base of the myoma and myometrium, causing local vasoconstriction and subsequent enucleation of this nodule with reduced bleeding at this surgical site. Then after the retroperitoneal dissection, using the obliterated umbilical artery as anatomical reference, the uterine arteries were clamped bilaterally.

The surgery was performed with 3 supra-pubic auxiliary ports. For hysterotomy it was employed monopolar electrosurgery connected to hook forceps. The cleavage plane of dissection was done with ultrasonic energy and traction of the fibroid with Pozzi.

Take home message: The use of two techniques associated for bleeding control and hemostasis was effective and is an alternative to be considered in extreme situations.

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ES23-0288
Video Session 2: Operative Risk Management

THE USE OF HEMOSTATIC SEALANT(TACHOSIL) IN PRESERVATION OF OVARIAN RESERVE DURING LAPAROSCOPIC OVARIAN CYSTECTOMY

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Objectives
Laparoscopy has become the gold standard for surgical treatment of benign ovarian cysts and is usually performed by stripping the ovarian cyst wall, followed by bleeding control of the ovarian wound ground using bipolar coagulation. However, hemostasis achieved with bipolar coagulation result in damage to the ovarian reserve. In recent our study, we found that hemostasis by hemostatic sealant(FloSeal) is superior to that achieved by bipolar coagulation in preserving ovarian reserve in patients undergoing laparoscopic ovarian cystectomy.
In this video, we will show the hemostasis by another hemostatic sealant agent called 'Tachosil'. Tachosil is not easy to manipulate due to it's sticky property. Objective of this video is to demonstrate easy application of Tachosil during laparoscopic ovarian cystectomy.

Methods
Women who were planning to undergo laparoscopic ovarian cystectomy for benign ovarian cysts were invited to participate. After the introduction of general anesthesia, the patient was placed in the Trendelenburg position, and a single channel port was inserted through the umbilicus. Identifying a cleavage plane between the cyst wall and ovarian cortex, the ovary was pulled slowly and gently in opposite directions by means of two atraumatic grasping forceps. Once the whole cystic wall was

separated from the ovarian cortex, Tachosil was applied for hemostasis. Because of difficulty to handle of Tachosil, a peculiar method was performed using with gauzes. Cutting into same sized with Tachosil, gauzes were applied on Tachosil's nonfunctioning surface. After inserting through the umbilicus, the materials were attached at remained ovarian surface and compressed using with grasping forcerps for about 2 minutes. Afterthat the gauzes was removed softly leaving Tachosil to ovarian surface.
Results
Procedure was performed successfully without complications. There was no bleeding at remained ovarian surface.
Conclusions
This is a record of a demonstration on how to place Tachosil simply after conducting ovarian cystectomy in a patient. According to procedure of video, we believe that adequate application of Tachosil will help preservation of ovarian reserve in patients.

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ES23-0524
Video Session 2: Operative Risk Management

VAGINAL CUFF DEHISCENCE
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Introduction: Vaginal cuff dehiscence after total laparoscopic hysterectomy presents an incidence between 0.3 and 3.1%. Possible causes may be the electrosurgical colpotomy, the technique used for vaginal vault closure and an early resumption of regular activities after surgery.

Clinical case: We present the case of a 46 year-old patient complaining with dysmenorrhea, dyspareunia and hypermenorrhea due to uterine fibroids, adenomyosis and rectovaginal septum endometriosis. She underwent a total laparoscopic hysterectomy with rectovaginal endometriotic nodule excision. Eighty-three days after the surgery the patient complained of acute abdominal pain triggered by sexual intercourse. At examination she presented a vaginal cuff dehiscence around 5mm with no vaginal blood loss, haematoma or evisceration that has been managed by laparoscopy.

Conclusion: In this patient several factors contributed to the vaginal cuff dehiscence, including weakness of the tissue by the endometriosis, thinning of the vaginal wall caused by the surgery, suture technique and increased tension on the suture.

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ES23-0149
Video Session 2: Operative Risk Management

TRANS-VAGINAL REPAIR OF VAGINAL WOUND BREAKDOWN AFTER TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH)
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Recently TLH has widely spread but several reports show that there are complications around the vaginal stump after the operation, for example, bleeding of the stump, abscess, and wound breakdown. In our clinic, we perform total 290 TLH from 2011 to 2013. We have experienced 3 wounds breakdown and in all cases we repaired trans-vaginally. We will show one case that we performed repair of wound breakdown.

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ES23-0080
Video Session 2: Operative Risk Management

TO AVOID COMPLICATIONS DURING FIRST TROCAR ENTRY - A METHOD OF DIRECT PUNCTURE VIA THE UMBILICUS WHERE THE FASCIA IS ABSENT USING A 5-MM SCOPE.
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Objectives:Forty percent of laparoscopic complicationsoccur during first trocar insertion.Overlookingexisting vascular or bowel injury can be fatal. Recently, with advancements inoptical equipment, the image quality of 5-mm scopes has improved rapidly. Here,we introduce a method of direct puncture via the umbilicus where the fascia isabsent using a 5-mm scope.

Methods:In our hospital, four ports are placed in adiamond configuration, and the first trocar of 12 mm is inserted with thesemi-open first umbilical trocar access technique using a 10-mm scope. When thefirst trocar cannot be inserted with this conventional method, it is convertedto an open technique, in which the fascia is grasped and incised directly.However, there have been a few cases in which the bowel was grasped with thefascia, and the trocar was inserted into it. When a 5-mm trocar is insertedperpendicularly in the non-fascial part after a 5-mm skin incision has beenmade while grasping and elevating the umbilicus to avoid bowel injury, thetrocar can be inserted into the abdominal cavity with little resistance withoutincising the fascia.

Results:The direct puncture method via the non-fascialpart of the umbilicus using a 5-mm scope was initiated in 2011, and there hasbeen no complication during first entry for 2 years.

Conclusions:With advancementsin optical equipment, the use of 5-mm scopes may predominate in the future. It isconsidered that safe placement of the first trocar can be facilitated with thedirect puncture method via the non-fascial part of the umbilicus.

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ES23-0139
Video Session 2: Operative Risk Management

EARLY REMOVAL BY LAPAROSCOPY OF MISSING FOREIGN BODIES FROM PREVIOUS OPERATIONS IS THE KEY FOR SUCCESSFUL OUTCOME

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Objective: Early detection and immediate removal of missing foreign bodiespreferably by key hole surgery is the key for successful outcome.

Introduction:Missing swabs or gauges is not an extinct situation during laparotomy. The most common complication is intraperitoneal abscess and plastron of the foreign body with the bowels, as long as adhesions in the lower pelvis. The standard practice is to re-operate the patient by laparotomy and remove the swab. On the other hand, missing broken particlesof endoscopic instruments in the abdominal cavity, is an unusual complication,since once they are misplaced, they should be removed immediately.

Material and Methods: A 25 year old woman was operated in a private district hospital by laparotomy for right hydrosalpinx, prior to IVF treatmentand underwent salpingectomy. The patient presented chronic pelvic pain for the following 3.5years. A CT-scan was performed and the report was indicative of a missing surgical swab.

The second caseincluded a 40 years old patient who underwent laparoscopic hysterectomy withoutadnexectomy for meno-metrorrhagia due to adenomyosis. During the interventionthe tip of the monopolar diathermy was broken and despite thorough inspectionand application of C-arm in the operation theatre, the tip of the device wasnot found.

Results: The first patient underwent divertion of the intraperitonealabscess, removal of the swab and extensive adhesiolysis and was discharged onthe next day. She became pregnant at the second IVF trial.

The second patient, three days after the initial intervention presentedfever, for which she received antibiotics, while on the seventh postoperativeday presented with symptoms of peritonitis. She underwent immediatelaparoscopy, during which filmy adhesions in the lower abdomen were found andlysed, while the tip of the device was found rusty at the right pelvic wall andremoved. The patient was discharged on the second postoperative day.

Discussion: Laparoscopic approach is a successful technique for removal of missing foreign bodies into the abdomen even after laparotomy. Keys to successful outcome are the competence of the surgeons and precisepreoperative evaluation.

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ES23-0043
Video Session 2: Operative Risk Management

HYSTEROSCOPIC COMPLICATION IN YOUNG WOMEN WITH ENDOMETRIOSIS ASSOCIATE TO DIAPHRAGM DEFECT AND ROBOTIC REPAIR.

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We present a case of robotic surgical repair of two uterine fistulas subsequent an hysteroscopy evaluation for infertility associated with endometriosis.
A young women 37 years old has been operated in our department for uterine fistulas subsequent a previous hysteroscopic study for infertility some years ago. In addiction two years before the patient was been operated for a diaphragm rupture and Endometriosis with a prothetic reparation.
Patient present dysmenorrea and chronic pelvic pain with fever each menstrual period, associated a long bleeding period and dyspareunia. Hysterosalpingographic study was made to evaluate the uterine cavity aspect and IRM study confirmed ovarian and peritoneal endometriosis.
We made robotical surgical approach to remove a like-bag pouch on uterine wall and repair fistulas. Our decision was guided by previous surgical history of patient.
After 8 months a Laparoscopic second look was made to evaluate the pelvis.

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ES23-0272
Video Session 3: Urogynaecology

LAPAROSCOPIC REPAIR OF VESICOVAGINAL FISTULA
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Objective: Genitourinary fistula is defined as an abnormal communication between the genital and urinary system organs. The most common type of genitourinary fistula is vesicovaginal fistula. In developing countries, 90 percent of genitourinary fistulas arise from obstetric trauma, however in developed countries, iatrogenic injury during pelvic surgery is responsible for 90 percent of vesicovaginal fistulas. Hysterectomy is the most common surgical cause of vesicovaginal fistula and laparoscopic hysterectomies are reported as associated with the greatest incidence. In this video presentation, we aimed to present laparoscopic repair of vesicovaginal fistula in a patient with the history of laparoscopic hysterectomy in a different health center.

Methods: In this video, we describe a laparoscopic repair of vesicovaginal fistula.

Results: Operation time was 140 minutes. The patient was discharged with bladder catheter on postoperative day one. The bladder catheter was removed 2 weeks after operation and retrograde cystography was revealed no fistula.

Conclusions: Vesicovaginal fistula can be repaired by laparoscopic surgery with advanced surgical skills.

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ES23-0013
Video Session 3: Urogynaecology

A CASE OF LAPAROSCOPIC SACROCOLPOPEXY TO TREAT RECURRENT VAULT PROLAPSE AND VAGINAL MESH EROSION SUBSEQUENT TO 3 PRIOR SURGERIES

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Importance and relevance

Abdominal sacrocolpopexy is safe and effective and is considered the gold standard in vault prolapse repair. Laparoscopic sacrocolpopexy follows the same technique with advantages of enhanced view, more anatomical repair with less scarring, reduced postoperative morbidity and shorter stay in hospital. This is particularly suitable for elderly women. Our case demonstrates that laparoscopic colposuspension can be safely offered to patients with recurrent vault prolapse subsequent to a failed abdominal sacrocolpopexy with vaginal mesh erosion.

Case report

66 year old lady underwent Vaginal Hysterectomy, Anterior and Posterior repair in April 1990 for a 2nd degree UV prolapse, large cystocele and moderate to large rectocele. She developed a Vault prolapse and underwent Abdominal Sacrocoplopexy using a polypropylene mesh in May 2005.

She developed recurrent prolapse in May 2012 and had a ring pessary inserted. In December 2012 she was referred with mesh erosion and prolapse and noted to have a complete vault prolapse with mesh erosion near the right angle of the vault. In May 2013 she underwent a Sacrospinous Fixation with ‘fix it’ and the visible mesh was dissected away and buried. On follow up in September 2013 a recurrent vault prolapse was seen. She underwent a Laparoscopic excision of Sacrocolpopexy using polypropylene mesh in December 2013. It was a routine 4 port laparoscopy and she went home on Day 1 and at the 8 weeks follow up is doing well with no residual prolapse or erosion.

Literature review and conclusions

Abdominal sacrocolpopexy is considered the gold standard for vault repair [1]. Reported success rates for this procedure ranges from 78-100% with an extrusion rate of 3.4% [2]. The aim of surgical repair must address the need to preserve or improve function and should restore normal anatomy [3]. Abdominal sacrocolpopexy is more effective than vaginal sacrospinous colpopexy in reducing recurrent vault prolapse (4% Vs. 15%) and in preventing postoperative dyspareunia [4]. The benefits of the abdominal approach must be weighed against a longer operating time and return to normal activity and increased costs [5].

Abdomino sacrocolpopexy and sacrospinous fixation had failed in our case, having been offered after failed primary prolapse repair. The shortened vaginal length and the advantages of laparoscopic surgery especially with regards to lower postoperative morbidity convinced us to offer this to our patient versus a redo sacrospinous fixation on both or the left side.

References

1. The management of post hysterectomy vaginal vault prolapse. RCOG Green-top Guideline No. 46, October, 2007

2. NICE Interventional Procedure Guidance 284; 2009

3. The Obstetrician and Gynaecologist July 2013; 15:3: 167-170

4. The Obstetrician & Gynecologist July 2009; 11:3:169-176
5. Surgical management of pelvic organ prolapse in women. Maher et al; Cochrane Database Systemic review 2007- updated 2010 and 2013

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ES23-0112
Video Session 3: Urogynaecology

LAPAROSCOPIC DISSECTION OF SACRAL PROMONTORY FOR SACROCOLPOPEXY
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Video objectives: Describe the laparoscopic dissection of the promontorium in laparoscopic sacrocolpopexy, with a special focus of anatomical landmarks and surgical traps.

Setting: Department of Gynecology, CMCO, Strasbourg University Hospital – France.

Patients: Women with invalidating genital prolapse.

Interventions: Laparosopic sacrocolpopexy are performed using three operative trocars (one midline suprapubic, two lateral ports) and a 0° umbilical Storz optical trocar. In order to suture a polypropylene mesh to the anterior vertebral ligament, promontory area has to be dissected. To improve exposure of the sacral promontory, we usually suspend rectum to the left anterior abdominal wall with T-Lifts®. Then, palpating the area under aortic bifurcation and iliac veins confluence identifies sacral promontory. Right ureter is also identified. Using two duck jaw fenestrated forceps, peritoneum is lifted (retroperitoneal vessels are fixed to the vertebral elements) and widely opened. Then, promontory is carefully dissected until the anterior vertebral ligament is seen. Rich in blood vessels and nervous elements, surgeons are advised to avoid the presacral space.

However, surgical approach of the vertebral ligament is sometimes difficult in obese women, when patients present anatomical variations such as: low iliac veinous circulation confluence, duplicity of middle sacral vessels, periosteal perforators, winding right common iliac artery, or in presence of lymph node.

Discussion: Laparoscopic sacrocolpopexy complications rates, such as bleeding coming from promontory varies from 0% to 4,7%, which sometimes requires conversion to open abdominal sacrocolpopexy. Described by radiologists at almost 3 centimeters from sacral promontory, right ureter can also be injured during reperitonization.

Conclusion: Promontory laparoscopic dissection implies to be careful of non infrequent anatomical variations.

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ES23-0205
Video Session 3: Urogynaecology

MINILAPAROSCOPIC APPROACH TO SACROCOLPOPEXY
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Genital prolapse repair is one of the most common indications for benign gynecologic surgery. Actually, as average life span increases, pelvic floor disorders are more common in female population. It is estimated that up to 50% of all women over 50 years of age are affected by pelvic organ prolapse (POP).
Sacrocolpexy has shown superior outcomes for correcting apical prolapse after total hysterectomy when compared to a variety of other vaginal procedures including sacrospinous colpopexy, uterosacral colpopexy and transvaginal mesh. With the continuous focus on minimizing visibility of scars new technological advances were developed in order to create small diameter endoscopes (5mm) and surgical instruments (3mm). Minilaparoscopy limits tissue trauma, postoperative pain and improves cosmesis.
We aim to report a video with our initial experience in performing minilaparoscopic sacrocolpopexy to correct vaginal apical prolapse after previous total hysterectomy.
Intraoperative complications, defined as bowel, bladder, ureteral, or vascular injuries, and an estimated blood loss > 200 mL were not observed.
Anatomical assessment and patient subjective evaluation were very positive.

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ES23-0285
Video Session 3: Urogynaecology

OUTCOMES OF LAPAROSCOPIC SACRAL COLPOPEXY
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Objective: Pelvic organ prolapse (POP) is common and increasing along with the aging of populations in many countries. POP patients should be assessed properly to select the best treatment for them. At our hospital, we started laparoscopic sacral colpopexey (LSC) in 1999. Here, we review and report our surgical outcomes.

Methods: Between January 2001 and May 2014, we performed LSC in 93 patients who have apical vaginal prolapse after hysterectomy or who are estimated to have high risk recurrence as POP-Q stage III–IV. We reviewed their cases retrospectively using medical records. We divided patients into five groups by operative procedure: Group 1, vaginal total hysterectomy (VTH) + colporrhaphy + LSC; Group 2, colporrhaphy + LSC; Group 3, total laparoscopic hysterectomy (TLH) + LSC; Group 4, LSC (uterus preserved); Group 5, LSC (double mesh).

Results: Group 1 (55 cases): The mean operating time was 114.3 min and the mean estimated blood loss was 71.8 ml. Group 2 (11 cases): The mean operating time was 108.2 min and the mean estimated blood loss was 29.5 ml. Group 3 (5 cases): The mean operating time was 176.5 min and the mean estimated blood loss was 94.2 ml. Group 4 (5 cases): The mean operating time was 118.5 min

and the mean estimated blood loss was 36.3 ml. Group 5 (8 cases): The mean operating time was 105.3 min and the mean estimated blood loss was 28.1 ml. A recurrence occurred in each of Group 3 and 4. We found no complication in any patient.

Conclusion: LSC is useful for patients with a high risk of POP recurrence. We expect to perform LSC safely and effectively with improvement of surgical skills and increased experience.

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ES23-0067
Video Session 3: Urogynaecology

CERVIKOSACROPEXIE WITH LAPAROSCOPIC POSTERIOR REPAIR
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ES23-0530
Video Session 3: Urogynaecology

LAPAROSCOPIC SITE SPECIFIC REPAIR OF PELVIC FLOOR DEFECTS
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Laparoscopic Site Specific Repair of Pelvic Floor Defects

Objective: To study the efficacy of laparoscopic management of significant utero vaginal prolapse and post-hysterectomy vault prolapse (POP) without the use of mesh

Design & Methods: Tertiary care referral centre for advanced laparoscopic surgery.115 cases of POP were managed over last five years. Endopelvic fascia along with levator ani muscles form the main support of the pelvic organs. Cullen Richardson pointed out that prolapse was not caused by stretching of the supports of the pelvic organs but by breaks in the endopelvic fascia. These breaks usually occurred at the attachment of endo pelvic fascia to arcus tendineus white line. These defects can be readily identified and repaired judiciously using laparoscopic route. Non-absorbable sutures are used to approximate the torn rectovaginal septum building the recto vaginal septum back to the level of ischial spine.Pubocervical fascia is plicated to obliterate the hiatus anteriorly to prevent cystocele. Next fixation of vagina or vaginal vault to the proximal ends of utero sacral ligaments at level of pericervical ring is carried out.Uterosacral ligament plication is done ipsilaterally on both sides starting at level of iscial spine till the back of uterus. Vault prolapse after hysterectomy and prolapse with intact uterus were managed by this technique of site specific repair.

Results: Good surgical correction obtained combining an anterior and posterior site specific laparoscopic repair. At follow up of four years no patient developed any recurrence of symptoms or prolapse, and good level of satisfaction.

Conclusion: Laparoscopic approach to prolapse repair ensures better surgical out come by easy recognition of pelvic floor support anatomy along with good anatomical correction employing endosuturing.

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ES23-0432
Video Session 4: Innovations

ULTRASOUND GUIDED LAPAROSCOPIC FIRST ENTRY: A NEW METHOD AND DEVICES – FIRST RESULTS FROM AN EXPERIMENTAL PROCEDURE.

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Objectives

First entry still represents the main source of complications in laparoscopic surgery as many of the gestures are made blindly. A scarred abdomen poses the risk for bowel injury depending on the type of prior surgery. Methods that use ultrasound like visceral slide or peroperative periumbilical ultrasound guided saline infusion predict with high accuracy the existence of subumbilical adhesions.

Therefore I have developed an alternative method and devices that use ultrasound as a guiding tool for the Veress needle. A needle guide for laparoscopic surgery with the ability to lift the abdominal wall is presented.

Method

In a plastic container, the anatomy of the abdominal wall with a simulated underlying adhesion is recreated by inserting layers of an ultrasound conductive gel within a vacuumed wrap.

Surgery is simulated, demonstrating a good delineation of the trajectory of the Veress needle, especially by instillation of saline that creates fluid pockets for a better picture of the abdominal layers on ultrasound.

A balloon retractor is further presented that is to be inserted as an external sheet for the Veress needle after insufflation. It comprises: a shaft, an inflatable balloon surrounded by an outer mesh with a specific display of the fibers and a pilot balloon. Upon insertion of the trocar, its sharp tip will cause the balloon retractor to burst, followed by the collapse of the mesh around it, resulting the catch and entanglement of the tip of the trocar. The procedure is recreated in an experimental setting.

Conclusion

Although still in an experimental setting, and requiring further studies, this experiment indicates that this new devices and method could transform the blind gestures of first entry into standardized, reproducible and documentable ones, with possible first entry sites at any point of the abdominal wall. The use of the balloon retractor protects the inner organs form trocar inflicted injuries.

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ES23-0107
Video Session 4: Innovations

LAPAROSCOPIC IMPLANTATION OF NEUROMODULATORS FOR URINARY AND MOTORIC REHABILITATION OF PARAPLEGIC INDIVIDUALS DUE TO MULTIPLE SCLEROSIS

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INTRODUCTION

The laparoscopic implantation of neuromodulation electrodes was first described by Possover in 2008 as a rescue procedure in patients with local complications of a Brindley procedure. Due to its successful results and lesser invasiveness, it was then used as a primary procedure in spinal cord-injured patients, aiming to improve locomotion and bladder function. Long term data has shown improvement in voluntary motor function and sensitivity, suggesting positive effects on neuroplasticity.

The objective of this video is to demonstrate the technique for laparoscopic implantation of electrodes for bilateral neurmodulation of femoral, sciatic and pudendal nerves and describe our initial experience with two Multiple Sclerosis patients.

CASE REPORTS

Our first implantation was performed on a 44 year-old woman with 14-year history of primarily progressive MS. Since one year before the procedure she was on a wheelchair due to spastic paraplegia and wearing diapers due to urge urinary incontinence.

Urodynamic evaluation revealed increased bladder sensitivity and detrusor overactivity, leading to complete bladder emptying after 201mL of saline infusion.

The second case is that of a 54 year-old woman with a 20-year history of gradually progressive MS. Since two years before the surgery she was on an electric bike due to spastic tetraparesia and wearing diapers due to urge urinary incontinence, and had already failed interferon, gamaglobulin, intrathecal cortisone and intracranial stem-cell therapies. Urodynamics revealed detrusor overactivity with phasic contractions followed by reduction in electromyographic perineal activity.

The proposed therapy for both patients was the laparoscopic implantation of neuromodulation electrodes on the femoral nerves, to promote quadriceps contraction and modulate spasticity; on the lumbosacral trunks to enhance plantar flexion of the feet and on the pudendal nerves to improve continence.

The procedure starts with the dissection of the femoral nerve is then extended to the obturator fossae and carried down to the ischial spine, revealing the sciatic and pudendal nerves.

A quadripolar electrode is then implanted with two poles into the Alcock's canal and the two other laying over the lumbosacral trunk and tied to the pelvic pectineal line.

The proximal poles of the electrodes are exteriorized and connected to the test cable, to confirm a successful implantation. Another electrode is implanted on the contralateral side in a similar fashion.

The other two electrodes are implanted posteriorly to the femoral nerves and tied to the transversus abdominalis muscles.

After surgery, both patients presented full recovery of urinary symptoms. One of them now finds it easier to stand up for transfers and daily activities and the other managed to advance from the wheelchair to the walker.

CONCLUSION
These two videos demonstrate her gait evolution from the first moment when neuromodulation was turned on to three weeks after the implantation.

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ES23-0286
Video Session 4: Innovations

OVARIAN CYSTECTOMY MADE EASY..
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Objective : To reduce the amount of bleeding during ovarian cystectomy, avoiding the use of cautery and thereby preventing damage to the ovarian tissue.
Method : During ovarian cystectomy, Inj. vasopressin 20 units diluted in 100 ml saline was injected into the broad ligament. Using a 3mm pitressin injection needle, 10 - 20 ml of the solution was used. The vasoconstriction of the ovarian vessels reduced the bleeding from the cyst wall and base. The method was applied to all ovarian cyst surgeries, including dermoid cysts, mucinous cysts and choclate cystectomy.
Result : The amount of blood loss reduced significantly. The was no need to use the cautery in majority of the cases after the removal of the cyst to control the bleeding from the ovarian tissue. In few cases, bleeding points were identified with a wash and then cauterised to get effective hemostasis.
Conclusion : Using vasopressin is an effective way to prevent bleeding in an ovarian surgery. This avoids the use of cautery in the ovarian tissue and thereby preserves the ovarian function and fertility potential of the patient. The bloodless field also helps to identify the correct planes for cyst dissection, making the surgery easier.

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ES23-0456
Video Session 4: Innovations

VAGINAL VAULT SUSPENSION TECHNIQUE DURING TOTAL LAPAROSCOPIC HYSTERECTOMY IN A CASE WITH PREVIOUS HYSTEROPEXY.
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Vault prolapse following hysterectomy is more likely if there was pre-existing pelvic floor defect or prolapse. Uterosacral ligament vault suspension during total laparoscopic hysterectomy is a commonly done procedure to prevent vaginal vault prolapse. Here we describe a technique, in which we retain the rectus sheath sling used in the hysteropexy procedure that was done earlier on the patient to treat uterocervical prolapse.

Objective:

The same rectus sheath sling was utilized to suspend vaginal vault in addition to uterosacral ligament vault suspension. The objective is to prevent vault prolapse in future.

Method:
We present a report of a 41 year old female with history of menorrhagia since 6 months. She had undergone hysteropexy with rectus sheath flaps three years back. She had two normal vaginal deliveries in past and has two healthy children. In this case, total laparoscopic hysterectomy was done after dissecting the sling from anterior surface of uterus, keeping it intact. Vaginal vault closure was done using no 1 polygalactin sutures, hitching bilateral uterosacral ligaments to the vault. The vault was then suspended by adhering rectus sheath sling to it with no1 polygalactin sutures, followed by closure of peritoneum.

Result:

In this unique procedure, a previously used autologous sling was utilized for prevention vault prolapse following hysterectomy. It precluded use of any foreign material. There were no complications during the 98 minutes duration of surgery. On follow up after 4 months, there was no vault prolapse.

Conclusion:
This is a cost effective technique that can avoid future surgery for vault prolapse in such cases.

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ES23-0287
Video Session 4: Innovations

ECTOPIC REMOVAL.. & REPAIR ??
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1Gynaecological Endoscopy, Akola Endoscopy Centre, Nagpur, India
2Gynaecological Endoscopy, Akola Endoscopy Centre, Akola, India
Objective : To be able to remove the ectopic pregnancy and prevent damage to the tube and to repair the tube so that patency of the tube is restored.

Method : Ectopic pregnancy operated laparoscopically usually means doing a salpingotomy and removal of the ectopic. The bleeding which happens results in cauterisation of the tube and resultant tubal damage. This leads to fibrosis and tube being blocked. To avoid the tubal damage, we inject vasopressin into the broad ligament. 20 units of Inj. Vasopressin, diluted in 100 ml of saline and 10 - 20 ml of this solution is injected with a 3mm injection needle into the broad ligament. Care is taken to avoid the congested vessels. The ectopic if unruptured, is opened with a scissors on the anti mesenteric border. No cautery to be used. Ectopic removed and tube suctioned gently and then flushed with methylene blue. The bleeding stops in about 5 min. The tubal opening is then repaired with 6-0 suture.
Result : The entire surgical procedure of removal of the ectopic pregnancy and the tubal repair gets done without the tube getting damaged by cautery. The tubal repair done at the same time allows the tube to heal properly, without fibrosis. Using vasopressin is a simple, effective way of preventing bleeding and thereby preventing cauterisation and fibrosis of the tube.

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ES23-0473
Video Session 5: Oncology

LAPAROSCOPIC TIPS AND TRICKS TO EVALUATE PERITONEAL CARCINOSIS INDEX IN OVARIAN CANCER
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Background
A thorough laparoscopic assesment of the abdomiopelvic cavity is a crucial step in the workup of an adnexal carcinomatosis to decide, between upfront cytoreductive surgery or neoadjuvant chemotherapy, which is the best option for an adequate management. The purpose of this video is to present our technique of this peritoneal staging procedure.
Material and methods
We use a single-port laparoscopic approach(Gelpoint - Applied system) which enables the surgeon to adequately explore the abdominal cavity and assess the Sugarbaker ´ PCI score, thanks to a 30 degrees laparoscope,several instrument and an endoscopic retractor. In addition,due to the protection of the incision by an Alexi Sound protector, it is possible to perform and extract multiple biopsies with minimal risk of port site contamination.
From 2012,25 women have been assessed with this technique and compared to classical laparoscopy and laparotomy. Results of this series will be presented with the video.
Conclusion
single access laparoscopy seems to be a good method to adequately assess the origin and operabilityof a peritoneal carcinomatosis thusaiding us to plan optimal management.

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ES23-0409
Video Session 5: Oncology

TYPE C RADICAL HYSTERECTOMY WITH PELVIC LYMPHADENECTOMY FOR CERVICAL CANCER.
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2Gynaecology, IRCAD, strasbourg, France

This video shows a standardized and reproducible approach to radical hysterectomy. The procedure begins with the dissection of the lateral spaces of the pelvis to identify and isolate the pracervix. After the coagulation and section of the round ligament the surgeon perform a T shape incision till the psoas muscles to expose the field for the ileo-obturator lymphadenectomy. The paravesical fossa is then dissected in its medial and later aspect using the umbilical artery as landmark. Following the umbilical artery in a ventral-dorsal direction the surgeon identify the uterine artery and than the paracercix. Using the uterine artery as landmark of the paracervix the dissection continues posteriorly developing the Lasko and Okabayashi space to isolate the paracevix. Ones the spaces have been developed the lymphadenectomy is performed separating the external iliac vessels from the psoas muscle to reach the obturator fossa. During this step the obturator nerve is identified to avoid injuries and to mark the caudal limit of the lymphadenectomy.

The procedure continues with the isolation of the ureter in its anterior aspect between the paracervix and the bladder. To do so the bladder pillar is identified and the dissection continues between its medial and lateral aspect developing the so called Yabuky space. The bladder pillar is then transected at the level of the bladder. The rectal pillar is transected at the level of the rectum paying attention to isolate the inferior ipogastric nerve. The paracervix is then cut at the level of the ipogastric vessel and the ureter unroofed.

The vagina is cut with monopolar energy using a vaginal valve as a guide and the specimen extracted vaginally.

The vagina id closed with three stiches using extracorporeal knocking technique.

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ES23-0398
Video Session 5: Oncology

THE LAPAROSCOPIC PELVIC LYMPHADENECTOMY: TIPPS AND TRICKS FROM FRANKFURT.
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Background:

The pelvic Lymphadenectomy is an essential procedure in the surgical staging of early stage endometrial, cervical and ovarian cancer. Laparoscopic surgery is a safe and reliable alternative to laparotomy with significantly reduced hospital stay and postoperative complications. A good anatomical knowledge as well as the choice of proper operative instruments are mandatory to safely perform this procedure.

Video description:

In our video we describe the operative technique of the pelvic lymphadenectomy showing the important anatomical key structures of the pelvis. We also give our experience in standardizing certain operative steps and instruments to simplify the procedure.

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ES23-0422
Video Session 5: Oncology

DIAGNOSTIC VALUE OF LAPAROSCOPIC AND OPEN PELVIC LYMPHADENECTOMY IN EARLY ENDOMETRIAL AND CERVICAL CANCER: COMPARATIVE ANALYSIS

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Objectives: In early endometrial and cervical cancer pelvic lymphadenectomy is an important part of surgical staging in determining indications. Traditionally it's performed by laparatomic approach. Objective of this study was to compare the diagnostic role of laparoscopic and abdominal pelvic lymphadenectomy.

Methods: Study represents a retrospective review of 64 patients with laparoscopically and laparotomy managed preoperative clinical stage IA-IB endometrial cancer (endometrial adenocarcinoma) and IA-IB1 cervical cancer (squamous cell carcinoma) were carried out from 2010, through 2012.

Laparoscopic procedure was carried out using the same standard technique: initial evaluation of the peritoneal cavity was followed by the collection of peritoneal cytology. Total laparoscopic hysterectomy (TLH) was carried out in patients with preoperative grade 1 lesions. Laparotomic technique was similar to laparoscopic except the approach procedure. Uteri were sent to pathology for frozen-section evaluation for determination of grade and depth of myometrial invasion. If the lesion was upgraded, or if the depth of invasion exceeded one-half the myometrial thickness, or if the tumor covered a majority of the anterior and posterior walls of the uterus, laparoscopic lymphadenectomy was performed. In patients with preoperative grade 2 or 3 lesions, the lymphadenectomy was performed prior to the hysterectomy. Among 64 cases of pelvic lymphadenectomy 32 patients were operated laparoscopically (1st group), 32 - by abdominal access (2nd group). There were no differences in age, clinical stage, histologic type, body mass index in two groups.

Results: Operation time (180,3±22,2) min and (167,9±17,3) min, number of removed lymph nodes (from 6 till 11), rate of complications (1 case in each group), were similar in both groups. Positive pelvic lymphnodes were detected in 2cases in 1st group (6,3%) and 3 cases in 2nd group (9,4%). We used postoperative drainage after lymphadenectomy during 5-7 days until the amount of lymphorrea had markedly diminished (less than 70-80 ml). Lymphocele formation was detected in 2 cases in 1st group and 4 cases in the 2nd group of patients. There were also no differences for disease recurrence and survival rate in two groups.

Conclusions: There were no significal differences in diagnostic value of laparoscopic and abdominal pelvic lymphadenectomy in early endometrial end cervical cancer. Number of removed lymph nodes was similar. Laparoscopic lymphadenectomy is less invasive, that results in shorter hospital stay and less frequent lymphocele formation.

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ES23-0268
Video Session 5: Oncology

SURGICAL MANAGEMENT FOR A LARGE PELVIC METASTATIC LYMPH NODE BY LAPAROSCOPIC ROUTE

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To report as video presentation the possibility of debulking by laparoscopy for a large iliac metastatic lymph node.

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ES23-0349
Video Session 5: Oncology

TOTAL LAPAROSCOPIC NERVE SPARING PELVIC POSTERIOR EXENTERATION FOR STAGE IIIC EPITHELIAL OVARIAN CANCER

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3Surgical Oncology, Erasto Gaertner Hospital, Curitiba, Brazil
4Anesthesiology, Vita Batel Hospital, Curitiba, Brazil

This presentation shows the feasibility of optimal laparoscopic debulking for selected patients with advanced epithelial ovarian cancer

Surgeons: Ribeiro, R.; Kondo, W.; Hayashi, R. Luz, M.A.
OR team: Uliana G.N. (Anesthesiologist); Elysia M. (Scrub nurse)
Vital Batel Hospital - Curitiba - Brazil

Learning objective: Demonstrate the technique of pelvic posterior exenteration for patients with advanced ovarian cancer with nerve sparing considerations.
Epithelial ovarian cancer is one of the leading cause of death from gynecologic cancer in developed countries. Cytoreductive surgery is the initial treatment recommendation for patients with clinical stage II, III, or IV disease. (Ann Oncol 2005;16 Suppl 8:viii7-viii12., 113). Optimal surgical cytoreduction can include radical pelvic dissection, bowel resection, and others. (Gynecol Oncol 2007;106:69-74.) Radical surgical approach is getting even more important as patients with low-

volume residual disease after cytoreduction are potential candidates for intraperitoneal therapy (IP) (N Engl J Med. 2006;354(1):34.) As the open surgery for ovarian cancer is a morbid procedure, it can delay the start of the chemotherapy and, maybe, make IP more difficult. Laparoscopy can be used for debulking of patients with advanced ovarian cancer in a well-selected population (JSLS. 2010 Apr-Jun;14(2):155-68). We believe that laparoscopic radical surgery should be considered for this group of patients, reducing morbidity, shortening time from surgery to chemotherapy and, maybe, helping to reduce IP related abdominal morbidity.
Setting, equipment and instruments: The patient is placed in the dorsal decubitus under general anesthesia. The legs are positioned at 30 degrees flexion, the arms along the body and buttocks at the edge of the table. Urinary catheterization. The surgeon is positioned to the left of the patient, the first assistant to the right and the second assistant insert and control the uterine manipulator. Trocars placement: 10mm umbilical trocar, two 5mm trocar 2cm medial and cranial to the right and left anterior superior iliac spine and a 5mm trocar in the midline 8cm bellow the umbilical one.

It was used a Image 1 full set (Karl-Storz). Instruments: Graspers, scissor, bipolar forceps, harmonic scalpel, uterine manipulator, aspirator, hook, needle-holders.

Take Home message: Total laparoscopic posterior pelvic exenteration for advanced ovarian cancer is feasible for selected patients treated by experienced teams in gynecological malignancies and laparoscopic advanced surgery.

Conclusion: The patient was discharged from the hospital on the 3rd postoperative day and was ready to start chemotherapy on day 7 after the surgery. She had no postoperative complications after 30 days. Final pathological analysis confirm serous carcinoma of the right ovary with retal implants, extensive pelvic peritoneal and omental implants, appendix infiltration, and no lymph node involved.

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ES23-0476
Video Session 5: Oncology

SALVAGE LUMBO-AORTIC LYMPHADENECTOMY IN A RECURRENT CERVICAL CANCER PATIENT WITH LEFT RENAL VEIN VARIATION

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Objectives: Lumbo-aortic lymphadenectomy plays a significant role in the management of gynecologic malignancies such as ovarian/fallopian tube and endometrial cancer. Lately, its importance as a staging or even therapeutic procedure in cervical cancer patients is being evaluated through several studies.

For cervical cancer, the incidence of isolated para-aortic recurrence ranges from 2,1 to 3,6%. Although the 5-year survival rate of these patients has been reported to be 3% to 13%, Singh et al. found a 100% 5-year survival when the recurrent site was treated with chemoradiotherapy. Therefore, these patients could survive for as long as the patients with primary carcinoma and should be treated curatively.

It has been shown that laparoscopic lumbo-aortic lymphadenectomy (LLAL) is feasible and has a low morbidity rate compared with the laparotomic approach.

However, it encompasses some limitations in cases of recurrence hence surgery, radiotherapy, chemotherapy, or combinations of these modalities could lead to severe adhesions.

Anatomic variations in the major vessels are not so uncommon and contribute to an increase in the technical difficulties and preferably should always be identified in pre-operative exams in order to avoid injuries. Particularly, retro-aortic left renal vein has documented incidence of 1,7% in cadaver specimens.

The objective of this video is to show the LLAL in a patient with isolated para-aortic lymph node recurrence of cervical cancer.

Methods: In the 1 year follow-up after treatment of IIB SCC cervical cancer of a 54 yo asymptomatic patient, an isolated 1,7cm left para-aortic lymph node metastasis was identified through CT scan.

Initially palliative chemotherapy with cysplatin and paclitaxel was offered, but since the patient showed complete clinical-radiological response, a surgical approach was offered and an informed consent form was signed.

In pre-operative work-up there was no other site of tumor recurrence and CT scan showed a retro-aortic left renal vein.

Four trocars were placed: one 11-mm at the umbilicus and three 5-mm trocars in the lower abdomen, midline, and left and right side.

Exposure of the retroperitoneum was effective due to T-Lift devices holding the peritoneum folds.

The systematic approach of the retroperitoneal space was the key strategy for the successful removal of all bulky node disease which was firmly adhered to the aorta and abnormal left renal vein.

The radiotherapy field was marked with surgical clips.

The procedure was performed entirely by a fellow-in-training and assisted by an experienced surgeon and a resident.

Results: The procedure duration was 4h and the estimated blood loss 10cc.

Patient was dismissed on the next day and had no post-operative complication.

Pathological report showed involvement of 3 out of 13 nodes.

The patient is now performing chemoradiotherapy.

Conclusion: Salvage laparoscopic lumbo-aortic lymphadenectomy is feasible, even after previous therapy and in abnormal anatomic conditions.

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ES23-0375
Video Session 5: Oncology

VIDEO REPORT OF EXTENSIVE ADHESIOLYSIS IN SUSPECTED OVARIAN CARCINOMA
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Objectives

Adhesions are attachments of tissues at non-anatomical sites, resulting of surgical trauma. Adhesions are a source of major concern because of their clinical significance and the impact on the quality of life for millions of people worldwide. In certain situations, these adhesions can additionally simulate ovarian cancer cases. Nowadays, laparoscopy represents the gold standard to surgically approach such patients in a minimally invasive setting. Video demonstrating the importance of adhesions and adhesiolysis, in a patient presenting with suspected ovarian cancer.

Methods

Laparoscopy performed to a nulliparous 38-year-old female patient referred to the outpatient clinic of the Department due to gradually increasing left pelvic pain over a period of 3 months. Prior infertility workup after two miscarriages revealed bilateral tubal occlusion. An open myomectomy for an eight-centimetre subserous fibroid had been performed a year before. The gynaecological ultrasound now revealed a thirteen centimetre complex left ovarian cyst with multiple septa and solid areas, with low vascularization index.

Results
The ROMA (risk of ovarian malignancy algorithm) was positive. Extensive adhesiolysis was performed in a rather complex initial approach to a hidden pelvis. The large cyst proved to be septate fluid in adhesions. Patient was asymptomatic at the one-month follow-up appointment.

Conclusions
Postoperative adhesions are recognized as an important cause of morbidity, such as in chronic pelvic pain or infertility cases. Every abdominal surgery can causes adhesions, and these can be mistaken for the presenting symptoms of early ovarian cancer, especially with false positive tumor markers.

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ES23-0358
Video Session 5: Oncology

LAPAROSCOPY PARA-AORTIC LYMPHADENECTOMY FOR CERVICAL CANCER
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Objective. Introduce our experience of laparoscopic para–aortic lymphadenectomy.

Method. A 44 years old woman, with Ib2 cervical adenocarcinoma and no pelvic lymph node metastasis by MRI, treated with preoperative adjuvant chemotherapy based on one cycle of cisplatin 70mg/m2 and cyclophosphamide 800mg/m2 before,was scheduled to laparoscopic radical hysterectomy with para-aortic lymphadenectomy and pelvic lymphadenectomy. The patient was placed in Trendelenburg position under general anesthesia.CO2 was insufflated via the Verres needle .A 12mm trocar was inserted 5cm above the navel for the introduction of the camera. Four others were placed: one 12mm diameter in the left upper abdomen and one 5mm in the left lower abdomen and two others in the right side symmetrically. The right para-aortic lymphadenectomy started with the incision of peritoneum along the right common iliac artery up to the Treitz ligament. Identification of the right ureter as well as the upper edge of the infundibulopelvic ligament was made. The left para-aortic lymphadenectomy started with the placement of the mesosigmoid in the left upper abdominal cavity and with the identification of the inferior mesenteric artery and the left ureter. Lymph nodes around vena cava and of the aorta up to the level of inferior mesenteric artery were dissected.

Results. The operation was performed successfully with no intraoperative or postoperative complication. Operative time of para-aortic lymphadenectomy was 60 min.15 lymph nodes were removed and no metastasis was detected.The volume of red fluid from peritoneal drainage was 300 ml and 24-hour urinary volume with clear color was 1600 ml in day 1. Intestinal recovery and dietary intake was started at day 2.

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ES23-0154
Video Session 6: Miscellaneous

LAPAROSCOPIC APPROACH OF A UNICORNUATE UTERUS WITH NONCOMMUNICATING CAVITATED RUDIMENTARY HORN

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Background. Müllerian duct malformations delineate a miscellaneous group of congenital anomalies that result from arrested development, abnormal formation, or incomplete fusion of the mesonephric ducts. Unicornuate uterus with a rudimentary horn is one of the rarest congenital anomaly of the female genital system. It can result in a variety of gynecologic and obstetric complications.

Case. This video shows a cavitated, noncommunicating, rudimentary horn in a 17 years old girl who presented with lower abdominal pain and severe dysmenorrhea. A magnetic resonance image demonstrates a normal-appearing right unicornuate uterus (with a normal cervix and vagina) and a non-communicating left rudimentary horn with endometrium. According to the new ESHRE-ESGE classification system of female genital tract congenital anomalies, this case is classified as U4 C0 V0. A four-puncture laparoscopy was performed with a 10-mm infraumbilical port, a 10 mm suprapubic port, and two 5-mm suprapubic ports laterally in the right abdominal side and in midline. Laparoscopy revealed a normal right hemiuterus, tube, and ovary, and a left rudimentary uterine horn. A left salpingectomy was started at the fimbriated end using bipolar coagulation and laparoscopic scissors. The left tube was used to pull up the rudimentary horn. The left uterus was dissected apart from the bladder using scissors and bipolar coagulation and was removed using a morcellator (Karl Storz, Germany). She went home 1 day after surgery and began a regimen of oral contraception with 75 µg of desogestrel. She continues free of pelvic pain six after surgery.

Conclusion. This condition was diagnosed by MRI together with laparoscopy examination. Operative videolaparoscopy proved to be a successful approach for the treatment of this congenital Müllerian anomaly.

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ES23-0187
Video Session 6: Miscellaneous

INTERVAL HYSTEROSCOPIC EXCISION OF CAESAREAN SCAR PREGNANCY

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Objectives:

To illustrate the successful management of caesarean scar ectopic pregnancy with interval hysteroscopic removal of scar pregnancy tissues.

Methods:
Different strategies are employed in the management of caesarean scar ectopic pregnancy. Timely diagnosis and effective management are crucial in reducing morbidities and complications from this condition and in preserving future fertility.

The case illustrated in this video presentation was managed with transvaginal aspirate of sac fluid together with systemic and intra-gestational methotrexate. HCG plateaued at 4 units even 3 months after treatment. Transvaginal ultrasound demonstrated residual mass at uterine scar, thus outpatient hysteroscopic removal of scar pregnancy tissue was performed.

The hysteroscopic appearance of scar pregnancy tissue and the hysteroscopic removal were shown in this video. In the context of avascular tissue after methotrexate and with time, the outpatient procedure was performed, which was uneventful with minimal bleeding. Such hysteroscopic approach could be the optimal rescue treatment in the group of patients with small residual tissue and low HCG level.

Conclusion

This case illustrated the valuable role of hysteroscopy as interval treatment in caesarean scar pregnancy with persistent HCG and remnant tissues. Compared to other management modalities of scar pregnancy, interval hysteroscopic treatment allows safe removal of scar pregnancy and early return to fertility for future pregnancy. The timing and selection of patients for hysteroscopic treatment remain the key to minimize complications and optimize treatment outcome.

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ES23-0387

Video Session 6: Miscellaneous

BIPOLAR PLASMA ENERGY VAPORIZATION: A NEW ALTERNATIVE FOR ENDOMETRIAL ABLATION FOR PATIENTS WITH BLEEDING DISORDERS.

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Bipolar resectoscopy and endometrial ablation are recently incorporated techniques in the field of gynecological endoscopic surgery.

We describe our preliminary experience with this technique, based on clinical features associated with this kind of electrical surgery .

The hypothesis was that by adopting bipolar endometrial plasma vaporization instead of the traditional resectoscopy, due to its greater penetration power (3-5 mm), surgical bleeding could be reduced and postoperative effectiveness could be improved.

We performed 36 procedures of endometrial plasma vaporization, including 3 women presenting heavy menstrual bleeding associated to an inherited bleeding disorder.

All patients underwent a previous diagnostic hysteroscopy and endometrial biopsy. All patients presented abnormal uterine bleeding; with no myomas nor polyps.

A high frequency electrosurgical unit with both optional bipolar coagulation and cut , a 26 Fr bipolar resectoscope with a 12 degrees optic, an Endomat suction/irrigation system were used.(Storz Endoscopes)

At the video presentation, we show details of the hovering technique.

We had no intraoperative complications.

Recent studies (Muzii L, Bellati F et al 2007 ; Mencaglia L, Lugo E et al 2009; Berg A, Sandvik L et al (2009)reported that the bipolar resectoscopy is feasible and safe.

In our experience, endometrial ablation with plasma vaporization electrode was a safe and effective long term treatment in women with menorrhagia, and it appears to be a good alternative for women with bleeding disorders.

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ES23-0103
Video Session 6: Miscellaneous

LAPAROSCOPIC TUBO-CORNUAL ANASTOMOSIS FOR REVERSAL OF STERILIZATION

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This video shows a case of tubo-cornual anastomosis for the reversal after tubal sterilization. A 43 years old 4 parous patient, had a laparoscopic tubal sterilization using Hulka clips in 2003. She requests a reversal of this sterilization. On the hysterosalpingography, we can see that the Hulka clips are really near uterine horns.

The video demonstrates the dissection of the interstitial part of the tube, the catheterism of a guide hysteroscopically in the ostium then in the interstitial part of the tube and the tubo-cornual anastomosis. In our opinion, the quality of the anastomosis directly depends on the complete congruence of the two tubal stumps. Different prognostic factors are discussed in previous studies : age, type of sterilization (clips or coagulation), length of remaining tube and the site of anastomosis. According to literature, the best anastomosis site, in terms of successful pregnancy, would be the isthmic-isthmic position.
In our experience, the use of a tubal hysteroscopical guide seems the best help to obtain a luminal alignment and is more comfortable for the suture.

http://player.vimeo.com/video/103377418?autoplay=1

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ES23-0084
Video Session 6: Miscellaneous

A NOVEL METHOD OF SELECTIVE PERTUBATION AT OFFICE HYSTEROSCOPY
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Tubal dysfunction is a leading factor in female infertility. Laparoscopy dye is the gold standard to detect tubal patency, but hysterosalpingography (HSG) and hystero-contrast-sonography (HyCoSy) are also widely applied, but proved to be less accurate.

We developed a less invasive, effective and reproducible method, which can be performed in an outpatient setting without anesthesia. Office hysteroscopy guided selective chromopertubation (OHSC-SPT) can be applied as an outpatient procedure.

A 2.7 mm optic is used, with a 5.5 mm sheath (EMD Endoscopy Technologies) with an inbuilt working channel. Normal saline (0.9% sodium chloride) is used for distension.The patient is placed in dorsal lithotomy position. The hysteroscope is introduced without grasping or dilatation of the cervix, so any kind of anaesthesia is not needed. Diagnostic hysteroscopy is performed first, to exclude any anomalies of the uterine cavity or endometrium. Second step, a 1.7 mm diameter flexible, transparent plastic catheter (Cavafix, B-Braun) is introduced through the inbuilt channel of the sheath and the tip of it is placed into the tubal orifice. Through the catheter 2-10 ml of methylene blue dye (Patente Blue, 2 ml in 1000 ml saline) is injected slowly. With patent Fallopian tube the blue dye does not appear in the uterine cavity and normal color of the endometrium is seen. With tubal occlusion the distension media of the uterine cavity turns blue, according to the backflow of the methylene blue. After the backflow of the dye, it clears up in 3-4 seconds, so the whole procedure

can be performed on the other side. Based on the pressure, injecting the methylene blue dye, normal tubes and damaged, narrowed, but still functioning tubes can be differentiated, too.

Office hysteroscopy with selective pertubation can be safely performed without anaesthesia in an ambulatory setting. Patients refer minimal pain and discomfort during the procedure. Transvaginal sonography can be done before and after hysteroscopy measuring the free fluid around the ovaries and in Douglas pouch and exclude hydrosalpinx.
The novel method of OHSC-SPT is an effective, highly minimal invasive method to investigate the tubal patency, which can be performed in an office setting without anesthesia.

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ES23-0322
Video Session 7: Endometriosis 1

DEMONSTRATION OF NERVE SPARING RESECTION OF ENDOMETRIOSIS IN THE GREATER SCIATIC FORAMEN

J. Berger1, M. Smeets1, J. rhemrev1
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Demonstration of nerve sparing resection of endometriosis in the greater sciatic foramen

J.P. Berger, M. Smeets, J. Rhemrev, J. English
Objectives:

This video demonstrates the dissection of the left sciatic nerve into the greater sciatic foramen in the treatment of DIE causing sciatica and other symptoms.

Introduction:

The patient, a nulliparous 41 year old, presented with severe abdominal pain, dysmenorrhoea, dyschezia and left sciatica. Clinical examination revealed a large nodule palpable in the cul de sac. Both parametria were rigid and indurated. Neither adnexa was separately palpable. An MRI scan showed a (24 mm) endometrioma in the left ovary and a (27,2 mm) nodule in the rectum, dorsal to the uterus.

Method:

At laparoscopy we performed a hysterectomy and a low anterior resection. Following this, it became evident that there was significant DIE posterior to the sacral hypogastric fascia and the dissection was extended to include the sacral plexus and sciatic nerve running into the greater sciatic foramen. The post-operative course was complicated by transient loss of adduction of the left hip likely due to neuropraxia of the nerve to quadratus femoris (L4,5,S1) exiting the pelvis through the greater sciatic foramen.

Result:

Full motor function was restored with resolution of the sciatic pain.

Conclusion:

Dissection of the left sciatic nerve into the greater sciatic foramen in the treatment of DIE

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ES23-0438
Video Session 7: Endometriosis 1

FIRST SUCCESSFUL LAPAROSCOPIC LEER

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Objectives : Currently we know that the laparoscopic approach plays an essential role in the management of deep endometriosis lesions. Successful treatment lies in the radical surgical resection. Isolated ureteral endometriosis is rare, pseudotumoral form of low ureteral stenosis is the most common. The extension of these retroperitoneal lesion on the lateral pelvic wall can simulate an uterine cancer. Höckel's work shows that laterally extended endopelvic resection (LEER) by laparotomy is feasible, efficient with an acceptable rate of complications. Experienced laparoscopic surgeons have shown that laparoscopic approach was very comfortable for pelvic exenteration. But the laparoscopic technique of LEER has not been described. That is why we decided to do a LEER by laparoscopy in a case of severe retroperitoneal endometriosis.
Methods : Our case was a 37 years old multiparous patient with a large nodule of endometriosis invading the right parameter, part of the bladder trigone and lower right ureter. The nodule was 10 centimeters and caused pain. We decided to install higher than conventional gynecologic laparoscopy. We used the standard laparoscopic equipment: in particular ROBI bipolar grasper which is very useful to dissect.To control the right hypogastric vein we employed « ENDO-GIA » clip.

Results: we managed to achieve the first successful LEER by laparoscopy in eight hours. The patient didn't have any major post-operative complication. We noticed a deficit in the territory of the right obturator nerve in the immediate postoperative time. Today she just complains of moderate urinary incontinence.

Conclusion : The technique appears efficient. However it should be noted that this indication of LEER was very special and we can not conclude about outcomes on irradiated tissues of recurrent cervical cancer.

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ES23-0134
Video Session 7: Endometriosis 1

THE USE OF A HEMORRHOIDAL CIRCULAR STAPLER FOR A DISCOID RESECTION FOR DEEP ENDOMETRIOSIS NODULE.

R. Fernandes1, J. Castellano1, R. Murtada1, C. Meza1, G. Centini1, A. Wattiez1
1Gynecology, IRCAD EITS, Strsbourg, France

TITLE: The use of a hemorrhoidal circular stapler for a discoid resection for deep endometriosis nodule.

Summary: We report a case of a 30 year old patient presenting with dysmenorrhea, dyschesia and chronic pelvic pain. Surgery was performed laparoscopically and a bowel endometriotic nodule was removed by means of a hemorrhoidal circular stapler.

Introduction: Deep endometriosis is defined as implants invading more than 5mm in deepness from the peritoneal surface. Bowel is affected in 3-37% of the cases and specific strategy depends on the size of the disease. Superficial lesions can be managed by means of shaving whereas deeper ones need a complete wall resection. Circular staplers can be used when nodules reach no more than 3cm in size due to the limited reservoir.

Materials and methods: Surgical video of a 30 year old patient presenting with dysmenorrhea, dyschesia, chronic pelvic pain and a rectovaginal nodule. Both pararectal fossas were developed and bowel detached from the uterine torus. After revaluation of the bowel nodule a discoid resection using a hemorrhoidal circular stapler was performed. From the Departments of Gynecologic Surgery CHU Hautepierre, CMCO, NHC University Hospitals and from the Institute de Recherche contre les Cancers de l'Appareil Digestif (IRCAD), Strasbourg, France.

Results: The complete surgery was carried out laparoscopically. Patient didn't show any complications post operatively

Discussion: Large bowel endometriotic nodules are systematically managed by segmental bowel resection. Discoid resections are considered a radical, but more conservative approach if compared to segmental resections as the rae of complications are lower. Systematic shavings associated to larger circular staplers can spare some patients from a complete segmental bowel resection.

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ES23-0361
Video Session 7: Endometriosis 1

REVERSE TECHNIQUE AND RECTAL SHAVING IN THE TREATMENT OF DEEP ENDOMETRIOSIS

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Deep infiltrating endometriosis is diagnosed in 20% of women with endometriosis: 5-12% of patients have bowel involvement. Therefore, surgery for deep endometriosis is associated with high risk of major postoperative complications, especially in case of concomitant vaginal and rectal surgery. Traditionally, dissection of recto-vaginal endometriosis starts with the separation of the posterior surface of the nodule from the anterior rectal wall. However, in our experience, dissection can begin from posterior surface of uterus and vagina to obtain a complete nodule's circumscription. This approach is called 'Reverse technique' and these are its fundamental steps:

1 Mobilization of the sigmoid and identification of both the ureters. If necessary, ureterolysis has to be performed.

2 Opening of pararectal fossa. If the utero-sacral ligaments are involved, they have to be dissected and transected.

3 Lateral dissection of the nodule from the healthy fat of recto-vaginal space.

4 Anterior dissection of the nodule using a monopolar cutter and its release from the posterior surface of uterus and cervix.

5 Anterolateral dissection until a healthy vagina is identified below and outside the nodule trough repetitive intraoperative examination.

6 Resection of a patch of vagina is needed when the nodule is greater than 2cm: it is performed using scissor or monopolar cutter.

7 Complete nodule's release from the vagina and from its lateral attachment.

8 The rectal shaving is performed, pulling the nodule up with two grasp without complete opening of bowel wall.

9 Vaginal or laparoscopic suture of the vaginal wall defect.

Reverse technique enable a greater mobility and better visualization of nodule's landmark and it facilitates the rectal shaving and a more conservative management of recto-vaginal endometriosis. In our previous study this technique decreases the rate of postoperative complications. Moreover, in our experience, it seems to have a shorter learning curve.

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ES23-0186
Video Session 7: Endometriosis 1

BIPOLAR ENERGY FOR OVARIAN HEMOSTASIS IN ENDOMETRIOMA SURGERY: DURING, AFTER, OR NOT AT ALL?: PRESENTATION OF 3 DIFFERENT CYSTECTOMY TECHNIQUES COMPARED IN AN ONGOING RCT

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Objective:

To present three different operative techniques to achieve hemostasis during laparoscopic stripping of endometriomas.

Methods:
Our study has been recruiting reproductive age patients < 40 years old, with endometriomas scheduled for laparoscopic surgery. FSH and AMH levels will be measured during the early follicular

phase pre- and 6 months post-operatively. Before and 6 months after laparoscopy both ovaries will be assessed with a transvaginal scan: the shape and size of both the normal and diseased ovary will be examined, the size and morphology of the endometrioma recorded, and the characteristics of the residual ovarian tissue described. Additionally, ovarian follicles count will be performed during the late follicular phase on both the normal and diseased-operated ovaries. Laparoscopic cyst excision is performed by one of two experienced operators in endometrioma surgery, using 3 different and randomly chosen operative techniques,: a) Stripping, with bipolar energy hemostasis applied only after completion of the cyst excision, b) Stripping with bipolar energy applied briefly during each step of the cyst dissection aiming at a reduction in the total post-stripping duration of coagulation hemostasis, and c) Stripping with complete avoidance of electrical hemostasis which will be achieved exclusively with suturing the ovary in one or two layers with absorbable sutures. Operative parameters such as: Total time of bipolar energy application, number of bipolar coagulation attempts to achieve ovarian hemostasis e.t.c. will be recorded.

Results:
This report focuses on the description of the 3 techniques used for ovarian hemostasis. No preliminary data will be presented.

Conclusions:
Despite the fact that laparoscopic stripping is a most commonly used and effective treatment of endometriomas, we feel that little has been done to investigate most important aspects relevant to the correct and desirable application of this technique. It has been previously reported that normal ovarian tissue was histologically present in > 50% of stripped endometriomas, in comparison to only 6% of ovarian cysts with a real anatomic capsule (dermoids, serous, and mucinous cystadenomas). To this well recognized loss of ovarian tissue, excessive and/or untimely use of bipolar energy to prevent bleeding, or achieve post-stripping hemostasis may further deteriorate ovarian reserve. Furthermore, the role of ovarian suturing as the solely applied hemostatic tool has not been adequately assessed in endometrioma surgery despite the existence of scant evidence that it may better preserve ovarian function.

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ES23-0276
Video Session 7: Endometriosis 1

LAPAROSCOPIC NERVE-SPARING RADICAL EXCISION FOR PELVIC DEEP INFILTRATING ENDOMETRIOSIS

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Objectives:
DIE (deep infiltrating endometriosis) frequentlyinduce severe clinical symptoms and serious clinical problems. DIE can bearbitrarily divided into anterior (involving bladder), posterior (involvinguterosacraal ligament, vagina, rectum), lateral (involving retroperitonealstructure, ureter), other GI tract DIE (sigmoid colon, appendix, ceccum).Posterior DIE lesions involving USL (uterosacral ligament) are the most common,and complete surgical excision is the most effective way to relieve patient's pain. Hypogastric nerve, inferior hypogastric plexus, andsometimes, splanchnic nerve may be infiltrated by the DIE lesions. However,aggressive excision of the deep lesions may sometimes cause troublesomepost-operative morbidity, such as constipation, loss of bladder sensation,

andvoiding difficulty, due to destruction of the pelvic nerves during theresection. Just like the emergent demands of nerve-sparing radical hysterectomyfor early cervical cancer, the pelvic nerves should be carefully preserved aspossible during the posterior DIE excision procedure.

Methods:
Several videos of patients receivingnerve-sparing DIE excision were reviewed and edited. Videos of nerve-sparingradical hysterectomy were also reviewed, to further illustrated the neuroanatomy.Results:

The neuroanatomy of presacral nerve, hypogastricnerve, splanchnic nerve, inferior hypogastric plexus, and their anatomicalrelationship to USL, ureter, and pelvic vessels will be demonstrated. Afterureterolysis, identification of the hypogastric nerve (just between ureter andipsilateral USL) is the first step of the nerve-sparing technique. Then thehypogastric nerve, and later the inferior hypogastric plexus, and sometimes thesplanchnic nerve (for lateral DIE lesions), should be carefully dissected awayfrom the USL DIE complex as possible, down to level below the ureter tunnel.Then the USL DIE can be radically excised, with minimal risk of nervetransection and destruction. The post-operative voiding morbidity is brief andinsignificant. Conclusions:

Laparoscopic nerve-sparing DIE excision forposterior DIE lesions is feasible, and should be the gold standard, forachieving complete excision of the lesions, while minimizing the post-operativebowel and bladder morbidity due to nerve destruction.
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ES23-0512
Video Session 8: Endometriosis & Miscellaneous

LAPAROSCOPIC URETEROLYSIS, BOWEL SHAVING AND NEPHRECTOMY FOR DEEP INFILTRATING ENDOMETRIOSIS WITH URETEROHYDRONEPHROSIS
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2Urology, APHP HOPITAL Saint Louis, PARIS, France
3GENERAL SURGERY, APHP HOPITAL Lariboisière, PARIS, France
A Para 0 34 year old patient was referred with a deep infiltrating endometriosis involving, the rectovaginal cul de sac, rectosigmoid, left ureter and extension to the left kidney with ureterohydronephrosis is presented. Laparoscopic ureterolysis, bowel shaving, deep infiltrating endometriosis, left nephrectomy with morcellation and bladder suture is presented. After an early discharge the patient was free of pain to date. No early nor long term complication is reported at a 3 year follow up.
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ES23-0135
Video Session 8: Endometriosis & Miscellaneous

LAPAROSCOPICALY MANAGEMENT OF AN ABDOMINAL WALL ENDOMETRIOMA
R. Fernandes1, J. Alves1, A. Host2, M. Puga1, K. Afors1, A. Wattiez1
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2Gynecology, Hopitaux Universitaire de Strasbourg, Strasbourg, France

TITLE: Laparoscopicaly management of an abdominal wall endometrioma
Category: Endometriosis
Summary: We present a case of a 35 year old patient presenting with hepatic pain during menses and an extensive abdominal wall endometrioma in the upper right quadrant in managed by laparoscopy.

Introduction: Endometriosis is a disease responsible for ectopic implantation of endometrium more commonly on the pelvis. In rare cases, reports already demonstrated that endometriosis implants can appear the umbilicus, nose, and thorax.

Materials and methods: Surgical video of a 35 year old patient presenting with extensive endometrioma of the abdominal wall. We demonstrate the laparoscopic management of the endometrioma of the transverse muscle invading the abdominal cavity. From the Departments of Gynecologic Surgery CHU Hautepierre, CMCO, NHC University Hospitals and from the Institute de Recherche contre les Cancers de l'Appareil Digestif (IRCAD), Strasbourg, France.

Results: The complete surgery was carried out laparoscopically. After one year of follow up the patient didn't present with pain recurrence at the place of the intervention.

Discussion: In the last few decades endometriosis turned out to be a common disease but with it's clear physiopathology yet to be discovered. Endometriotic spots are commonly found in the pelvis, whereas distant implants are rare. With adequate strategy and exposure, laparoscopy has demonstrated to be not only a safe, but also to be the best way to approach endometriosis all over the abdominal cavity.

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ES23-0171
Video Session 8: Endometriosis & Miscellaneous

LAPAROSCOPIC ADNEXECTOMY FOR THE NEWBIES.
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The laparoscopic adnexectomy is a very well standardized procedure. Its major danger is the injury of the ureter at the level of infundibulo-pelvic ligament.

The purpose of this educational video is to describe, for the beginners, step by step, a standard adnexectomy with a special focus of the crucial step of the procedure, the pediculisation of the infundibulo-pelvic (IP) ligament, to avoid an ureteral injury.

The procedure is showed step by step in a standard case.

The installation is standard. The insertion of the trocars is performed as usual. The material is not specific: cold scissors, atraumatic forceps, bipolar forceps, uterine cannula, suction and irrigation device.

The exploration of the abdominal cavity is the first step. Then, the exposition is done with the remove of the omentum, then the small bowel. An exploration of the pelvic cavity is performed. A peritoneal cytology is realized.

The pediculisation of the IP ligament is mandatory to avoid any ureteral damage. By then, the video focuses on some anatomical consideration, in particular the anatomical relations between the ureter, the IP ligament, the external iliac vessels, the ovarian veins and the avascular part of the broad ligament.

The pediculisation of the IP ligament is the crucial step of the procedure. A forceps holds the infundibulo-ovarian ligament. A traction is exercised in direction of the contro-lateral side, medially and upper. A fold appears on the upper part of the broad ligament, in the avascular area. A bipolar coagulation is realized at the top of the fold and the peritoneum is incised. The peritoneum of the upper part of the broad ligament is open. The cellular tissue of the broad ligament was dissected close to the uterus. The posterior part of the peritoneum of the broad ligament appears then as grey-blue. The forceps and the scissors are pushed together on the grey zone and a peritoneal window is realised. The 2 instruments are moved in opposite directions, parallel to the IP ligament in order to stretch it. The IP ligament is now pediculized, the ureter is far away, and the ligament can be safely coagulated and cuted.

The treatment of the utero-adnexal ligament is then performed. The tube is coagulated, then the mesosalpinx and the utero-ovarian ligament can be now coagulated and sectioned. The treatment of the contro-lateral adnexa is realized.

Pieces are removed in a laparoscopic bag.

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ES23-0470
Video Session 8: Endometriosis & Miscellaneous

LEFT RADICAL ADNEXECTOMY FOR A LARGE ENDOMETRIOMA

R. Murtada1, C. Meza1, G. Centini1, J. Castellano1, K. Afors1, A. Wattiez1
1Gynecology, ircad, Strasbourg, France

This video aims to demonstrate the surgical strategy applied in the management of a large endometriotic cyst which was not accessible to stripping or partial ovariectomy, and was treated by radical adnexectomy.
It is the case of a 28 year old patient presenting with severe dysmenorrhea and chronic pelvic pain, without dyspareunia or dyschesia. The MRI (magnetic resonance imaging) revealed a large endometriotic cyst of the left adnexa, as well as bowel involvement at the level of the sigmoidal loop, on a length of 5-6 centimeters (cm). Upon surgical exploration, the uterus and the sigmoid are retracted to the left adnexa. The endometrioma measures 10 cm and is severely adherent to all surrounding structures. We performed a radical adnexectomy which consisted in a full excision of the cyst by passing in sano on its entire surface. The surgical strategy entailed dissection of the left pararectal fossa so as to separate the sigmoid from the cyst. The right pararectal fossa and the recto-vaginal space were dissected allowing to free the rectum. A shaving of an endometriotic nodule of the sigmoid, adjacent to the cyst, was performed. The infundibulopelvic (IP) ligament was

skeletonized and reserved until final decision of radical adnexectomy. The cyst was separated from the pelvic wall, then the broad ligament. In the process, we performed ureterolysis and the left uterine artery was sacrificed. Finally, cystectomy was completed by coagulation section of the IP ligament and the uteroadnexal pedicle. This procedure necessitated the dissection of major pelvic anatomical planes and structures and is a fine example of the importance of a good knowledge of anatomy and dissection techniques. It allowed the management of a difficult case of endometriosis, ensuring complete excision of lesions.

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ES23-0041
Video Session 8: Endometriosis & Miscellaneous

DEEP RECTAL SHAVING FOLLOWED BY TRANSANAL DISC EXCISION IN LARGE DEEP ENDOMETRIOSIS OF LOWER RECTUM: THE ROUEN TECHNIQUE

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2Surgery, Rouen University Hospital, Rouen, France

We report an original technique of deep rectal shaving using PlasmaJet® followed by transanal disc excision using Contour Transtar® stapler suitable in large deep endometriosis of lower rectum. The procedure was performed in a 30 year-old nullipara referred with a large endometriotic nodule infiltrating the right uterosacral ligament and the anterolateral wall of the lower rectum. Rectal infiltration measured 30 mm in diameter and was responsible for stenosis. The first step of the procedure is represented by a laparoscopic deep rectal shaving performed using exclusively the plasma energy, combining the detachement of the nodule from the rectum with in situ ablation of residual endometriotic foci of the shaved area. Then, transanal excision is performed by the colorectal surgeon from rectal approach. Three of four traction parachute sutures are placed in the middle and outside the shaved area. Their traction induces the prolaps of shaved rectal wall, that is resected using the Contour Transtar® stapler, which is a device originally destined to remove rectal prolaps. The final staple line is inspected for bleeding and secured with interrupted resorbable suture as required. Immediate postoperative outcomes were uneventful, and bowel movements were normal beginning with day 5. Four months later, the patients has 1 painless bowel movement each day and no trouble of anal continence. Based on our experience, we believe that our conservative technique is feasible in large low rectal endometriosis and avoids the risk of unfavorable outcomes related to low colorectal resection.

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Selected abstracts for Oral presentation (40) *

ES23-0262
Selected Abstracts 1

HYSTEROSALPINGO-FOAM SONOGRAPHY (HYFOSY): A LESS PAINFUL PROCEDURE FOR TUBAL PATENCY TESTING DURING FERTILITY WORK-UP, COMPARED TO (SERIAL) HYSTEROSALPINGOGRAPHY. A RANDOMIZED CLINICAL TRIAL.

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1OB/GYN, Spaarne Ziekenhuis, Hoofddorp, The Netherlands
2OB/GYN, FREE UNIVERSITY MEDICAL CENTER, AMSTERDAM, The Netherlands

Objectives

Is a hysterosalpingo-foam sonography (HyFoSy) a less painful procedure as a first office tubal patency test in the fertility work-up, compared to a serial hysterosalpingography (HSG)?

Methods

A two-center, prospective open RCT between January and October 2013. In order to demonstrate a difference of 50% in VAS pain scores between a HyFoSy and a HSG, a total number of 40 patients were required. Eligible women were randomly allocated to undergo a HyFoSy procedure or a HSG.Women were eligible when aged between 18-41 years, had a low risk for tubal pathology and had an indication for tubal patency testing during their fertility work-up. Both examinations were equally performed in the VU University Medical Center and Spaarne Hospital. Visual Analogue Scale was used to asses pain scores.

Results

The mean Visual Analogue Scale (VAS) score for pain perception during a HyFoSy procedure was 1,5 cm (standard deviation 1,1) compared to 4,3 cm (standard deviation 2,5) during HSG ($p<0,01$). Mean difference 2,7 cm (95%CI 1,5-4,0). The HyFoSy procedure also showed a significantly shorter procedure time compared to a HSG; median 5,0 min (interquartile range 3,0) for HyFoSy versus 12,5 min (Interquartile range 16,0) for HSG ($p<0,01$).

Conclusions

A HyFoSy procedure is a less painful tubal patency test compared to a serial HSG.
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ES23-0082
Selected Abstracts 1

INTEREST OF A THREE-DIMENSIONAL VISION SYSTEM IN LAPAROSCOPIC SUTURING ON PELVI-TRAINER: A PROSPECTIVE COMPARATIVE STUDY AMONG NAÏVE MEDICAL STUDENTS

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Objectives
Three-dimensional (3D) vision appears as an important factor influencing the quality of a controlled gesture. The purpose of this prospective and randomized study is to obtain subjective and objective data on the contribution of the 3D vision in laparoscopic surgery training.

Methods

Seventy-eight naïve medical students were randomly assigned to group A (2D vision, n = 39) and group B (3D vision, n = 39). They were trained for 3 consecutive days to achieve intra-corporeal sutures on pelvitrainer. Every day, the making of a stitch with the right and the left hand was recorded on video. On the last day, after their third day evaluation, the same exercise was recorded with the other vision system. Following each suture, students gave their impression on the two techniques through questionnaires and two experts evaluated blindly the gesture (operating time and technical scores).

Results
A significant increase of performance in terms of time and score was observed in both groups. There was no time difference between them (p=0,23). The technical score of both subjective and objective evaluation of video were significantly higher in group B at each assessment (p<0,001). As the group A switched to 3D, their operating time and scores were similar to those of group B on day 3 (p= 0,51 and p=0,78 respectively). And vice versa when group B switched to 2D (p = 0,27 and p =0,98 respectively). Participants considered the suture technique to be significantly easier in 3D. Eighty-three percent of students preferred 3D to 2D. However the group B showed significantly more visual strain (46% vs 21% at day 1, p =0,01).

Conclusions

This study confirms that 3D vision facilitate complex tasks execution by novices and is superior to last generation 2D HD systems. Further studies in clinical practice are necessary in order to translate these results to experienced surgeons.
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ES23-0161
Selected Abstracts 1

UTERUS TRANSPLANTATION MODEL IN SHEEP COMBINING LAPAROSCOPIC AND MICROSURGICAL PROCEDURES.
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2Microsurgery Department, Jesús Usón Minimally Invasive Surgery Center, Cáceres, Spain
3Obstetricia y Ginecología, Clínica Norba, Cáceres, Spain
4Hospital La Salud. Cádiz (5)Obstetricia y Ginecología, Instituto Extremeño de Reproducción Asistida González Carrera (IERA), Cáceres, Spain
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Objectives
The prevalence of uterine infertility ranges 3-5%. Some of the uterine infertility factors are congenital pathologies, for instance uterine agenesis and uterine hypoplasia; others are acquired pathologies, such as a previous ovariohisterectomy. For the past few years the uterine transplant has become an alternative for infertile women. The aim of our study was to develop an uterine autotransplant in an animal model, in order to assess its feasibility and safety.
Methods
Ten multiparous ewes were selected. All of them weighed between 40-50kg. Under general anesthesia Laparoscopic ovariohysterectomy with a precise dissection of the arteries and veins of the uterus was carried out. Once dissection was finished, heparin was administered (100UI) every hour until the transplant was completed. The broad ligament and the cervix were sealed with the Ligasure®. Vessels were clamped with titanium clips and were severed with a scissor. Whereupon,

the uterus was removed and irrigated with a cold sterile heparin solution using a 21G intravenous catheter, to remove residual blood. After that, the uterus was transplanted. End-to-end anastomosis technique with continuous suturing was used to approximate the veins and end-to-end anastomosis technique with non-continuous suturing was used to approximate the arteries. Once the vascular anastomosis was completed, the correct reperfusion of the uterus was checked. Finally, the cervix was sutured with a non-continuous suturing pattern and the uterus was fixed to the pelvic cavity to avoid rotation. Follow-ups were carried out 15 days, 1 month and 2 month after the surgery. These consisted of an ultrasound scan, a hysteroscopy, an angiography and an exploratory laparoscopy. In addition, blood samples were retrieved from the jugular vein for subsequent analysis of FSH, LH, progesterone and estradiol plasma levels.
Results
All transplants were carried out successfully without complications during surgery. The mean duration of the hysterectomy was 117 minutes. The mean duration of the ischemia was 187 minutes. The mean total duration of the surgery was 374 minutes. At 1 month follow-up, one animal showed a closed cervix at hysteroscopy and it was impossible to indentify the uterine structures during the exploratory laparoscopy. In the rest of the ewes, the exploratory laparoscopy carried out 1 month after surgery showed abdominal adhesions but the uterine structures could be identified.
Conclusions

Laparoscopic ovariohysterectomy allowed a better visualization of the vessels and their correct dissection. The angiographies enabled to identify uterine arteries before the surgery and to check the vascular patency after it.
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ES23-0038
Selected Abstracts 1

VARIATION OF ANTIMULLERIAN HORMONE LEVEL AFTER ENDOMETRIOMA ABLATION USING PLASMA ENERGY

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Objectives
To investigate the impact of ovarian endometrioma vaporization using plasma energy on antimullerian hormone (AMH) level.
Methods

We report a prospective, non comparative series (NCT01596985) of patients enrolled during the period of November 2010 to November 2012 at the Rouen University Hospital, France.
Twenty two patients with unilateral ovarian endometriomas >=30 mm, with no surgical antecedent and no ongoing pregnancy were enrolled in the study.
59% were nulligestae, 41% were known being infertile, only 29% previously delivered. Deep endometriosis was associated in 73%, while 43% of patients also presented with colorectal involvement.

They underwent ablation of ovarian endometriomas using PlasmaJet®. The surgery of deep endometriosis was performed in all cases.
The mean length of postoperative follow-up was 18.2 ± 8 months.

AMH levels were assessed before surgery, 3 months postoperatively and at the end of follow-up.

Results

AMH level significantly varied through the three assessments performed in the study, as the mean values±SD were 3.9 ± 2.6 ng/ml before the surgery, 2.3 ± 1.1 ng/ml at 3 months and 3.1 ± 2.2 ng/ml at the end of the follow up (P=0.001).

There was a significant increase from 3 months postoperatively to the end of follow up (median change 0.7 ng/mL, P=0.01). 71% of patients had an AMH level >2 ng/mL at the end of the follow up vs. 76% before the surgery (P=1). During the postoperative follow up, eleven patients tried to conceive, of whom eight became pregnant (73%). Two of patients not yet pregnant are homosexual and their pregnancy desire is laboriously managed by ART abroad. Ultrasound assessment revealed no endometriomas recurrences at the end of the follow up.

Conclusions
The ablation of unilateral endometriomas is followed in a majority of cases by a significant decrease in AMH level 3 months after surgery. In subsequent months this level progressively increases, raising questions about the real factors that impact postoperative ovarian AMH production.

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ES23-0234
Selected Abstracts 1

OCCULT LEIOMYOSARCOMA PREVALENCE AT HYSTERECTOMY OR MYOMECTOMY FOR PRESUMED FIBROIDS.

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Objectives

The United States Food and Drug Administration recently discouraged the use of electromechanical morcellation due to an estimated prevalence of occult leiomyosarcoma (LMS) in presumed fibroids at the time of surgery of 0.20 to 0.28%. However, their “systematic review” encompassed only 9 English language publications: 1 abstract, 2 prospective studies, and 6 retrospective reports (one of which was a letter to the editor). We have found that the available literature is extensive, and we have systematically reviewed it to determine a clinically relevant prevalence rate of occult LMS in surgeries for presumed fibroids.

Methods

A computerized and hand search was performed for all published studies in which surgery was performed for the primary indication of fibroids. Inclusion required peer-review, and the ability to

extract those cases in which fibroids were the indication from any other cases present in the publication. At least five cases were required for inclusion. No languages resulted in exclusion. The primary analysis involved all manuscripts in which post-operative histopathology results were provided for all study specimens. Rates were tabulated by data collection method (prospective, retrospective) and for the aggregate. A secondary analysis was performed for all eligible studies, including those with absent or incomplete histopathology.

Results

4552 candidate studies were evaluated, of which 747 were found to be relevant to this issue. 428 manuscripts were excluded based on inclusion and exclusion criteria. Of the remaining 319 studies, 123 were used in the primary analysis. Primary Analysis: 65 published prospective cohort and randomized trials included 6025 women, and provided a prevalence of LMS of 0.033%. 58 retrospective studies provided data for 22,091 women and gave a prevalence rate of 0.095%. Taken together, these 123 studies give a prevalence rate of 0.082% for LMS. Secondary Analysis: 196 additional studies failed to explicitly provide post-operative histopathology results in the publication, but also did not mention finding any LMS. Adding these to the above totals, 63,018 surgeries were performed. If we presume that an LMS would have been stated if present, the resulting prevalence rate for all 319 studies is 0.036%.

Conclusions

The prevalence of occult LMS in presumed fibroids at the time of surgery is far less than previously estimated. The best available estimate comes from prospectively collected, histopathologically evaluated cases; this rate is 0.033%. Retrospectively collected data are less reliable due to inherent biases, and tend to exaggerate the risk. In the future, prospectively collected data from large registries should be examined with the express purpose of confirming or improving upon this estimate of LMS prevalence in presumed fibroids at the time of surgery.
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ES23-0518
Selected Abstracts 1

GUIDELINE FOR OVERDIAGNOSIS AND OVERTREATMENT OF SEPTATE UTERUS: THE ESHRE/ESGE VERSUS ASRM CLASSIFICATION OF FEMALE GENITAL TRACT CONGENITAL ANOMALIES IN EVERYDAY PRACTICE.

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Objectives

Our first experience using the ESHRE/ESGE classification prompted us to conduct a prospective, observational study evaluating the influence of this classification on the frequency of septate uterus diagnoses, and the overall rate of congenital uterine anomalies, compared to the American Society for Reproductive Medicine (ASRM) criteria. The main objective was to confirm the initial hypothesis assumes that the application of the ESHRE-ESGE classification criteria significantly increases the incidence of septate uterus diagnoses with respect to the classification of ASRM supplemented by absolute morphometric criteria.

Methods

A prospective observational study was performed with consecutively enrolled 261 non-pregnant women in reproductive age presented for evaluation to one medical centre (Ludwin & Ludwin Gynecology, Krakow, Poland). A gynecological examination and 3-dimensional ultrasonography were performed to assess the presence of a congenital defect of the uterus, cervix or vagina. The congenital anomalies were diagnosed using ASRM classification and criteria for the ESHRE-ESGE classification. We compared the incidence and concordance of diagnoses of septate uterus and all congenital malformations of the uterus according to the ESHRE/ESGE and ASRM classification.

Results

Septate uterus was diagnosed in 44/261 patients (16.9%) using the ESGE-ESHRE criteria and in 16/261 patients (6.1%) using the ASRM criteria [odds ratio (OR) ESHRE-ESGE:ASRM, 3.1; 95% confidence interval, 1.7 to 5.7; $p < 0.001$]. All congenital anomalies by ESHRE-ESGE was diagnosed in 43/261 (16.5%) patients and using ASRM classification in 58/261 (22.2%) [ORESHRE-ESGE: ASRM, 1.45; 95% confidence interval, 0.9 to 2.2; $P = 0.1$]. Strength of agreement in diagnosis of septate uterus was moderate ($\kappa = 0.45$, $P < 0.001$), while in regard to recognition of septate + arcuate uterus by ASRM vs septate uterus by ESHRE-ESGE was good ($\kappa = 0.79$; $P < 0.001$). Strenth of agreement in recognition of anomaly/norm was good ($\kappa = 0.70$; $P < 0.001$). Morphology of septa identified by ESHRE-ESGE [lenght of internal fundal identation (mm): median 10.7; interquartile range, 8.1 - 20] significantly different ($P < 0.001$) from those identified by ASRM [lenght of internal fundal identation (mm): median, 21.1; interquartile range, 18.8 - 33.1]. Internal fundal identation (lenght of the septum) in 16/44 (36.4%) cases was less than 1cm in uteri septate by ESHRE-ESGE and met the criteria for normal uterus by ASRM.

Conclusions

Use of the ESHRE-ESGE classification causes extraordinary increase in the frequency of septate uterus recognition. Diagnoses of septate uterus by ESHRE-ESGE are quantitatively dominated by morphological states that correspond to arcuate uterus or whose not diagnosed any congenital malformations by ASRM criteria. Surgical treatment in these cases may not provide the expected benefits or be completely unnecessary.
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ES23-0331
Selected Abstracts 1

LAPAROSCOPIC REVERSAL OF TUBAL STERILIZATION: A RETROSPECTIVE STUDY OVER 135 CASES

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Objectives

To evaluate the pregnancy and delivery rates of laparoscopic tubal reanastomosis technique

Methods

From June 2003 to September 2013, 135 laparoscopic tubal reversals were performed by the same surgeon according to the four stitch technique using polypropylene 7.0 and 8.0 sutures.

Our inclusion criteria are patients with previous tubal sterilization all methods combined, no medical, surgical or obstetrical contraindications and no other infertility factors.

A survey is conducted by contacting the patients themselves, their gynecologist or their family doctor, to assess the pregnancy rate and outcome. The parameters studied, included positive pregnancy test, miscarriage, ectopic pregnancy, termination of pregnancy, term delivery, post-operative time to conception, post-operative hysterosalpingography and spermogram.

Results

Among the 135 patients operated, 28 were out of contact, 13 were associated with an abnormal spermogram and therefore were excluded from the study, 1 patient was diagnosed for ovary cancer 9 months after the tubal reanastomosis and was also excluded. No surgical adverse outcomes were encountered.

Of the 93 patients remaining, the age of patients varied from 27 to 47 years old. All ages combined, positive β-HCG blood sample rate was 75.3% (95% confidence interval [CI]: 65.0%-83.4%) and term delivery 52.7% (95%CI: 42.1%-63.0%). Also, the miscarriage rate was 23.7%, medical interruption of pregnancy was 2.2% and ectopic pregnancy was 6.5%. The age-adjusted pregnancy and delivery rates were as follows:

27-35 y.o. (n=23) 95.7% (95%CI: 76.0%-99.8%) and 73.9% (95%CI: 51.3%-88.9%),

36-39 y.o. (n=40) 77.5% (95%CI: 61.1%-88.6%) and 47.5% (95%CI: 31.8%-63.7%),

40-42 y.o. (n=19) 68.4% (95%CI: 43.5%-86.4%) and 52.6% (95%CI: 29.5%-74.8%),

43-47 y.o. (n=11) 36.4% (95%CI: 12.4%-68.4%) and 27.3% (95%CI: 7.3%-60.7%).

The cumulative pregnancy rate at 6, 12 and over 12 months postoperatively was 57.0% (95%CI: 46.3%-67.1%), 68.8% (95%CI: 58.3%-77.8%) and 75.3% (95%CI: 65.0%-83.4%) respectively. Pregnancy rate was significantly associated with age group ($p=0.002$) and hysterosalpingography ($p=0.003$), but not with sterilization type ($p=0.58$).

Conclusions

In the literature, the pregnancy rates after laparoscopic reversal of tubal sterilization vary from 30% to 85%. In our series it is estimated at 75,3% overall.

For women with tubal sterilization and no other infertility factors, reanastomosis can restore anterior natural fertility related to age. Although, there may coexist other infertility factors within patients treated with IVF, our pregnancy rates for patients over 43 years is 36,4% which is greater than that reported in patients with IVF.

Laparoscopic reversal of tubal sterilization is a safe and cost-effective method to restore fertility. It should be proposed systematically to patients and performed by well trained laparoscopists specialized in reproductive surgery, avoiding potentially the inconvenient and adverse outcomes of

an IVF treatment. Although, it may seem a more cost-effective technique compared to robotically assisted reversal, a prospective randomized trial is necessary in Belgium to answer this question.
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ES23-0033
Selected Abstracts 1

THE EUROPEAN ACADEMY TRAINING AND TESTING FOR LAPAROSCOPIC SUTURING SIGNIFICANTLY IMPROVES SURGEONS PERFORMANCE AND PATIENTS' SAFETY

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Objectives
The efficiency of suturingtraining and testing (SUTT) model by laparoscopy was evaluated, measuring thesuturing skill acquisition of trainee gynaecologists at the beginning and inthe end of a teaching course.
Methods
During a workshoporganized by the European Academy of Gynaecological Surgery (EAGS), 25participants with three different experience levels to laparoscopy (minor,intermediate, major) performed the 4 exercises of the SUTT model (Ex1: bothhands stitching and continuous suturing, Ex2: right hand stitching andintracorporeal knotting, Ex3: left hand stitching and intracorporeal knotting,Ex4: dominant hand stitching, tissue approximation and intracorporeal knotting).The time needed to perform the exercises, at the beginning and after completionof the training, were recorded for each trainee and group and statisticalanalysis used to note the differences.

Results
Overall all trainees achievedsignificant improvements in suturing time ($p < 0.002$) as measured before andafter completion of the training. Similar significantly improved suturing timedifferences ($p< 0.002$) were noted among the groups of trainees withdifferent laparoscopic experience before and after completion of the training
Conclusions
In conclusion a shortwell-guided training course, using the SUTT model, improves significantly thelaparoscopic suturing ability, independently of the level and time of experiencein laparoscopic surgery.
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ES23-0293
Selected Abstracts 1

LAPAROSCOPIC SIMULATORS – A PILOT SCHEME OF MODULAR SIMULATION TRAINING

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Objectives

It is well known that the surgical skills required to reach competence in endoscopic surgery are essentially different from open surgery and requires a longer learning curve. Providing and receiving

structured training is becoming increasingly challenging with the pressures of patient safety, theatre time and the European Working Time Directive.

The Wales Endoscopic Skills Training (WEST) course was a pilot, modular course to teach the fundamentals of basic and intermediate laparoscopic theoretical knowledge and psychomotor skills over 6 months, in order to provide participants with a safe foundation for subsequent intra-operative training.

Methods

Trainees were given “Laprotrain” simulator boxes to take home and practice tasks of gradually increasing complexity, for a minimum of 4 hours per week. With regular tutorials for each module, mentorship, and commitment to a structured curriculum, participants were able to repeat complex tasks in their own time. The pilot scheme commenced March 2013 and was completed August 2013. All Specialty Trainees of years 2 -3 were invited to take part. Each module included interactive presentations and psychomotor skills exercises that would be based around the simulation of common procedures such as ectopic pregnancy, dissection or cutting and tissue retrieval. Each of these exercises were demonstrated at each session, then set as monthly home-practice assignment. All trainees underwent formal baseline and post home-practice assessments which were based upon parameters such as 3D spatial awareness, Bimanual dexterity or time. Time targets were set by the average time it took for an experienced gynaecological surgeon to complete the task set.

Results

Eight trainees started the scheme and 6 trainees completed it. Of the two that withdrew, one person changed career and the other had personal circumstances unrelated to the course. In all of the tasks set, a marked improvement was seen in the dexterity and the time taken to complete each task. Following assessments of camera movement, object manipulation, dissection, endoloop placement, ovarian cystectomy, specimen retrieval and suturing, all participants were completing the required task within the target time frame, after only a month of practice. This improvement was demonstrated to be maintained over time.

Conclusions
Laparoscopic psychomotor skills learnt via simulation have been proven to be transferable to the operating theatre. The ideal laparoscopic training course must provide a comprehensive curriculum, objective assessment, validation and allows time for trainees to progress up their own individual learning curve, consolidate skills and to achieve competence. Feedback from participants was very positive in that they felt that they now had basic skills that were transferring well to supervised training in the operating theatre. The pilot study was successful in showing that with a structured curriculum, achievable aims and regular feedback, trainees can benefit greatly in improving their skills.
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ES23-0301
Selected Abstracts 1

STRATEGY FOR SUCCESSFUL TREATMENT OF FIRST-TRIMESTER MISCARRIAGE: RESULTS OF A DAILY PRACTICE.

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Objectives
Over the last years, management of miscarriage has evolved towards an individualized treatment, in which patients' preference is becoming more significant. Expectative, medical or surgical treatment can be offered to these patients. The aim of this study was to ascertain the success rate of first choice treatment and, in case of incomplete results, further therapy. These data should enable better counseling of women in their decision-making.
Methods
A retrospective study of women with first-trimester miscarriage between January 2012 and December 2012 in a tertiary medical teaching hospital in the Netherlands. Primary outcome was successful treatment, diagnosed using ultrasound, in the different treatment groups. Other outcomes of interest were need for further treatment and complications of curettage (infection, perforation and intra-uterine adhesions).
Results
In 2012, 328 first-trimester miscarriages were diagnosed in 314 women. The mean gestational age when miscarriage was diagnosed was 62 days. Expectative treatment, with an average duration of 12 days, was chosen in 183 cases (55.8%), and was effective in 46%. Only 33% (n=61) had an expectative period of 2 weeks, as recommended by the NICE guideline, which led to successful treatment in 52% (n=31). Sixty-one women (18.6%) preferred misoprostol as first choice treatment. After administering medication, a follow-up visit was planned after 6 days on average. This treatment was successful in 50.2% of the cases. If misoprostol was given following unsuccessful expectative treatment, a further 45% (25/55) reached complete abortion. Dilatation and curettage (D&C) was performed with a total of 180 women, 84 as first-choice treatment and 96 after incomplete expectative or medical treatment. 28 (15.6%) D&C's were performed for strict medical reasons such as excessive bleeding or possible molar pregnancy. Complications of D&C were reported in 11 cases (6%), including 5 women (3%) diagnosed with Asherman syndrome.
Conclusions
Almost half of our patients were subject to D&C. A previous preference study reveals that the most important factors influencing women's decisions are pain reduction and time to return to normal activities, as this can be achieved by using D&C as first treatment. However, in our opinion, the number of D&C's should be reduced because of the higly negative impact of some complications on fertility. We found that 57% of expectative and/or medical treatment leads to a complete miscarriage. This success rate can be improved by using a more positive approach of longer expectative treatment, and by offering misoprostol as an effective alternative for D&C when incomplete. Counseling should respect the patient's preference, but must also put particular emphasis on potential complications and the consequences of surgical treatment.
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ES23-0275
Selected Abstracts 2

THE RISK OF MORCELLATING UTERINE LEIOMYOSACOMAS IN LAPAROSCOPIC SUPRACERVICAL HYSTERECTOMY AND LAPAROSCOPIC MYOMECTOMY, A RETROSPECTIVE TRIAL OF 4765 WOMEN
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Objectives
To evaluate the incidence of uterine leiomyosarcomas (LMS). To identify the risk of morcellating LMS in a gynaecological department that offers laparoscopic supracervical hysterectomy (LSH) and laparoscopic myomectomy as primary surgical treatments.

Methods
A retrospective trial in a Norwegian university teaching hospital. The trial included all women diagnosed with uterine LMS and the total population of women who underwent surgical treatment for uterine fibroids in the period January 1st 2000 to December 31st 2013.

Results
In total, 4.765 women were included in this trial, 1.957 laparoscopic procedures were performed and a morcellator was used in 1.846 of the procedures. Twentysix women were diagnosed with uterine LMS in specimen after surgery. The mean age of women diagnosed with uterine leiomyosarcoma was 61.2 (SD=12.3) years. In six women, the LMS was detected by endometrial biopsy, preoperatively. Due to clinical suspicion of a malignant condition preoperatively, 14 women were treated by abdominal hysterectomy and bilateral salpingo-oophorectomy. Consequently, six women with uterine LMS were treated according to anticipated benign fibroids. Laparotomy was performed in five of these women due to tumor size. In one woman with uterine LMS diagnosed in specimen, LSH was performed and a morcellator was used for tissue extraction. The incidence of uterine LMS in the population of women with anticipated benign fibroids was 0.0054 (1 in 183 women). The rate of unintended morcellation of LMS was 0.0005 (1 in 1846 women).

Conclusions

The incidence of uterine LMS was comparable with the incidence found in the literature. The risk of unintended morcellation of uterine LMS after a preoperative selection of women with fibroids appears to be very low.
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ES23-0306
Selected Abstracts 2

FERTLITY OUTCOME AND QUALITY OF LIFE AT LONG TERME FOLLOW UP OF COMBINED EMBOLIZATION AND SELECTIVE MINIMALLY INVASIVE MYOMECTOMY AFTER MRI (CESAM)

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Objectives
To evaluate the long term results, quality of life and fertility outcome of Combined Embolization and Selective minimally invasive myomectomy After MRI (CESAM) technique

Methods

Prospective study (Canadian Task Force classification II-3). Combined Uterine Artery
We previously described the first fibroid embolization performed in our department in 1997, and the first case of combined embolization and selective myomectomy by laparoscopy in 2002, as an alternative to hysterectomy, when multiple myomectomy or uterine artery embolization alone were considered at high risk of complications. We followed all of our patients treated between 2002 and 2011 by UAE and selective myomectomy by laparoscopy or hysteroscopy. After clinical examination,

MRI and pre-operative multidisciplinary decision, referred patients were admitted for selective embolization of uterine fibroids at day1, with single or multiple myomectomy (up to 4) performed by laparoscopy or hysteroscopy at day 1 or 2. Only large sub-serosal, or sub mucosal fibroids were removed while embolization alone was supposed to be ineffective or dangerous.
Clinical examination and MRI were performed at day 3 and 6 months after the combined procedure. Intra-operative and post-operative complications, pre operative and post operative symptoms were assessed. Quality of Life was assessed by a speific questionnaire before and up to 10 years after the procedure and analyzed by a Wilcoxon test. Fertility outcomes were assessed up to 10 years.

Results

38 CESAM procedures were performed (29 by laparoscopy, 9 by hysteroscopy) between 2002 and 2012. The main characteristics of the patients and fibroids are summerized in TABLE 1.

Mean age at procedure	38.3 (26.3-46.5)
Mean BMI	24,3 (16,9-33,1)
Mean parity	0,7 (0-3)
Mean Number of Fibroids	8 (3-20)
Mean uterine volume	505 cc (199-1052)
Mean Number of fibroids removed	1 (1-4)
Mean diameter of fibroid removed	6.3 cm (3-12)
Localization of removed fibroids	SS 80,6% - SM 25%- Int 33,3 %

No transfusion was needed during the procedure. One patient was reoperated for hematoma at the site of laparoscopic myomectomyat day 3 by laparoscopy . Heavy bleeding resumed after 6 months when the MRI at day 3 was showing a total devascularization of the remaining fibroids. In one case devascularization was not total at 6 months, although the patient was not symptomatic at that time. Pelvic pain resumed or markedly improved after 6 months. The volume of the remaining fibroids shrunk 60% in average. Transient amenorrhea was noticed with two patients. No major complication was noticed in the long term follow up. Symptom severity, sexual function, activities, mood and overall QOL scores dramatically improved after the procedure at the long term follow up. 4 pregnancies were obtained with 2 miscarriages and 2 uneventfull vaginal deliveries among 8 patients actively willing.

Conclusions

With a maximum follow up of 10 years, combined embolization and selective minimally invasive myomectomy after MRI is a safe and effective new approach to treat large uteri with multiple fibroids, with a remarquable improvement of quality of life at long term, including symptom severity, and sexual function. 4 pregnancies with 2 vaginal deliveries were obtained, while those patients were offered a hysterectomy as an alternative to a risky multiple myomectomy or uterine artery embolization. When embolization is dangerous due to the risk of necrosis, or ineffective, due to the

localization of some fibroids, and when single or multiple myomectomies can be performed by minimally invasive surgery, the CESAM technique is an alternative to hysterectomy, especially in women of child bearing age.
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ES23-0215
Selected Abstracts 2

THE ULTIMATE CONFIRMATION TEST TO PROVE CORRECT ESSURE STERILIZATION; THE “WINGS” SIGN AT THE DYNAMIC HSG.

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Objectives

The last decade the new hysteroscopic sterilization by Essure devices became popular . After the Outpatient hysteroscopic placement of the two devices the correct position can be confirmed by a transvaginal ultrasound (TVU) in most cases or an hysterosalpingography (HSG). To read an HSG and to understand whether the devices have been placed correctly seems to be difficult since most frequent cause of pregnancy is the misreading of the ordinary HSG (42%).

We developed another HSG procedure to simplify the reading and to understand the position of the devices.

Methods
After placement of an intrauterine small balloon, and a tenaculum positioned on the cervix to move the uterus up and down, the speculum is removed. We start with a picture of the plain x ray to recognize the presence of 2 devices; slowly fill the uterus with contrast using low pressure until the tubal area has been filled; now push the uterus up and pull down as far as possible; this movement of the uterus , will create a movement of the two devices which mimics the wings of a bird. Pictures are taken of the maximum position of the uterus in both directions. During this movement the 4 markers of the device have to be on line. Next two pictures will taken of the uterus with the woman in left and right position of 45 degrees to create a detailed pictures of the devices in the tubes in another plane since most tubes re not lying in the same plane as the body of the uterus.

Results

Introduction of this dynamic HSG creates an understanding of the surgeons whether the devices are in the correct position or not; the diagnosis of wrong placement can be made easier. The quality panel of 5 Dutch trainers has introduced this procedure in the Netherlands after which the number of annual pregnancies has been reduced from 0.3% to 0.15% as the diagnosis of incorrect placement became easier.

Conclusions

This dynamic HSG and the recognition of the Wings Sign confirmation test are easier and reduces the misreadings; the number of unwanted pregnancies and not recognized complications can be reduced tremendously.
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ES23-0386
Selected Abstracts 2

3D ULTRASOUND OF 362 ARCUATE UTERI RECLASSIFIED ACCORDING TO ESHRE/ESGE CLASSIFICATION: IS THERE A DIFFERENT IMPACT ON REPRODUCTIVE OUTCOMES OF THE NOW CLASSIFIED SEPTATE UTERUS?

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Objectives

The arcuate uteri diagnosed with Salim classification (2003) on 3D transvaginal (TVS) coronal section can be now, according to the new ESHRE/ESGE classification (2013), normal/dysmorphic or septate uteri. The aim of this study was to verify the impact of uterine morphology on arcuate uteri and to correlate the reclassified uteri with reproductive problems.

Methods
362 stored volume of arcuate uteri were reclassified according to ESHRE/ESGE classification. In a 3D TVS coronal scan 4 measurements were taken: septal/identation width-W (distance between the two internal tubal ostia), septal length-L (distance from the tip of the fundal indentation or uterine septum to the interostial line), free uterine wall thickness-M (distance from the interostial line to the external uterine serosa) and fundal indentation angle-α (angle between the two endometrial layers). Recorded adverse reproductive outcomes evaluated: infertility (inability to conceive after 12 months contraceptive-free intercourses) and at least one miscarriage (pregnancy loss before 20 weeks of gestations).

Results

Of the 362 previous arcuate uteri, 180(49,7%) become septate because L exceeded the 50% of M while 182(50,3%) were considered normal/dysmorphic. The new septate uteri had W (26,8±5,0 vs 25,7±5,1 mm), L (6,3±1,8 vs 4,3±1,0 mm), M (8,3±1,7 vs 11,0±2,4 mm) and α (128,4±10,1° vs 140,8±8,3°) significantly different ($p<0.05$) compared to normal/dysmorphic uteri. No statistical difference in reproductive outcomes were observed. Not expected a higher percentage of women with infertility (41% vs 36%) and at least one miscarriage (26% vs 20%) was observed in normal/dysmorphic uteri.

Conclusions

Arcuate uteri, with the new ESHRE/ESGE classification, arise several diagnostic and clinical implications and may result in difficulties in counselling and in the treatment options in women who experience miscarriages and infertility. The new classification is not supported by retrospective results and prospective studies of corrective surgery that could help to refine selection criteria for metroplasty, resulting in improved long-term outcomes.
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ES23-0012
Selected Abstracts 2

SYSTEMATIC LAPAROSCOPIC REVERSE CONE ENDOCERVIX EXCISION WITH ELECTRICAL LOOP FOR CONTROL OF POST LASH (LAPAROSCOPIC SUPRACERVICAL HYSTERECTOMY) MENSTRUAL BLEEDING

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Objectives

To determine the occurrence of cervical stump menstrual bleeding and assess patient satisfaction 12-36 months after LASH performed systematically with cone excision of the endocervix.

Methods

Retrospective longitudinal observational study of patients and their files using a questionnaire.
PATIENTS:

Four hundred sixty two premenopausal women underwent LASH and laparoscopic reverse cervix conisation between January 2009 and November 2012 on the basis of a benign condition.

Results
The main outcome measures were the occurrences of menstrual bleeding and patient satisfaction 12 -36 months after the procedure. Four hundred three women were followed up according to the study protocol. In total, four women (1%) reported bleeding episodes during the follow up period after LASH; Three of these women (0,74%) had regular menorrhagia solved by transvaginal cervixectomy. One patient reported minimal spotting episodes requiring no therapy. Patient satisfaction after LASH was very high (9.8); scored on a visual analogue scale (0-10).

The mean length of the cervix stump measured measured after the procedure via vaginal ultrasound was 4 cm. The length of the removed cones was 2,9 cm on average. All cones were collected separately and were examined histopathologically

Conclusions

Amenorrhea rate and patient satisfaction were very high after LASH plus laparoscopic cervix conisation. Episodes of vaginal bleeding after only LASH are relatively common. These range according to literature between 2,9% and 33% (.Berner, Qvigstad, Langebrekke, Lieng,2012). Such bleeding may delude patients' expectation and affect satisfaction .This study demonstrates the efficacy of the reverse cervix conisation performed during LASH in terms of significantly reduced menstruation rate and outcome improvement. This technique is easy to perform and it proved to be more efficient than the thermo coagulation of the cervical canal. Utilizing the same loop for both; uterus supracervical amputation and cervix conisation; additional cost was ruled out. The technique is safe, as no complication occurred. Furthermore, the conisation technique offers an additional advantage over the coagulation method. It allows to assess the histopathology of the endocervix. In the past, we used to coagulate the cervical canal to avoid post LASH menstruation, achieving results similar to those mentioned in the literature. The reached results under the conisation method, were the reason to abandon the coagulation and to perform only the conisation procedure in our center.
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ES23-0155
Selected Abstracts 2

LAPAROSCOPIC CERVICAL CERCLAGE - A CASE SERIES

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Objectives
To outline the patient details, operative and pregnancy outcomes in a series of women, undergoing laparoscopic cervical cerclage.
Methods
Prospectively gathered data on a series of women with a history of cervical incompetence, undergoing laparoscopic cervical cerclage. All women undergoing this procedure had their details collated on a database, recording their obstetric history and operative details. Follow-up was by clinical review and telephone consultation. Follow-up period is short, at 2years.
Results
22 women had a laparoscopically placed cervical cerclage for a diagnosis of cervical incompetence. 82% were interval sutures, and 18% were intra-partum sutures. One third of patients had a previous vaginal suture placed. The complication rate was 9% - in both cases this comprised a conversion to open approach, in both cases the suture was being placed during pregnancy.
45% of women went on to have a full term delivery, two patients are currently pregnant and three patients suffered a second trimester loss subsequent to suture placement.
Conclusions
Laparoscopic cervical cerclage is a technically challenging procedure, with significant risk of vascular injury to the uterine arteries. It has theoretical advantages to vaginally placed sutures, and this short follow-up series would suggest that outcomes are favourable. In the hands of a laparoscopic surgeon, skilled at intra-corporeal suturing, this is a reasonable alternative to vaginal suture placement.
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ES23-0060
Selected Abstracts 2

LAPAROSCOPIC RADIOFREQUENCY VOLUMETRIC THERMAL ABLATION (RFVTA) OF SYMPTOMATIC FIBROIDS VERSUS LAPAROSCOPIC MYOMECTOMY (LM): A RANDOMIZED TRIAL OF UTERINE-SPARING TECHNIQUES

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Objectives
To compare efficacy of RFVTA to LM for the treatment of symptomatic fibroids in terms of pain medication use, time to return to normal activities and work, and responses to the validated Uterine Fibroid Symptom and Quality-of-Life (UFS-QOL) questionnaire and to satisfaction and overall treatment effectiveness surveys.
Methods

Fifty premenopausal women ≥ 18 years old with symptomatic fibroids were indicated for surgical intervention for their fibroid symptoms and desired uterine conservation and maintenance of their

reproductive function. The participants enrolled in a randomized, prospective, single-center, longitudinal trial of RFVTA to LM and were followed to 6 months post-procedure. Consented subjects were randomized (1:1) intraoperatively to LM or RFVTA after laparoscopic (contact) ultrasound mapping of their fibroids.

Results
Postoperatively, RFVTA subjects (n = 25) experienced a median of 4.0 days [range 1–46 days] on pain medications, whereas LM subjects (n = 25) experienced a median of 7.0 days [range 1–83 days] [p = 0.060] on pain medications. The median number of days to return to normal activities was 21.0 days [95%CI: 15-–30] for RFVTA subjects (n = 25) compared with a median of 28.0 days [95%CI: 20–35] for the LM subjects (n = 25) [p = 0.86]. RFVTA subjects (n = 24) missed a median of 12.0 days from work [95%CI: 10–18] compared with a median of 17.0 [95%CI: 10–21] days for the LM subjects (n = 18) [p = 0.28]. Mean reduction (improvement) in UFS-QOL symptom severity scores at 6 months post procedure was –16.0 [95%CI: -27.7, -4.3] for RFVTA subjects (n = 23) and –12.4 [95%: –23.4, –1.4] for LM subjects (n = 22). Mean increase (improvement) in quality-of-life scores for RFVTA (n = 23) and LM (n = 23) subjects, respectively, were 6.6 [95%CI: –2.8, 16.0] and 8.7 [95%CI: –2.5, 19.9]. LM subjects had greater improvement from baseline values in mean health state scores (12.0 ± 20.3 for LM versus 6.2 ± 13.6 for RFVTA), and a higher percentage of LM subjects expressed being somewhat, moderately, or very satisfied with their treatment compared with RFVTA subjects (100.0% versus 90.0%, respectively). However, a higher percentage of RFVTA subjects (82.6%) than LM subjects (60.9%) found the treatment to be effective at their 6-month follow-up visits.

Conclusions
The short-term data in this randomized controlled trial confirm the equivalence in terms of efficacy of radiofrequency volumetric thermal ablation to laparoscopic myomectomy.
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ES23-0516
Selected Abstracts 2

REPRODUCTIVE OUTCOME AFTER LAPAROSCOPIC MYOMECTOMY: LONGITUDINAL PROSPECTIVE COHORT STUDY

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Objectives
To describe the fertility rate, reproductive outcome and complications profile of a cohort of women who underwent laparoscopic myomectomy for subfertility.
Methods
Prospective cohort study. Women with myomas treated laparoscopically from 2000-2010 were included in the study. Women were followed up until today and were examined for their pregnancy rates, conception intervals, mode of delivery and antenatal and postnatal complications. A control group was built consisting of pregnant women matched for age, parity, mode of conception and prenatal history, in order to assess pregnancy related complication risks of the study group. Statistics were performed using MedCalc.
Results
In total, 208 patients underwent laparoscopic myomectomy. From them 38 were lost from follow-up and 170 (81,7%) women were included in the study. Main indications for myomectomy were: 1) subfertility (44/170 – 25.9%), 2) menorrhagia and/or dysmenorrhea (54/170 – 31.8%), and 3) large or

rapidly increasing myoma size (72/170 – 42.35%). A total of 77 (77/170, 45.3%) patients wished to conceive post-operatively. 58 women of the study group became pregnant (58/77, 75.3%) giving 83 pregnancies. 61 babies were born in 59 deliveries – 11 vaginal (81.6%) and 48 caesarean sections (81.4%). In the study group there were 20 (24.1%) 1st trimester miscarriages, no 2nd trimester miscarriages and 7/59 (11.8%) premature deliveries. Complications during pregnancy and delivery were up to 23% (14/59), including 1st and 2nd trimester bleeding, preeclampsia, and perinatal blood transfusion. In the control group were recruited 154 women. Compared to the study group, there were no differences in the perinatal outcome and in the complications profile.
Conclusions
Laparoscopic myomectomy appears to be a safe and beneficial intervention for women with symptomatic myomas. This group of women carries the increased risk of caesarean delivery but otherwise the complication rates seem to be unaffected compared to non-myomectomized controls.
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ES23-0180
Selected Abstracts 2

THE OBSTETRIC OUTCOME OF PATIENTS WITH UNICORNUATE UTERUS AND NON-COMMUNICATING RUDIMENTARY HORN (ESGE/ESHRE CLASS U4) REMOVED LAPAROSCOPICALLY: A CASE SERIES

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Objectives
To present the obstetric outcome of patients withunicornuate uterus and non-communicating rudimentary horn (ESGE/ESHRE classU4), broadly attached, which was removed laparoscopically.

Methods
Introduction: Unicornuate uterus with rudimentary horn, which is the result of partialdevelopment of one Müllerian duct, accounts for 5-13% of uterine congenital anomalies, while in 25% ofthese horns there is a cavity withfunctional endometrium. To date, thereare limited studies reporting the obstetric outcome after laparoscopic removalof the functional, non-communicating horn, due to dysmenorrhea, hematometra orrupture of ectopic pregnancy in the rudimentary horn.

Materials and methods: In a period of 21 years (1992-2013), 8patients with functional,non-communicating horn were encountered in our department and operated by thesame endoscopist. (G.P.). The laparoscopic technique includedtransection of the round and utero-ovarian ligaments, coagulation of the upperbranch of the uterine artery and excision of the horn with either monopolardiathermy or CO2 laser. Then, the myometrium of the unicornuate uterus was sutured withinterrupted 1/0 vicryl sutures and thespecimen was removed by morcellation.

Results
Results: From the 8 patients, 7 became pregnant and carriedsingleton pregnancies (2 of which with ART). Intra-uterine growthretardation (IUGR) was observed in onepatient (14%), pregnancy-inducedhypertension in 3 (42%) and vaginal bleeding during the first trimester in 4(57%) and in the second trimester in one (14%). No abortion was noticed and theall women had a preterm delivery by caesarian section (infants weight: 1897±607.8gr).

Conclusions

Conclusions: Pregnancies in patients with unicornuate uterusand functional, non-communicating horn removed laparosopically, should beconsidered as high-risk ones, while the surgical removal of the horn does notseem to have any adverse affect on the outcome.
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ES23-0223
Selected Abstracts 2

SACROCOLPOPEXY MESH COURSE AND VAGINAL VAULT DISPLACEMENT ON MAGNETIC RESONANCE IMAGING

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Objectives
The ideal anchoring point for laparoscopic sacrocolpopexy (LSC) mesh is under debate, furthermore there are no in vivo methods for measuring its in vivo compliance. In a first attempt to measure compliance, we take advantage of Magnetic Resonance (MR) visible meshes. We aimed to develop a methodology to quantify, 1) the course of a LSC mesh and its laxity at rest and at valsalva, 2) the mobility of the vaginal apex (VA).
Methods
11 consecutive patients underwent LSC with Dynamesh Visible-Endolap (FEG Textiltechnik, Aachen, Germany) with paramagnetic Fe_3O_4 microparticles incorporated into its constituting filaments. These appear as hypointense structures in MR images which we acquired 3 months post-operatively on a 3T scanner (Ingenia, Philips, Netherlands) in the supine position. We used high resolution T1 weighted full 3D gradient echo sequences at rest. Mid-sagittal dynamic True Fast Imaging with steady state precision (TrueFISP) was used at valsalva. On a mid-sagittal plane, the Sacral Promontory (SP), the tip of the coccyx, the symphysis and the mesh attachment point (AP) were identified; the coordinates of the AP were defined by its lateral distance to the mid-sagittal plane and its vertical distance to the SP. The course of the mesh was traced using its 3D model (figure A). The tangent to the mesh curve at VA represents the vaginal axis. Its projection on the sacrum curve defines a hypothetical Functional Attachment Point (FAP). The laxity of the mesh was described by 3 variables: mesh curvature, vaginal angle (FAP-VA-AP angle) and FAP-AP distance. A compliant ingrown mesh would have high laxity values. On dynamic images, the VA was marked and traced to calculate its maximum absolute displacement(Matlab, Mathworks Inc.).
Results

The position of AP was 9.92±4.33mm lateral to the mid-sagittal plane and 5.85±2.70mm above the promontory. The FAP was 17.46±10.51mm more caudal to the AP. The average vaginal angle was 15.09±7.12°. Due to curvature, the mesh takes a course that is 7.77±2.72% longer to reach the AP from VA (Figure (B)). The max VA displacement was 11.01±6.19mm.

Conclusions
We successfully developed and demonstrated a methodology to measure mesh position, laxity and apical displacement using MR visible meshes. At rest, the mesh is not straight and the vaginal axis projects about 17mm below the AP. In this series, this corresponded with about half the height of the first sacral vertebra. The mesh laxity was such that the VA-AP distance may be extended by 7.8%. On valsalva, the displacement of the VA was around 11mm, a measure of the degree of mesh mobility.

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ES23-0511
Selected Abstracts 3

ENDOMETRIAL THICKNESS AFTER MENOPAUSE: ARE WE OVER TREATING?

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Objectives
Even if transvaginal ultrasound has proven its value in endometrial cancer screening there is still discussion about its value in post menopause in non symptomatic women.
Our primary goal is to evaluate the histologic diagnostic of post menopause women with endometrial thickness bigger than 5mm. Secondary, we intend to study how many consultations and hysteroscopies we performed in order to find endometrial atypical hyperplasia or endometrial carcinoma.
Methods
Observational study of 233 assymptomatic post menopause women submitted to hysteroscopy because of endometrial thickening bigger or equal to 5mm between 2011 and April 2014.
Primary outcome was hystologic findings of atypical endometrial hyperplasia or endometrial carcinoma.
Secondary outcome was number of consultations and number of hysteroscopies performed.
Results
Atypic endometrial hyperplasia and endometrial carcinoma were rare (5 cases; 2,15%). Endometrial thickness medium was 10 mm (from 6,7 to 16mm in atypic). Most frequent hysteroscopic findings were: polyps (80%), endometrial atrophy (9,4%) and myoma (6,9%). The sensibility and specificity of hysteroscopy for detecting atypic endometrial hyperplasia and endometrial carcinoma was 80% and 99,5%, respectively. To identify these cases in 274 women we did 766 consultations and 297 hysteroscopies. If we had changed our cutoff value to do histeroscopy from 5 mm to 9mm we would have detected 80% of carcinomas, performing 128 consultations and 49 hysteroscopies per case of atypical hyperplasia or endometrial carcinoma.
Conclusions
It is still not clear what should be the best cut-off value for post-menopause endometrial thickening in assymptomatic women. When choosing a different cut-off one should take in consideration the considerable burden in consultations and exams and its feasibility.
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ES23-0106
Selected Abstracts 3

THE IMPACT OF DIAGNOSTIC CRITERIA ON THE INTERNATIONAL INTER-OBSERVER AGREEMENT ON THE SEPTATE UTERUS

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Objectives

Hysteroscopy is regarded as the gold standard for diagnosing intrauterine abnormalities. However, the inter-observer agreement on the hysteroscopic diagnosis of certain intrauterine abnormalities was found to be poor. Well-defined criteria for the hysteroscopy diagnosis of abnormalities in the uterine cavity are lacking. Therefore, the aim of this study is to assess whether diagnostic criteria could improve the reliability of office hysteroscopy in diagnosing the septate uterus.

Methods

Ten video recordings of hysteroscopy procedures of infertile women indicated for IVF/ICSI treatment were uploaded online on the website of the European Society for Gynecological Endoscopy (ESGE). The selected recordings contained images of uterine cavities previously diagnosed as septate, arcuate or normal. Gynecologists visiting a Dutch conference or the ESGE website were asked to assess the recordings with specific focus on the internal uterine shape. The observers were randomized in 2 groups. Group 1 was shown diagnostic criteria of the septate uterus before assessment of the video recordings. Group 2 assessed the recordings without additional information. The diagnostic criteria of the septate uterus were defined based on a literature search and the opinion of experts in the field of gynecological endoscopy. The inter-observer agreement was compared between both groups. The inter-observer agreement was expressed as the intraclass correlation coefficient (ICC). A linear mixed model was used to calculate the ICC. An ICC value of <0,20 represents poor agreement, 0,21 - 0,40 fair agreement, 0,41 -0,60 moderate agreement, 0,61 - 0,80 substantial agreement, and, a value of 0,81 – 1,00 indicates almost perfect agreement.

Results

From April 2013 until May 2014, 191 observers from 42 different countries assessed the hysteroscopy recordings. Eighty-six observers were randomized for receiving diagnostic criteria before assessment of the recordings. The inter-observer agreement on the uterine shape was moderate in both groups. The ICC was significantly higher in the group that used the preset diagnostic criteria (ICC: 0.564) compared to the group without diagnostic criteria (ICC: 0.498, p-value 0.012). The overall agreement on the necessity to correct the uterine abnormality was found to be fair (ICC 0.384) and appeared not to be significantly different between both groups (p-value: 0.9).

Conclusions

The inter-observer agreement for the diagnosis of a septate uterus at hysteroscopy is moderate, but can be improved by offering diagnostic criteria. Still, the reliability of office hysteroscopy in diagnosing septate uterus might be questioned and additional imaging techniques such as transvaginal sonography may need to be studied for improvement.
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ES23-0318
Selected Abstracts 3

FIRST CLINICAL EXPERIENCES USING A NOVEL DEVICE (SONOSURE®) INTEGRATING ENDOMETRIAL BIOPSY AND SALINE INFUSED SONOGRAPHY.

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Objectives

in case of suspected uterine abnormalities (myometrium and endometrial) saline infused sonography is the gold standard. Compared to hysteroscopy it provides more information concerning intramural positioning of myoma. often ultrasound investigation is time consuming and followed by endometrial tissue sampling. a combination in a single hand setting would be an improvement. A novel device combining saline infusion for transvaginal sonography and brush for endometrial sampling was tested.
Methods
Biopsy was done prior to or following saline infusion. The novel device has a more rigid and bendable catheter and a softer acorn tip as the Goldstein catheter, developed to simplify introduction and decreasing fluid leakage. It and is available containing a built in compressible reservoir for saline fluid, single hand use, ready to use. The brush in the device is pushed forward and after rotation it provides a sufficient sample of endometrial tissue.
prospective descriptive study. in a outpatient department of regional non-university teaching hospital. 28 consecutive patients with abnormal uterine bleeding and thickened endometrium (>4 mm post and >8 mm or abnormal pre) were investigated

Results
Introduction was possible in all 28 patients (pre = 19; post: 9), reliable sonographic imaging was seen in all patients. Introduction of the catheter was painful in 6 women (>2/10 on VAS [4 pre; 2 postmenopausal]). In 16 patients sufficient tissue was obtained endometrial sampling performing sampling following SIS. In 24 patients sufficient endometrial tissue was aspirated for histological diagnosis (pre: 19; post: 5). Remaining 5 (postmenopausal) women showed atrophy and /or polyp(s), The amount of tissue obtained did not depend on the sequence of performing the two diagnostic modalities. The time needed to perform the procedure was less than 3 minutes in 85% of patients. Single introduction of the devices, the soft closing tip and the bending capacity of the catheter were advantageous to other devices.
Conclusions
clinical assessment of a novel device (Sonosure®) integrating endometrial biopsy and infusion of saline for uterine sonography effective diagnostic too
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ES23-0515
Selected Abstracts 3

PAIN REDUCTION WITH ALTERED INSUFFLATION GAS AT LAPAROSCOPY
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Objectives
Post-operative pain is related to the gas used for laparoscopy as demonstrated for 100% of nitrous oxide in 2002 by Tsereteli. In a previous trial we demonstrated that the use of full conditioning adding 10% of nitrous oxide and 4% of oxygen to the CO_2 pneumoperitoneum with humidification and altering the temperature of the insufflation gas, the use of Hyalobarrier gel and administration of 5mg dexamethasone significantly reduced post-operative pain and decreased adhesions. As we believed that just altering the insufflation gas by adding 10% of nitrous oxide and 4% of oxygen would reduce pain and adhesions by itself, we performed a RCT on women undergoing robot assisted laparoscopic myomectomy.
Methods

14 women undergoing robot assisted laparoscopic myomectomy were randomized 1:1 receiving 86%CO_2 + 10% N_2O + 4% O_2 or 100% CO_2. Outcome parameters were post-operative (VAS) and adhesions observed at second look laparoscopy after 2 weeks.

Results
Pain and pain killer intake was significantly reduced by using the altered insufflation gas ($p<0.05$). Adhesions did not show a significant difference, although the study group tended to have less adhesions ($p<0.21$).
Conclusions
Addition of 10% N_2O + 4% O_2 to the pneumoperitoneum significantly decreased post-operative pain in even a low number of participants, which demonstrates a strong effect.
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ES23-0365
Selected Abstracts 3

NERVE-SPARING (CLASS C1) LAPAROSCOPIC RADICAL HYSTERECTOMY: FUNCTIONAL, CLINICAL AND SURVIVAL OUTCOMES IN A MULTI-INSTITUTIONAL RETROSPECTIVE STUDY.
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Objectives
to report our experience about clinical outcomes, recurrence rates, survival and quality of life after total laparoscopic radical hysterectomy with nerve sparing approach (TLNSRH) for early stage or locally advanced cervical carcinoma.
Methods

multi-institutional, retrospective/cohort study of patients submitted to nerve-sparing Class C1 (Querleu-Morrow classification) radical hysterectomy plus systematic pelvic or additional lumbo-aortic lymphadenectomy for the treatment of carcinoma of the uterine cervix. All patients were investigated with preoperative urodynamic studies. Postoperative early and late complications were recorded. During the follow-up period, at 6, 12 and 18 months, patients were asked to fill in a questionnaire regarding pelvic functions and quality of life.

Results

From January 2004 to December 2012, 116 consecutive patients were collected for the study. All of the patients underwent TLNSRH with systematic pelvic lymphadenectomy for invasive cervical cancer. Twenty-one (18.1%) of them, were submitted to additional para-aortic lymphadenectomy. At questionnaire evaluation, three patients (2.6%) presented urinary incontinence (2 urge incontinence; 1 mixed incontinence) preoperatively detected by urodynamic studies. Significant worsening in these dysfunctions were not detected post-operatively. During the questionnaire evaluation, 3 patients

(2.6%) reported mild/moderate difficulty to empty the bladder. Eight patients (6.8%) reported moderate/severe constipation, but the same symptoms were complained pre-operatively by the patients and were not significantly worsened post-operatively. 40 patients (34.4%) reported sexual activity previously to the operation. In 5 patients (12.5%) a change of frequency in sexual activity was detected; 7 patients (17.5%) complained dyspareunia; 5 patients (12.5%) complained moderate vaginal dryness. One patient (2.5%) had vaginal blood loss during intercourse. Thirty patients (75%) reported sexual satisfaction. A total of 106 patients (91.3%) considered their postoperative quality of life unchanged, compared with that before surgery. Eighteen months after surgery, no pelvic (bladder, bowel) neurological functional impairments were dectected clinically or after the filling of the quality of life questionnaire. The median time of follow-up was 37 (24-88) months. OS was 100 % for stage IA2, 90.2% for IB1, 88.9% for IB2, 80% for IIA and 80% for IIB disease. Cumulative OS was 91.4%.

Conclusions

We believe that nerve-sparing approach to radical hysterectomy for cervical cancer is feasible if specific resection limits, such as the deep uterine vein, are carefully identified and respected. However, a nerve-sparing surgical effort should be balanced by the oncological priorities of removal of the disease and all its potential routes of local spread. Laparoscopy has proven to be safe and effective and should be the referral approach for the treatment of cervical cancer patients. Until prospective randomized studies about TLNSRH will be published, we believe that technique could be safely be performed by expert hands, with similar oncological outcomes with respect to the classical RH but with better clinical long-term results.
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ES23-0098
Selected Abstracts 3

TEN YEARS OF CENTRALIZED ASHERMAN SURGERY IN THE NETHERLANDS, 2003-2013
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Objectives

Objective: The goal was to provide descriptive statistics on hysteroscopic adhesiolysis in patients with Asherman syndrome after centralization in the Netherlands. Analyzing success rates of restoring the normal uterine cavity and restoring normal bleeding patterns. Access the occurrence of early and late recurrence of adhesions.

Methods

Design: retrospective cohort study.Setting: All patients where operated in the same hospital, the Spaarne Ziekenhuis in the Netherlands. This hospital is a university affiliated (University of Amsterdam and Free University Amsterdam) training hospital.Population: women with Asherman syndrome who were referred by various gynaecologists to the Spaarne Ziekenhuis. Methods: A cohort from 2003-2013 was analysed. A total 638 women were included. In total 770 attemps of

adhaesiolysis were performed. They all had hysteroscopic adhesiolysis to remove intra uterine adhesions and to restore the normal uterine cavity. This was done with operative hysteroscopy with conventional instruments in combination with intraoperative fluoroscopy.

Results

Results: In 606 (95%) of the patient, a normal uterine cavity was restored in 1 to 3 attempts. Of the patients who had a successful operation, the adhesions spontaneously recurred in 130 cases (20.5 %). First trimester curettage were more prone to give low grades of adhesions (Grade 1-2a) and post partum procedures were more prone to give high grades of adhesions (Grade3-5).

Conclusions

Conclusions: Centralization of advanced hysteroscopic procedures like adhesiolysis in Asherman patients seems to have a positive effect on surgical success rates. These success rates are higher than those reported in the literature. The focus point on primary prevention should be on minimalizing the damage to the uterine cavity in post partum procedures. The secondary prevention of M.Asherman can be assessed by new RCT’s in centers with high volume of cases.

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ES23-0049

Selected Abstracts 3

LAPAROSCOPIC AND VAGINAL CERVICAL CERCLAGE – REPRODUCTIVE OUTCOMES (EARLY RESULTS).

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Objectives

During last years number of patients who are planning pregnancy after surgery of cervical cancer progressively increasing. Except patients after cervix amputation, radical abdominal trachelectomy or vaginal trachelectomy with laparoscopyc lymphadenectomy cervical cerclage application is necessary for patients with miscarriages of pregnancy. For progression of pregnancy in this group laparoscopic cerclage or even vaginal cerclage is mandatory.

Methods

For the last 37 month we perform 23 laparoscopyc, 1laparotomyc and 5 vaginal procedures. 9 patients were after radical abdominal trachelectomy, 11 patients after cervix amputation, 9 patients with noncarrying of pregnancy. 23 patients were unwent laparoscopic approach, in one case laparotomyc surgery was done with simultaneously myomectomy. In 5 cases, when enough length of cervix presents we done vaginal cervico-istmic cerclage. We use Mesh type 3 protesis 10-15mm wide for this procedures, with suturing fixation to the cervix or Mersilene tape.

Results

4 patients have spontaneously pregnancy, 3 patient achieve pregnancy by IVF. 4 patients with miscarriages of previous pregnancy on 16-18 weeks were delivered on 36-38 weeks by cesarean section. 2 patient is on the early stages of pregnancy. In one case extrauterine pregnancy were admitted.

Conclusions

laparoscopyc and cervical cerclage with Mesh application on a pregnancy planning stage create conditions for successful carrying of a pregnancy among patients with high risk of pregnancy miscarriages.
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ES23-0042
Selected Abstracts 3

SACRAL COLPOPEXY: LONG-TERM MESH COMPLICATIONS INVOLVING REOPERATION(S)
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Objectives
Sacral colpopexy (SC) is a classic procedure used for the surgical treatment of pelvic organ prolapse. Although the procedure boasts excellent success rates, there are risks of complications and reoperation may be required. The purpose of this study was to evaluate the extent of complications following SC, requiring reoperation, as well as the operating techniques of this kind of surgery.
Methods

A retrospective monocentric study of patients who were operated on following a mesh complication after SC was conducted, at the University Hospital of Lille, between January 2007 and January 2013. Information relating to medical and surgical history, SC surgical technique, type of complication (using the International Urogynecological Association/International Continence Society classification), and reoperations techniques were gathered.

Results
27 patients required surgery for complications after SC. 19 patients were treated for vaginal mesh exposures, 4 for intravesical mesh (including one with vaginal mesh exposure), 1 for ano-rectal dyschesia, 1 for spondylodiscitis with a vaginal mesh exposure,1 for mesh infection, and 1 for vaginal fistula communicating with a collection in ischio-coccygeal muscle. The delay between the initial SC and the first reoperation was 5.3±1.1 years. The average operating time was 89±17 minutes,and the length of hospital stay was 3.8±0.7 days. 10 patients needed several interventions.

Conclusions

Complications of SC may be serious and occur years after the initial surgery. Their medico-surgical management must be known in order to minimise their risks and consequences.
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ES23-0348
Selected Abstracts 3

LAPAROSCOPIC SIMULATION TRAINING - A SURVEY OF OBSTETRIC AND GYNAECOLOGY TRAINEES IN NORTHERN IRELAND.
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Objectives

Laparoscopic simulation training improves surgical skill and has become an integral part of many surgical training schemes worldwide. However, for trainees in the United Kingdom simulation training is not compulsory and for many, it is not a feature of their surgical training. We sought to ascertain the attitudes of trainees to simulator use with the prospect of introducing compulsory simulation training.

Methods

A 10 question 'survey-monkey' e-questionnaire was distributed to all 102 Obstetrics and Gynaecology trainees in Northern Ireland. The questionnaire was reviewed and sanctioned by the Heads of the School of Obstetrics and Gynaecology. The survey ascertained the level of training and educational needs with respect to laparoscopic surgery, of the respondent. We enquired as to how they had obtained their current level of knowledge with respect to laparoscopic surgical techniques and instrumentation. Questions asked if they had access to a simulator, used it in the last month, if they felt it would help and what prevented them from using simulator at all or more often. Opinions were sought regarding assessment of simulation use and compulsory use of simulation.

Results

Only 36/102 (35.3%) of trainees responded to the survey. 13/36 (36.1%) were junior trainees and 8/36 (22.2%) in their final two years of training. 17/36 (47.2%) of trainees felt that they were unlikely to meet their educational targets by the end of this training year with respect to laparoscopic surgery although 3/36 (8.3%) were not aware of what their requirement was. 22/36 (61.11%) of trainees have access to a laparoscopic simulator but only 8/36 (22.2%) of trainees had used one within the last month. The over whelming reason for not using the trainer was lack of time during working hours and 7/36 (19.4%) of trainees felt that they did not know how best to use the simulator. 19/36 (52.8%) of trainees have learnt some laparoscopic principles at a course, mostly electrosurgical principles. However the majority of trainees learn instrumentation, safety, techniques and steps of procedures in theatre. Two trainees do not feel that using a simulator will improve their surgical skill. Few trainees, 5/36 would object to compulsory time being spent on training, but half of respondents would object to having to attain a standard on the trainer before being granted permission to operate.

Conclusions

Despite several reminders, the response to this survey was disappointingly low. Almost half of the respondents are struggling to meet their educational targets in laparoscopy and while over 60% have access to a simulator they can’t find the time during the day to use it. A compulsory curriculum of dedicated time spent training on a simulator complemented by lectures on laparoscopic principles would ensure all trainees were given time and support to help them achieve their targets.
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ES23-0278
Selected Abstracts 3

PARTIAL LOSS OF BAF250A (ARID1A) IN DEEP ENDOMETRIOSIS AND COMPROMISED PELVIC LYMPH NODES: A NORMAL PHENOMENON OR AN EARLY EVENT OF MALIGNANT TRANSFORMATION IN ENDOMETRIOSIS?
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Objectives

Endometriosis has been associated to cancer risk, mainly with ovarian cancer. Most studies report atypical ovarian endometriosis (endometriomas) as possible precursor lesions, which may suffer malignant transformation. ARID1A gene mutation leads to the loss of BAF250a protein expression. These alterations were identified among endometriosis-associated ovarian carcinomas (EAOC) and the atypical endometriosis lesions beside the tumour cells; this was described as a possible early event in the transformation of endometriosis into cancer. Afterwards, the complete loss of BAF250a expression was also
identified in benign endometriosis, especially in ovarian endometriosis. However, deep-infiltrating endometriosis (DIE) affecting the bowel or the rectovaginal site is clearly the most aggressive presentation of endometriosis. Some studies showed already the lymphatic spread of endometriotic lesions in patients with rectovaginal DIE with 25% of the pelvic sentinel lymph nodes (PSLN) affected with typical endometriosis lesions. The risk of malignant transformation of this advanced form of endometriosis has not been studied so far and it was the aim of our study.

Methods
We evaluated the immunohistochemical expression of BAF250a protein in rectovaginal DIE (n=30), in pelvic sentinel lymph nodes (PSLN) (n=30), of which 7 were compromised with typical endometriotic lesions, ovarian endometriosis – endometriomas (n=20) and eutopic endometrium from patients without endometriosis as controls (n=20). Moreover, we also assessed the BAF250a expression in endometrioid carcinomas (n=5) and endometrial stromal sarcomas (n=8) affecting the bowel or the rectovaginal site, as those types of cancer might be associated with endometriosis.
Results
Epithelial and stromal BAF250a expression was assessable in 25/30 (83.3%) of DIE, 7/7 (100%) endometriotic lesions of PSLN, 20/20 (100%) of endometriomas and 20/20 (100%) of eutopic endometrium from controls. We identified the partial loss of BAF250a expression in 40% (10/25) of DIE, 43% (3/7) of endometriosis lesions compromising the PSLN, 30% (6/20) of endometriomas, and also in 25% (5/20) of eutopic endometrium from controls. The results regarding the BAF250a expression in the endometrioid carcinomas and endometrial stromal sarcomas affecting the bowel are being assessed.
Conclusions
The rate of the partial loss of BAF250a protein expression in DIE and in endometriosis affecting the PSLN is described for the first time. The value of this finding as a predictor of malignant transformation in endometriosis needs to be clarified in further analysis.
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ES23-0253
Selected Abstracts 4

COMPLIANCE WITH NATIONAL PATIENT SAFETY AGENCY'S 'RAPID RESPONSE REPORT' ON LAPAROSCOPIC PROCEDURES IN GYNAECOLOGY AT A DGH: CLOSURE OF AUDIT LOOP
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Objectives
Primary audit of laparoscopic procedures was undertaken during May - November 2013 to review

our compliance with the recommendations related to laparoscopic surgery in the 'Rapid Response Report ' published in Sept 2010 by NHS 'National Patient Safety Agency'. This was then re-audited to close the audit loop and re-assess the compliance after implementation of recommended changes.

Rapid Response Report states that all laparoscopic procedures should be monitored for any complications appropriately and patients on discharge from hospital should be provided with a copy of discharge summary along with verbal and written advice on post-operative, in addition to sending copy of the discharge letter to the GP.

Methods

Primary audit for 96 cases was done over 6 month period (March-August 2011). For re-audit, 84 laparoscopy cases undertaken over 6 month period (May-October 2013) were reviewed. Standards were drawn from the document: NPSA/2010/RRR016: Laparoscopic surgery: Failure to recognise post-operative deterioration

Results

1. 100 % cases discharged from gynaecology ward were provided with a written/typed discharge summary with details of procedure documented. Although primary audit yielded similar results, there was significant variation in this practice with varying levels of information documented due to different forms of discharge templates/no templates being used in different wards and this was eliminated by introducing a standardized discharge template.

2. 100% provision of RCOG leaflet on laparoscopy-post operative care (Primary audit: 92%)

3. 100% use of Early Warning Score (EWS) observation sheet (Primary audit: 100%)

4. 100% women were provided with details of emergency contact numbers at discharge (Primary audit: 100%).

5. 97% of elective laparoscopies had received pre-operative procedure information sheet and had their consent taken pre-operatively in clinic (Primary audit: 92%). 3% patients in re-audit period who required consenting on admission were all noted to be transfers from private care.

6. Only 1 intra-operative complication (stomach perforation with veress needle) was observed and this was managed laparoscopically and the patient was discharged within 24 hours. No major complications were noted in both the audits.

Conclusions

Recommendations of the primary audit were implemented and improvement was noted in the provision of discharge summary with relevant information to patient as well as general practitioners. Excellent compliance with use of EWS in the post-operative period was noted. Complication rates from procedure remained very low. Recommendation made regarding appropriate consenting for patients listed from outside NHS.
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ES23-0032
Selected Abstracts 4

PATIENT-REPORTED QUALITY-OF-LIFE AND SEXUAL-FUNCTION OUTCOMES AFTER LAPAROSCOPIC SUPRACERVICAL HYSTERECTOMY (LSH) VERSUS TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH): A PROSPECTIVE FOLLOW-UP STUDY IN 915 PATIENTS

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Objectives

To compare patient-reported quality-of-life and sexual-function outcomes in women after laparoscopic supracervical hysterectomy (LSH) or total laparoscopic hysterectomy (TLH) for benign uterine disease.

Methods
In total, 915 respondent patients were included in this prospective, questionnaire-based follow-up study.
Results
In total, 915 of 1952 (48.5%) women were included in the present analysis, of which 788 (86.1%) and 127 (13.9%) had undergone LSH or TLH, respectively. Women undergoing LSH reported significantly lower pain levels ($p = 0.037$) and faster partial ($p = 0.015$) and complete ($p < 0.001$) resumption of normal daily activities compared to those undergoing TLH. As regards sexual function, women undergoing LSH resumed sexual activity significantly sooner ($p = 0.018$), rated sexual desire as greater in magnitude ($p = 0.023$), and reported more frequently that their sexual life had improved postoperatively ($p = 0.008$) than did women undergoing TLH.

Conclusions

Women undergoing LSH for benign uterine disease mayhave better outcomes regarding certain quality-of-life and sexual-function parameters than women undergoing TLH for benign uterine disease.
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ES23-0193
Selected Abstracts 4

A PROSPECTIVE RANDOMIZED CONTROL TRIAL TO COMPARE THE EFFICACY OF INTRAUTERINE BALLOON AND INTRAUTERINE CONTRACEPTIVE DEVICE IN THE PREVENTION OF ADHESION REFORMATION FOLLOWING HYSTEROSCOPIC ADHESIOLYSIS

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Objectives
To assess the efficacy of adhesion reformation between triangular intrauterine balloon and intrauterine contraceptive device(IUD) after hysteroscopic adhesive resection surgery.
Methods

This is a randomized control trial, with subjects randomly allocated to one of two modalities: insertion of IUD or intrauterine balloon after intrauterine adhesiolysis for moderate to severe intrauterine adhesion (AFS ≥5). Both devices were removed after 1 week. A second look hysteroscopy was carried out within 2 month. The rate of the recurrence of adhesion and the reduction of AFS score in the 2 groups were compared.
Results
159 cases were recruited initially, 27 cases dropping out for method violation or without second look in time, 15 in IUD group and 12 in balloon group, finally 61 cases in IUD group and 71 cases in balloon group completed were included in the final analysis. The age, parity, menstrual characteristics and AFS score before surgery were comparable between the two groups. The median AFS score reduction (7 in both groups) and the recurrent adhesion rate (IUD group 36.1%, balloon group 31.0%) were not significantly different between the two groups.
Conclusions
The intrauterine balloon and intrauterine contraceptive device are of similar efficacy in the prevention of adhesion reformation following hysteroscopic surgery for Asherman syndrome.
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ES23-0460
Selected Abstracts 4

LAPAROSCOPIC SACROCOLPOPEXY VERSUS ABDOMINAL SACROCOLPOPEXY FOR VAGINAL VAULT PROLAPSE: A RANDOMIZED CONTROLLED TRIAL
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Objectives

Abdominal sacrocolpopexy represents the most effective treatment for vault prolapse and is considered as the gold standard for vaginal vault prolapse treatment. Since the laparoscopic sacrocolpopexy has been introduced, it has gained popularity. Laparoscopic sacrocolpopexy has potential advantages in terms of reduced morbidity and recovery time. However, the laparoscopic approach has potential surgical disadvantages like decreased degrees of movement, two-dimensional vision, and a learning curve associated with the laparoscopic approach. The aim of this randomized trial was to evaluate functional outcome of laparoscopic compared to open sacrocolpopexy, with disease specific quality of life as primary outcome.

Methods
We performed a multi-center randomized study in 2 university and 4 teaching hospitals in the Netherlands within the Dutch urogynecological consortium. We included patients with symptomatic post hysterectomy vaginal vault prolapse requiring surgical treatment. Seventy-four patients were randomized, of whom thirty-seven to the open abdominal group and thirty-seven to the laparoscopic sacrocolpopexy group. We studied disease specific quality of life, using validated questionnaires. Secondary outcome included anatomical outcome, peri-operative data and long term follow-up.
Results
Long term preliminary follow-up results show no significant difference in disease specific quality of life and anatomical outcome. In the laparoscopic sacrocolpopexy group blood loss and hospital stay

was significantly less compared to the abdominal group. There was a trend seen towards fewer complications in the laparoscopic group, although this is no significant difference.

Conclusions
This randomized controlled trial comparing open abdominal and laparoscopic sacrocolpopexy has shown clinical equivalence in the treatment of vault prolapse in terms of functional and anatomical outcome. Laparoscopic sacrocolpopexy is a safer treatment for vaginal vault prolapse compared to abdominal sacrocolpopexy, moreover this technique does not prolong the operation.
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ES23-0494
Selected Abstracts 4

LAPAROSCOPICALLY ASSISTED SIGMOID COLON VAGINOPLASTY
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Objectives
To review indications of laparoscopic vaginoplasty using the sigmoid colon and outline technical details.
Methods
A Google Docs survey was addressed to French-speaking surgeons in Europe. The aim of the questionnaire was to know the place of laparoscopically assisted sigmoid colon vaginoplasty (LAVS) in the treatment of vaginal atresia and to collect surgical data from patients managed by LAVS.
Results

Nine centers answered the survey. Six centers performed LAVS, but one of them has now switched to the Davydov procedure by laparoscopy. Three centers performed sigmoid vaginoplasty by
Eleven LAVS were evaluated (median age: 17years, range: 5-28). The endostapler was used through the introïtus in one center. In order to divide the bowel transplant, and anvil insertion was performed through the neo-introitus (4 centers) using a Natural Orifice Transluminal Endoscopic Surgery (NOTES) technique. One LAVS was converted to laparotomy.
Mucus discharge was negligible (3 patients were impaired); the introitus was wide enough (one introital stenosis was noted); most patients were satisfied with surgery and resumed normal sexual activity (scored 4/5 according to Likert scale).

Conclusions
Laparoscopic transplant of an isolated segment of sigmoid colon to create a neovagina can be considered an option in the non-invasive treatment of vaginal atresia, with results that quickly contribute to a satisfactory sexual activity.
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ES23-0281
Selected Abstracts 4

LAPAROSCOPIC URETEROCYSTONEOSTOMY FOR INFILTRATIVE URETERAL ENDOMETRIOSIS: OUTCOMES AT MEDIUM AND LONG TERM FOLLOW UP OF 84 CONSECUTIVE CASES.
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Objectives

To investigate the efficacy of laparoscopic ureterocystoneostomy in patients with ureteral endometriosis by analyzing the results in short, medium and long term.

Methods

Retrospective review of records of all patients with endometriosis treated by laparoscopic ureterocystoneostomy between January 2009 and November 2013 in the Department of Obstetrics and Gynecology Hospital of the Sacred Heart, Negrar.

Results

84 patients were included in the study; in all patients excision of endometriosis was radical and ureteral endometriosis was histologically confirmed (49.5% intrinsic and 50.5% extrinsic) .
In 66.6 % of cases ureterocystoneostomy was performed with psoas hitch technique. The average execution time of ureterocystoneostomy was 102.5 min.
Postoperative complications were infrequent : 3 cases of intestinal fistula , 1 case of urinary tract infection , 1 case of hyperpyrexia, 2 patients experienced transient deficit bladder voiding and 1 case of hematuria . The mean follow-up time was 16.6 months (1-60).
The study reported good clinical and surgical results in the medium and long term with 1.1% of recurrent ureteral stenosis and statistically significant regression of symptoms.

Conclusions

This is the most numerous serie of patients with deep endometriosis undergoing laparoscopic ureterocystoneostomy in literature.
The collected data show that, in the case of ureteral endometriosis, this technique is effective, safe and provides good results in terms of relapses and control of symptoms.
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ES23-0485
Selected Abstracts 4

THE WORLD'S FIRST OCULUS RIFT GYNAECOLOGICAL ENDOSCOPIES – BRINGING THE HIGH DEFINITION DA VINCI SURGICAL IMMERSION TECHNOLOGY INTO YOUR OPERATING THEATRE
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Objectives

We present the design and implementation of an innovative, immersive, stereoscopic, head mounted visualisation system to help ameliorate the visual limitations of modern day gynaecological endoscopy.

Through a series of procedures, our aim was to thoroughly validate and evaluate the proposed system and explore the feasibility of bringing this technology into mainstream.

Methods
Our system utilises the state-of-the-art Oculus Rift head mounted display immersion unit connected to a stack. The programming and protocol of the software that allows this connectivity was developed for this purpose. A high end laptop is required for image processing and output.

The Oculus Rift is unlike any HMD in the market. Improving depth perception by employing previously, classically, ignored binocular depth cues, the Oculus Rift can be connected to any stack, and provides a 1080p immersive experience, similar to the da Vinci Surgical System. It comes complete with a gyroscope, accelerometer, and magnetometer, this enables head tracking at very low latency and can be used to reduce camera tremor and sway.

Consultant Gynaecologists were given the opportunity to use the Oculus Rift in theatre for a total of 20 cases.
Specific Likert Scale psychometric questionnaires were filled in before and after each laparoscopic, hysteroscopic or cystoscopic procedure where the Oculus Rift was worn.

This was followed by a detailed discussion on the cumulative experience and of the technology with the operator, at the end of every procedure, in order to determine qualitative responses on the overall convenience, practicality, workability, viability and application of the technology. Suggestions for improvement were also explored.

Results
Completed surveys on the use of the Oculus Rift at gynaecological endoscopy revealed that overall satisfaction from its utility (scale: 1, worst; 5, ideal) was high (mean, 4.38). Complete immersion into the operative field/cavity was mentioned as one of the greater advantages.

Operators were highly satisfied with the video quality (mean, 4.25) and the graphics (mean, 4.38) that the unit delivered. Complete immersion into the operative field/cavity was mentioned as one of the greater advantages.

Operators felt using the Oculus Rift restored the natural alignment of the visual and motor axes to eliminate paradoxical imaging (mean, 4.13) and this led to reduced neck and back strain during procedures (mean, 4.19). (Image 1.)

Image 1.

Conclusions
With this head mounted visualisation system scoring high in potential utility (mean, 4.50) and high in overall satisfaction of current utility (mean, 4.38), the Oculus Rift has numerous unrealised benefits in the world of endoscopic surgery. Bringing this €200 marvelling device into operating theatres to enhance day to day operative gynaecological endoscopies is an easy process, one to be considered by endoscopists worldwide.

With augmented reality a possibility in the very near future, the Rift is an essential part of that future, now.
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ES23-0431
Selected Abstracts 4

INTRAUTERINE ADHESIONS FOLLOWING HYSTEROSCOPIC TREATMENT FOR RETAINED PRODUCTS OF CONCEPTION: WHAT ARE THE RISK FACTORS?
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Objectives
Intrauterine adhesions (IUA) may result from retained products of conception (RPOC), and are often associated with infertility and pregnancy complications. The aim of this study was to assess the prevalence and risk factors for IUA following hysteroscopic treatment of RPOC.
Methods
A retrospective cohort study, analyzing 167 cases of women referred to our institution from 2009 to 2013 for hysteroscopic treatment of RPOC. We investigated demographic characteristics, obstetrics parameters and surgical variables to evaluate which factors could be associated with IUA formation.
Results
Out of 167 women treated for RPOC, 84 (50.3%) had undergone a follow-up hysteroscopic evaluation after the operative hysteroscopy and were included in the study. IUA were found in 16 (19.0%) cases, of which only 3 (3.6%) were severe adhesions. Presence of IUA was associated with RPOC following delivery by cesarean section (5/10 [50.5%] developed IUA versus 7/49 [14.3%] following vaginal delivery, p=0.01). The patients' gravidity, parity and the interval between the termination of the index pregnancy and the treatment for RPOC were not associated with post-operative IUA.
Conclusions
Hysterosopic treatment for RPOC is associated with a low incidence of severe intrauterine adhesions formation. RPOC occurring after delivery by cesarean section are particularly at risk for development of IUA.
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ES23-0321
Selected Abstracts 4

COMPARISON OF POST-OPERATIVE PAIN FOR DIFFERENT INSUFFLATION PRESSURES DURING GYNECOLOGIC LAPAROSCOPY OPERATIONS: A PROSPECTIVE RANDOMIZED TRIAL
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Objectives
To determine the effects of different intra-abdominal pressure values under trendelenburg position on visceral type pain in gynecologic laparoscopic surgery.
Methods

This randomized, controlled prospective trial was conducted at a tertiary education hospital. In total, 150 women had undergone operative gynecologic laparoscopy at different abdominal insufflation pressures. Out of 150 women, 54 of 150 women in low pressure group (LPG), (8 mm Hg), 45 of 150

women in standard pressure group (SPG), (12 mm Hg) and 51 of 150 women in high pressure group, (HPG), (15 mm Hg) were enrolled into the study. The statistical analyses included the mean age, BMI (Body mass index), duration of surgery, analgesic consumption, length of hospital stay, amount of CO2 consumption and volume of hemorrhage. Postoperative pain was assessed at 6, 12, 24 h after operation by the Visual Analog Scale (VAS).

Results

Table 1. The effects of the different intraperitoneal pressure during gynecologic laparoscopy.

LPG (8 mm Hg, n=54)
SPG (12 mm Hg, n=45)
HPG (15 mm Hg, n=51)
p value
Pain score(VAS)
6 h
12 h
24 h
4.83±1.89
2.31±1.68a.b
1.07±1.38c
5.51±1.75
3.08±1.54
1.33±1.66d
5.62±1.23
3.57±0.86
2.41±1.33
.07 (NS)
<.001
<.001
Analgesic consumption (doses)
1.09±0.29
1.20±0.40
1.25±0.45
.07 (NS)
Duration of hospital stay (days)
1.03±0.19
1.11±0.31
1.11±0.30
.32 (NS)
LPG: Low pressure group, SPG: Standart pressure group, HPG: High pressure group
Data are expressed in mean±SD
Significant difference as p<0,05
a LPG is significantly different from SPG (p< .05)
b LPG is significantly different from HPG (p< .05)
c LPG is significantly different from HPG (p< .05)
d SPG is significantly different from HPG (p< .05)
VAS: visual analog scale, NS: not significant

No statistically difference was found between the groups comparing age, BMI, analgesic consumption, length of hospital stay. The mean duration of operative time and total CO2 consumption during the surgery were higher in LPG than SPG and HPG. The mean intensity of post-

operative pain assessed by VAS score at 6, 12 was less in LPG than SPG and HPG, statistically significance was seen at 12 h. VAS scores at 24 h in LPG and SPG were lower than HPG.
Conclusions
Low insufflation pressure is better than standard or high pressure in terms of pain scores however it results in longer operation times and more hemorrhage.
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Oral Presentations (128)

ES23-0419
Free Communications 1: Endometriosis 1

TAILORING THE MANAGEMENT OF RECTOVAGINAL ENDOMETRIOSIS: PRELIMINARY REPORT OF 276 CASES
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Objectives

Treatment of rectovaginal nodule with bowel invasion is still a subject of debate. While some groups claim rectal shaving as the best alternative others promotes the systematic bowel resection in cases of deep invasion. We believe that the main goal of the treatment should be two-folds: first, to improve the quality of life of theses patients by reducing pain and ideally improving fertility and secondly, prevent recurrence. Consequently, we adapt the surgical strategy according with the symptoms and patient's goals. The objective of this study is to perform a comprehensive review of the surgical management of RVN in our department with special focus in the preoperative symptoms and outcomes of patients treated for rectovaginal nodules: pain and bowel symptoms, functional symptoms, complications, recurrences and pregnancy rate.

Methods

Retrospective, descriptive study of 276 consecutive patients with histologically confirmed RVN managed between September 2009 and September 2013. The different surgical techniques were specified. Pain, other bowel symptoms, complications, recurrence and pregnancy rate were evaluated. Data were collected from medical records and telephone interview.

Results
276 Procedures were performed laparoscopically. There were not conversions. Dysmenorrhea was present in 54,3% (mean 6,61, median 8, range 1-10), dyschezia present in 33,7% (mean 2,96, median 0, range 3-10), dysmenorrhea (mean 6,61, median 8, range 2-10) MRI indicated invasion in 1/3 of the patients. Surgical techniques were 144 (52,17%) adhesiolysis, 76 (27,54%) shavings, 41 (14,86%) of segmental bowel resections and 15 (5,43%) discoid resections. Prevalence of dyschesia was associated with the surgical radicallity (adhesiolysis 0%, shaving 21,5%, discoid resection 40% and segmental bowel resection 46,34%. Postoperative complications rate was 6,91% (Dindo-Clavien most frequent II). Significant postoperative reduction in all the pain indicators was noted. Recurrence rate and pregnancy are still in course by telephone interview and will be presented in detail in the congress according to technique and symptoms.
Conclusions

Although symptoms and MRI do not predict completely the surgical gesture it help us to adapt the surgery to the patient disease. Conservative approach was successful in 80% of the cases and was always intended except in cases of stenosis or multifocal disease. Even in cases of large RVN a cytoreductive approach was essayed and the combination with discoid resection was considered in order to spare patients from bowel resection. Despite this conservative approach 1 out of five patients were submitted to some sort of bowel resection highlighting the necessity for the surgeon to dominate several techniques and not only restrict the management to one or another. The reduction in pain symptoms was significant in all groups and independent of the technique utilized, but the complications were more frequent in cases that required more radical approach. Benefits and risks of surgery should be balanced in the decision-making process, discussed with the patient and adapted according to the intraoperative findings.
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ES23-0079
Free Communications 1: Endometriosis 1

DOES REMOVAL OF DEEP INFILTRATING ENDOMETRIOSIS IMPROVE FERTILITY?
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Objectives

Deep infiltrating endometriosis (DIE) showsa high disease activity, and is considered to be related to pain caused byendometriosis. We previously reported that the systemic removal of DIE relievespain. Here, we report the effect of DIE removal on fertility.

Methods

Subjects were 106 patients (33.1±5.42 years old) who underwent laparoscopic fertility-preserving surgeryfor endometrioma and DIE between 2008 and 2012, desired pregnancy directlyafter the surgery, and had not received infertility treatment. The approval ofthe ethics committee of our hospital and informed consent of the subjects wereobtained. The presence or absence of DIE was evaluated during laparoscopic surgery(59 in DIE group; 47 in no DIE group), and systemic DIE removal was conducted whenobserved. The cumulative live birth rate at 5 years in each group was evaluatedwith the Kaplan-Meier estimator and log-rank test. Complete cul-de-sacobliteration was observed in 47 cases (80%).

Results
The cumulative live birth rates of both theDIE and no DIE group were 30% at 5 years, showing no significant difference (log-ranktest: $\chi 2=0.588$, $P=0.443$)

Conclusions

The live birth rate of the no DIE group,including mild cases, following natural conception was equal to that of the DIEgroup, including severe cases with complete cul-de-sac obliteration undergoingsystemic DIE removal. Therefore, DIE removal improved fertility.
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ES23-0068
Free Communications 1: Endometriosis 1

RUSSIAN CONSENSUS IN TREATMENT OF ENDOMETRIOSIS

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Objectives
Endometriosis (E) is one of the most common gynecological diseases, it is found in 50-60% of adolescents with pelvic pain, in 35-50% of patients with infertility, in 70-80% of women with chronic pelvic pain. To work out national guidelines for treatment strategies of patients with endometriosis.
Methods
We searched for articles in English in Pubmed and The Cochrane Library (1999-2012), available meta-analyses and systematic reviews of randomized controlled trials, to prepare Recommendations for the treatment of endometriosis. We developed 3 algorithms for the management of patients with combination of endometriosis and infertility, adenomyosis and endometriosis in adolescents.
Results
Results. In Ott's research institute of Obstetrics and Gynecology, Saint-Petersburg, within the frameworks of worked out recommendations, 536 patients with endometriosis were analyzed. In 62.9% of patients, III and IV stages of endometriosis (r-AFS) were found. Infiltrative endometriosis was diagnosed in 32.1% of women. Chronic pelvic pain was present in 78,9% of cases, 39.9% of the patients complained on dyspareunia, 42,7% of women had infertility. Asymptomatic form of the disease was stated in 3,9% of women. All the surgical interventions were performed by laparoscopic access. In 53 % we performed cystectomy, in 46,8% - excision of endometriotic lesions on peritoneum of pelvis minor, in 32.1% - removal of endometrioid infiltrate, in 1.1% - resection recto-sigmoid part of colon. During postoperative period, 38,6% of patients received GnRH agonists (6 months), 20,1% - dienogest 2 mg (6 months), 6% - combined contraceptives (CC) in extended regimen. We also demonstrate the results of our experience of the use of aromatase inhibitors with progestogens (6 months) in 20.9 % of patients. 14.2% of patients didn't receive any hormonal therapy. The results of treatment were estimated by the duration of recurrence-free period, disappearance/decrease of pain, overcoming of infertility. When observed within 3-5 years after the operation, in 12.9% of cases clinical recurrence of the disease was stated by second-look laparoscopy. In 93,9% of cases, recurrence of endometriosis was observed in patients who received CC; in 13.5% after therapy with aGnRH, in 5.4% - after treatment with aromatase inhibitors, in 3.7% of cases after treatment with dienogest. We developed algorithm of selection of postoperative hormone therapy. The necessity of determination of FSH and AMG serum levels in late reproductive age and/or after removal of endometriomas is approved. In the case of III-IV stages of endometriosis or combination of endometriosis with pain or infertility, if ovarian reserve is preserved, application of aGnRH is approved. If ovarian reserve is reduced, dienogest or aromatase inhibitors should be prescribed.
Conclusions
Developed guidelines 'Endometriosis: diagnostics, treatment and rehabilitation' (2013) is a summary of the latest evidence on the diagnosis and treatment of endometriosis received both in Russia and abroad. They are recommended to be used in routine practice for specialists of wide profile.
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ES23-0401
Free Communications 1: Endometriosis 1

INTESTINAL ENDOMETRIOSIS: COMPARISON OF SHAVING, DISCOID AND SEGMENTAL RESECTION TECHNIQUES FOR SYMPTOM RELIEF, COMPLICATIONS AND RISK OF RECURRENCE

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Objectives

Bowel endometriosis can often cause debilitating symptoms, effecting women;s quality of life. The debate still continues as to which intervention (shaving, discoid or segmental resection) provides the best treatment option in terms of symptom relief and risk of recurrence.

The aim of this study was to compare symptom relief, complication rates and risk of recurrence in patients undergoing shaving , discoid or segmental resection.

The secondary aim was to evaluate histological samples to determine whether residual disease was left behind due to incomplete treatment (i.e. shaving) or equally if patient were unnecessarily over-treated in cases of segmental resection

Methods

A retrospective study of consecutive patients who underwent bowel shaving, discoid or segmental resection for endometriosis between 2010 – 2013 were recorded.

We analysed data on complications, symptom relief with a minimum of one year follow up and recurrence rates. Symptom relief was measured using a visual analogue scale for a range of symptoms; dyspareunia, dysmenorrhea, dyschezia, dysuria, and chronic pelvic pain. Patients were followed up at 6 weeks and one year postoperatively. Histological samples were also analysed and extent of endometriotic invasion documented.

Results

In terms of symptom relief patients undergoing discoid and segmental resection had a higher satisfaction rate. In addition the risk of recurrence was lowest in the discoid and segmental resection group and highest in the shaving group. Risk of major complications across all 3 groups was less than 6%,with a significantly lower complication rate in the shaving group.

Histological analysis showed that for the most part treatment was complete with evidence over treatment in only 5% of the segmental resection group.

Conclusions

In terms of long-term symptom relief, recurrence rate and risk of complications discoid resection may represent the most effective method of treatment. For all patients undergoing discoid resection an initial shaving was performed in a bid to evaluate the depth of infiltration and to try and minimize unnecessarily radical surgery where possible.

Shaving alone was associated with a low complication rate, however the risk of recurrence was higher. The findings of this study may be useful with regards to counselling patients pre-operatively in terms of treatment options and outcomes of bowel endometriosis.
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ES23-0075
Free Communications 1: Endometriosis 1

LAPAROSCOPIC CONSERVATIVE SURGERY FOR PELVIC DEEP INFILTRATING ENDOMETRIOSIS: SURGICAL TECHNIQUES AND LONG TERM RESULTS

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Objectives

Background: Endometriosis is a controversial and enigmatic disease. Deep infiltrating endometriosis (DIE) is responsible for painful symptoms and is the least understood type of endometriosis. Laparoscopic surgery is the primary treatment for DIE, but the long-term results of laparoscopic excision was less reported.

Aim of study: this study was to evaluate describe the surgical technique and long-term results of surgery in patients with DIE.

Methods

Methods: This is a prospective study, begin at 2003. Inclusion criteria consisted of patients age between 18-45yrs, complains of at least 1 pain symptom that were moderate to severe, with or without ovarian cyst. Diagnosis must be confirmed by laparoscopy and histology. All patients underwent excision of DIE lesions with or without cystectomy for ovarian endometrioma . Post-operative follow-up must be at least 36 months. The patients with definitive surgery were excluded.

Pain symptoms assessment included dysmenorrheal, chronic pelvic pain, deep dyspareunia and dyschezia. A ten point visual analogue scale (VAS) was used to rate the severity of pain. Postoperative follow-up was performed every 3-6 months in the first year, and every 6 to 12 months afterwards. Detailed symptoms and pelvic examination and imaging (transvaginal ultrasound, MRI, etc). Postoperative management including medical treatment was also advised.

During laparoscopic surgery, all DIE lesions were recorded in detail, including location, depth and number. DIE lesions in u/s ligaments, cul-dec sac were removed completely. Lesions in rectum was shaved and repaired. Segmental resection of bowel did not included in this study.

According to the laparoscopic finding and pathological confirmation, we devided the posterior pelvic DIE patients into three groups: 1) simplex group, DIE lesions without invasion of rectum or vaginal fornix., 2) Vaginal group: DIE lesions invaded into vaginal fornix, but no rectal involvemen,.,3) Rectal group: lesions infiltrated to the rectum with or without DIE in other places.

Results

Result: Totally, 253 patients with DIE were put into analysis, except 47 patients lost in follow-up. Average age of all patients was 33yrs. 90% of patients had moderate to severe dysmenorrhe and higher pain rate of 95.7% was observed in rectal group than simplex or vaginal group (90.5%, 87.5%). 35% patients had CPP and 46% patients had deep dyspareunia. Highest dyspareunia rate of 78% was observed in the vaginal group and highest dyschezia rate of 51% observed in rectal group. 81.8% of women underwent cystectomy for uni- or bilateral endometriomas.

The mean duration of operation was 66 min.

90.5% (229/253) had complete excision of DIE lesions, whereas,9.5% (24/253) had residual lesions in rectum. Two (0.8%) of patients had severe complications . One patient hadpostoperative hemorrhage which need surgical intervention and another hade chronic urine retention, which lasting 49 days.

All patients had effective pain relief within 6 months after operation. One, two , five and ten year pain relief rate was 97%, 92%, 80% and 72% respectively. 5 year and 10 year pain recurrence rate was 19% and 27% respectively. Statistical analysis showed that pain relief in three groups was different. Median pain relief time in rectum group (73.4 months)was much shorter than that of simplex (102.8 months) or vaginal(86.3 months) group. The median pain relief time in DIE patients complicated with adenomyosis was 69 months, which was shorter than that of patients without adenomyosis (OR: 3.47).

In patients with complete excision of DIE, the median pain relief time was 102 months, which was much longer that in patients with incomplete excision(64 months). OR was 3.44. In 58 patients who got pregnant after operation, the median pain relief time was 115 months, which was much higher than that in patients who were not pregnant (74 months)

Conclusions

Conclusion:DIE was associated with severe pain symptoms. Laparoscopic conservative surgery could effectively reduce pelvic pain. Complete surgical excision of DIE could lead to lower recurrent rate of pain compared with incomplete excision.
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ES23-0453
Free Communications 1: Endometriosis 1

LAPAROSCOPIC MANAGEMENT OF DEEP ENDOMETRIOSIS: THE EXPERIENCE OF A PORTUGUESE TERTIARY HOSPITAL CENTER

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Objectives
To report our recent experience with laparoscopic management of deep endometriosis.
Methods
Retrospective evaluation of all consecutive cases of deep endometriosis treated laparoscopically by a multidiscilinar team from December 2010 to May 2014.
Results

Fourteen women treated with laparoscopic excision of deep endometriosis were evaluated. Mean patient age at surgery was 34.8 years (29 to 43 years). Preoperative symptoms were dysmenorrhea in 4 patients (28.6%), chronic pelvic pain in 13 (92.5%) including dyspareunia in 6 cases and urinary symptoms in 1 (7.1%). Associated symptoms included abnormal uterine bleeding in 2 (14.3%), infertility in 5 (35.7%) and gastrointestinal symptoms in 7 (50%). Two patients (14.3%) had undergone previous surgery because of endometriosis. Surgical procedures intended radical excision of all endometriotic lesions and included extensive adhesiolysis and dissection of the rectovaginal space in 13 (92.5%) patients, followed by removal of vaginal endometriotic nodule in 4 patients (28,6%), excision of bowel lesion by the “shaving” technique in 3 (21.4%), discoid bowel excision in 1

(7.1%), segmental bowel resection in 4 (28.6%) and resection of endometriotic lesions located at the uterosacral ligament in 5 (35.7%) and partial cystectomy in 1 (7.1%). Associated procedures were laparoscopic hysterectomy in 1 patient (7.1%), bilateral salpingo-oophorectomy in 2 (14.2%), ovarian cystectomy in 3 (21.4%). A temporary diverting ileostomy was performed in 5 patients (35.7%) and ureteral stenting was necessary in 5 (35.7%). There were no conversions to laparotomy. Minor postoperative complications occurred in 2 (14.2%) patients (one requiring red blood cells transfusion due to anemia and other with persistent vomiting related to prophylactic antibiotic therapy). In 1 (7.1%) patient a late bowel stenosis occurred solved with mechanical dilatation. Mean follow-up time was 34.8 months (4 to 49 months). Postoperatively, 12 patients (85.7%) reported significant improvement of symptoms namely pain relief and 1 conceived spontaneously.

Conclusions

Although limited and recent in our experience, laparoscopic excision of deep endometriosis can be accomplished with good results and low rate of complications but the success relies in an adequate preoperative evaluation and the existence of a multidisciplinary team approach.

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ES23-0442

Free Communications 1: Endometriosis 1

LONG-TERM OUTCOMES AFTER HYSTERECTOMY FOR PELVIC PAIN ATTRIBUTED TO ENDOMETRIOSIS

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Objectives

While the role of hysterectomy in the management of unexplained chronic pelvic pain is subject to debate, it is considered a viable option for the treatment of pelvic pain in relation with endometriosis. It is performed in patients severely debilitated by symptoms who no longer wish to retain reproductive function. Our objective was to evaluate the long-term outcomes of hysterectomy, in pelvic pain attributed to endometriosis and/or adenomyosis.

Methods

We conducted a retrospective, single-center observational study based on hysterectomies performed between 2006 and 2012. We included patients of all ages whose main complaint was pelvic pain (chronic pelvic pain and/or dysmenorrhea, dyspareunia, dyschezia, dysuria) known or suspected to be in relation with endometriosis. Residual pain, level of satisfaction and subjective patient-reported score on quality of life and sexual quality of life were assessed, at one year postoperatively and at time of study in 2014.

Results

The final analysis was performed on 30 patients. The mean age at operation was 39,4. Endometriosis was confirmed on pathological study in 50% of cases and adenomyosis in 73% of cases. Residual cyclic pain (of various levels) was found in 60% of patients at one year and 30% at time of study, chronic pelvic pain in 26% and 30%, dyspareunia in 60% and 40%. In 30% of patients the pain was

different in characteristics from the one reported preoperatively. In 2 cases that pain was deemed in relation with fibrosis as a consequence of multiple surgical treatments. 40% of patients required hormonal treatment. 13% required repeat surgery for pain. Nevertheless, 30% of patients reported being satisfied and 53% were very satisfied. Only 6% of patients were not satisfied. Quality of life estimated on a 0 to 10 scale was improved in 70% of cases with a mean difference between preoperative period and time of study of 3,6. Sexual quality of life on the same scale was improved in 90% of cases with a mean difference of 4,5.

Conclusions

Hysterectomy in endometriosis yields a high level of satisfaction and an improvement in quality of life in patients, despite their young age and the presence of residual pain in a significant number of cases. Thorough preoperative assessement should seek to identify real cases of endometriosis and adenomyosis eligible for surgery. Patients with unexplained pelvic pain that has been mistaken for endometriosis are poor responders and should be managed precautiously.
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ES23-0345
Free Communications 1: Endometriosis 1

SILENT LOSS OF RENAL FUNCTION SECONDARY TO URETERAL ENDOMETRIOSIS: A CLINICAL CASE.
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Objectives

Ureteral endometriosis is rare condition and is a frequently complication of endometriosis of other localization. Diagnosis of this pathology may be suggested by the finding of hydronephrosis in patients with suspected endometriosis. The quickly surgical treatment is crucial for attempt to reverse the damage of kidney. With this work we want reinforce fundamental aspects of ureteral endometriosis.

Methods

Describe and discuss a clinical case of ureteral endometriosis with silent loss of renal function.

Results

Caucasian woman. 47 years old. No history of medical, surgical, and gynecological pathologies. Previous obstetric history of a term pregnancy. No contraception.

The patient was oriented to a Gynecologic appointment due to intense dysmenorrhea, dyspareunia (8-9/10) and moderate dyschezia (6/10) from six years ago, with progressive worsening. The gynecological exam was difficult for defense.

This woman was gone through preoperatively: gynecologic sonography, Uro-computerized tomography scan, and an analytical study. These imaging tests revealed a leiomyomatosis bulky uterus and a left ovarian endometrioma. Regarding the urinary tract, it was observed: a marked left

ureterohydronephrosis, and alterations of left kidney parenchyma. She had a normal serum creatinine, hypocalcaemia and hypokalemia.

Underwent surgical treatment where was find a bulky uterus, 'kissing ovaries' with a left endometrioma, an obliterated Douglas' pouch, and a nodule of endometriosis of rectovaginal septum, infiltrating the left uterosacral ligament and left ureter. The intervention began with the introduction of bilateral ureteral stents.

We go on by laparoscopic surgery: lysis of adhesions, left ureterolysis with excision of infiltrating endometriosis and rectovaginal nodule, total hysterectomy and bilateral adnexectomy, assessment of intestinal integrity. Early postoperative was without any complications.

The anatomic pathological study confirmed the diagnosis of uterine leiomyoma and endometriosis.

The patient had a good clinical and analytical postoperatively evolution. Ureteral stents were removed after eight weeks. A renogram with diuretic test was carried out two months and showed a renal function on the left and right kidney of 11% and 89%, respectively. This exam was repeated at eighteen months after surgery revealing an improvement of left renal function (15%). In successive renal ultrasounds was observed a slight renal size asymmetry with progressive improvement of left ureterohydronephrosis.

Conclusions

With this clinical case we want to reinforce that to diagnose ureteral endometriosis an high index of suspicion is required. The delay of diagnosis is frequent and, as happened in this case, can cause the silent loss of renal function. So, we must check urinary tract in all cases of deep infiltrating endometriosis.

The treatment of choice is conservative laparoscopic surgery. A postoperative rigorous surveillance with assessment of renal function evolution is fundamental. Despite the surgical technique be very effective in relieving ureterohydronephrosis, the damage of renal parenchyma may be irreversible when the obstruction is prolonged.
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ES23-0447
Free Communications 1: Endometriosis 1

POSTOPERATIVE MEDICAL TREATMENT FOR PREVENTING ENDOMETRIOMA RECURRENCE AFTER CONSERVATIVE SURGERY
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Objectives

Laparocopic excision of ovarian endometrioma is considered the standard method for diagnosis and treatment both. Postoperative hormone therapies have been claimed due to the high rate of endometriosis recurrence. Hormone therapy using gonadotropin releasing hormone (GnRH) agonists and oral contraceptives (OC) are widely used. The protective effect of hormonal therapy is limited to

the period of use. We assess the differences of the recurrence rate between GnRH agonists and OC. Also we evaluate the differences according to the treatment duration.

Methods

From January 2010 to december 2011, The 261 women who had undergone ovarian endometrioma excision surgery and followed up were recruited. The cases with combined hysterectomy or previous hysterectomy state and pregnancy after operation within 2 years were excluded. The women who were followed up by ultrasonograpy at least 2 years were included. Recurred endometrioma excluding simple cyst in ovaries was defined as above 2 cm homogeneous cystic mass detected by ultrasonograpy. A retrospective chart review was done.

Women were categorized into two groups: a group with postoperative medication treatment (n= 221) and a group with no adjuvant treatment (n=40). Postoperative medication group was subdivided into 3 subgroups. GnRH agonist for 3 months treatment group (n = 45), GnRH agonist for 6 months treatment group (n = 132) and a group that received cyclic low-dose oral contraceptives for 6 months(n=44)

Results

During the follow up period (median 33 months), recurrent endometriomas were detected in 23 women(57.5%), in non adjuvant treatment group. Patients with GnRH agonist for 3 months and 6 months had a recurrence rate of 51.1%(23/45) and 21.2%(28/132), whereas women receiving OC had a recurrence rate of 22.7%(10/44). There were significant difference in recurrence rate between GnRH for 3months group and GnRH for 6 months group(51.1 % vs. 21.2%, P< 0.01). However there was no significant difference between GnRH for 6 months group and OC for 6 months groups.

Conclusions
Adjuvant treatment using a 6 months course of hormone therapy after surgery has a protective effect for endometriosis recurrence. There is no significant difference in hormone treatment method. The treatment duration is the only influencing factor for the recurrence. We recommend at least 6 months course of hormone therapy after surgery. Further analysis is necessary to choose an adjuvant therapy considering the side effects of each hormone treatment.
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ES23-0115
Free Communications 2: Teaching and training

VALIDATION OF A TRAINING MODEL IN A GYNECOLOGIC LAPAROSCOPIC SURGERY AT OUR INSTITUTION

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Objectives
Laparoscopic surgery is displacing open surgery due to its advantages for the patient. However, it also has some disadvantages regarding the specific skills the surgeon must develop before carring out this approach. With this work we intend to present our experience in design and development of a laparoscopic training program for gynecologists, and the results of its face validity. These courses

are supported by The Spanish Society of Gynecology and Obstetrics (SEGO), and their objectives are to enable surgeons to progressively acquire dexterity in a safe environment, improving the safety and quality of patients in laparoscopic surgery
Methods
Data included in the study have been obtained throughout 16 workshops held between 2010 and 2014, with a total of 264 attendants. The courses consist of 1 hour theoretical session and a practical session of 20 hours. Theoretical session included knowledge and use of the laparoscopic instruments and tower and ergonomics. Whereas the practical part involves exercises onbox trainer and animal model training. In the box trainer the attendants practice the cutting, dissection and intracorporeal suture tasks on organic tissues. When the participants mastered handling maneuvers and intracorporeal suturing on the simulator, they switch to experimental animal model. On the experimental model they practice ovariectomy, vascular dissection, miomectomy, tubarical ligation and hysterectomy. The reduced number of attendees allows for constant tutor supervision. At the end of the training program, a subjective evaluation questionnaire was handed out to the attendants, in which different didactic and organizational aspects were considered
Results
93.81% agreed with the division of theory and practice. 74.53% were in accordance with the total duration of the course, 25.47% considered that it should last longer. All techniques carried out throughout the course were considered of high to very high value, being the dissection of vascular structures the best valued (9.55 points). Regarding skills self-assessment, 84.82% of the participants considered that they had progressed much, and 93.16% considered themselves qualified to perform trained procedures on patients
Conclusions
The training model has proved to be effective enabling students to gain knowledge and improve skills, and has been very well appreciated, thus providing confidence to the application of learned techniques in the clinical practice
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ES23-0487
Free Communications 2: Teaching and training

CHANGING THE TRADITION FROM LAPAROTOMY TO LAPAROSCOPY IN A SMALL HOSPITAL IN NORWAY. THE SANDNESSJØEN MODEL.
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Objectives

Make laparoscopic supracervical hysterectomy (LSH) part of the treatment modality in Sandnessjøen Hospital.

Methods

Gynecologists in Sandnessjøen Hospital wanted to improve their skills in laparoscopy. The prodject "The Sandnessjøen model" was established for a period of three years. Team Sandnessjøen, two gynecologists and two operating room nurses, and Team Ullevål, two gynecologists and three operating room nurses started a training program for three years. We had training sessions in Oslo and in Sandnessjøen. The training program will be presented.

Results

The gynecologists in Sandnessjøen imroved their skills in laparoscopi. After the training period laparoscopic supracervical hysterectomy was done in 50 % of the cases, vaginal hysterectomy in 17 % and laparotomy in 33%. Before the training laparotomy was done in 76% of the cases and vaginal hysterectomy in 24 %.

Conclusions

The gynecologists in Sandnessjøen improved their skills in laparoscopy. They can offer laparoscopic supracervical hysterectomy to women suitable for that prosedure.
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ES23-0277
Free Communications 2: Teaching and training

FACE AND CONTENT VALIDITY OF THE SCANTRAINER ULTRASOUND SIMULATOR

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Objectives

The ScanTrainer is a virtual reality ultrasound simulator for learning a systematic approach to transvaginal sonography in gynaecology and early pregnancy. We sought to assess the face and content validity of the ScanTrainer simulator.

Methods

During the 23rd European Congress of Obstetrics and Gynaecology in Glasgow, participants volunteering to the study were asked to complete three training modules in the simulator. Participants were categorised according to their sonography experience. All participants completed a questionnaire immediately after performing all three modules. Face and content validity of ScanTrainer system (MedaPhor Ltd., Cardiff, UK) was assessed by asking participants to indicate the level of their agreement with statements in a questionnaire on a 10- point Visual Analogue Scale VAS.

Results

The inexperienced group (n=25) consisted of 20 specialist trainees (55%), 2 specialists (5%), 1 consultant (2%), 1 medical student (2%) and 1 stated as other (2%). All inexperienced subjects had a median ultrasound experience of 6-11 months and stated as trainees under supervision who had scanning sessions once every week. The experienced/skilled subjects (n=11) consisted of 3 consultants (8%), 4 specialists (11%), 3 specialist trainees (ST7)(8%) and 1 other (2%). All experienced subjects were independent practitioners who had more than 2 years of ultrasound experience. The

majority of subjects in both groups had no previous experience with either simulation or any other ultrasound models prior to participation. All subjects in both groups ranked the simulator as useful for training. The average score of all 14 statements in the questionnaire ranged from 7.5 to 9.3 which achieved acceptability. There was no significant difference found among groups' scorings in 12 statements, however statistically significant difference (Kruskal-Wallis test $p \leq 0.05$) between experienced and inexperienced groups was noted in the rating of the simulator's ability to test the gynaecology anatomy

Conclusions

The results show that the ScanTrainer simulator has face and content validity as a virtual reality simulator for transvaginal ultrasound training. The ScanTrainer could become a beneficial tool for learning ultrasound skills and worthwhile addition to current training.

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ES23-0464

Free Communications 2: Teaching and training

ABC2: IDENTIFYING THE RATE LIMITING STEP IN TOTAL LAPAROSCOPIC HYSTERECTOMY

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Objectives

The primary goal of this study is to determine which step of a total laparoscopic hysterectomy (TLH) is rate-limiting in terms of time. Secondary objectives include identification of patient attributes or intra-operative findings that directly effect operative time as well as proposing strategies to increase operating room efficiency during TLH during the most complex or time-consuming portions of this procedure.

Methods

This study is a single-center, retrospective, consecutive case series. Available surgical videos from total laparoscopic hysterectomies performed by the Minimally Invasive Gynecologic Surgery (MIGS) division at University of Louisville between January 2010 and May 2014 wereobtained and reviewed. The TLH procedure was divided into five steps. Each case was reviewed for the time required to complete each step as well as for the total operative time. In addition, the electronic medical record was used to collect information regarding demographics, surgical indication, weight of uterus and final pathology. Statistical analysis was performed to determine which step of TLH is the most time consuming and what variables (i.e., uterine size, patient BMI, energy device, surgical history) affect this trend.

Results

A total of 300 TLH's were performed by the MIGS division between January 2010 and May 2014. Of these cases, 260 were recorded. After reviewing these videos, 124 were excluded due to missing footage. An additional 3 had pathology that could not be obtained for review; however these subjects were included in final analyses aside from those related to surgical pathology and effect on operative times.

Preliminary data analysis revealed that, on average, step four (colpotomy) was the lengthiest portion of TLH.

Conclusions
Improving efficiency in the operating room is not only important in regards to patient morbidity but is also cost saving. With that in mind it would be of great benefit to our patients if we could propose a standardized teaching method and/or select the optimal energy device to improve efficiency and shorten this part of surgery.
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ES23-0069
Free Communications 2: Teaching and training

LAPAROSCOPIC ANATOMY OF PRE AND PARAVESICAL SPACES: DEDUCTIONS FOR RECONSTRUCTIVE SURGERY
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Objectives
To visualize the architecture of the pre and paravesical spaces by laparoscopic access in normal and pathological cases. The photos and short videos offer a better knowledge before pelvic organ prolapse surgery, to avoid injuries of noble organs. To show the different parts of the pelvic diaphragm, the different layers of endopelvic fascia, the different vascular and nerve pedicles and the attachment sites that may be chosen for reconstructive surgery.
Methods
By transumbilical laparoscopy, an horizontal incision of the peritoneum above the bladder gives access to the prevesical or Retzius space. the different steps of dissection are described. The passage through the bubbles of the prevesical space is easy; between pubis and umbilico-prevesial fascia. It communicates laterally with the paravesical spaces. The paravesical space has the following limits: medially bladder, laterally obturator muscle, deeply obturator fossa and levator ani muscles and behind paracervix.
Results
The different pictures of the presentation show the attachment sites that may be useful to do the pelvic reconstruction and to treat the pelvic organ prolapse: pectineal ligament (Cooper), arcus tendineus fascia pelvis, ischial spine, endopelvic fascias. In the prevesical space, the retropubic veinous plexus may be huge and must be avoided to limit the risk of hematoma. In the paravesical space, the obturator pedicle, the corona mortis artery and the lymphatic nodes must be visualized to avoid any injury. The movements of the instruments into the homolateral ancillary trocar must be delicate and soft to keep away the risk of dramatic injury of the external iliac vein, even if far from the space.
Conclusions
The transumbilical access by laparoscopy of the pre and paravesical spaces, after peritoneal incision above the bladder is an excellent way to reach the pelvic floor, to visualize the anterior and medial anatomical defects and to treat them with suspensions, fixations, using the attachment sites we described.
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ES23-0452
Free Communications 2: Teaching and training

RULES OF DISSECTION: USEFUL TIPS
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Objectives
This communication's aim is to show, in a practical and visual way, that the key for optimal outcomes in laparoscopic surgery resides in knowing the technical steps and following the rules of dissection. This communication aims to provide a thorough and clear overview of the main rules for correct, safe and fast dissection.
Methods
By means of surgical videos and theoretical explanations, we show the different techniques laparoscopic surgeons must know and apply.
Results
Surgical rules of dissection are simple and easily learnt. An optimal outcome of any surgical procedure is obtainable by applying the simple tips shown here.
Conclusions
Knowledge is power, and everything we do during laparoscopic surgery has a reason for being. It is fundamental to understand that it is a series of simple actions that lead to performing complex procedures. It is only possible to reach excellence if we learn and follow the basic rules to apply during surgery. This enables us to maximize the power of our instruments and actions.
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ES23-0509
Free Communications 2: Teaching and training

TRAINING COMPLEX SURGICAL SKILLS: FROM A PERSONAL TRAINER TO TEAMWORK.

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In recent years, educational dilemma in medicine has been intensified: the physician should be able to enhance his skills, and the patient should be provided with quality care with minimal risk to life and health. Operating theatre is not the best place for the training of complex surgical skills. Computer simulators help to solve this ethical and legal conflict of interests. Most simulators are surgeon workplace in form of a personal trainer. We have improved the simulator by adding the ability of the surgeon and 1-2 assistants to train together, workplace of the operating nurse (assistant) in the surgical team, as well as workplace of anesthesiologist and anestesist-assistant. The software part of the simulator greatly enriched and has grown to include both individual and collaborative work of all team members in different scenarios.
This integration makes possible to overcome the limitations of personalized simulators, not only improving the quality of personal training, but also improve the technical and tactical training exercise due to work as a team.
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ES23-0206
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

INTEREST OF HYALURONIC ACID GEL IN THE PREVENTION OF INTRAUTERINE ADHESIONS AFTER HYSTEROSCOPIC METROPLASTY FOR UTERINE SEPTUM.

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Objectives
To evaluate the incidence of adhesions after metroplasty for uterine septum and the efficacy of hyaluronic acid gel in the prevention of these adhesions.
Methods

Between 2010 and 2013, 91 patients who underwent postoperative diagnostic hysteroscopy were retrospectively analysed. Congenital anomaly was classified using ESHRE/ESGE classification system. 36 patients were treated for uterus arcuatus, 52 patients U2a and 3 patients U2b classification. Resection was performed using cold scissors. Hyaluronic acid gel was used at the end of the intervention since mid 2012 for U2a or U2b corrections. Diagnostic hysteroscopy was performed 6 to 8 weeks after the intervention.

Results

Of the 3 patients treated for U2b, 2 received hyaluronic acid at the end of the intervention. Both had residual septum at postoperative check. Of the 52 patients treated for U2a 17% (n=4) presented postoperative with residual septum or minimal adhesions. Half of them needed hysteroscopic reintervention. 15 patients had received hyaluronic acid gel. Of the 36 patients treated for arcuatus 3% (n=1) presented with residual fibrosis. In the group who received hyaluronic acid gel adhesions were found postoperatively in 27% (n=4) of cases.

Conclusions

Adhesion formation after hysteroscopic metroplasty for uterus arcuatus or U2a is not frequent and mild. Hyaluronic acid gel does not decrease this risk.
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ES23-0142
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

THE COST OF ENDOMETRIAL POLYP MORCELLATION UNDER DIFFERENT CLINICAL SETTINGS
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Objectives
To compare the institutional cost of hysteroscopic polypectomy in a day surgery setting or on an office basis.

Methods
Hysteroscopic polypectomy, in an operating theatre, with either general anaesthesia or intravenous sedation for the first 42
procedures (24 with bipolar resectoscopy and 18 with hysteroscopic morcellator using a 2.9 mm rotary blade and a 5-mm hysteroscope) and in an office setting without either intravenous sedation or local anaesthesia for the second 16 cases with hysteroscopic morcellator
Results
The various costs associated with the

procedures in a day surgery setting or on an office basis were compiled,and activity-based cost/mamagement (ABC/M) system, an accounting technique, allowing accurate resource cost estimation detecting when, where and why the money is spent for associated services, was performed. Truclear 5.0 procedure had high costs for disposable equipment. A significantly decreased in costs was detected in performing hysteroscopic polyp morcellation on an office basis.

Conclusions
In our institution, the hysteroscopic polyp morcellation on an office basis had significant cost savings to public health care system.
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ES23-0172
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

HYSTEROSCOPIC MORCELLATORS. A REVIEW OF THE LITERATURE.
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Objectives

Hysteroscopic resection is today the gold standard for the treatment of intrauterine pathologies. A new technology has recently appeared for the treatment of endo-uterine pathologies: hysteroscopic morcellators. They use a blade inserted trough a hysteroscope. These devices cut and aspirate tissue in order to remove intrauterine pathologies. We review the international literature about them.

Methods
Systematic literature search of Medline, Cochrane and CRD databases
Results

Three companies commercialize different models and the technical difference between them are analysed. In vivo, a study has proved that the quantity of removal of the tissue is proportional to the hardness of it. Two studies compared the difference of efficiency between different models and the results are discordant. The anatomopathological examination is not perturbed.

For the operative time, all the studies agree that hysteroscopic morcellation is faster than hysteroscopic resection. The quantity of fluid used is also lesser, as the deficit of fluid when the morcellator is used. The percentage of success to remove the pathology is high, close to 100% for the polyps and 90-95% for the sub-mucous myomas. The surgeon’s satisfaction rate is high and, in a comparative study, residents and theirs teachers are more confident with the hysteroscopic morcellators than with the resectoscopes.

The indications are the polyps and the sub-mucous myomas type 0 or 1. The morcellation of remnant trophoblastic tissues has also be described and seems effective. Others indications, as the removal of uterine septum or cure of uterine synechias, are criticisable.

Conclusions

Hysteroscopic morcellators are probably a great progress for the cure of the endo-uterine pathologies. They cannot yet concurrence the hysterosopic resectoscopes for the treatment of big sub mucous myoma or those with a large intramyometrial involvement. The future progress would permit the generalization of their use and the diminution of the cost, actually prohibitive for the single-used devices.
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ES23-0231
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

OFFICE OPERATIVE HYSTEROSCOPY IN POST-MENOPAUSAL WOMEN: A FEASIBILITY AND ACCEPTABILITY STUDY

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Objectives

To evaluate the feasibility and acceptability of performing office operative hysteroscopy in post-menopausal women utilising a patient experience questionnaire.

Methods

Design: Prospective observational pilot study using the MyoSure® Hysteroscopic Tissue Removal System (Myosure®)(Hologic Inc,USA).

Setting:Office Setting, King's Mill Hospital, Nottinghamshire, United Kingdom.

Patients: Forty-one consecutive post-menopausal women who were previously diagnosed hysteroscopically with an endometrial polyp.

Interventions: All patients received oral pre-medication with paracetamol 1g and tramadol 100mg, in conjunction with 6.6 mls of local anaesthetic (prilocaine 3% with felypressin 0.03units/ml) administered as a para-cervical block. The procedure required dilatation of the cervix to Hegar 7. After dilatation the Myosure® device was inserted into the uterine cavity and the polyp was morcellated and removed. Pain scores were assessed using a validated numeric rating scale and graded from 0 (nopain) to 10 (severe pain) at various stages (pre-, intra- and post-procedure). Entonox® was available if required. Anticipated complications included failure to tolerate or gain entry into the uterine cavity, false passage, perforation,haemorrhage and vasovagal syncope. Patients were asked subsequently if they would recommend the procedure to a friend.

Results

We included 40 patients in the analysis. One patient was excluded due to tramadol-induced confusion. The mean age was 60 years (range between 36 and 83 years), with a wide variation in body mass index (BMI) from a minimum of 18 to a maximum of 64. Eleven patients (28%) had a BMI greater than 40. Six women (15%) were nulliparous or had only delivered by caesarean section. Cervical dilatation to Hegar 7 was achieved in all patients. Median total procedural duration was 7 minutes and 12 seconds, with a median polyp resection time of 39 seconds.

The median pain scores were as follows: anticipated pain score was 6 (inter-quartile range (IQR) 4-7.5), with scores at administration of the cervical block and cervical dilatation of 3.0 (IQR 2-6.0) and 3.0 (IQR2-5) respectively. Intra-procedurally the pain score was 2.0 (IQR 0-4), falling to 0 (IQR 0 to 2.0) immediately post-procedure. Four patients required additional Entonox® intra-procedurally. Nulliparity did not influence pain scores.

All endometrial polyps were successfully removed. There were no complications, although 5 patients reported dizziness secondary to tramadol. All of the women questioned (28/40) would recommend the procedure to a friend.

Conclusions

We have shown that office hysteroscopic polypectomy with MyoSure® is a safe,effective and well-tolerated procedure in post-menopausal women. It is possible to achieve cervical dilatation to Hegar 7 in the office setting using our analgesia regimen, without procedural complications and with lower than anticipated pain scores . In our cohort we have demonstrated that the office pathway is an acceptable alternative to the general anaesthetic route in the management of endometrial polyps.
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ES23-0030
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

HYSTEROSCOPIC EVALUATION OF ENDOMETRIAL MICROPOLYPS IN PATIENTS WITH UNEXPLAINED INFERTILITY UNDERGOING ICSI
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Objectives
This study aims to study the consistency of hysteroscopy findings of endometrial micro polyps in patients with unexplained infertility undergoing icsi and evaluation of removal and antibiotics effect on the success rate of icsi outcome

Methods

120 cases with Hysteroscopic evaluation of patients with unexplained infertility undergoing icsi (February 2010 up tp December 2013 |) in Mansoura fertility care Centre were studied. 44 patients with unexplained infertility ' endometrial samples withCD38/CD13immunohistochemical stain for chronic endometritis screening. In 38 cases micro polyps under hysteroscopy were considered part of chronic endometritis diagnostic parameters. Antibiotic was offered to group of these patients 20 cases with micro polyps after removal by hysteroscopy. , the other group with micro polyp nonintervention were done these compared with control; The patients' clinical outcomes were analyzed by statistical methods.

Results
In 120 cases, the hysteroscopy diagnosis rate was 65,6%, while histological chronic endometritis rate was 42,1 %.The sensitivity and specificity of hysteroscopy were 32.2 and 61.5 %. In histological chronic endometritis with micro polyps patients, 20 cases underwent regular antibiotic treatment after hystroscopic removal and 18 cases with micropolyps no intervention were done .). In hysteroscopy chronic endometritis patients, the implantation rate (18.6 vs.1 4.9 %) and ongoing

pregnancy rate (29.3 vs. 7.4 %) significantly increased ($P < 0.05$) with and its effect antibiotic treatment, and higher intrauterine pregnancy rate in treatment group (29.3 vs. 11.1 %).. When live birth rates of control group and the subgroups were compared, it was significantly higher in the subgroups ($p < 0.05$). When live birth rates of the subgroups were compared, there was a statistically significant difference in treated intrauterine micro polyps subgroup ($p < 0.05$)

Conclusions

hystroscopy can play an important role in detection and treatment of micro polyps in patients with unexplained infertility undergoing icsi, and a great impact on its success .

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ES23-0332

Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

MINI-RESECTOSCOPE VS. CONVENTIONAL RESECTOSCOPE FOR REMOVAL OF LARGE ENDOMETRIAL POLYPS WITH PARACERVICAL BLOCK.

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Objectives

In case of large endometrial polyps (EP) (> 1.5 cm) the employment of resectoscope is advisable instead of the operative hysteroscope. However, conventional resectoscope (26 Ch) requires cervical dilatation up to 9.5 mm and probably may represent an overtreatment. Mini-resectoscope may be an appropriate instrument for polypectomy combining efficient cut with small diameter. The aim of this study was to evaluate the feasibility, acceptability and outcomes of removal of large polyps by using a mini-resectoscope with local anaesthesia. For this purpose we compared the results with mini-resectoscope with those obtained with conventional resectoscope.

Methods

Eighty patients with hysteroscopic and ultrasound diagnosis of large EPs were randomly divided in two groups one treated with conventional monopolar resectoscope 26Ch (group 1) and the other with slender monopolar resectoscope 22Ch (group 2) (Karl STorz, Tuttlingen, Germany). Cervical canal was dilated up to 9.5 or 7 mm according to the instrument and with local anaesthesia by a paracervical block. The operating time (dilatation plus resectoscopy), pelvic pain and operative outcomes (total or partial removal, complications) were compared. Pain was assessed by means of a visual analogue scale (VAS) ranging from 1 to 5.

Results

The two groups were similar as regard as age, parity, mode of delivery and menopausal status. Also polyps size was similar between the two groups (2.4±0.7 vs 2.5±0.7). In group 1 5 patients reported severe pain especially in the last phases of dilatation and general anaesthesia was required. Patients

in group 1 reported a greater intensity of pain compared to group 2 (VAS 3 ± 0.8 vs. 2 ± 0.9, P<0.0001). Operating time was similar in the two groups (10 ± 2 vs. 11 ± 3 minutes, Group 1 vs 2, respectively).
Conclusions
Employment of mini-resectoscope required a minor cervical dilatation and induced significantly lower pain with local anaesthesia. The procedure took the same time as compared to that with conventional resectoscope as the longer resectoscopic phase was compensated by a shorter dilation phase. In conclusion, polypectomy with mini-resectoscope with paracervical block is an effective, well accepted and safe approach for large endometrial polyps.
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ES23-0493
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

RESECTOSCOPIC MYOMECTOMY AFTER THE ENDOMETRIAL INCISION WITH BIPOLAR VERSAPOINT BY OFFICE HYSTEROSCOPY
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Objectives

We demonstrate that 3 or more incisions of the endometrium with bipolar incision VersaPoint in correspondence of the mapping of the ultrasonographic intramural myoma, can change the position of turning it into submucous myoma so that it can be removed in surgery resectoscopic
Methods
The 3 incisions of the endometrium close to the US mapping of the myoma in office hysteroscopy, break the the bridge between mioma and endometrium and aim the migration in cavity
Results
after one month the intramural myoma is visible in cavity anda can be removed in hysteroscopic surgey
Conclusions
these simple insions of the endometrium by twizzle versapoint can help to remove after one month myomas that can moves and go in cavity
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ES23-0359
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

3D TRANSABDOMINAL ULTRASOUND. A NEW FIRST LINE CONFIRMATION TEST AFTER ESSURE HYSTEROSCOPIC STERILIZATION. A PROSPECTIVE SINGLE –CENTER COMPARATIVE STUDY ABOUT 147 CASES.
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Objectives

The aim of our study is to assess the feasibility and accuracy of 3D transabdominal ultrasound as a first line confirmation test of the correct positioning of Essure® microinserts three months after

hysteroscopic tubal sterilization by comparing it to the 3D transvaginal US which is considered the "Glod Standard".

Methods

This single-center prospective study enrolled 147 patients who underwent hysteroscopic sterilization from June 2009 to February 2013 in the Gynecologic Surgery Unit of Poissy- Saint Germain en Laye University Hospital. Three months after Essure procedure, both 3D transabdominal and 3D transvaginal US were performed to localize the Essure microinserts across the utero-tubal junction. Implants viewed in a proper position were classified as "IN". Undetectable or viewed in an inadequate position implants were classified as "OUT".

Results

The final sample of our study consisted of 277 Essure® microinserts. 3D transvaginal US allowed us to see 95% of Essure implants in a correct position (IN) while only 76% of where described in "IN" position when using 3D transabdominal ultrasound. Retroverted uterus and BMI>30 are factors of failure of transabdominal US. Despite these findings, correlation between 3D TV and TA ultrasound seems perfect because in 99% of cases, Essure® microinserts considered in "IN" position by 3D TA US were also properly positioned by 3D TV US.

Conclusions

Transabdominal 3D ultrasound can be used as a first line confirmation test of satisfactory Essure® devices placement if technical conditions are favorable because it's less invasive, easy and reproducible. It could replace the 3D transvaginal ultrasound in many cases. If the microinserts are unidentified by transabdominal approach (OUT), 3D transvaginal US is required to overcome technical difficulties.
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ES23-0297
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

FROM GENERAL ANESTHESIA TO PROCEDURAL SEDATION AND ANALGESIA; A SHIFT IN THERAPEUTIC HYSTEROSCOPY

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Objectives

In our hospital years of experience in minimal invasive gynaecologic surgery combined with the nowadays available therapeutic arsenal in hysteroscopy has led to a shift from performing therapeutic hysteroscopies in the operation theatre to the outpatient clinic setting.

The introduction of procedural sedation and analgesia for therapeutic hysteroscopic procedures made the shift complete and resulted that all diagnostic and almost all therapeutic hysteroscopic procedures are performed safely in an outpatient setting.

Methods

In 2012 127 TCR-P, TCR-M and TCR-S were performed either through vaginoscopy, with local anesthesia or when indicated under conscious sedation.

Either the Versapoint system or the Truclear system was used and in 2013 also myomas up to 1.5-2.0 cm and placental remnants were safely operated under conscious sedation, up to a total of 140 procedures.

Propofol (Diprifan®) and alfentanil (Rapifen®) are used, under strict protocols and after being analysed by a prospective risk analysis. National guidelines were incorporated including knowledge and skills concerning indication, medication, screening, monitoring, counselling, recovery and Basic Life Support.

A time out procedure is performed with every patient and a special trained nurse is in charge of the sedation procedure, thereby not interfering with the operation procedure itself.

Results

Patient experiences are being measured indicating no pain during the procedures, positive patient satisfaction and the patients advising the sedation technique to relatives with mobility directly after the completion of the procedures.

Conclusions

All hysteroscopic procedures can be safely performed in an outpatient setting with quicker recovery and higher patient satisfaction when using the conscious sedation technique as compared to general anesthesia.
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ES23-0026
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

DIAGNOSIS AND TREATMENT OF WOMEN WITH IUD COMPLAINTS
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Objectives
Intrauterinelong-acting reversible contraceptives (LARC) can help reduce the number ofunintended pregnancies. However, if they cause harmful effects, commonly knownas 'side effects', these will automatically result in discontinuation of themethod and make the woman vulnerable to unintended pregnancy. The primaryobjective of any contraceptive is to avoid unintended pregnancy. Thispresentation will focus on solutions with the aim to maximize continuation ofuse to help meet the LARC objectives. The conventional insertion technique of theframeless GyneFix IUD, inserted under hysteroscopic vision, will be shown in avideo film.
Methods
Patientsconsulting with IUD complaints were subjected to 3-D ultrasound and/or hysteroscopy as diagnostic tools to identifywith precision the reason for the complaints.
Results

Disproportion between the IUD and the uterine cavity was found to be themain reason for the complaints resulting in embedment of the IUD. These IUDswere replaced by the frameless IUD which fits properly in the uterine cavity.
Conclusions

Asthe width of the uterus in the fundal area is on average 2.5 mm, and many IUDsare significantly larger, 10 up to 50% of women, particularly nulliparouswomen, request removal of the IUD within the first year. The 'frameless' IUDGyneFix is proposed as a solution for these problems.
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ES23-0094
Free Communications 3: Hysteroscopy /Operative Hysteroscopy 1

PROGESTERON PREOPERATIVE TREATMENT FOR MYOMECTOMY WITH THE INTRAUTERINE BIGATTI SHAVER (IBS®)
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Objectives

IBS® has proved to be a valid alternative to conventional bipolar resectoscopy, for the treatment of polyps and less than 3 cm sub mucosal myomas. On the other hand, myomas larger than 3 cm which present a higher consistency often underwent a second step procedure or a conversion to conventional bipolar resectoscopy. The aim of this randomised prospective comparative study is to evaluate if a preoperative treatment with progesteron could reduce the myoma consistency and improve the results for myomectomy with the IBS®.
Methods

All hysteroscopic myomectomies have been performed with the IBS®. Patients with submucosal myomas diagnosed at hysteroscopy have been recruited. After randomization patients have been included, for a three months observation period, into 5 groups according to the type of preoperative therapy:

- Group A, Norethisterone Acetate 10 mg 2 times per day;

- Group B, Micronized progesterone 200 mg 1 time per day;

- Group C, Dienogest 2 mg 1 time per day;

- Group D, Ulipristal Acetate 5 mg 1 time per day;

- Group E ,Control Group with no treatment.

Records about fluid balance, cervical canal dilatation time, resection and total operation time, complications, second look procedures and conversion to bipolar resectoscopy have been taken.

Results

From September 2013 until today seven patients were recruited in the study. Five patients were pretreated with Primolut, two with Visanne. The mean size of myomas was 27.14 mm, of which two type 0, four type 1 and one type 2. The mean cervical dilatation time was 1.14 min. Differences about resection times were observed: using Primolut the mean resection time was 14.4 min while using

Visanne it was 48.5 min. Always, when Visanne was used, a conversion to conventional bipolar resectoscopy was necesary.

Conclusions

The rationale of the preoperative treatment with progesteron is its effect on the endometrial layer. During the second half of the secretory phase progesteron increases the vascular permeability of the spiral arteries inducing oedema of the connective matrix. This effect should also reduce the myoma consistency, increasing the cutting effect of the shaver. We also expect a possible reduction of the total operation and resection time and a decrease in the number of two steps procedures or conversions to the traditional technique

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ES23-0121

Free Communications 4: Hysterectomy and fibroid treatment

LASH : A REPRODUCIPLE SKILL OR A HARBINGER OF TROUBLE

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Objectives

To assess the efficacy and benefits of LASH while identifying strategies and tips for safe practice from our experience of laparoscopic subtotal hystrectomy.

Methods

A retrospective analysis of 113 laparoscopic assisted subtotal hysterectomies between August 2008 and June 2013 in Wishaw General hospital

Outcome measured:
1-operative indication
2- Safety.
3- Cost.

Results

In total of 113 patients undergoing LASH :
Main indication was dysfunctional uterine bleeding,
88.3% of patients had previously failed medical or hormonal treatment.
Mean duration of the procedure was 90 min with mean blood loss of 136ml.
The major complication identified were:
one case with pelvic hematoma ,one case of
scar tissue formation and chronic pain at morcellator port,
1 case of ureteric oedema ,
one case of ureterovaginal fistula and hernia from lateral port site and .
Four cases had wound infection.
The average inpatient stay was 1.7 nights compared to 3.7 nights for abdominal hysterectomy.

	LASH	SubTotal Hystrectomy
Theatre time		

90 minx £3.08 = £277
70min x£3.08 = £215.60
instruments
£1156
£200
Hospital stay
1.7d x£486 = £826.2
3.7d x £486 + £1798.2
Total cost
£2259
£2213

Conclusions

LASH might be considered as a minimally invasive method with a low perioperative morbidity to treat benign uterine pathologies. Our study has showen that skills needed to perform procedure are reproduciple, moreover,precedure is feasible in a district general hospital setting.
Use of disposable morcellator.
Shorter duration of hospital stay reduces the bedcost to NHS and makes more beds available.
Quicker recovery gives unmeasurable gain to the community , in terms of early return to work and daily activities.
***

ES23-0240
Free Communications 4: Hysterectomy and fibroid treatment

"BENEFIT OF GYNECOLOGICAL ROBOTIC SURGERY FOR MULTIPLE MYOMAS"

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Objectives

St. Antonius-Hospital is a 240-bed hospital situated in a rural area in the Northwest of Germany close to the Dutch boarder. The hospital`s Department of Urology is one of the pioneers of robotic surgery internationally having completed more than 7000 DaVinci prostatectomies. In the tailwind of this accomplishment, the Department of Gynecology started a program of robotic gynecological surgery, mostly in benign conditions in 2010. Until now, some 330 cases have been completed.

Methods

We draw data from our own operative program from 2010 until 2014 using descriptive statistics.

Results

We present our data concerning women with desire for a child. The benefits of using robotic surgery for women with multiple myomas are delineated. Data on factors like duration of procedures, type of procedures, complications as well as learning curve will be discussed. A case report about one patient with 14 myomas taken out during surgery underlines the advantage of this technique.

Conclusions

Robotic Surgery for myomas offers specific advantages over other types of surgery. So far, there have been few data on this specific topic. We hope to establish robotic surgery especially for women with a desire for a child. Data on subsequent pregnancies as well as outcome have yet to be gathered.
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ES23-0023
Free Communications 4: Hysterectomy and fibroid treatment

COMPARATIVE STUDY BETWEEN ROBOTIC LAPAROSCOPIC MYOMECTOMY AND ABDOMINAL MYOMECTOMY

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Objectives
To compare short-term surgical outcomes of robotic and abdominal myomectomy and to analyze the factors affecting the short-term outcomes.
Methods
Retrospective study of a consecutive case series at Saint Joseph's Hospital, Atlanta, USA. From February 2007 to June 2009, 122 patients with symptomatic leiomyomata underwent either robotic assisted laparoscopic myomectomy (RALM, n=77) or abdominal myomectomy (AM, n=45). The variables investigated included the type of surgery, age, BMI, gravity, parity, number of leiomyomata, diameter of largest tumor size, total operative time, estimated blood loss, and length of hospital stay.
Results
No significant differences were found between the two groups regarding age, gravity and parity. However, BMI, numbers of leiomyomata and tumor sizes were significantly higher in AM compared to RALM. The total operative time was significantly longer in RALM compared to AM. The total estimated blood loss and length of hospital stay were significantly lower in RALM compared to AM group. The predicted odds of staying one day or less in the hospital for patients receiving RALM was 193.5 times the odds for patients receiving AM when adjusted for the number of leiomyomata and the tumor size. The probability of one day admission or less in the hospital was significantly increased for patients receiving RALM.
Conclusions
RALM has shorter hospital stay, less blood loss and increased operative time compared to AM, regardless of tumor size and number of tumors. Although operative time was increased with the RALM procedure, blood loss and hospital stay were integral outcomes in the study result.
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ES23-0425
Free Communications 4: Hysterectomy and fibroid treatment

NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (NOTES) MYOMECTOMY: AN INNOVATIVE APPROACH FOR MYOMECTOMY

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Objectives
To introduce an innovative surgical procedure – NOTES myomectomy, and the preliminary surgical outcomes.

Methods
Women with leiomyoma underwent myomectomy by transvaginal NOTES in tertiary referral medical center and surgical outcomes were measured.

Results

These three patients underwent the surgery at mean age of 43 [SD, 6] and body mass index of 21.6 [SD, 2.1] kg/m2. The average of operative time were 128 [SD, 55] minutes. The average of blood loss in the operation was 317 [SD, 207] mL without blood transfusion. No intra-operative or post-operative complications were noted. No cases were converted to traditional laparoscopy or laparotomy.

Conclusions

Our preliminary results showed the safety and feasibility of transvaginal NOTES in laparoscopic myomectomy in selected patients. It is one of minimally invasive surgery and scarless. However, it has limitations and should be evaluated in more cases.
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ES23-0433
Free Communications 4: Hysterectomy and fibroid treatment

IMPACT OF LAPAROSCOPIC HYSTERECTOMY ON QUALITY OF LIFE: A PROSPECTIVE FOLLOW UP STUDY
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Objectives
The impact of a laparoscopic hysterectomy (LH) on quality of life (QOL) and recovery is prospectively evaluated. Indications for a LH were benign or early stage, low risk endometrial cancer.

Methods
From January 2005 until January 2007, a multicentre, prospective, feasibility study was performed on the implementation of LH in the Netherlands. QOL was measured before and six weeks and six months following surgery, using the Short Form-36 Health Survey (SF-36). Mean QOL values were compared to an unselected, age matched, female, Dutch reference population. To assess changes in QOL over time and to identify subgroups of patients who have a QOL different to the mean in the group, a longitudinal linear mixed model was applied. Covariates were preselected and entered into a start model, and by backward elimination the final models were constructed which identified subgroups of patients who had a lower QOL or less change in QOL over time.

Results
Data of 116 patients were available for analysis. Six months after a LH all QOL values were significantly higher than before surgery and equal or higher than the reference values. However, with increasing age patients scored significantly lower on physical functioning, social functioning, role physical, vitality, bodily pain and general health at six months.

Conclusions
In general, minimal invasive surgery has little negative impact on QOL and recovery. However, for women with increasing age, a minimal invasive procedure such as a LH results in impaired QOL 6

months postoperatively. Awareness of prolonged reduced QOL after LH with increasing age, can help to adjust needed care postoperatively.
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ES23-0316
Free Communications 4: Hysterectomy and fibroid treatment

A COMPARISON OF LAPAROSCOPIC SUPRACERVICAL HYSTERECTOMY AND TOTAL LAPAROSCOPIC HYSTERECTOMY - A SINGLE CENTRE REVIEW
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Objectives

The aim of this study was to compare the incidence of and evaluate the risk factors for peri-operative complications in laparoscopic supracervical hysterectomy (LASH) with those of laparoscopic total hysterectomy (TLH) and to assess the impact of body mass index (BMI) and uterine size on outcomes.

Methods

All laparoscopic hysterectomy cases for benign conditions between 2005 and 2013 at Whipp's Cross Hospital, London were reviewed retrospectively.

Results

166 underwent LASH and 98 underwent TLH, with or without bilateral salpingo-oophorectomy. The TLH group was significantly younger (42.8 years vs 46.7 years; p<0.0001), with lower BMI (28.6 vs 31.1 kg/m2; p=0.002) and smaller estimated uterine size (11 weeks vs 17 weeks; p<0.0001). There was no significant difference between estimated blood loss (TLH 180mls vs LASH 205mls; p=0.128), length of procedure or hospital stay between groups. Bladder injury occurred in 3 cases (1.8%) from the LASH group and none in the TLH group. One patient was transfused following TLH.

BMI and uterine size had a significant effect on blood loss and operation length. In patients with BMI≤ 25 and uterine weight ≤ 280g, mean blood loss was 144mls and operation length 62 mins, compared to a mean blood loss of 278ml and operation length 97 mins in patients with BMI>25 and uterine weight >280g.

Conclusions

In women who opt for hysterectomy, controversy remains about whether or not the cervix should be removed. Much evidence about the effect of cervical removal on sexual, bowel and bladder function is extrapolated from other surgical routes. This study provides data on peri-operative outcomes and demonstrated that high BMI and large uterine size significantly affect surgical risk, and this should be taken into consideration when counselling patients preoperatively.
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ES23-0338
Free Communications 4: Hysterectomy and fibroid treatment

IS THIS THE END OF LAPAROSCOPIC HYSTERECTOMY?

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Objectives

A minimal access approach to hysterectomy for benign disease offers well established advantages over laparotomy. While the vaginal route is preferred by "NICE" and a laparoscopic approach also commended with those with the skill set, a large percentage of hysterectomies in the United Kingdom, indeed worldwide continue to be performed via laparotomy! We surveyed all Consultant Gynaecologists in Northern Ireland in order to ascertain their preferred approach to hysterectomy for benign disease.

Methods

An electronic 'survey monkey' questionnaire was e-mailed to all 68 Consultant Gynaecologists in Northern Ireland via the regional Obstetrical and Gynaecological Society. The questionnaire was made of 10 stems and enquired as to the preferred route for hysterectomy for benign disease and factors influencing this decision. Questions also established the years qualified as consultant, surgical attitudes towards training and opportunity to teach.

Results

The response rate was 36/68 (54.94%), 44/36 (38.88%) of respondents had been a consultant for less than 10 years. More than 50% had less than 40 theatre sessions per year and 4 (11.11%) had performed fewer than 10 hysterectomies in the preceding year, (mean range 10 – 30). Of all hysterectomies performed by consultants the individual preferred route was vaginal 66.67%, abdominal 22.22% and laparoscopic hysterectomy, 11.11%. Of the respondents 16/36, (44.44%) are able to offer a laparoscopic hysterectomy (50% were most recently qualified). Most commonly sited deterrents for vaginal / laparoscopic route were lack of training, followed by inexperienced theatre team/assistants. More than 50% indicated that over the past year they had not been able to mentor the same trainee on more than five occasions. Most commented that independent practice should be competency, not number based. 20/36 (55.56%) recommended competitive streaming in the final years of postgraduate training to optimise Gynaecological surgical skills in newly appointed consultants.

Conclusions

Encouragingly 66% of consultants performed vaginal hysterectomy, however disappointingly laparotomy was the second preferred route. Twice as many consultants using this approach versus laparoscopy. Only 1 in 10 gynaecologists performing laparoscopic hysterectomy. Of concern it seems that this trend is likely to continue as the most junior consultants feel lacking in the Minimal Access Surgical (MAS) skill required. This study supports the role of fellowships and targeted training in order to improve MAS capabilities of the newly qualified consultants. Mentorship, for trainees and

between consultant colleagues, will also help to increase the numbers of laparoscopic hysterectomies performed by improving confidence and maintaining skills.
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ES23-0523
Free Communications 4: Hysterectomy and fibroid treatment

ESTABLISHING TOTAL LAPAROSCOPIC HYSTERECTOMY SERVICES IN A DISTRICT GENERAL HOSPITAL; HOW TO DEVELOP A BUSINESS CASE AND SECURE FUNDING

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Objectives

Total Laparoscopic Hysterectomy (TLH) has several advantages over Total Abdominal Hysterectomy (TAH) including quicker recovery and discharge, less postoperative pain, less risk of wound infection, deep vein thrombosis, need for blood transfusion, risk of adhesion formation and carries an overall higher patient satisfaction rates. Also, data suggests that in skilled hands, TLH is associated with reduced risk of serious adverse events and complications. In our district general hospital, 2 consultants out of 8 perform laparoscopic hysterectomies for benign disease and the rest perform open hysterectomies. Due to intense financial pressures, no formal funding has been allocated to TLH procedures. We have looked into the feasibility of introducing TLH as the default method for all suitable cases and the relevant financial implications for the trust.

Methods

To identify the workload that the unit would be faced and to do forward planning, all total abdominal hysterectomies within the last year ie May 2013- May 2014 were identified and notes, preoperative imagings mainly ultrasound, and histology results using measurements and sample weights were reviewed; suitability of these cases for a TLH procedure were assessed using above mentioned parameters plus further data regarding vaginal access, difficulty of surgery and location of fibroids. To access this data, hospital paper notes, ORDERCOMM software (used for laboratory and histology reports) and Picture Archiving and Communication System (PACS) were used.

Results

One hundred and three cases of laparoscopic and abdominal hysterectomies had been performed from May 2013 to May 2014 out of which, 74 cases were done as open procedures. Forty five notes were accessed and reviewed. The limit for performing TLH without morcellation was set at a uterine size equal to 12 weeks or 280 grams. To consider a case to be suitable for TLH, several other factors were taken into consideration in addition to uterine size; these include: vaginal access, location of fibroids and difficulty of surgery ie presence of severe adhesions or severe endometriosis. Out of 45 cases, 27 patients deemed to be suitable for a straightforward TLH using the abovementioned criteria with no need for allocation of extra operating time.

Conclusions

From this data, it is estimated that roughly 60% of the current total abdominal hysterectomy procedures could be done laparoscopically. This equates to roughly 44 additional cases a year. Therefore, to offer TLH as the standard preferred method of hysterectomy to all suitable patients with benign disease, unit will need to offer additional 44 TLH procedures a year. This data has been used to calculate the funding needed and formulate a business case for providing TLH to all suitable cases as the default procedure. We will publish our data in a year's time to evaluate the recommended changes to optimise this service.
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ES23-0325
Free Communications 4: Hysterectomy and fibroid treatment

FEASIBILITY OF LAPAROSCOPIC MYOMECTOMY IN A LARGE UTERUS (>16 WEEKS) USING VASOPRESSIN AS THE ONLY HAEMOSTATIC INTERVENTION
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Objectives

Laparoscopic myomectomy offers shorter hospital stay and quick recovery times compared to conventional laparotomy; however, not all cases are amenable to this approach. Common interventions used to reduce risk of surgical bleeding include administration of gonadotrophin releasing hormone (GnRH) analogues, mechanical tourniquet, ligation of uterine artery, and administration of diluted vasopressin or tranexamic acid.

We present a single surgeon case series examining the feasibility of a laparoscopic myomectomy using vasopressin as the principal intraoperative haemostatic intervention in women with large (≥16 weeks gestational) fibroid uterus.

Methods

This is a retrospective case series analysis of all laparoscopic myomectomies conducted between 2008 and 2013 at a tertiary centre. Feasibility of the proposed intervention was assessed by the following outcomes: conversion to open, transfusion rates, operating time, duration of hospital stay and complications. 1:20 diluted vasopressin was injected into fibroid capsule. Uterine incisions were closed with multi-layer technique and all specimens were morcellated intra-abdominally prior to extraction.

Results

A total number of 110 laparoscopic myomectomies were conducted during study period. The mean age (range 25-48) was 37. Overall, 3 (2-8) fibroids with an average diameter of 77 mm (range 30-200 mm) were removed through average 2 (range 1-6) incisions. 3.6% (4/110) were converted to an open procedure and 3.6 (4/110) required blood transfusion. 53/110 (3.6%) women presented with infertility and 38% (20/53) conceived following surgery. The mean operating time was 02 hours 45 minutes (range 49 minutes - 05 hours 36 minutes) and hospital stay 2 (range 0 -6 days) days. There were 3 major complications - 1 case of severe depression secondary to GnRH analogues, 1 bowel incarceration in 5mm port and 1 post-operative haemorrhage requiring return to theatre for laparoscopic re-suturing. There were 2 cases of heart rate abnormalities following administration of intra-myometrial vasopressin. The histology was benign leiomyoma in all cases.

64 out of 110 cases had a uterus equal to or larger than 16 weeks gestational size. Mean age was 38 (range 25-47). Overall, 4 (1-19) fibroids with an average diameter of 86 (range 30 - 200) mm were removed through average 2 (1-6) incisions. The mean operating time was 03 hours (range 1 hour 23 minutes- 5 hours 36 minutes) and hospital stay 2 (range 1-6) days.

Conclusions

We report feasibility and safety of laparoscopic myomectomy for large multiple fibroid uterus. The hospital stay, conversion to open, transfusion and complication rate remains low. Our findings are consistent and have confirmed previous reports of vasopressin as a suitable haemostatic intervention.
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ES23-0104
Free Communications 4: Hysterectomy and fibroid treatment

THE TRUE SINGLE AND CONCEALED INCISION (SCARLESS) HYSTERECTOMY
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Objectives

Background : Hysterectomy is the most commonly performed gynecological surgical procedure. Approximately 90 percent were done for benign conditions. ACOG Committee on Gynecologic Practice recommends Vaginal hysterectomy as the approach of choice whenever feasible, based on its well-documented advantages and lower complication rates

Objective : To assess the feasibility and safety of performing vaginal hysterectomy for benign nonprolapsed and enlarged uterus.

Methods

The medical records of women with non-prolapsed uterus requiring hysterectomy for benign uterine conditions who underwent vaginal hysterectomies by myself in 5 private general hospitals in Bangkok Thailand from December 2007 to April 2012 were reviewed

Results
Of 229 vaginal hysterectomies 219 were successfully performed whereas a conversion from the vaginal to abdominal route was required in 10 cases.

41 patients were nulliparous (9 singles)

32 had previous c/s
16 had prior abdominal or pelvic surgery

7 cases had vaginal hysterectomies with bilateral salpingo-oophorectomy

8 cases had vaginal hysterectomies with unilateral salpingo-oophorectomy

The mean operative time was 102 minutes (range from 45 to 240 minutes)

The mean estimated blood lost was 180 ml. (range from 50 to 600 ml.)

The mean uterine weight was 255 gram (range from 55 to 1300 grams)

The weight of largest uterus successfully removed vaginally was 1300 grams

There was one case of intraoperative accidental injury to urinary bladder and one case of vaginal cuff hematoma

The mean duration of hospitalization was 2.1 days (range from 1-4 days)

Conclusions

Vaginal hysterectomy is feasible and safe for nonprolapsed and enlarged uterus even in nulliparous or history of prior abdominal surgery women
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ES23-0344
Free Communications 5: Operative Risk Management and Complications

LAPAROSCOPIC MYOMECTOMY: TIPS AND TRICKS FOR REDUCING BLEEDING
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Objectives: to show different operative techiques in order to minimize bleeding during laparoscopic myomectomy
Methods: by means of surgical videos and descriptive slides, we show various surgical procedures that will help us minimize the bleeding in this complex surgery.
Results: it is possible to obtain an optimal outcome during laparoscopic myomectomy, and to reduce blood loss to a minimum, if we apply some simple and reproductible tips.
Conclusions: laparoscopic myomectomy has been traditionally regarded as a complex procedure, limited to experienced and skilled surgeons. The main reason for this is the high risk of heavy bleeding during the intervention, as well as the need of good suturing skills. There are various surgical techniques that can help us prevent blood loss, thus turning this type of surgery into a safe and feasible procedure.
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ES23-0291
Free Communications 5: Operative Risk Management and Complications

THE IMPACT OF SURGICAL VOLUME ON THE CONVERSION RATE OF LAPAROSCOPIC HYSTERECTOMIES TO LAPAROTOMY IN PROVEN SKILLED SURGEONS
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Objectives
To evaluate the impact of surgical volume in laparoscopic hysterectomies on the conversion rate to laparotomy, in proven skilled surgeons.
Methods

1051 consecutive patient records of laparoscopic hysterectomies performed by 19 gynaecologists in 14 hospitals in the Netherlands from January 2007 till January 2010 were retrospectively reviewed. All gynaecologists were proven skilled in performing a laparoscopic hysterectomy by passing an objective structured assessment of technical skills (OSATS) before 2007. Thereafter, surgical volume and conversion rate were retrospectively assessed.
Of all patients, age, body mass index (BMI), co-morbidity, indication for laparoscopic hysterectomy, previous laparotomies and conversions were recorded. The main outcome measure was the conversion rate from laparoscopy to laparotomy. Adjusted logistic regressions were performed to estimate the impact of surgical volume on the conversion rate. In addition odds ratios (OR) and 95% confidence intervals (95% CI) were estimated.

Results

The mean annual volume of laparoscopic hysterectomies per surgeon was 26.7 (SD 12.2). Conversion to laparotomy occurred in 5.0% (53 of 1051) of all laparoscopic hysterectomies. A higher annual volume per surgeon was significantly associated with a lower conversion rate (OR 0.96, 95 % CI 0.93 to 0.99). These estimates were adjusted for BMI, age, co-morbidity and indication for laparoscopy. Surgeons who performed < 20 laparoscopic hysterectomies per year had a five times higher conversion rate than surgeons who performed ≥ 20 procedures per year (OR 5.1, P<.001).

Conclusions
Increased annual surgical volume of laparoscopic hysterectomies in proven skilled surgeons is inversely related to the conversion rate to laparotomy.
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ES23-0519
Free Communications 5: Operative Risk Management and Complications

IATROGENIC PARASITIC MYOMA : LATE COMPLICATION OF LAPAROSCOPIC UTERINE MORCELLATION WITH A RISK OF ATYPICAL HISTOLOGICAL TRANFORMATION.
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Objectives
Laparoscopic uterine morcellation has recently become a highly controversial issue. The goal of this study was to identify parasitic myomas following uterine laparoscopic morcellation and to describe the circumstances of diagnosis, management, potential consequences and possible preventive measures.
Methods
Retrospective study of observed cases in a university hospital between 2000 and 2013 and review of the literature.
Results

Five cases were identified in our department. Pelvic pain was the main symptom in three patients while one was asymptomatic and one consulted for a cystocele. The average time to diagnosis was 88 months (3-192). Surgical removal was performed in four cases by laparoscopy and vaginally for one case. Histological examination showed typical leiomyomas, but in one case, an atypical leiomyoma with limited experience for a typical primary lesion. In the literature, there is about fifty cases. One required a bowel resection and for another one, after subtotal hysterectomy, histological examination showed complex atypical endometrial hyperplasia for normal endometrium initially.
Conclusions
In a period of controversy regarding the use of uterine morcellators, this study should draw the attention of laparoscopic surgeon. It emphasizes, beyond a potential reoperation, a risk of atypical histological secondary processing. Surgical resection should be discussed even in case of asymptomatic lesions.
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ES23-0188
Free Communications 5: Operative Risk Management and Complications

CONVERSION RATE FOR LAPAROSCOPIC MYOMECTOMY: ANALYSES OF RISK FACTORS
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Objectives

The literature on conversion rates for laparoscopic myomectomy is limited, with a reported incidence between 0% and 11.6%. In addition, the general definition of conversion to laparotomy varies widely. The aim of this study is to evaluate the rate of conversion to laparotomy during laparoscopic myomectomy and to analyze risk factors associated with it.

Methods

This retrospective cohort study included all patients who underwent a laparoscopic myomectomy in a tertiary academic centre from 2009-2012. Medical records were reviewed for baseline characteristics, perioperative characteristics and post-operative outcomes. Conversion was defined according to the recent consensus definition in use by gynaecologists, general surgeons and urologists in the Netherlands. Basic statistical evaluation was performed: data were summarized and the converted cases were compared with the non-converted group.

Results

Our cohort contained 731 patients and included 28 surgeons. In seven laparoscopic myomectomy cases a conversion to laparotomy was performed (0.95%). All of the converted cases were reactive conversions. One case was converted to an abdominal hysterectomy; two cases were converted to an abdominal myomectomy because of impaired vision due to bleeding and one case because of a tear of the ileum. In three of those procedures, blood transfusion was required intra-operatively. In the last three cases, the decision to convert was made during the procedure because of the prolonged operating time, blood loss, the amount of fibroids and/or adherent fibroids. The cases where an extension of incision was 'only' performed for specimen retrieval were not included.

The converted procedures were associated with more blood loss (1557ml vs 167.92 mL, p=0.01) and a longer hospital stay (0.55 vs. 3.57 days, p=<0.001). Similarly, the operative time was longer (313 vs. 128.6 minutes, p=0.09) and on average more fibroids were removed in the converted cases (11 vs 3.47, p=0.442) but these results were not statistically significant. The weight of removed fibroids was found to be associated with a higher conversion rate (426,6 vs. 260.9 gram, p=0.0426, mean 512 vs. 188 gram). In terms of prior surgery, no significant correlation was found with conversion (previous laparoscopy 0% vs 15.37%, p=0.41, previous laparotomy 42,85% vs. 21.15% p=0.30).
Conclusions
The conversion rate for laparoscopic myomectomy was low (0.95%) in our centre. This could be explained by a correct patient selection as well by the fact that the surgeons performing this laparoscopic procedure are experienced and skilled for this high level surgery. This is an encouraging finding if we consider patient safety.

As far as risk factors are concerned, the weight of the removed fibroids was found to be associated with conversion. Due to the low conversion rate, the latter finding should be interpreted with caution.
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ES23-0140
Free Communications 5: Operative Risk Management and Complications

BARBED SUTURE VERSUS VIRYL FOR THE VAGINAL CUFF CLOSURE IN TOTAL LAPAROSCOPIC HYSTERECTOMY : A 3 YEARS EXPIRIENCE
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Objectives

Our aim was to do a retrospective analysis of the intra and postoperative complications with the use of three different techniques to close the vagina in total laparoscopic hysterectomy (TLH) in 92 women.

Methods

This was a series of TLH over a three year period (january 2011 to December 2013). It included 92 consecutive women requiring hysterectomy. Three suture techniques for the closure of vaginal cuff were revised: barbed suture (Vlock) performed by laparoscopy, Vicryl performed by laparoscopy and Vicryl performed vaginally. Intraoperative , early (0-7 days) and late postoperative (7-30 days) complications were registered. We used T-test to assess for differences between groups.

Results

The average age of patients was 47,6 years , range 30 to 78.The most frequent diagnosis was uterine leiomyoma (53.3%) , followed by adenomyosis (33.7%), endometriosis (8,7%) , and polyposis (6,5%). Five hysterectomies (5,4%) needed conversion to laparotomy : 3 due to multiple adhesions , and 2 for oncologic reasons to complete the staging. Fort he closure of the vaginal cuff ,barbed suture was used in 39,1 % (36) of the hysterectomies. 52,2% (48) were in the group of vicryl suture performed vaginally, and 3,3% (3) were vicryl suture performed by laparoscopy.No intraoperative

complications related to the suture occurred. One complication occurred in the first postoperative week , one bowel ostruction on day 5 in the group were Vicryl suture was performed vaginally . The late postoperative complications were : 1 vaginal cuff dehiscense which required re-suturing on the 16th post operatory day in barbed suture group ; 4 vaginal cuff hematomas , 3 of them in the barbed suture group and 1 in the Vicryl suture performed vaginally; and none in the Vicryl suture performed by laparoscopy. There was no significant difference between the three groups in the proportion of women who developed complications.

Conclusions

In our experience there were no significant differences between the three groups.
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ES23-0309
Free Communications 5: Operative Risk Management and Complications

ACUTE ABDOMINAL PAIN IN PREGNANCY: LAPAROSCOPIC MANAGMENT

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Objectives
Discuss laparoscopy and current guidelines as a safe diagnostic and therapeutic tool in pregnant patients
Methods
Case report about a 31 years old, greek primigravida 20 weeks with increasing lower abdominal pain and previous laparotomy in Greece four years prior for ovarian cyst.
Questions for managing this patient include, is there a need for tocolytics, is surgical intervention appropriate for this patient and if so is laparoscopy an option? The (US) guidelines regarding these questions and other issues for our patient such as: is intraoperative fetal monitoring mandatory, timing for laparoscopy in pregnancy, and trocar placement etc. are referenced.

Results
The patient was brought to surgery where laparoscopy was performed.Palmer's point was chosen for optic trocar placement.
The intraoperative findings were: massive adhesions with torsion of Appendix and adherent omentum in douglas pouch.
Sharp adhesiolysis of adhesions and de-torsion of appendix was performed.
Patient did well postoperatively and was discharged symptom-free after 48 hours.

Conclusions
Current evidence for use of laparascopy in pregnant women was reviewed.
Laparoscopy is a valid and secure method for diagnostic and therapeutic procedure for abdominal pain in pregnant patients in the second trimester.
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ES23-0077
Free Communications 5: Operative Risk Management and Complications

VAGINAL MYOMECTOMY IN TREATMENT OF UTERINE FIBROIDS.

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Objectives

To establish the feasibility, safety and clinical effectiveness of vaginal myomectomy in comparison with laparoscopic and traditional approaches.

Methods
From December 2006 to June 2013 we conducted a retrospective and prospective study involving 61 women with subserous and intramural fibroids of fundal, posterior or anterior walls uteri. The mean size of a dominant nodus was 7,6 (± 1,3 cm) and the number of them were no more than 5. The first study group comprised 18 patients who were underwent intervention by vaginal route. The control 2 and 3 groups consisted of 24 and 19 women treated by abdominal and laparoscopic approaches. Indication for surgical treatment in all groups were: menorrhagia in 27 (44%) of the cases, pelvic pain in 8 (13%), rapid growth in 11(18%) of the women, recurrent pregnancy loss in 6 (9,8%) of the patients, primary infertility in 17 (27,8%) and secondary infertility in 5 (8%) of the women. The mean intraoperative blood loss, operating time, VAS pain score and the consumption of analgesics postoperatively, temperature, complications and length of hospital stay in three groups were compared.
Results
The mean intraoperative blood loss was 113,61±67,12 ml in the vaginal group, 135±97,08 and 246± 113,18 ml in laparoscopy and laparotomy groups. The mean operating time was 83±61 min in first group, 114,58±48,09 min in 2 and 97±33,60 min in 3 group. VAS pain score was 3,5±0,9 in vaginal group, 3,3±1,3 and 4,7±1,3 in 2 and 3 control groups. Postoperative analgesics (NSAID) consumption was during 4 days in the vaginal and laparoscopy groups and during 7 days in the laparotomy group. The mean top postoperative temperature was (37.8 ±1.1) °C in all groups. The mean length of hospital stay was 4,6±1,14 days in vaginal, 4,8±0,79 in laparoscopy and 6,35±1,2 in laparotomy group. We had no cases of conversion in 1 and 2 groups. Injury of small intestine was occured in vaginal group and repairing of bowel was performed by laparoscopic route. Postoperative period was uneventful.

Conclusions

Vaginal myomectomy as laparoscopy may offer the same advantages insofar as low intraoperative blood loss, less trauma and short recovery time in comparison with laparotomy. However, vaginal myomectomy is not suitable for all women with uterine fibroid. Additional studies need to evaluate indication and place of that approach in conservative treatment of fibroid uteri.
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ES23-0233
Free Communications 5: Operative Risk Management and Complications

TOTAL LAPAROSCOPIC HYSTERECTOMY WITH PREVIOUS CESAREAN SECTION USING A STANDARDIZED TECHNIQUE: EXPERIENCE OF PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE.

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Objectives

In the presence of previous uterine scars such as cesarean section (CS) most surgeons will choose Subtotal laparoscopic hysterectomy over Total Laparoscopic hysterectomy (TLH) to reduce surgical risks. Little in the literature has been published on surgical outcomes in patients undergoing TLH with previous CS. The objective of this study is to address the safety of TLH in patients with one or more previous CS using a standardized technique in an OBGYN residency program.

Methods

Retrospective study of all cases of TLH performed in our Hospital, Pontificia Universidad Catolica de Chile, from January 2006 through April 2014. Patient demographic information, diagnosis, history of previous CS, operating time, conversion to laparotomy, uterine weight and major complications were analyzed.

Results

458 TLH were performed during the study period. 40% of patients had 1 or more previous CS (Median 1, Range 1-4). 45% had 2 or more. Benign pathology was the main indication for hysterectomy in 85% of cases, and malignant pathology a 15%. Myoma was the principal indication in 41% of cases. Average surgical time was of 131 minutes (Median 120 min, range 50-360 min); 128 minutes in patients without previous CS and 136 minutes with CS (p=1.0). Major complication rate was of 3% (n=14), 5 in patients with previous CS and 9 with no CS (p=0.964). Urologic lesions were the most common major complication, accounting for 1,5% (n=7) of all performed TLH. 4 cases with no previous CS and 3 with CS (p=1.0). Of major urologic complications 3 were inadvertent cystotomies, 1 with no previous CS and 2 with CS (p=0.5663). Indications for surgery in these cases were endometrial hyperplasia, myoma and adenomyosis respectively. 9 patients were readmitted (2%). Of these, 2 were cases of patients with no previous CS that presented with acute abdomen secondary to ureteral lesion and uroperitoneum needing ureteral reimplantation. Average postoperative hospital stay was of 3 days (range 2-6) interchangeably for patients with or without previous CS.

Conclusions

TLH in patients with previous CS is becoming increasingly common. The presence of previous CS poses a higher difficulty for surgeons approaching TLH since bladder adhesions to the uterus may make dissection difficult and might even preclude bladder mobilization off the cervix. Our inadvertent cystotomy rate was of 0,7% showing no statistical significant difference between women with or without previous CS. In the last 3 years more than 50% of our patients had 1 or more previous CS, fact that supports the learning curve or our technique. The findings of our series show that TLH in the presence of one or more previous CS, in the hands of experienced laparoscopic surgeons using a standardized technique, is a safe procedure with minimal complication rates.

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ES23-0444

Free Communications 5: Operative Risk Management and Complications

TOTAL LAPAROSCOPIC HYSTERECTOMY IN WOMEN WITH PREVIOUS CAESAREAN SECTIONS

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Objectives
Total Laparoscopic Hysterectomy is an excellent alternative to Abdominal Hysterectomy. Previous C-Sections may cause difficulties during the operation. An understanding of the anatomy of the pericervical arena makes the surgeon aware of the pathology of the adherent bladder due to previous C-sections. The use of the Mangeshikar Uterine Mobilisar was evaluated for the safety of TLH in such cases.
Methods
TLH was performed in 100 consecutive cases of TLH by the author between the period: January 2011 to December 2013 using the standard technique of Bipolar Coagulation and sharp scissors dissection. The uterus was manipulated by Mangeshikar Uterine Mobilisar (MUM). Bilateral Salingectomy was performed in all cases with additional Bilateral Oophorectomy performed in 35 cases. The upper pedicles were disconnected using Bipolar Coagulation 40 watts using the RoBi Forceps with Sharp Scissors Dissection. The UVF of peritoneum was dissected with sharp scissors. The broad ligament leaves were dissected to expose the uterine pedicles. The space of Sheth between the uterine pedicles and the bladder was attenuated using blunt dissection techniques aided by pneumodissection. The bladder was mobilised using the Vaginal presenter of the MUM which served as a platform to facilitate the dissection from lateral to medial. Circumcision of the vagina was accomplished using Monopolar Hook Energy Pure Cut 80 Watts at the Cervico-vaginal junction. The uteri with / without adnexae were delivered either vaginally after vaginal debulking or by uterine morcellation using power morcellators. The vagina was sutured in one or two layers as full thickness closure with involvement of the pericervical fascia as continuous closure performed laparoscopically.
Results

No. of Previous C-Secions	No. of cases
1	15
2	65
3	17
4	3

Weight of uterus	No. of cases
≤ 200	23
201 to 400	26
401 to 600	17
601 to 800	18
801 to 1000	10
1001 to 2000	6

There was no injury to the bladder or the ureter during the operation or in the post-operative period. All patients were discharged the following day.

Conclusions
A thorough knowledge of the anatomy and the pathology of the C-Section sequelae of adhesions involving the bladder aided with judicious usage of bipolar energy and dissection techniques with the use of the uterine manipulator and the vaginal presenter makes the TLH operation safe and easy even with uteri with previous C-Section(s).
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ES23-0220
Free Communications 5: Operative Risk Management and Complications

PERIOPERATIVE NORMOVOLAEMIC HAEMODILUTION (PNH): NOVEL STRATEGY FOR MANAGEMENT OF COMPLEX BLOOD COMPONENT REQUIREMENTS FOR DIFFICULT REPRODUCTIVE SURGERY.

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Objectives

Blood component transfusions are life-savingbut carry significant risks of mismatch causing transfusion reactions andinfectious disease transmission. This study set out to develop robust strategiesto optimally manage complex perioperative blood component requirements forreproductive surgery in:
Jehovah’s witnesses who cannot receive allogenic blood products
Presence of multiple/complex blood group antibodies and incompatibilities
Limited availability of blood components
Very high infectious disease prevalence with increased risks of transmission

Methods

Longitudinal case series of 3 Jehovah’s witnesses undergoing difficult reproductive surgery and requiring perioperative management of blood component requirements.
Preoperative haemoglobin augmentation, preoperative blood collection, post-surgery re-transfusion of the collected blood, close surgical and post-surgical monitoring.
Study conducted over a period in a Tertiary referral centre for reproductive surgery.
Preoperative haemoglobin was augmented with Erythropoietin and Iron.
15-20mls/Kg blood was collected perioperatively at anaesthesia induction with colloid volume replacement; 2 in citrated bags and 1 though cell-salvage.
Blood products were re-transfused at end of the surgical procedures.

Results

Preoperative haemoglobin was built up to 14-16gm/dl.
Two units of blood was collected from each participant with colloid replacement; haemodynamic stability was not compromised.
Citrated blood kept on ice for duration of surgery with no deterioration in pH and haemoglobin.
Cell-salvage produced two units of packed red cells for re-transfusion with no deterioration in pH or haemoglobin.
Surgery and perioperative blood loss was well tolerated with no haemodynamic concerns.
Collected blood was re-transfused to all participants at the end of surgery.
2 participants who received blood kept on ice developed unexplained low-grade pyrexia (37.5-37.8ºC) with normal inflammatory markers in immediate postoperative period.
Haemoglobin levels were normal in all participants post re-transfusion.
No adverse long term complications.

Conclusions

PNH provides 2-3units of patient-derivedblood components to replenish surgical blood loss. Two techniques are proposeddependent on resources involving preoperative haemoglobin augmentation andperioperative collection of 15-20mls of blood via:
Citrated blood bags kept cool on ice connected to patient
Cell-salvage with red cells filtered for re-transfusion

Demonstration that PNH manages complexperioperative blood component requirements provides a viable strategy in:
Jehovah's witnesses who cannot receive allogenic blood products
Presence of multiple/complex blood group antibodies and incompatibilities
Limited availability of blood components particularly in developing countries
Very high infectious disease prevalence with increased risks of transmission
It is cost-effective and a proven useful alternativeto traditional blood transfusion particularly in less wealthy health systems.
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ES23-0343
Free Communications 6: Oncology

SELECTING PATIENTS FOR ENDOSCOPIC TREATMENT: EXTERNAL VALIDATION OF THE PEDIATRIC RISK OF MALIGNANCY INDEX.

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Objectives

Adnexal masses in girls are rare and their incidence has been estimated at 2.6 per 100.000 girls each year [1]. The Pediatric Risk of Malignancy Index (PRMI) has been developed to discriminate malignant masses from benign masses and is based on three variables: the maximum solid diameter of the mass on imaging (in cm), flow or enhancement in a septum or at the base of a solid papillary formation (+4) and the presence of sex hormone related symptoms (+6). If the score of these variables combined is 7 or higher risk of malignancy is high [2]. In this study we aimed to externally validate this model and tried to determine its value in selecting patients for endoscopic surgery.

1. Cass DL et al. Surgery for ovarian masses in infants, children, and adolescents: 102 consecutive patients treated in a 15-year period. J Pediatr Surg, 2001. 36(5): p. 693-699.
2. Loh AH et al. Pediatric risk of malignancy index for preoperative evaluation of childhood ovarian tumors. Pediatr Surg Int, 2012. 28(3): p. 259-66.

Methods
Patients under the age of 18 who had been diagnosed with or treated for an adnexal mass at the Radboud University Medical Center Nijmegen between January 1999 and October 2013 were included. Information was collected on diagnosis, presenting symptoms and signs and imaging characteristics. The PRMI was calculated for each patient. Sensitivity, specificity, positive- and negative predictive values were calculated and a receiver-operating-characteristic-curve (ROC-curve) was made.

Results
Seventy-eight patients were included with a mean age of 9.7 ± 6.0 years. A malignant mass was found in 17 patients (21.8%). The PRMI with a cut-off value of 7 resulted in a sensitivity of 70.1% (95% CI: 44.1-89.6%) and a specificity of 85.3% (95% CI: 73.8-93.0%). The positive predictive value was 57.1% (95% CI: 34.0-78.1%) and the negative predictive value was 91.2% (95% CI: 80.7-97.0%). The positive likelihood ratio was 4.8 (95% CI: 2.4-9.4), and the negative likelihood ratio was 0.4 (95% CI: 0.2-0.7), resulting in a diagnostic accuracy of 82.1%. The area under the ROC-curve was 0.868 (95% CI: 0.756-0.980), which indicates a good discriminative power as a diagnostic test.

Conclusions

The PRMI showed in our population less discriminative capacity than originally published, but it's performance is comparable with models currently used in adults. The decision for a surgical approach should as always be based on multiple individual characteristics, but with a negative predictive value of 91.2% the PRMI can help in selecting patients for endoscopic surgery.
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ES23-0384
Free Communications 6: Oncology

SENTINEL LYMPH NODE LAPAROSCOPIC BIOPSY FOR UTERINE AND CERVICAL MALIGNANCIES USING INDOCYANINE GREEN NEAR-INFRARED FLUORESCENCE IMAGING

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Objectives

Sentinel lymph node (SLN) biopsy has been widely used for gynecologic malignancies. Although near-infrared (NIR) imaging appears to be a beneficial new technique for SLN biopsy, reports of SLN biopsy using laparoscopic NIR fluorescence imaging are scarce. The objective of this study was to assess the detection rate of positive SLN using laparoscopic NIR fluorescence imaging for uterine and cervical malignancies.

Methods

From 5/2012, We performed 16 cases of laparoscopic NIR fluorescence imaging SLN biopsy with Olympus system during a 2-year period. Four cc of 500µM indocyanine green (ICG) was injected into the uterine cervix before the surgery. Blue dye was concurrently injected in some cases. After the pneumoperitoneum, we open the retroperitoneum and identified SLN. These procedures will demonstrate step by step in the video. In all cases, systemic pelvic lymph node dissection was performed after SLN biopsy.

Results

We use ICG in 16 cases and blue dye was used concurrently in 14 cases. We were able to identify SLN in 12/16 (75%), with bilateral pelvic mapping in 10/16(62.5%) using NIR fluorescence imaging. Looking at the blue dye group, we were able to identify SLN in 7/14 (50%), with bilateral pelvic mapping in 3/14 (21.4%). During the procedure, there were no intraoperative complications.

Conclusions
Laparoscopic NIR fluorescence imaging for SLN biopsy is a promising new technique, with low complications. Even though these cases were conducted during the early learning curve stage of our learning to perform the procedure, we found laparoscopic NIR fluorescence imaging for SLN to be superior to the blue dye metho
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ES23-0111
Free Communications 6: Oncology

LONG TERM CLINICAL OUTCOMES OF ROBOT ASSISTED LAPAROSCOPY FOR EARLY STAGE CERVICAL CANCER: RECURRENCE, SURVIVAL AND COMPLICATIONS

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Objectives
Data on long term endpoints of robot assisted radical cervical cancer surgery is limited. We aimed to study the oncological outcomes and long term complications of robot assisted radical surgery in early stage cervical cancer.

Methods
A cohort of the first 100 consecutive cervical cancer patients (stage IA1 – IIB) treated by robot assisted laparoscopy (2008 to 2013) was studied. Two gynaecological oncologists specialized in minimally invasive surgery performed all surgeries on a three/four-armed (da Vinci) robotic system. Their robotic experience, preceding the first case included in this study, was ≥2 years. Procedures consisted of a level 2 pelvic lymphadenectomy combined with a radical hysterectomy, radical vaginal trachelectomy or parametrectomy. The primary outcome measures were recurrence, survival and long term complication rates.

Results
In 100 subjects, 104 laparoscopies were performed and no conversions to a laparotomy occurred. The median follow-up was 29.5 months (2.5 – 67.1 months). Thirteen subjects had a loco-regional (8%), distant (4%) or combined (1%) recurrence at a median 14.4 months (2.9 – 34.8 months). All mortality (7%) was caused by recurrent disease. In addition, 4 recurrences currently receive palliative care and two are in complete remission. The five-year progression free, disease specific and overall survival rates were 81.4%, 88.7% and 88.7%. Long term complications encompassed lymphedema (26%), lower urinary tract symptoms (19%), urinary tract infections (17%), and sexual disorders (9%). Four cases (4%) experienced (some degree of) skin hypoesthesia due to obturator or genitofemoral nerve injury. One subject had a vaginal cuff dehiscence. No complication induced mortality occurred.

Conclusions
The obtained recurrence and survival rates are comparable to those reported in literature for early stage radical cervical cancer surgery via laparotomy. The equally comparable long term complication rates identified in this cohort, provide reassurance for the continued clinical use of robotics in cervical cancer surgery.
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ES23-0330
Free Communications 6: Oncology

LAPAROSCOPY VS LAPAROTOMY FOR WOMEN WITH ENDOMETRIAL CANCER A FEASIBILITY STUDY.

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Objectives
To evaluate performance status and cost for the surgical treatment of endometrial cancer by laparoscopy versus laparotomy.
Methods

In the period between 12/2012 and 3/2014, 9 women with endometrial cancer were treated laparoscopicaly in our institution. These patients were compared to 10 patients who were treated by conventional laparotomy. Surgical time, blood loss, number of lymph nodes resected, hospital stay and overall cost of treatment were compared between the two groups.
Results

There were no differences between the two group in terms of demographics. Surgical time was increased in the laparoscopic group (212 min versus 140 min). There were no differences in the number of lymph nodes obtained between the two groups. Blood loss was decreased in the laparoscopic group (166 versus 265 cc). As expected hospital stay was significantly decreased in the laparoscopic group as well as the overall cost of treatment.

Group Statistics
Laparoscopy (9)
Laparotomy (10)
Mean
Std. Error Mean
Mean
Std. Error Mean
P value
Difference
Operative time (min)
212
13.51
140
10.220
0.01
72
Blood loss (cc)
166
30
265
33.375
0.01
- 99
Lymph nodes
17
3.31
18.20
3.806
0.84
- 1.2
Hospital stay (days)
3.33
.52
6.00
.394
0.01
-2.67

Transfusion (units)
.00
.000
.00
.000

Complications
.00
.000
.00
.000

Conclusions
Laparoscopic management of women with endometrial cancer is feasible despite an increase in operative time.
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ES23-0279
Free Communications 6: Oncology

CONSERVATIVE SURGICAL TREATMENT IN EARLY CERVICAL CANCER. A RETROSPECTIVE STUDY OF 36 CASES

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Objectives

Objectives: to present our experience in the conservative traetment of early cervical cancer

Methods

Material and methods: 36 patients diagnosed with early cervical cancer (IA-IB1) were operated on between 2006-2013 by the same team. Women under 40 years of age with squamous cell carcinoma or adenocarcinoma of the cervix stages IA (with lymphovascvular invasion) through IB1 and with a desire of preserving their fertility and/or body image were included in the study. The mean age of the patients was 33 years. All cases were assessed preoperatively by cytology, colposcopy, MRI, colposcopically guided biopsy, or cone biopsy. The operation began with laparoscopic identification of the sentinel lymph node, followed by frozen section. Radical vaginal trachelectomy was performed as a second step only in cases with negative nodes.

Results

Results: Radical trachelectomy with pelvic lymphadenectomy could be completely carried out in 32 cases out of 36, as four patients were excluded due to positive sentinel nodes found at frozen section. The mean operative time was 117 ± 22,8 minutes (77 – 167 minutes), mean blood loss was 486 mL (150-800 mL) and perioperative complications occurred in 12,3% of the cases. Seven women

went on to become pregnant postoperatively and five of them were delivered successfully at 38 weeks of pregnancy by planned Caesarean section.

Conclusions

Conclusion: Radical vaginal trachelectomy with pelvic lymphadenectomy represents an advantageous alternative procedure in selected patients with early cervical cancer who desire further pregnancies.
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ES23-0221
Free Communications 6: Oncology

ARE THE RESULTS OF TOTAL LAPAROSCOPIC RADICAL HYSTERECTOMY DURING THE LEARNING CURVE INFERIOR TO THE PLATEAU OF THE OPEN SURGERY FOR CERVICAL CANCER?

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Objectives
To compare surgical and oncological outcomes between Total Laparoscopic Radical Hysterectomy (TLRH) and conventional Open Radical Hysterectomy (ORH), during the learning curve of the laparoscopic technique.
Methods

Retrospective analysis of all patients with cervical cancer who underwent Radical Hysterectomy and pelvic lymph node dissection (PLND) either by laparoscopy or conventional technique between October 2009 and February 2014.

Results

During the study period, 166 cervical cancer patients were treated with radical hysterectomy. Of them, 41 (25%) and 125 (75%) underwent TLRH (by a single surgeon) and ORH, respectively. TLRH cases included the learning curve period of the surgical team. Epidermoid carcinoma was observed in 78% of patients in both groups. Patients in TLHR group were younger (39.8 versus 43.8 years-old, p=0,069). FIGO staging distribution was: IA2 37% versus 32% and IB1 58% versus 50% for TLHR and ORH, respectively. No statistically significant difference was observed in OR time for TLRH compared to ORH (218 vs 208min). Hospital stay was shorter for the TLRH group (2.1 vs 2.7 days, p<0,0007). TLHR patients had 7.1% class III complications according to the Clavien-Dindo classification; on the other hand, ORH group presented 5.6% of class III complications. Transoperative complications were more common in the ORH group. The total number of lymph nodes retrieved was 11,3 (3-30) in the ORH group compared to 13 (3-26) in the TLRH group. Two patients in the ORH group were found to have positive margins in the surgical specimens. One patient died in the TLRH group from a massive vaginal bleeding in the 12th postoperative day. No postoperative death was observed in the ORH group. The median follow-up for TLHR and ORH was 18.4 months (2.0-54.8) and 27.2 months (1.9-51.5), respectively. In the ORH group thirteen patients (9,6%) had recurrences, seven (6,4%) were loco-regional recurrences, three (2,4%) distant and one (0,8%) combined local and distant recurrence. There was no locorregional recurrence in the TLRH group; the only death by tumor in this group was caused by a systemic recurrence (retroperitoneal and pulmonar).

Conclusions

Even during the learning curve, TLRH has apparently similar surgical morbimortality when compared to ORH. Longer follow-up is necessary to compare oncological outcomes.
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ES23-0051
Free Communications 6: Oncology

COMPARISON OF LAPAROSCOPY AND LAPAROTOMY FOR MANAGEMENT OF ENDOMETRIAL CARCINOMA: A PROSPECTIVE RANDOMIZED STUDY WITH 11-YEAR EXPERIENCE
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Objectives
We compared laparoscopic approach with the conventional laparotomy approach for the treatment of patients with endometrial carcinoma in developing country.
Methods

272 patients with endometrial carcinoma were enrolled in a prospective randomized trial and treated with laparoscopic or laparotmy approach.

Results

One hundred and fifty-one patients treated by laparoscopy while one hundred and twenty-one by laparoscopy. The median operative time was 211 min in the laparoscopy group and 231 min in the lapaprotomy group (P>0.05). The median blood loss was 86 ml in the laparoscopy group and 419 ml in the laparotomy group(P<0.05). The median length of hospital stay was 3 days in the laparoscopy group and 6 days in the laparotomy group(P<0.05). Pelvic lymphadenectomy was performed in all the patients. Para-arotic lymphadenectomy was performed in 15% of the laparosocpy and 31.4% of laparotomy group (P<0.05). The overall survival and 5-year survival rate for the TLH were 94% and 96% compared with 90.1% and 91% in the TAH, respectively (P>0.05).

Conclusions
Laparoscopic surgery is a safe and reliable alternative to laparotomy in the management of endometrial carcinoma patients, with significantly reduced hospital stay and postoperative complications, however, it does not seem to improve the overall survival and 5-year survival rate, although multicenter randomized trials are required to evaluate the overall oncologic outcomes of this procedure.
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ES23-0117
Free Communications 6: Oncology

IMPLICATIONS OF A TWO-STEP PROCEDURE IN SURGICAL MANAGEMENT OF PATIENTS WITH EARLY-STAGE ENDOMETRIOID ENDOMETRIAL CANCER
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Objectives

Introduction: Since ESMO recommendations, pelvic lymphadenectomy should not be performed for women with early-stage endometrioid endometrial cancer preoperatively assessed at presumed low- or intermediate-risk. Nonetheless, a discrepancy between the preoperative and the final staging may require the patient to undergo a second surgical procedure.

Objective: to study the evolution of our surgical practices, and the implications of a second surgical procedure in case of preoperative understaging.

Methods

This retrospective single-center study included women with EEC preoperatively assessed at presumed low- or intermediate-risk who had surgery between 2000 and 2013. Two periods were defined: 2000-2010 (before ESMO recommendations) and 2011-2013 (after). Demographics characteristics, surgical management, operative morbidity, and rate of understaging were compared. The rate of second surgical procedure required for lymph node resection during the second period and its morbidity were also studied.

Results
162 patients were operated for EEC preoperatively assessed at presumed low- or intermediate-risk: 100 between 2000 and 2010 and 62 between 2011 and 2013. 89.0% vs 19.4% had an immediate pelvic lymphadenectomy ($p<0.0001$). 26.0% and 27.4% of the patients were upgraded on final histology ($p=0.86$). 23.5% of the 27.4% patients who were upgraded during the second period didn't undergo a second surgical procedure due to their comorbidity/age. 52.9% of the 27.4% patients underwent a second operation for lymph node resection. Mean operative time of this second procedure was 246.1±39.3minutes. A third of them required another reoperation because of a postoperative complication
Conclusions
Since ESMO recommendations, a second surgical procedure for lymph node resection is required for about a quarter of women with EEC presumed at low or intermediate-risk. This reoperation is not always performed due to age/comorbidity of the patients, and presents a significant morbidity.
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ES23-0496
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

OUR EXPERIENCE OF THE OFFICE HYSTEROSCOPIC MYOMECTOMY: 75 CASES WITHOUT ANESTESIA.
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Objectives
Moving operative hysteroscopy to the ambulatory settings has enabled the myomectomy under a physician's office. Constraining factors for office hysteroscopic myomectomy distribution, is the

complexity of the procedures in the absence of anesthesia, the possibility of developing specific complications of resectoscopy and few publications of experience of such operations.
Methods
In 2013, we conducted a prospective observational study of tolerability and safety of office hysteroscopic myomectomy without anesthesia. The study included 75 patients with menstrual in 45 (60%) and reproductive 22 (29,3%) complaints. The median age was 31,25 ± 8,8 years. Parity 1,2 ± 0,8 (0 to 3). Uterine myomas G1 - 16 (21%), G2 - 44 (59%), G3 - 15 (33.3%). The average size of fibroids was 1,8 ± 1,1 cm. We use Alphascope + Versapoint II equipment for vaginoscopic approach. Myomectomy techniques: one-stage enucleation of the nodes G0 up to 1.5 cm, Slicing of the nodes G0-1 up ??to 2.5 cm, OPPIUM technique for nodes G1-2 up to 2.0 cm. Portability of myomectomy procedures was studied by a 10-point visual analog scale of pain.

Results

In all 75 (100%) cases was performed complete removal of fibroids. The mean operative time was 42 ± 12,8 minutes. The average volume of fluid consumed 1200 ± 487,0 (400.0 mL min, max 3500). Average deficit of 120 ± 50,0 ml. Blood loss is defined as minimum. Tolerance of the procedure during the diagnostic stage was Me 1.0 (CI 0,8;1,5) on the stage of the operation Me 3,0 (CI 2,2; 3,9). There were no complications. 32 (42,6%)patients reported pain with touching by electrode "drill" myometrial wall of the uterus with fibroids enucleation. Overall comfort during surgery indicated as high as 72 (96%)patients, 3 (4%) did not feel comfortable in connection with the initial nervousness.

Conclusions
Thus, ambulatory hysteroscopic myomectomy is safe and well tolerated procedure that can be successfully carried out without anesthetic support in ambulatory conditions.
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ES23-0228
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

ACCURACY AND REPRODUCIBILITY OF DIAGNOSTIC HYSTEROSCOPY IN ABNORMAL UTERINE BLEEDING
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Objectives

Hysteroscopic reliability may be influenced by a lack of morphological diagnostic criteria and its operator-dependence. The aim of this prospective study was to evaluate the inter-observer agreement and the relation between diagnostic accuracy and clinicians' different levels of experience at the Centre Hospitalier Universitaire d'Estaing in Clermont-Ferrand, France.

Methods

Different experienced observers evaluated a video of 51 hysteroscopies, without any patients' clinical information except the initial diagnosis of abnormal uterine bleeding. Every hysteroscopy was completed by endometrial resection and clinicians were blinded for histological result. Observers were free to indicate whether quality of recordings was insufficient for an adequate assessment of clinical situation and they had to judge endometrial macroscopic appearance as normal, suspected or

with strong signs of malignity (question n1). They had to indicate a probable histological diagnosis, choosing between atrophic endometrium (AE), proliferative endometrium (PE), simple hyperplasia (SH), glandulo-cystic hyperplasia (GCH), atypical hyperplasia (AH) and endometrial carcinoma (EC) (question n2).

Results

Histological results were: AE in 8 cases (15.7%), PE in 14 (27.4%), SH in 18 (35.3%), GCH in 8 (15.7%), EC in 3 (5.9%), no atypical hyperplasia was detected. Observers were 5 expert clinicians (>100 performed hysteroscopies), 5 senior ones (20-99 procedures) and 6 inexpert ones (≤ 19 procedures).

Considering diagnostic accuracy for EC, mean sensibility and specificity resulted respectively 55.5% and 85.7% for inexpert observers, 66.6% and 81.2% for seniors and 86.6% and 87.3% for experts.

Inter-observer agreement is poor on macroscopic analysis of the uterine cavity (question n1) for inexpert group (k 0.1014) and fair in senior and expert groups (k 0.2343 and k 0.2235, respectively). Inter-observer agreement resulted fair only in senior group (k 0.3008) in predicting histological diagnosis (question n2)

Conclusions

The present study seems to suggest that sensibility rate improves with observer's experience. The reproducibility of hysteroscopy for endometrial malignant pathologies in patients with abnormal uterine bleeding is not satisfying, explaining the lack of agreement in its use as 'gold standard' method. Our study seems to suggest that establishment of more uniform and objective visual diagnostic criteria could reinforce the diagnostic accuracy of inexpert observers and simplify the learning curve of gynecological endoscopy in training operators.
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ES23-0237
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

THE ROLE OF OUTPATIENT HYSTEROSCOPY IN THE EVALUATION OF PATIENTS WITH ABNORMAL UTERINE BLEEDING AND ENDOMETRIAL THICKENING BY ULTRASOUND, 508 CASES ANALYSIS
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Objectives

To establish a correlation between hysteroscopic and patholological findings in patients referred to the gynaecological clinic with menorragia or sonographically thickened endometrium.

Methods

A retrospective study was conducted between 1st of January and 1st of April 2011 and between 1st of January and 31st of April 2012 where a total of 508 cases referred to the gynaecological clinic, were subjected to diagnostic hysteroscopy. Data collected included age, parity, indication of the

hysteroscopy, ultrasound findings, menopausal status, hysteroscopic findings, histological result and complications during hysteroscopy.
Statistical treatment with Statistical Package of Social Sciences (SPSS) version 20.0.

Results
Of the 508 hysteroscopies performed, the mean age of the patients was 52 years (minimum 27; maximum 102). The most frequent indication for diagnostic hysteroscopy were abnormal uterine bleeding, endometrial thickening, hematometra and fibroid. Ultrasound was performed in most of the patients. The most frequent hysteroscopic diagnosis was the presence of polyps followed by submucous fibroid and normal cavity. The patient with abnormal hysteroscopic findings had biopsy done and the most frequent diagnosis were endometrial polyps, fibroid, normal histology, simple glandular hyperplasia without atypia, atrophic endometrium and carcinoma endometrium. There were no complications associated with the procedures.

Conclusions
Outpatient diagnostic hysteroscopy is a safe, reliable and efficient method for the investigation of patient with abnormal uterine bleeding and thickened endometrium. The commonest pathology detected was endometrial polyps.
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ES23-0463
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

REVIEW OF ONE YEAR OF PROSPECTIVELY COLLECTED DATA FOLLOWING THE INTRODUCTION OF HYSTEROSCOPIC MORCELLATION (MYOSURE) INTO A SINGLE VISIT AMBULATORY POST-MENOPAUSAL BLEEDING CLINIC.
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Objectives

To evaluate the clinical outcomes and patient experience following introduction of a hysteroscopic morcellation system (MyoSure) into a Single Visit Post-menopausal Bleeding (PMB) Clinic.

Methods

Prospectively collected data from a busy PMB clinic (min. of 8 new patients per week) were reviewed one year after introduction of the MyoSure Hysteroscopic Morcellator. The clinic is run in the Queen Alexandra Hospital, Portsmouth, a large district general hospital in the United Kingdom. We analysed the outcomes of each patient, the requirement for inpatient surgery under general analgesia, the time from first presentation to first treatment and general patient satisfaction. We also looked at the cost effectiveness of the service for the Healthcare Economy.

Results

All patients who underwent a diagnostic hysteroscopy who were found to have a clinically significant polyp or submucous fibroid could be effectively treated at their initial visit avoiding the need for inpatient treatment under general anaesthesia. There were no adverse outcomes despite more than one hundred treatments with the MyoSure. The need for inpatient treatment under general anaesthesia was dramatically reduced to those patients who were unsuitable for ambulatory procedures (e.g. virgo intacta or lacking capacity to consent) or who had confirmed cancers. All patients who accepted an awake procedure tolerated it extremely well and would recommend the service to a friend.

Conclusions

Introduction of MyoSure Hysteroscopic Morcellation to the Single Visit Ambulatory PMB clinic is well tolerated and is both clinically and economically effective treatment for these patients.
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ES23-0070
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

OFFICE BASED HIGH-SPEED ULTRASOUND IMAGE GUIDED HIFU (HIGH INTENSITY FOCUSED ULTRASOUND) ABLATION OF UTERINE FIBROIDS

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Objectives

Objective: To present case studies demonstrating the feasibility of an office based HIFU uterine fibroid treatment system that can ablate fibroids of clinically relevant size within 10 minutes of total treatment time without the need for anesthesia.

Methods

Methods: In order for gynecologists to treat symptomatic uterine fibroids in an office setting, it should be feasible to deliver treatment without the need for anesthesia within 30 minutes of total procedure time. Furthermore, the procedure should be non-invasive so that it may be deployed outside of a sterile OR setting. Most importantly, the treatment needs to be clinically relevant and safe. An ultrasound image guided HIFU system has been developed by Mirabilis Medica, Inc. to treat uterine fibroids with these goals in mind. HIFU treatments were developed to produce high-speed volumetric ablation of fibroid tissue. This study was designed to establish the feasibility of the treatment system in meeting the above stated clinical requirements.

Subjects were selected from patient volunteers who were advised to have hysterectomy for symptomatic uterine fibroids. Most procedures were performed in a clean but non-sterile office setting. Pre-treatment and post-treatment MRI studies were preformed to evaluate treatment efficacy by measuring the NPV (Non- Perfused Volume) in the target fibroids produced by HIFU ablation. Most subjects had hysterectomy performed within the first week post-treatment. Tissue viability staining was performed on some of the excised uteri to correlate pathology findings with the MRI findings.

Results

Results: HIFU treatments were performed in 57 subjects. There were no Serious Adverse Events or Unanticipated Adverse Device Effects. Most patients complete treatment using only oral analgesia and no patients required anesthesia. The average intra-procedure pain score was less than 3/10, with a majority of subjects reporting no pain. The average total treatment time was less than 5 minutes, and the total procedure time was less than 30 minutes in all cases. The treatment efficacy was promising with NPVs of up to 126 cc observed. One subject who decided to delay her hysterectomy had a follow-up MRI done at three months post treatment, which reported fibroid volume shrinkage of 54%.

Conclusions
Conclusion: The results of this study indicate that the Mirabilis ultrasound imaging guided HIFU system can non-invasively treat uterine fibroids in an office setting in less than 30 minutes, without the need for anesthesia. These results are encouraging and warrant further study.
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ES23-0046
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

MYOSURE HYSTEROSCOPICAL MORCELLATOR: INDISPENABLE AND EFFICIENT FOR CHALLENGING HYSTEROSCOPIC SURGERY. REPORT ON 100 CASES.
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Objectives
To evaluate total operative and cutting time , fluid loss, complications and completion of excision of polyps and myomas (types O, I, II) with the Hologic Myosure Morcellator.

Methods
100 symptomatic women with endometrial polyps and myomas were preoperatively evaluated with transvaginal ultrasound, sonohysterography and MRI (for types I and II submucus myomas. Three types of Myosure morcellators were used (XL,Stantard,Lite) for the hysteroscopic removal of the lesions.

Results
All polyps and myomas were completely removed with Myosure. The XL Myosure was superior for bigger myomas and its use was associated with decreased operative/cutting time and fluid loss. Operative time: for polyps (4,30-10.00min)Av. Time:7,00min,myomas (8,00-35,00min)Av time:17,16min. Cutting time: polyps (0,18-5,00min) Av time:1,56min,myomas (2,31-12min) Av time:7,73min.Fluid loss: polyps(0-600ml) Av. 290ml, myomas(400-2200ml)Av. 985ml. No complications were observed.

Conclusions

Myosure morcellator proves to be totally efficient in removing completely even the most challenging endometrial polyps and myomas.

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ES23-0266
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

OFFICE HYSTEROSCOPIC POLYPECTOMIES WITH TRUCLEAR© MORCELLATOR. COMPARATIVE STUDY WITH POLYPECTOMIES PERFORMED WITH BIPOLAR ELECTRODE.
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Objectives

Analyze the results of the hysteroscopic polypectomies performed in office setting with Truclear morcellator and compare the results with similar procedures performed with bipolar electrode.

Methods

Retrospective descriptive study of the hysteroscopic polypectomies performed in office setting with Truclear morcellator and with bipolar electrode between March 2011 and June 2014 in our hospital.

Results

We have performed a total of 217 procedures with 289 polypectomies with morcellator and we have compared these results with 217 similar procedures performed with bipolar electrode.

The size of the polyps in both groups varied between 0.5 and 5 cm.

The average time of operative hysteroscopy with morcellator was 12.35 minutes (2-27). The average time of polypectomy was 2.05 min (0.16 to 15.5).

Tolerance was good in 97.82% of cases.

The average time of the whole procedure was shorter with morcellator: 12.35 min vs. 19.38 min with bipolar electrode. The average time of polypectomy was also shorter in the morcellator group: 2.05 min vs. 9.13 min with bipolar electrode. These differences were more striking with increasing number and size of polyps.

Conclusions

The Truclear morcellator is a useful tool for operative office hysteroscopy.

The "learning curve" is shorter than that required for performing polypectomies with bipolar electrode

The Morcellator facilitates the removal of large endometrial polyps, those located in the fundus, or with sessile implantation and the endometrial polyposis, decreasing the length of procedure and minimizing the risks of intervention.
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ES23-0227

ARE PREGNANCY OUTCOMES AFFECTED BY THE PRESENCE OF HYSTEROSCOPIC FINDINGS IN ASYMPTOMATIC WOMEN UNDERGOING IN VITRO FERTILIZATION TREATMENT?

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Objectives

To determine the incidence of abnormal hysteroscopic findings and evaluate their association with pregnancy outcome in asymptomatic women undergoing subsequent in vitro fertilization (IVF) treatment.

Methods

Retrospective analysis of 602 asymptomatic women with no abnormal findings at preceding hysterosalpingograpgy (HSG) or transvaginal ultrasound scan (TVS), who underwent routine hysteroscopy prior to IVF treatment from January 2009 to December 2013 at Eugonia Assisted Reproduction Unit, Athens. Incidence of abnormal hysteroscopic findings and pregnancy outcomes in the subsequent IVF cycle were assessed.

Results

Out of 602 asymptomatic women undergoing routine hysteroscopy, 443 (73.6%) had unsuspected abnormal findings, unrecognized with previous HSG or TVS. Of these, 273 women had a single abnormal finding and 170 women had two or more abnormal findings. The incidence of different findings among women with uterine pathology was: endometritis n=158 (35.7%), hyperplasia of endometrium n=118 (26,6%), adenomyosis n=70 (15.8%), uterine polyp n=52 (11.7%), cervical polyp n=49 (11.1%), uterine adhesions n=28 (6.3%), endocervical inclusion (glandular) cysts n=20 (4.5%) uterine scar n=17 (3.8%), submucosal fibroids n=7 (1.2%), remnants of previous gestation n=5 (1.1%), congenital abnormalities of the uterus n=2 (0.5%), other n=4 (0.9%).

Following routine hysteroscopy, a total of 442 women (n=125 without hysteroscopic findings versus n=317 with hysteroscopic findings) proceeded to fresh embryo transfer in the subsequent IVF cycle.

Within the population undergoing ET, women with abnormal uterine findings compared to women without findings, had similar positive hCG rates [163 (51.4%) vs 71 (56.8%)], significantly lower clinical pregnancy rates [138 (43.5%) vs 68 (54.4%), p=0.04], higher but not statistically significant ongoing pregnancy rates per embryo transfer [105 (33.1%) vs 52 (41.6%), p=0.0898], significantly lower implantation rates [169/754 (22.0%) vs 82/285 (29.0%), p=0.03], and significantly higher preclinical miscarriage rates (positive hCG not reaching clinical pregnancy) [25/163 (15.3%) vs 3/71 (4.2%), p=0.02].

Conclusions

Unsuspected uterine pathology was detected in the majority of women who underwent routine hysteroscopy (73.6%). Women with abnormal hysteroscopic findings had lower clinical pregnancy

and implantation rates and higher preclinical miscarriage rates compared to women without findings at hysteroscopy. The most common type of uterine pathology detected by hysteroscopy was endometritis. Considering that the presence of abnormal hysteroscopic findings was associated with lower pregnancy outcomes, it appears that hysteroscopy may be beneficial prior to IVF treatment.
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ES23-0058
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

OFFICE HYSTEROSCOPY. AN OPERATIVE GOLD STANDARD TECHNIQUE AND AN IMPORTANT CONTRIBUTION TO PATIENT SAFETY.
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Objectives

According to WHO, about 1 out of 10 hospitalized patients suffers an adverse event, in developed countries. This implies unnecessary suffering, as well as a huge cost to health systems. This issue is so important that WHO has defined it as a global health problem and in 2004 launched the World Alliance for Patient Safety, with the aim to coordinate, disseminate and accelerate improvements in patient safety. Office Hysteroscopy (OH) as an independent technique of the hospital circuit and being a low risk procedure, has the ideal conditions to be qualified as a patient safety procedure. However, sometimes pain is associated with OH and the intracavitary masses size is usually referred to as one of its limitations. Our aim is to demonstrate that OH can be the alternative to the operating room (OR) in almost all cases of surgical treatment of uterine intracavitary pathology.

Methods

All our OH have been performed by see and treat hysteroscopy and by vaginoscopic approach at the Hospital das Forças Armadas in Lisbon. Hysteroscopic Anesthesia (HA) was given when requested by the patients. We rely on 3 retrospective studies conducted in our Department: one between April 2011 and April 2014 (375 procedures) that assessed the number of patients sent to the OR, another between May 2010 and March 2012 (207 procedures) that evaluated effectiveness of HA and another between January 2010 and December 2012 (230 procedures) that evaluated the dimensions of the excised masses in OH. We have questioned the patients about pain felt during procedures, by using a 0-10 pain scale.

Results

OH was successful in about 92-95% of cases, without resorting to the OR. The procedures were generally well tolerated. When they were not, the intensity of pain was clearly inferior after giving HA. The removal of masses larger than 5 cm is practicable in OH.

Conclusions

OH as an independent technique of the hospital circuit, has the ideal conditions to be qualified as the gold standard technique for the surgical treatment of intracavitary uterine pathology. It does not require the use of OR, hospital admission and general or locoregional anesthesia, thus being an important contribution for patient safety.
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ES23-0467
Free Communications 7: Hysteroscopy /Operative Hysteroscopy 2

REPRODUCTIVE OUTCOMES AFTER HYSTEROSCOPIC MANAGEMENT OF DYSMORPHIC UTERUS: REPORT OF 100 CASES.

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Objectives

The dysmorphic uterus is a congenital malformation of the female tract, recognized in the ESHRE-ESGE classification as class U1, referring to subtle cavity deformations, like the T- shaped uterus and the infantile uterus, but also all other subtle cavity deformations. The incidence and pathogenesis remains unclear, however exposure to diethylstilbestrol (DES) in utero has been associated with the presence of a T-shaped uterus. Today it is documented that also patients without exposure to DES can present with this malformation and possible have reduced reproductive outcome. The aim of this presentation is to evaluate the effect on reproductive outcome of the surgical correction of a U1 uterus prior to IVF, in case of recurrent miscarriage or preterm delivery.

Methods

Retrospective, descriptive study of all patients who underwent hysteroscopic surgery for dysmorphic uterus at the ZOL, Genk Belgium hospital between June 2007 and April 2014 by the same surgeon. Only patients with recurrent miscarriage, history of preterm delivery or prior to IVF where admitted to surgery. We studied the postoperative pregnancy rate, miscarriage rate and complication. Only the first pregnancy after the surgery was considered. Data were collected from medical records and telephone interview.

Results

Until today 100 patients where operated on, no complications recorded and all patients could leave the facility within one hour. The postoperative control after 2 months showed an incomplete result in 3 patients and adhesion formation in 1 patient requiring a second intervention. 57 women (57 %) became pregnant. In 9 cases the pregnancy ended in a miscarriage (16%), no ectopic pregnancy was recorded. Currently 11 pregnancies are ongoing and 36 (98 %) deliveries resulted in a term delivery with normal birth weight for one preterm twin delivery at 34 weeks of gestation. We recorded in total 3 placental retentions and in one of those the removal was complicated with a severe hemorrhage.

Conclusions

This study represents currently the largest series of surgical correction for dysmorphic uterus. None of the patients included in this study has been exposed to DES hormone in utero. For an experienced surgeons, using a small bored hysteroscope and the micro scissors an excellent anatomical result is obtained in a simple ambulatory procedure with low complication rate. The obstetrical outcome is excellent with only one preterm delivery on 34 weeks and 36 term deliveries. This study supports the hypothesis that surgical correction of a dysmorphic uterus could be beneficial for patients with recurrent miscarriage, preterm delivery and prior to IVF treatment to improve baby take home rate.
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ES23-0037
Free Communications 8: Endometriosis 2

COLORECTAL RESECTION VERSUS RECTAL CONSERVATIVE SURGERY IN THE MANAGEMENT OF SEVERE RECTAL ENDOMETRIOSIS: PRELIMINARY RESULTS OF ENDORE RANDOMIZED TRIAL

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Objectives
To determine whether colorectal resection is responsible for a higher rate of postoperative digestive and urinary dysfunction when compared to rectal nodules excision (shaving or disc excision) (ENDORE, NCT 01291576).
Methods

Prospective in intention to treat randomized trial, enrolling patients with deep endometriosis infiltrating the rectum up to 15 cm from the anus, for whom rectal involvement exceeds 20 mm on length, the muscular layer on depth, and up to 50% on rectal circumference

60 patients randomly benefited from conservative procedure or colorectal resection.

Results
In the arm of the conservative surgery, shaving was performed in 10 patients (37%), disc excision in 2 (55.6%) while 2 patients underwent conversion to colorectal resection (7.4%). In the arm of radical surgery, 33 women underwent colorectal resection (100%).
Patients characteristics were fully comparable beween respectively conservative and radical surgery arms. The mean diameter of rectal area involved was 3.4 (SD 1.1) vs 3.1 cm (1), the height from the anus respectively 82 mm (24) and 92 mm (29). The reduction of rectal diameter was revealed in 81 and 61%. When disc excision was performed, the mean diameter was 47mm (14). When colorectal resection was done, the mean length of the specimens was 97mm (48).
Two rectovaginal fistulae occurred in 2 patients in the conservative surgery arm (7.4%), however one of them actually underwent colorectal resection (P=0.11). Four patients (12.1%) presented a stenosis at the level of the rectal suture in the radical surgery arm, requiring complementary surgical or endoscopical procedures (P=0.06). Postoperative rectorrhage from the rectal suture occurred in 3 patients (9.1%) in the radical surgery arm (P=0.11). When the rates of Clavien 3 complications directly related to rectal procedure are compared 'in intention to treat' , the difference is not statistically significant : 2 patients (7.4%) with 1 complication in the conservative surgery arm vs. 3 patients with 1 (9.1%) and 1 patient with 2 complications (3%) in the radical surgery arm (P=0.64).
As the trial is ongoing, the 2 ys follow up is not accomplished in more than a half of patients. Among 28 patients who intended to get pregnant after the surgery, 50% of them also had ovarian endometriomas managed exclusively by ablation using plasma energy. The rate of pregnancies is yet as high as 68%, with 68% spontaneous conception.

Conclusions
Shaving or disc excision are feasible in 93% of patients managed for large rectal endometriosis. The difference between the rates of immediate complications is not statistically significant, however the study was not powered for this outcome. Pregnancy rates in this series of patients managed by surgery are between the highest ever reported in the literature.
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ES23-0028
Free Communications 8: Endometriosis 2

VALIDATION OF THE ECO SYSTEM IN MANAGEMENT OF PATIENTS WITH ENDOMETRIOSIS: A PRELIMINARY STUDY

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Objectives
To validate a new instrument created to suggest treatment of patients with endometriosis for non-specialized gynecologists.
Methods
A retrospective study of 166 patients with a diagnosis or suspicion of endometriosis, seen at the endometriosis outpatient's clinic, Hospital Universitário Antônio Pedro (Brazil) and Pius Clinic Oldenburg, University of Goettingen (Germany). The management used at the service was compared to the procedures suggested by the ECO system.
The ECO System is formed by the following parameters: Extension of the Disease, which represents the site and extension of endometriosis (the score is 0 when the endometriosis is peritoneal; it is 1 when it affects the uterus and/or uterine ligaments (uterosacral and parametric) and/or endometrioma ≤ 3 cm, and is 2 when there is involvement of an intestinal loop and/or bladder and/or ureter and/or ovarian endometrioma > 3 cm); Clinical status of the patient represents the complaint of the patient (the score is 0 when the patient is asymptomatic; it is 1 when there is complaint of non-incapacitating pain and/or infertility, and it is 2 when the pain is incapacitating); Objective of the patient represents the desire of the patient (the score is 0 when the patient does not express a desire for a change in the situation; it is 1 when she desires to get pregnant or get relief of pain, and it is 2 when the patient desires to get pregnant and get relief of pain).

Results
All patients with a score of 2 were submitted to exclusively medical treatment. In the group with a score of 3, a total of 96.1% were dealt with clinically, while 3,9% were submitted to surgical intervention. In patients with a score of 4, in 50% clinical control with drug treatment was indicated, and in the other half the surgical approach was indicated. All other patients with scores of 5 and 6 were treated surgically.
Conclusions
Patients with ECO System scores ≥ 4 should be referred to centers specialized in endometriosis.
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ES23-0019
Free Communications 8: Endometriosis 2

DEEP NODULAR ENDOMETRIOSIS AND INVASION PROCESS: LESSONS FROM EXPERIMENTAL MODEL. NEW ARGUMENTS IN FAVOR OF THE SHAVING TECHNIQUE?

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Objectives
We validate an experimental model on deep nodular endometriosis. This model is used to explore the invasion process of the disease and validate surgical strategies.

Methods
We induced deep nodular lesion using an animal model by grafting uterine specimens in baboon. Induced lesions were microscopically examined by immunohistochemestry using different antibodies (CK22, CD10, KI67, beta-catenin, e-cadherin, MMP-2 and MMP-).

Results
Our data from baboons show morphological similarities with cancer invasion process (collective invasion), confirming that multicellular coordination between the leading (invasive) edge and the training (cohesive) edge is mandatory.

Conclusions
This could explains the good results of the shaving technique, which removes the cohesive part of the nodule. When the cohesive part of the nodule (training edge) is separated from the invasion front (leading edge), the remaining endometriotic tissue left in place is not able to develop anymore.
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ES23-0283
Free Communications 8: Endometriosis 2

RADIOFREQUENCY THERMAL ABLATION FOR SYMPTOMATIC UTERINE ADENOMYOSIS: A POSSIBLE ALTERNATIVE TO HYSTERECTOMY
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3cDepartment of Obstetrics and Gynecology, University of Verona, VERONA, Italy

Objectives

The purpose of this study was to evaluate the midterm outcomes of radiofrequency ablation (RFA) of symptomatic uterine focal adenomyosis in terms of durability of symptom control.

Methods
Consecutive 34 women with symptomatic uterine localized adenomyosis underwent radiofrequency thermal ablation under laparoscopic guidance.

Ultrasound evaluation was performed at the baseline and at the postoperative follow-up at 3, 6, 9, and 12 months and therefore annually. The impact of adenomyosis related symptoms was assessing using Visual Analogic Scale.

Results
The median number of adenomyosis localization treated per patient was one (1-2). The median baseline volume of the adenomyosis was 61 cm3 (18-154). The median reduction in adenomyosis volume was 56.4%, and 71.3% at 6, and 12 months, follow-up evaluation, respectively. A significant progressive improvement in the symptoms score was observed at, six, and 12 months follow-up. The

median follow-up time was 21 months, with 10 women completing three years of follow-up. The median reduction in myoma volume was 68.8% and 77.9% at six months and one year, respectively. One year after the procedure, one woman (2.9%) underwent hysterectomy for recurrence of dysmenorrhea.

Conclusions
RFA of symptomatic uterine focal adenomyosis seems to be a possible alternative to hysterectomy, with significant reduction of symptoms for most patients and a low chance of recurrence at midterm.

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ES23-0312
Free Communications 8: Endometriosis 2

THE RELATIONSHIP BETWEEN SYMPTOMS AND LOCATION OF ENDOMETRIOSIS
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Objectives

To examine whether specific types of pain are associated with anatomical locations of endometriosis.

Methods
A prospective multicenter cohort study of women undergoing surgical treatment for endometriosis.
Results

A total of 5255 women were registered on to a UK database between 2007 and 2014. The number of women reporting severe symptoms for the following types of pain were: 2792/4802 (58%) premenstrual pain; 3693/4816 (77%) menstrual pain; 2258/4811 (47%) non-cyclical menstrual pain; 2183/4741 (46%) deep dysparaunia; 2240/5255 (43%) cyclical dyschezia; 1151/4784 (24%) non-cyclical dyschezia; 2499/4800 (52%) lower back pain. Rectovaginal disease was significantly associated with all types of pain symptoms while ovarian disease and bowel other than rectal disease was only significantly associated with menstrual pain.

Conclusions

Women with surgically confirmed endometriosis are more likely to report severe cyclical symptoms than non-cyclical symptoms. There is strong evidence to suggest that there is an association between locations of endometriosis and specific pain symptoms.
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ES23-0096
Free Communications 8: Endometriosis 2

LAPAROSCOPIC THERAPY OF EXTRAPELVIC CYSTIC ENDOMETRIOMA PRESENTING DEEP INSIDE LEFT GLUTEAL MUSCLES
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Objectives

Objective: To report our experience with the first case of extrapelvic cystic endometrioma which presenting deep inside pelvic wall and protrude into gluteus muscles of the left hip in a 21-year-old woman.

Study design: Case report. Followed 8 months since operation.

Setting: University affiliated hospital.

Methods

Patients: A 21-year-old nulliparous Chinese woman suffered from dysmenorrhea, cyclic leg pain and numbness. The diagnosis of hip endometrioma was aided by the history of cyclical symptoms, needle aspirate, ultrasonography scan and magnetic resonance imaging.

Interventions: We adopted both laparoscopic approach and posterior endoscopic approach. The mass was located and partly striped from the pelvis by laparoscopy. Then the patient was tuned to prone position. Operation space was formed beneath gluteus minimus and carbon dioxide pneumoperitoneum was built; Laparoscope was inserted into the space, and cystectomy was performed. The patient was followed and received gonadotropin-releasing hormone agonist treatment for 6 months.

Results

Main Results: Laparoscopy showed the pelvis to be free of gross disease. A cystic mass about 7 cm in diameter was found deep inside the gluteus muscles and adhered to left sciatic nerve. Laparoscopy combined transgluteal endoscopic approach successfully removed the endometrioma and relieved the sciatica nerve compression symptoms. Pathological examination of the specimen demonstrated endometrial implantation cyst. Postoperative hormonal suppression therapy proved to be efficient in preventing recurrence as well as wound implantation.

Conclusions

Conclusion: To our knowledge, this is the first case of a large separated endometrioma deep beneath pelvic floor and expanded into gluteus muscles that reported in literature. Laparoscopy combined posterior transgluteal endoscopic approach was an effective way to excise the extrapelvic endometrioma. Patient had benefited from the combined approach of minimally invasive operation, and results was favorable. Gluteal endometrial implantation cyst should be added to the differential diagnosis of extrapelvic endometriosis and led to our deep thought of the unsolved myth of the origin of endometriosis.
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ES23-0517
Free Communications 8: Endometriosis 2

ATYPICAL POLYPOID ADENOMYOMA (APA): CURRENT EVIDENCE AND MANAGEMENT
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Objectives

Atypical polypoid adenomyoma (APA) is a rare benign uterine tumour, with less than 200 cases been reported in literature. Previously APA was considered as a benign lesion though increasing number of cases demonstrate features of malignant disease including high rates of recurrence and malignant transformation. Clinically it presents mainly in premenopausal women with abnormal uterine bleeding, pelvic pain and subfertility.

Histologically it consists of smooth muscle, endometrial glands and often scanty endometrial stroma. Although the association between APA and endometrial carcinoma is unclear, recognition and correct diagnosis are important.

Hysterectomy is the primary therapeutic choice for patients with APA. However, younger patients with fertility scope conservative treatment of APA is proposed. Conventional treatments of APA include endometrial curettage and polyectomy and hysteroscopic resection

Most patients remain disease free after subsequent surgery and no deaths have been reported. Moreover, successful spontaneous pregnancies have been reported in patients with conservative treatments: hysteroscopic surgery or polypectomy or repeat curettage in recent years.

Methods

Literature review of the published cases.

Results

We are presenting the published cases and different proposed management plans. In addition we are presenting our case who has been referred to us with a history of pelvic pain, menorrhagia and infertility, five laparoscopies, one laparotomy and one hysteroscopy. Imaging suggested the presence of adenomyotic uterus with APA extending from the posterior cervical wall into the cervical canal and to the rectovaginal septum (DIE). Histology confirmed APA.

Conclusions
Atypical polypoid adenoma is an unusual endometrial tumour that shows a tendency to recurrence and malignant transformation. It occurs predominantly in young women of reproductive age and the trend is towards conservative surgery including hysteroscopic resection with continuing surveillance of the patient. Additional cases and researches are needed for a better understanding of APA.
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ES23-0282
Free Communications 8: Endometriosis 2

ESHRE GUIDELINE ON MANAGEMENT OF WOMEN WITH ENDOMETRIOSIS; IS THERE EVIDENCE SUPPORTING SURGERY IN ENDOMETRIOSIS?
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Objectives

The ESHRE guideline on the management of women with endometriosis containing 83 recommendations, was recently published. The aim of guideline was to improve clinical practice by providing clinicians with recommendations for diagnosis and treatment of endometriosis based on high quality evidence and expert opinion. Among other topics, the evidence on surgery for the treatment of painand infertility associated with endometriosis was collected.

Methods
As described in the ESHRE manual for guideline development, key questions were defined by the guideline development group, and the corresponding key words were used to conduct searches for relevant evidence in PUBMED and the Cochrane database. The content and quality of the retrieved papers was assessed after which the body of evidence for each key question was summarized and translated into recommendations. In case of lack of evidence as a base of recommendations, good practice points were written based on expertise of the guideline development group.
Results
For endometriosis-associated pain, there is evidence supporting recommendations on the use of surgery. In general, when endometriosis is identified at laparoscopy, clinicians are recommended to treat endometriosis surgically, as this is effective for reducing endometriosis-associated pain, i.e. see and treat. For deep endometriosis, referral to a centre of expertise is advised in a good practice point.

For minimal to mild endometriosis-associated infertility, there is high quality evidence that operative laparoscopy is more effective than diagnostic laparoscopy inimproving pregnancy rates. We found no controlled studies comparing reproductive outcomes after surgery versus after expectant management for moderate to severe endometriosis or ovarian endometrioma, however the available evidence suggests that surgery can be considered to increase spontaneous pregnancy rates.

Finally, the effectiveness of surgery prior to Assisted Reproductive Technologies is not well studied. We found no evidence that surgery prior to ART improves live birth rate in women with ovarian endometrioma or deep endometriosis, although there is some evidence of benefit for stage I/II disease.

Conclusions
Laparoscopy is an option for treatment of pain and infertility in women with endometriosis, especially in women desiring laparoscopic confirmation of diagnosis. The effectiveness of surgery prior to ART, or as an alternative to ART to improve reproductive outcomes in women with endometriosis in not well established and should be the topic of high quality randomized controlled trials in the near future.
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ES23-0482
Free Communications 8: Endometriosis 2

DEEP ENDOMETRIOSIS AS A CAUSE OF ACUTE SMALL BOWEL OBSTRUCTION
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Objectives

In 5 years we performed 8 surgeries due to endometriosis with small bowel involvement. We have reviewed them focusing on the fact that half of them presented as acute obstruction.

Intestinal obstruction accounts for 15% of all the acute abdominal pain emergencies.Gastrointestinal involvement has been found in 3-37% of women suffering from endometriosis. Small bowel is affected only in 1% of endometriosis but from 7 to 23% of those will present as obstruction.
Methods

Between January 2008 and December 2012 we treated laparoscopically 8 patients with small bowel endometriosis, 4 of them presented as acute obstruction requiring emergency surgery.

In 5 cases out of 8 the imagining studies performed suggested the existence of endometriosis, in the remaining 3 was an unexpected surgical finding.

All patients had previously presented symptoms of intestinal subocclusion on several occasions.

Results

In all patients the obstruction was due to small bowel endometriosis.

In 6 cases the surgery consisted in bowel resection with construction of a side-to-side functional end-to-end stapled anastomosis; 2 cases were treated by “shaving” (with longer recuperation).

On average, the surgery lasted 4 hours and there were no complications.

Conclusions

Although symptomatic involvement of the small bowel is rare, enteric endometriosis should be considered when assessing young females with acute small bowel obstruction.

Being the colon more frequently affected, is the small bowel the main cause of acute bowel obstruction.

Due to the vagueness of symptoms, high suspicion is needed.
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ES23-0243
Free Communications 8: Endometriosis 2

REDUCING THE SIZE OF INDUCED PERITONEAL ENDOMETRIOSIS IN WISTAR-LINE RATS
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Objectives

Sizereduction of induced peritoneal EMS andalmost complete after using anti-angiogenic(Avastin®) treatment (AAT) and, also, size of it depends on number of injections.

Methods

Weused 60 female adult Wistar-line rats.Their weight was 280-300 gm, age - 4 – 4,5 months. All of them were intact. Totalnumber of rats was distributed in 4 groups. Each group had two subgroups – experienced group and control group. According with the number of group, thenumber of injections was adequate from 1 to 4. All experienced group received intraperitoneal0,35 mg of AAT (or 0,3 ml Solution of AAT). All control group - 1,0 ml 0,9%Physiological solution (placebo). The data were monitored and logged.

Results

Respectively, at the end of the experiment, allanimals has decapitation in week after each injection of AAT or pacebo. During laporotomy, according with ourexperimental conditions, the focuses of inducted peritoneal EMS was smaller in 85%in size after 4 injections of AAT. It's proved by macroscopic and morphologic study.

Conclusions

So, we proved the positive role of AAT in inducedperitoneal endometriosis in Wistar-line ratsexperiment . Under the impact of the blockade of this treatment brought us areduction of volume and reduction of size of focuses of peritoneal EMS. Thatcompared with the group of placebo. Our experimental model of EMS shows us aeffect of AAT and foolishlyconfirmed morphologically, macroscopically. The reduction of the focuses of EMSis a dose-dependent. The blockade Avastin® demonstrated a less of size and made reduced in85% of leukocytic, lymphocytic infiltration and macrophage activity in focusesof inducted peritoneal EMS. We are continue this study of effects of AAT (anti-VEGF therapy) on animals uterus,ovaries, fallopian tubes is continues.

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ES23-0090

Free Communications 8: Endometriosis 2

CLINICAL CORRELATION WITH LAPAROSCOPIC FEATURES OF PERITONEAL ENDOMETRIOSIS

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Objectives

The aim of this study is to establish a clinical correlation with the videolaparoscopic features of peritoneal endometriosis.

Methods

This is a retrospective cross-sectional study, with 110 patients submitted to gynecological laparoscopic surgery for any reason, presenting mascroscopic findings suggestive of superficial endometriosis during the procedure. Clinical and laparoscopic parameters were analyzed and compared with histopathologic results after 244 biopsies obtained from the different lesions. Statistical analysis were performed utilizing the probability method, chi-square and McNemar test, with a confidence interval of 95% and $P<.05$ statiscally significant.

Results

During the laparoscopic procedures were observed 9.1% of single typical dark-brown/black lesions, 15.4% of single atypical red lesions and 24.5% of single atypical white lesions. In 5.4% of the cases black lesions were associated with red lesions, in 1.8% black lesions were associated with white lesions, in 27.3% red lesions were associated with white lesions while in 16.4% of the cases the three types of lesions were found together. Retrospectively, we observed that 63 patients (57.3%) had chronic pelvic pain, dysmenorrhea and/or dyspareunia, 39 (35.4%) had infertility and only 8 patients (7.3%) had the diagnosis of adnexial mass during previous sonographic evaluation. The probability of finding typical lesions was correlated with mean age of 25-35 years while atypical lesions were most common in patients over 35 years.

Conclusions

Despite all the technology currently available the pre-operative diagnosis of peritoneal endometriosis still remains a challenge. In all of the cases the superficial peritoneal lesions were associated with endometriosis-related symptoms. Although the macroscopic aspect observed during the laparoscopic procedure the histopathological confirmation still is the best resource of diagnosis and should be investigated. Regardless of surgical indication when identifying superficial endometriosis lesions, peritoneal biopsy should be performed for proper counseling and monitoring of these patients.

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ES23-0102

Free Communications 9: Urogynaecology

TRANSVAGINAL MESH PELVIC ORGAN REPAIR AFTER FAILURE IN SACROCOLPOPEXY : A SERIES OF 130 PATIENTS.

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Objectives

The aim of the study was to determine the long-term results of vaginal vault prolapse repair by abdominal sacrocolpopexy (ASC) and by transvaginal mesh (TVM). The other objectives were to understand reasons for failure in ASC, to report on our experiences regarding the use of TVM after ASC and to evaluate the rates of complications and re-interventions.

Methods

We retrospectively collected data on consecutive patients who underwent TVM repair for recurrent vault prolapse after prior history of ASC between January 2005 and February 2014. Data was obtained from our hospital medical records and we further phoned patients to check if they had surgery in other hospitals since then.

Results

130 patients with recurrent prolapse after ASC were included in the study. In the cases of all of these patients ASC was considered a failure. The surgical treatment consisted of a TVM treatment and took place about 14 years (range 1-48 years) after ASC. 45% of patients had a prior history of hysterectomy, 77% had a prior history of surgery for stress urinary incontinence (SUI) 50% of these cases involved during ASC. 11 patients had 2 consecutive ASC treatments before TVM and 2 patients had 3 ASC treatments before vaginal surgery. The mesh was placed anteriorly and posteriorly in 32% of cases, posteriorly (rectovaginal) in 43%, and anteriorly (vesicovaginal) in 25%. An additional procedure was performed in 38% of cases. These procedures included hysterectomy (3 cases), enterocele repair (9 cases), posterior repair with perineorrhaphy (20 cases) and SUI surgery (22 cases). The rate of per-operative complications was 1% (1 hematoma and 1 bladder injury). After a median follow-up duration of 26 months (range 2-80 months), the rate of re-intervention for prolapse recurrence was 9% (12 cases), 2% for mesh exposure (3 cases) and 6% for SUI (8 cases).

Conclusions

Our study is the first to report a large series of failure in ASC and a long term follow-up after surgery. Our study also shows that the use of a TVM treatment after ASC is efficient and reliable with relatively low rates of re-intervention. According to the available literature and data, the rate of complications and re-interventions does not seem to be higher in those patients with a prior history of ASC.
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ES23-0448
Free Communications 9: Urogynaecology

COLPO(HISTERO)SACROPEXY: THE INICIAL EXPERIENCE OF A PORTUGUESE TERCIARY HOSPITAL CENTER

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Objectives

Genital prolapse is ahighly prevalent disorder in women with a lifetime risk of surgical repair of11.1%. In 38% of cases is associated with stress urinary incontinence. Differentapproaches may be used to treat pelvic organ prolapse but recently laparoscopiccolpopexy has been considered to be the goldstandard for the treatment ofapical defects. The objective of this retrospective study was to report therecent experience of our institution (a terciary hospital) and short-termresults with the use of laparoscopic approach for the treatment of pelvic organprolapse.

Methods

Laproscopic colpopexy was performed in our Department for the first time 10 years ago, but it was only since 2012 that this approach has been performed more frequently. From March 2012 to May 2014, 9 women with pelvic organ prolapse where submitted to laparoscopic sacral colpopexy with placement of a synthetic prolene mesh on the anterior vaginal wall and a posterior mesh on the levator ani muscle and posterior vaginal wall. All procedures were performed by the same surgeon, and follow-up was done at one, six and twelve months with clinical evaluation of complaints and physical exam.

Results

Ages ranged from 37 to 63; surgical indications were recurrent vaginal vault prolapse in 6 cases and uterine prolapse grade II in 3 cases. None of the women had stress urinary incontinence. The 2 women with uterine prolapse wanted to preserve the uterus so colpohysteropexy was performed with uterine preservation. The operative time ranged from 210–295 minutes. Regarding peroperative complications it only occurred a rectal lesion with immediate correction followed by the use of biological mesh for prolapse correction, postoperative period was uneventful and no complication occurred. There were no conversion, and no major complications occurred. At follow-up visits all patients referred significant improvement of vaginal bulge sensation and bowel function. None complaint of dyspareunia or pelvi-perineal pain and no mesh complication (erosion and infection) were detected. Also no de novo symptoms of stress urinary incontinence were reported.

Conclusions

Despite our short experience, laparoscopic promonto-fixation was feasible with good short-term results and low rate of complications. The longer operative time is a disadvantage but is also due to the learning curve effect.

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ES23-0257

Free Communications 9: Urogynaecology

LAPAROSCOPIC SACROCOLPOPEXY A DISTRICT GENERAL HOSPITAL'S EXPERIENCE

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Objectives

To evaluate the role of laparoscopic sacrocolpopexy for vaginal vault prolapse focusing on preoperative data, patients subjective improvement in symptoms, objective improvements in POPQ score and overall patient satisfaction.

Methods

This is a retrospective follow up study

Patients who underwent laparoscopic sacrocolpopexy in Altnagelvin Area Hospital using Vypro II mesh between 1/6/05 and 31/12/12 were selected.

Patients charts were reviewed for perioperative data including operating times, complications, post operative analgesia and day of discharge.

Patient demographics were recorded including age, parity and BMI along with results from the POP-Q clinical examination which was performed by a single experienced medical practitioner pre-operatively and at six week post operative review.

Patients were contacted to complete a follow up questionnaire to ascertain symptom improvement including prolapse, bowel function, stress incontinence, urge incontinence and overall patient satisfaction.

Results

Sixty five patients underwent laparoscopic sacrocolpopexy. The mean age of patient was 57.7, mean parity 3.5 and mean BMI 27. The average duration of follow up was 26.6 months (range 3-32.) Average operating time was 108 minutes. Intraoperative complications included bladder injury (3.6%), early complications included UTI (3.6%) wound infections (3.6%) and port herniation (1.8%). Two patients (3.6%) have represented with post vaginal wall prolapse and two patients with recurrent vault prolapse. Overall patient satisfaction is 8.5/10.
96% of patients reported an improvement in prolapse symptoms following laparoscopic sacrocolpopexy. 85% of patients reported an improvement in bowel symptoms, 4% reported worsening bowel symptoms. 92% of women reported improvement in symptoms of stress incontinence, 5% of women had worsening stress incontinence.81% of women reported improvement in urge incontinence symptoms.

POP-Q examinations showed an improvement in all compartments at six weeks post operatively. Point Aa showed an average improvement from -0.9 (range 0 to -2.5) to -2.6 (range 0 to -3). Point C showed an average improvement from -3.7 (range +3 to -6) to -9.7 (range -5 to -12). Point Ap showed an average improvement from -1.7 (range +1 to -3) to -2.7 (range-1 to -3).

Conclusions
Laparoscopic sacrocolpopexy is an effective and acceptable operation for patients. It provides successful treatment for vault prolapse with subjective improvement in a bowel and bladder symptoms reported by a significant number of patients.
Using the POP-Q system both pre and post- operatively we were able to demonstrate an objective improvement overall in all compartments, in particular point C.
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ES23-0065
Free Communications 9: Urogynaecology

LAPAROSCOPIC SACROCOLPOPEXY: THE GOLD STANDARD FOR VAULT PROLAPSE? A RETROSPECTIVE STUDY OF 5 YEARS' EXPERIENCE.

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Objectives

Abdominal Sacrocolpopexy is considered to be the gold standard for surgical treatment of post hysterectomy vaginal vault prolapse. Recent advances in surgical techniques have allowed this procedure to be carried out laparoscopically, which brings with it the well documented improvements in patient recovery. Our aim is to show the rate of reduction of vaginal vault prolapse following laparoscopic sacrocolpopexy.

Methods

We carried out a retrospective study of fifty-eight patients who underwent laparoscopic sacrocolpopexy to treat post hysterectomy vaginal vault prolapse between July 2008 and May 2013.

Previous pelvic floor surgery, parity and mode of delivery were documented, along with preoperative anatomical assessment. The main outcome measures were improvement in patient reported prolapse symptoms and anatomical findings. Secondary outcomes measures included surgical complications, time taken to complete surgery, development of further prolapse or urinary symptoms.

Results

Fifty-eight women with apical prolapse were included with a mean age of 60 years old (range 32-83). Twenty seven (46.6%) patients had undergone previous pelvic floor surgery. Follow-up in clinic revealed fifty-five out of fifty eight (94.8%) women had reduction in their prolapse and an improvement in their symptoms. Two out of fifty-eight (3.4%) women developed stress urinary incontinence with only one requiring surgical treatment. Nine (15.5%) women developed further prolapse requiring a further procedure.

Conclusions

Five years' worth of experience has confirmed management of vaginal vault prolapse with laparoscopic sacrocolpopexy is an effective and sound surgical treatment. With almost half of these women having already undergone previous pelvic floor surgery, laparoscopic sacrocolpopexy should be the gold standard in surgical management of vaginal vault prolapse.
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ES23-0222
Free Communications 9: Urogynaecology

LASER TREATMENT OF PELVIC ORGAN PROLAPSES

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Objectives

Pelvic organ prolapse (POP) is a very common indication affecting up to 50% of multiparous women. The most common of prolapses is the bladder or anterior vaginal wall prolapse - cystocele. Higher-grades cystoceles II-IV in which the anterior vaginal wall reaches or protrudes outside the vulva are especially disturbing and strongly influence patients' quality of life. A new minimally invasive laser technique for reduction of prolapses has been recently proposed. It exploits the photo-thermal effect of a laser beam on mucosa tissue in order to cause its shrinkage without any removal of the tissue. The objective of this study was to evaluate this new non-invasive, non-ablative Er:YAG laser technique for prolapse reduction.

Methods

Patients underwent the treatment of grades II–IV cystocele using new non-ablative Er:YAG laser treatment. Preoperative and postoperative evaluation included history and physical examination, classification of cystocele grades using Baden-Walker classification and photographing. Patients received between three to five treatment sessions with intervals of 2 months in between the sessions. Pain during the treatment was measured at every session with a visual analogue system (VAS) pain scale. Follow-ups were performed after 3, 6 and 12 months. Adverse effects and patients' satisfaction were monitored. The statistical analysis has been conducted with the SPSS 17.0 statistical analysis software.

Results

A total of 61 patients (average age 54.9 years, parous status 2.2, BMI 25.5) was monitored at 3 and 6 months follow-up, whereas for a 12-month follow up we had 52 patients so far.

These included 66% stage II, 24% stage III and 10% stage IV cystocele cases entering the study.

After 3 months 48%, after 6 months 81% and after 12 months 85% of patients improved to stage I and 0 cystocele. Within one year 87% of patients improved at least for one stage, 13% remained with stage II cystocele.

The reduction of the cystocele stage was on average for 1,6 stage. There was no significant statistical difference regarding numbers of sessions.

Statistically, there was a significant improvement in reducing the stage of cystocele in first and in second follow-up, but there was no statistical significant improvement between a 6- and 12-month follow-up.

90.2% of patients were satisfied or very satisfied with the treatment and treatment discomfort was very low (0.4 on average in 10 point VAS scale).

Conclusions

This study of efficacy and safety of a new non-invasive Er:YAG laser treatment for higher-grade cystocele demonstrated good efficacy in improvement of cystocele with minimal patients' discomfort during the treatment and no adverse effects. The effect of treatment lasted at least for 1 year.
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ES23-0424
Free Communications 9: Urogynaecology

A RETROSPECTIVE REVIEW OF POST OPERATIVE OUTCOMES AND PATIENT SATISFACTION FOLLOWING SURGICAL INTERVENTION FOR STRESS URINARY INCONTINENCE
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Objectives

The aim of this study was to retrospectively audit patient outcomes and satisfaction levels after placement of transvaginal tape (TVT) or transobturator tape (TOT) at a teritary benign gynaecology unit in Ireland. The study period extends from January 1st 2010 - December 31st 2013. Both TVT and TOT placement are commonlt used, minimally invasive procedures for treatment of stress urinary incontinence (SUI). SUI can cause significant restrictions on socail activities of affected patients and these treatments offer an acceptable approach to its management.
Methods
The surgical log books for the years 2010 - 2013 were screened for all procedures involving placement of a vaginal tape. The patient charts were all then reviewed retrospectively. The audit outcome of patient satisfaction levels were calculated based on written documentation of improvement at post operative review 6 weeks post procedure. Patients were also contacted by phone for further information of their subjective improvement in symptoms.
Results
During the four year study period 40 surgical procedures for management of stress urinary incontinence(SUI) were performed in our unit. Of these 76% are included in the final data. TVT procedures accounted for 94% of tapes. The mean age of surgical candidates was years 49 years. Only one of the women was nulliparous and 45% (n=14) were smokers or had recently ceased smoking. Documented preoperative physiotherapy was observed in 48% (n=15) of cases with more than half of these patients also having failed medical management. Documented urodynamics results were noted in 68% (n=21) and 80% of these patients had SUI alone. The women in this review were satisfied with the result of their surgery in 77% of cases. Satisfaction was rated as no further leaking or significantly improved quality of life. One patient was unhappy with the outcome and the remainder did not attend for scheduled follow up and declined our phonecall questionnaire.
Conclusions
Overall placement of a TVT or TOT in our gynaecology unit is a well tolerated procedure with minimal adverse affects. Overall only one woman was dissatisfied with or regreted the surgery with a 96% excellent patient satisfaction result. A dedicated proforma to compare objective symptoms pre- and post-operatively would be a beneficial inclusion to our urogynaecology unit. However, there was correlation between ojective and subjective improvement in symptoms at post operative review.
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ES23-0478
Free Communications 9: Urogynaecology

ONE-YEAR FOLLOW-UP OF FEASIBILITY AND OUTCOME OF LAPAROSCOPIC REPAIR OF VESICO VAGINAL FISTULA. A CASE REPORT.

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Objectives

The most common etiology of vesicovaginal fistula (VVF) in developed countries is surgical trauma or thermal necrosis associated with gynecologic procedure. The most common cause seems to be abdominal hysterectomy, with VVF occurring in approximately 0,5 % of hysterectomies.

The objective is to access the technical feasibility and to evaluate long-term success of performing laparoscopic repair of vesicovaginal fistula by presenting a case report.

Methods

We attempted a laparoscopic repair of VVF in a woman suffering from urinary leakage via the vagina after abdominal hysterectomy. Three pelvic ports were used and a monitor-type high-definition laparoscopy.

Initially we proceeded with a placement of a guide wire across the VVF via cystoscopy. Then a 12 Fr Foley catheter was passed through the VVF. This maneuver was made to help identifying the fistula during laparoscopic approach.

The surgical procedure was performed using the same principles as for open surgery:

Separation of the vaginal wall from the bladder wall was undertaken. Then the VVF was dissected around the Foley until a satisfactory tissue-plane was created.

Double-layer closure was performed using interrupted sutures for the vagina and running sutures for the bladder using a 4.0 absorbable suture. Care was taken to prevent opposition of each suture line.

The bladder was distended with saline solution to confirm the patency of the sutures.

Additionally interposition of an omental flap was performed.

A suprapubic catheter was left in place for 2 weeks to facilitate healing.

Results
There was early recovery of the patients in terms of continence, with permanent results in the one-year follow-up. The ICIQ-SF score changed from 18 preoperatively to 0 postoperatively.

Conclusions
We could notice a complete remission of the VVF which was consistent in the follow-up. Laparoscopic approach has the advantage of providing magnification, allowing better defect specific repair. In addition it can decrease postoperative morbidity.

In our opinion, laparoscopic VVF repair is feasible procedure for the trained surgeon with good results.
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ES23-0500
Free Communications 9: Urogynaecology

LAPAROSCOPIC PROMONTOFIXATION: SINGLE CENTER STUDY OF 44 PATIENTS
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Objectives
The pathology of the pelvic floor, including the urinary incontinence, the anal incontinence and the genital prolapse, is very dominant, concerning approximately a third of the adult women. Our objective was to evaluate the outcome and complications rate of laparoscopic promontofixation for treatment of genital prolapse with meshes.
Methods

Retrospective monocentric study at Erasme University Hospital at Brussels. Forty four patients between 01/01/2009 and 14/04/2014 were consecutively operated for a laparoscopic promontofixation. Laparoscopic promontofixation using meshes placed anteriorly in the vesicovaginal space and posteriorly to the levator ani muscles and in the prerectal space. Fife of these patients had a previous cure of prolapse with recurrence.

Results
Mean follow-up was 31 months, with one patients lost of follow-up. There is no any conversion to laparotomy or major perioperative complications. The early postoperative complication were observed in two cases 4,5% (hemoperitoneum at Day 1 and one subocclusion at Day 6). The late postoperative complication also in two cases (4,5%), one fistula (vaginal-ischio-rectal fossa) and one vaginal protrusion of the TOT meshe. One patient with recurrence of the prolapse after 15 months had to undergo a laparotomy promontofixation and two patients had to be reoperate stress urinary incontinence.
Conclusions

Laparoscopic promontofixation is feasible and efficient with good results in the cure of genital prolapse. Laparoscopy is performing the same procedure as the open technique with the advantages of the minimal invasive surgery. Laparoscopic placement of meshes induced few complications but the surgeon must be highly experienced.
***

ES23-0320
Free Communications 9: Urogynaecology

LAPAROSCOPIC PECTOPEXY VERSUS SACRAL COLPOPEXY FOR APICAL PROLAPSE CORRECTION: A RANDOMIZED PROSPECTIVE CONTROLLED PILOT STUDY
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Objectives
Sacral colpopexy is a well established method of apical prolapse correction. Although this technique allows to restore the physiological axis of the vagina, it also bares some potential risks: An injury to the presacral venous plexus, a long term risk of de novo constipation, difficult surgical conditions in obese patients. We developed pectopexy, an alternative method to avoid the presacral preparation: The vagina or cervix is fixed in a hammock-like manner to both iliopectineal ligaments by the use of a synthetic mesh.
Methods

We conducted a randomized prospective pilot trial to compare these two surgical approaches. 44 patients have undergone a laparoscopic pectopexy and 41 patients were treated by laparoscopic sacropexy.

Results

The average operating time (43.1 vs. 52.1 min) and blood loss (4.6 vs. 15.3 ml) were significantly lower in the pectopexy group. No major complications occurred in either group. There were no significant differences between the groups with regard to body mass index, hospital stay duration,

voiding difficulties, urinary tract infections and C-reactive protein values in the postoperative period. We reevaluated 42 pectopexy and 41 sacropexy patients after 21.8 months (range 12-35; pectopexy) and 19.5 months (range 12-37; sacropexy). There were one relapse of the apical prolapse in the pectopexy arm and four relapse cases in the sacropexy group. The occurrence of de novo constipation (0 vs. 8 patients) was significantly higher in the sacropexy group ($p<0.05$). The occurrence of de novo lateral-defect cystocele (0 vs. 5 patients) indicated some possible protective effect of pectopexy, but did not reach the statistical significance ($p=0.05$).

Conclusions
Pectopexy is a promising method of apical prolapse correction. Further multicenter studies are required to evaluate its long term results compared to sacral colpopexy.
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ES23-0156
Free Communications 9: Urogynaecology

LAPAROSCOPIC MESH SACROCOLPOPEXY - MESH EROSION RATE IN A CASE SERIES OF 524 WOMEN
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Objectives
To present a low erosion rate in a large cohort of women undergoing laparoscopic mesh sacrocolpopexy with and without concomitant total laparoscopic hysterectomy.
Methods
Retrospective review undertaken in a large volume, private unit in Sydney. Three Specialist Minimally Invasive Consultant Gynaecologists with large patient loads, had their collective database searched to identify all patients who had undergone laparoscopic mesh sarcocolpopexy procedures. All women identified over a twelve year period were included in the review. A total of 524 women were identified, and their data included in the analysis.
Results
Of the 524 women included in the series, 301 had undergoing concomitant laparoscopic hysterectomy at the time of their mesh sacrocolpopexy, 223 had mesh sacroscolpopexy alone. In the hysterectomy group there were 8 cases of mesh erosion, 2.66%. In the sacrocolpopexy group alone, there were 4 cases of mesh erosion corresponding to a rate of 1.79%. In almost all cases the mesh erosions occurred late after one year post-operatively, with half occurring within one to two years from surgery, and half occurring later at three to five years from primary surgery.
Conclusions
The rates of mesh erosion in this large series sit at the lower end of current literature reports. This series is one of the larger available data sets on this subject. This unit believes that the use of two separate mesh pieces, and a low dissection to place the mesh gives good outcomes and low erosion rates that patients find acceptable, when counselled for surgery.
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ES23-0238
Free Communications 9: Urogynaecology

FIRST VAGINAL DELIVERY CHANGES ACTIVE AND PASSIVE BIOMECHANICAL PROPERTIES OF THE DISTAL VAGINA.
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Objectives
One third of pre-menopausal and one half of menopausal women who have delivered at least once have pelvic organ prolapse. The leading cause of prolapse are vaginal delivery and aging. During pregnancy the extracellular matrix and smooth muscle of the vagina undergoes remodeling, which may predispose to additional trauma by vaginal delivery. This effect is similar in non-human primates. In rodents the effect of pregnancy and delivery are almost completely reversible. We are interested in sheep as a model for the effects of pregnancy and other life events, as well as for vaginal surgery.
This study aims to explore changes in active and passive biomechanical properties in two regions of the vaginal wall following first vaginal delivery.
Methods
This study included 6 nulliparous and 6 primiparous Texel sheep. Their ovarian cycles were synchronized with a progesterone sponge (Veramix, Pfizer). “En bloc” vaginal tissue was obtained 4 days following sponge removal. Specimens were opened longitudinally along the urethra and the posterior vaginal wall and divided into a proximal and distal part. Full thickness specimens were prepared from the proximal and distal specimens to perform passive (30x30mm) and active (8x10mm) biomechanical testing. We report data from the low stress part of the load-elongation curve (comfort zone); comfort zone stiffness and length using bi-axial tensiometry using a plunger test (200N-Zwicki tensiometer, Ulm, Germany). Active biomechanics were measured using a contractility assay. Freshly collected samples were equilibrated in Krebs solution and then exposed to 80mM KCl. The generated forces were normalized to the volume of the tissue.
Results

In nulliparous sheep, the active and passive biomechanical properties were similar in both regions. In primiparous sheep the comfort zone stiffness was 40% lower in the distal vagina as compared to the proximal vagina (p=0.014). Similarly, the smooth muscle contractility was 38% lower in distal area (p=0.028). The comfort zone length was not different between two locations.
Comparison between nulli- and primiparous ewes showed differences only in the distal vagina. In primiparous sheep, the comfort zone had a 49% lower stiffness and it comfort zone was 26% longer than in the nulliparous group. On contractility testing, distal primiparous samples generated about 64% less force (p=0.008) than nulliparous controls.

Conclusions
One year after first vaginal delivery, there are significant changes in the biomechanical properties of the ovine distal vagina. Following one vaginal delivery the distal vaginal wall has higher laxity and decreased contractility as compared to the proximal part.
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ES23-0377
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

HYSTEROSCOPIC RESECTION OR CONVENTIONAL BLIND CURETTAGE IN THE MANAGEMENT OF RETAINED PRODUCTS OF CONCEPTION, A SYSTEMATIC REVIEW.
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Objectives

Retained products of conception (RPOC) are estimate to complicate approximately 1% of term pregnancies. The prevalence of Intrauterine adhesions (IUAs) after surgical management because of RPOC is still undetermined. This is a systematic review to determine the prevalence of IUAs after hysteroscopic resection or evacuation (HR) and dilatation and curettage (D&C) in women suspected of RPOC.

Methods

We searched the literature for published articles on women suspected of RPOC and who underwent a surgical procedure, HR or D&C. Randomized controlled trails, prospective and retrospective studies reporting the prevalence of IUAs in women suspected of RPOC, surgically treated by HR or D&C and hysteroscopic revised for the presence of IUAs were considered for inclusion. Abstracts of conference presentations or dissertations, unpublished data, case reports and small case series with less than ten cases were not considered for inclusion. The primary outcome was the prevalence of IUAs, subsequently the degree and extent of the adhesions were analyzed, if reported. Secondary, time to conception, cumulative conception and pregnancy rates were determined.

Results

We included 4 prospective studies reporting on 295 women hysteroscopic revised after surgical management because of RPOC. IUAs were detected in 60 of the 259 women surgically managed by D&C or HR, resulting in a pooled prevalence of 23.2% (95% CI: 19.1% to 27.8%). %). In three studies 189 women were treated by D&C and in 56 women IUAs were reported, resulting in a pooled prevalence of 29.6% (95% CI: 23.6% to 36.6%). In two studies, 70 women underwent HR, and IUAs were reported in four women, resulting in a pooled prevalence of 5.7% (95% CI: 1.8% to 14.2%). Women treated with D&C had statistically significantly more IUAs compared to women treated by HR, P< 0.0001 (Fisher's exact test). Unfortunately, the reproductive outcomes were not reported in relation to IUAs; the relationship between IUAs and pregnancy outcome could not be analyzed.

Conclusions

The present review reports IUAs in one in five women suspected of retained tissue after delivery, D&C for miscarriage or medical abortion, spontaneous miscarriage and termination of pregnancy and surgically managed. After D&C significant more IUAs were encountered compared to women treated with hysteroscopy. Data on the link between adhesion formation after treatment of RPOC and long-term reproductive outcome are lacking. Theoretically, HR was already considered the best surgical management in women suspected of RPOC. Our findings seem to confirm these theories, implying superiority of HR in women suspected of RPOC.

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ES23-0499

Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

ENDOMETRIAL POLYPS – WHICH CAN WE SAFELY KEEP UNDER SURVEILLANCE?

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Objectives

Controversy remains around the best clinical approach to endometrial thickness. The aim of this study was to evaluate andcorrelate the ultrasound, the hysteroscopic and the histological findings.

Methods

It was performed a retrospective study (2 years) of the menopausal patients with endometrial thickness (cut-off>=5) or polyp suspicion at transvaginal ultrasound that underwent diagnostic hysteroscopy. A number of 163 patients with endometrial thickness or polyp at ultrasound underwent hysteroscopy. The clinical file of these patients was studied in what concerns age, symptoms, ultrasound associated findings, endometrial and uterine cavity hysteroscopic findings and histological diagnosis.

Results

From all those patients, 19 (10,4%) patients had malignant or pre-malignant lesions. Patients, menopausic, were divided into 2 groups depending on being submitted or not to operative hysteroscopy and characterized upon their symptomatic condition, detailed ultrasound and hysteroscopic findings. Until now, no cases of endometrial cancer were found among those selected patients left to surveillance, without an histologic result. Data underwent statistical approach with SPSS 20.0.

Conclusions

Despite the fact that 10,4% of patients were correctly referred to operative hysteroscopy, about 90% of patients underwent a procedure without any improvement of treatment and prognosis and with cost and risks associated. An endometrial thickness (cut-off>=5mm), mainly when associated to endometrial doppler ultrasound and to a detailed clinical and hysteroscopic evaluation of menopausal anomalous uterine bleeding situations may prevent non-malignant histological results and so an elevated number of false-positive for malignancy at pre-operative diagnostic methods.
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ES23-0141
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

REMOVAL OF ENDOMETRIAL POLYPS: HYSTEROSCOPIC MORCELLATION VS BIPOLAR RESECTOSCOPY, A RANDOMIZED TRIAL.

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Objectives

To compare hysteroscopic morcellation (HM) with bipolar resectoscopy for removal of endometrial polyps in terms of procedure time, peri- and post-operative adverse events, tissue availability, and short-term effectiveness.

Methods

A multicenter, open label, randomized controlled trial was performed comparing hysteroscopic morcellation and bipolar resectoscopy for the removal of larger (≥ 1 cm) endometrial polyps in an inpatient setting. Patients were randomized between HM with the TRUCLEAR 8.0 system (Smith & Nephew, Inc., Andover, MA, USA) and bipolar resectoscopy with a rigid 8.5 mm bipolar resectoscope (Karl Storz GmbH,Tuttlingen, Germany).

Results

Eighty-four women were included in the intention-to-treat analysis. Median operating time was 4.0 min (2.5 – 7.1 min) and 6.0 min (3.8 – 11.7 min) in the HM and resectoscopy group, respectively. Operating time was reduced by 38% (95% CI 5 – 60%, p = 0.028) in the HM group. Procedure time, defined as the sum of the installation and operating time, tended to be less for the HM group (median 9.5 min (7.6 – 12.2 min) versus 12.2 min (8.8 – 16.0 min), p = 0.072). In three patients of the resectoscopy group perforation occurred at dilation or hysteroscope (re)introduction which resulted in discontinuation of the procedure in two patients, and prolongation of the hospital stay in one patient. In one patient of the HM group perforation occurred at dilation, nevertheless the procedure could be completed and was otherwise uneventful. Postoperatively, two patients of the HM group were diagnosed with a urinary tract infection. Tissue was available for pathology analysis in all patients except for two patients of the resectoscopy group in whom the procedure was discontinued due to perforation. Three patients needed additional treatment for persistence of abnormal uterine bleeding, consisting of hormonal treatment in two patients of the resectoscopy group and endometrial ablation in one patient of the HM group.

Conclusions

Hysteroscopic morcellation is a faster, effective and possibly safer alternative to resectoscopy for removal of endometrial polyps.
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ES23-0381
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

PRACTICE OF OUTPATIENT HYSTEROSCOPY IN A LONDON TEACHING HOSPITAL.
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Objectives
To review the use of outpatient hysteroscopy in the diagnosis and treatment of women with abnormal uterine bleeding.

Methods

Suitable cases over a period of six months was identified from the Units procedure diary
Data was extracted to complete the Proforma designed
Analysis of the data and graphical representation was made via Excel

Results

93 cases were included in this study.
There was an 83% success rate

40% of cases were aged within 50-59 years of age
26.8% of cases were nulliparous
54% of cases were postmenopausal
40.8% of cases had a hysteroscopy and polypectomy performed
6% of cases had abnormal pathology

Conclusions

There was no need for cervical preparations in any of the patients.
The patients experienced no immediate or long-term complications.
Different size polyps (maximum size 24mm) were successfully removed.
The results demonstrated that it was possible to perform the procedure in different age groups and parities including women who were nulliparous or post menopausal.
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ES23-0413
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

OUT PATIENT HYSTEROSCOPY SERVICE -A SUCCESS STORY
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Objectives

RCOG(Royal College of Obstericians And Gynaecologists)recommends that all gynaecology units should provide a dedicated out-patient Hysteroscopy service. There are clinical and economic benefits with this type of service. Our aim is to establish a person-centred, cost effective and efficient out-patient hysteroscopy service at NHS Fife. We have successfully moved several procedures more traditionally performed in a theatre setting to an outpatient environment.

Methods

At Queen Margaret Hospital we run a weekly out-patient Hysteroscopy service with a consultant, two nurses and a healthcare assistant.

The referrals are made after suitable patient selection. Patients receive an information leaflet and appropriate counselling prior to appointment.

Each patient slot is 40mins including health check, vital signs, consent, procedure and recovery time. On average 6 patients are booked in one clinic session 0900-1230.

Results

We analysed 24 months data (Jan 2012-Jan 2014). A total of 180 cases were performed in the out-patient setting, including both diagnostic and operative Hysteroscopy. Endometrial biopsies/coil insertions/removals or vulval biopsies were excluded from selection criteria.

Diagnostic Hysteroscopy +/_ endometrial biopsy- 117 cases

Endometrial ablation (Novasure) _____________ 50 cases

Polypectomy and small fibroid resection (Myosure) 13 cases

Of these 180 cases only 2 were abandoned due to pain and vaso-vagal syncope. Only one complication was encountered, perforation of uterus, which was recognised and procedure abandoned.

In the absence of this clinic, these cases would have taken in-patient theatre slots. They would require assessment in a pre-assessment clinic, general anaesthetic, hospital bed, 23hrs stay and 2-4 days leave from work.

The out-patient service is popular and acceptable to patients, with no general anaesthesia, no days off work required and a well tolerated successful procedure.

These procedures when performed in out-patient Hysteroscopy service saved trust £43000. A well established service can save even more!

Conclusions

Out-patient Hysteroscopy is essential for ambulatory Gynaecology service. It is popular, acceptable, cheap and successful service.

References:

[1] Royal College of Obstetricians and Gynaecologists.Green Top Guideline No.59: Best Practice in Outpatient Hysteroscopy. London:RCOG; 2011 [http://www.rcog.org.uk/files/rcog-corp/GTG59Hysteroscopy.pdf].

[2]ClarkTJ,Gupta JK.Handbook of outpatient hysteroscopy:a complete guide to diagnosis and therapy. London:

Hodder Arnold; 2005.

[3]Marsh F,Kremer C,Duffy S.Delivering an effective outpatient service in gynaecology.A randomised

controlled trial analysing the cost of outpatient versus daycase hysteroscopy.BJOG 2004;111:243–8.

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ES23-0510

Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

THE 16 FR MINI-RESECTOSCOPE: ANALYSIS OF PRELIMINARY RESULTS IN OUTPATIENT HYSTEROSCOPIC ENDOMETRIAL RESECTION.

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Objectives

We investigated the feasibility of office hysteroscopic endometrial resection using a new continuous-flow operative 16 Fr mini-resectoscope.

Methods

The office hysteroscopic endometrial resection was performed with a mini-resectoscope under local analgesia or analgosedation in 25 patients. We evaluated the uterine cavity size, the comfort of resection, the operating time, the pelvic pain and complications.

Results

The office hysteroscopic endometrial resection was successfully performed in all 25 patients. The uterine cavity size ranged from 5 to 9,5 cm (mean 7.1) . The operating time ranged from 6 to 14 minutes after vaginoscopic introduction (mean 9mn 30s). Visual analog scale (VAS) ranged from 0 to 6 (mean 2.3). There was no major complications.

Conclusions

Our preliminary data demonstrated that use of the mini-resectoscope for endometrial resection is possible in office setting with minimal / local anesthesia. All procedures were completed successfully and well tolerated. This outpatient procedure is an acceptable and effective alternative to inpatient procedure under general anesthesia.
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ES23-0116
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

TIMING FOR INSERTION OF LEVONORGESTREL RELEASING INTRAUTERINE SYSTEM: A RANDOMIZED CONTROLLED TRIAL

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Objectives

A levonorgestrel releasing intrauterine system (LNG-IUS) is frequently used for contraception and as a treatment for heavy menstrual bleeding. Insertion during menstruation prevents unintentional insertion during (early) pregnancy and, in theory, could be less painful because of a dilated cervical ostium. Also, starting release of progestagens during the breakdown of the endometrium could prevent prolonged bleedings.

For the copper-IUD it is proven that there is no difference regarding patient-perceived pain in timing of the insertion of the device and therefore planning might be easier for women.

We conducted a randomized controlled trial to determine whether the timing of insertion in the menstrual cycle differs in patient-perceived pain.

Methods

120 women who were planned for an insertion of LNG-IUS as contraceptive or as treatment for menorrhagia were included after informed consent. 60 nulliparous and 60 multiparous women were randomized for insertion ‘during menstruation’ or ‘beyond menstruation’. The primary outcome was pain perception measured by the Visual Analogue Score (VAS score from 0-100 mm). Secondary outcomes were complications and bleeding patterns. Follow up time was 3 months. Women with a failed previous attempt, reinsertion of LNG-IUS or abnormal uterine cavity were excluded. All insertions were performed by one physician assistant.

Results

Between October 2013 and March 2014, 111 Women were randomized. The mean VAS score in the ‘during menstruation group’ was 54 mm versus 55 mm in the ‘beyond menstruation group’. There was no clinical significant difference in mean VAS score between these two groups. Even when the groups where stratified for parity (nulliparous and multiparous) there was no difference in mean VAS score.

Nulliparous women experienced more pain during insertion than multiparous women (mean VAS 70 mm vs. 37 mm respectively).

Conclusions

We found no differences in pain scores between the two randomized groups. Nulliparous women scored higher on the VAS. If timing of insertion influences bleeding pattern will be analyzed when follow-up has completed.
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ES23-0407
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

MINITOUCH ENDOMETRIAL ABLATION WITHOUT ANAESTHESIA IN AN OFFICE BASED SETTING
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Objectives
To study the feasibility of performing the Minitouch procedure (endometrial ablation with high-frequency microwaves) in a consulting office without anaesthesia, and to report patient outcomes.
Methods
Retrospective analysis of 37women with menorrhagia and no desire to retain fertility underwent the Minitouch procedure: (endometrial ablation by high-frequency microwaves sent by an intra-uterine positioned antenna) in an office- based setting. All procedures were done without any mechanical or hormonal pretreatment or menstrual cycle timing. All women were prescribed 400mg oral NSAID, to be taken one hour preoperatively. The procedures were performed without any anaesthesia or cervical dilation. Transvaginal ultrasonography was used pre-procedure to visualize the uterus orientation and measurements of the endometrial stripe , and post-procedure ultrasound to

measure the thermal lesion of the endometrium. A intra-procedure pain score on a 10-point visual analogue scale was used to measure the pain during the endometrial ablation.

Results
The Minitouch procedure was successfully performed by solo operators in an office setting on 100 % (n = 37) of patients. All patients were able to tolerate the procedure without any anaesthesia. Average intra-procedure pain score on a 10-point visual analogue scale was 4.8 (range 1 - 10). None of the patients reported any severe post-procedure pain. All patients could leave immediately after the procedure and return to normal activities. None of the patients reported any adverse events or needed readmission for postoperative complications. At follow-up periods ranging from one to twenty-eight months, 31 patients (84 %) reported amenorrhea. Two patients (5 %) reported hypomenorrhea and were satisfied. 4 patients (11 %) had undergone a subsequent hysterectomy and were found to have adenomyosis. Reporting the outcome of successful completion of procedures without anaesthesia and percentage of patients reporting amenorrhea.

Conclusions
The Minitouch procedure was successfully performed by a solo operators in an office setting on 100 % (n = 37) of patients. All patients were able to tolerate the procedure without any anaesthesia. Average intra-procedure pain score on a 10-point visual analogue scale was 4.8 (range 1 - 10). None of the patients reported any severe post-procedure pain. All patients could leave immediately after the procedure and return to normal activities. None of the patients reported any adverse events or needed readmission for postoperative complications. At follow-up periods ranging from one to twenty-eight months, 31 patients (84 %) reported amenorrhea. Two patients (5 %) reported hypomenorrhea and were satisfied. 4 patients (11 %) had undergone a subsequent hysterectomy and were found to have adenomyosis.
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ES23-0269
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

THE BENEFITS OF LAPAROSCOPIC GUIDANCE IN HISTEROSCOPIC METROPLASTY
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Objectives
To evaluate the benefits of hysteroscopic metroplasty under laparoscopic guidance in the treatment of infertile women with a diagnosis of septate uterus and the impact of this surgical procedure on reproductive outcome

Methods
We used the database of Polizu Hospital regarding hysteroscopic and we performed a general review through the speciality literature regarding the hysteroscopic metroplasty under laparoscopic guidance
Results
During the years 2010-2013 there were 24 hysteroscopic metroplasties at Polizu Hospital;
20 cases of septate uterus; 16 incomplete, 4 complete with no cervical/vaginal septum
4 cases with intrauterine adhesions (IUA) stage III-V (ESGE IUA’s classification 1995)

2 of the patients with Asherman syndrome needed a sequentially approach .Of 24, 18 patients were refered to our clinic from IVF centers and associated additional infertility factors: low ovarian reserve, hydrosalpinges, advanced maternal age, endometriosis. There were no significant incidents or complications.

Conclusions
Metroplasty is an accepted method of treatment in women with recurrent abortions and septate uterus and it significantly improves the subsequent reproductive outcome. Although some techniques (i.e., TVS, 3-dimensional ultrasound) show promise for assesing the external fundal uterus contour, the combined use of hysteroscopy and laparoscopy in the operating room remains the gold standard for differating between a bicornuate and a septate uterus
On the basis of data from the current literature, findings from descriptive meta-analysis show a 63.5% pregnancy rate and a 50.2% live-birth rate after hysteroscopic metroplasty of septate uterus. These rates may certainly be higher in subjects with exclusively recurrent miscarriages in whom their septum has been removed, and lower in those with other causes of infertility
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ES23-0340
Free Communications 10: Hysteroscopy /Operative Hysteroscopy 3

HYSTEROSCOPIC METROPLASTY FOR SUBFERTILE PATIENTS: RESECTION OR INCISION?
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Objectives
Evaluation of reproductive outcomes of women with infertility and (or) recurrent miscarriage following different methods of hysteroscopic metroplasty: intrauterine septum resection or incision.
Methods
A cohort of 76 non-parous patients with infertility or/and recurrent miscarriage with partial (American Fertility Society (AFS) class Va) and complete (AFS class Vb) septate uterus was treated for a transcervical hysteroscopic metroplasty. The septum size was evaluated by transvaginal ultrasound and hysteroscopy. The first group of patients (n = 38) underwent transcervical hysteroscopic septum resection with a semicircular cutting loop. The second group of women (n = 38) underwent hysteroscopic septum incision by using monopolar knife electrode. There were no significant differenses in primary or secondary infertility ave miscarriage rates among the patients.
Results
The operation time was (34,5+7,8) min in the 1st group and (25,4+6,2) min in the 2nd group, intraoperative blood loss was (20,2+5,3) ml and (15,2+3,5) ml respectively. Simultaneous laparoscopy was performed in 15 (39,5 %) cases in the 1st group and in 13 (34,2 %) in the 2nd group. No serious complications were in each group. No intrauterine device no postoperative estrogens were used in both groups. Outcomes including the number of pregnancies, live births and miscarriages were determined. At 15 months follow-up after metroplasty, 22 women (57,9 %) become pregnant in 1st group and 18 (47,3 %) in the 2nd group. Live birth rate was 17 (44,7 %) and 11 (28,9 %) cases and abortion rate was 5 (13,2 %) and 7 (18,4 %) cases respectively. Thirteen (34,2%) pregnancies in the 1st group and 15 (39, 5 %) in the 2nd group resulted from assisted reproductive technologies.
Conclusions
Hysteroscopic metroplasty is the method of choice in surgical correction of septate uterus in subfertile patients. An indictions and the methods of procedure are currently a topic of debate.This study demonstrated that hysteroscopic metroplasty of uterine septum in subfertile patients significally improves the reproductive results. The method of intrauterine septum resection by

cutting loop in comparison of septum incision by monopolar knife electrode demonstrates tendency of improving pregnancies and live birth rate and decreasing abortions rate. There were no significant differences in operation time, blood loss? complications and simultaneous laparoscopy rates in compared groups of patients.
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ES23-0124
Free Communications 11: Innovations

A RANDOMIZED TRIAL OF UTERINE-SPARING FIBROID TREATMENTS IN CANADA: LAPAROSCOPIC RADIOFREQUENCY VOLUMETRIC THERMAL ABLATION (RFVTA) AND MYOMECTOMY
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Objectives

To compare qualitative health outcomes, complications, and re-interventions for subjects with symptomatic fibroids who were randomized to either myomectomy (abdominal or laparoscopic) or ultrasound-guided RFVTA.

Methods

Thirty consented premenopausal women ≥ 18 years old with symptomatic fibroids and who desired uterine conservation and preservation of fertility and who were indicated for surgical intervention for their fibroid symptoms were enrolled in a post-market, randomized (1:1), prospective, longitudinal comparative study of RFVTA and myomectomy. The cases took place in a provincial hospital in Saskatchewan and a university hospital in Ontario.

Results

Consented subjects were randomized to myomectomy (n = 15) and RFVTA (n=14); one subject withdrew from the study before treatment. All myomectomies were carried out laparoscopically. Postoperatively, at 6 months follow up, Uterine Fibroid Symptom Severity scores improved (decreased) from baseline by 57.3% for the RFVTA group (n = 11) and by 61.2% for the myomectomy group (n = 10) and Health-Related Quality-of-Life scores improved (increased) by 75.3% and 70.4% for the RFVTA and myomectomy subjects, respectively. Likewise, general health-state scores improved (increased) from baseline by 31.2% and by 12.2% for RFVTA and myomectomy subjects, respectively. In response to the Menstrual Impact Questionnaire at 6 months, 45.5% of RFVTA subjects and 40.0% of myomectomy subjects reported heavy or very heavy bleeding. At 6 months, 54.5% and 50.0% of RFVTA and myomectomy respondents, respectively, reported being very satisfied with their treatment. At the same period, 45.5% and 30.0% of the respondents, respectively, thought their treatment effective in eliminating their fibroid symptoms. Last, 81.8% of RFVTA subjects thought their fibroid symptoms had improved versus 60.0% of myomectomy subjects. No RFVTA subjects reported complications; two myomectomy subjects reported serious or severe complications: cardiac arrest (n = 1) and wound infection and pain (n = 1). Intraoperatively, one myomectomy was converted to the abdominal approach. One RFVTA subject underwent total laparoscopic hysterectomy due to a return of symptoms.

Conclusions

In this small cohort of women, RFVTA provided equivalent-to-superior efficacy and safety outcomes compared to laparoscopic myomectomy.
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ES23-0441
Free Communications 11: Innovations

VISUALIZATION OF THE URETER DURING LAPAROSCOPY: CURRENT METHODS AND INTRODUCTION OF A NEW DYNAMIC, REAL TIME TECHNOLOGY
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Objectives

Injury of the ureter is a feared complication during laparoscopic surgery in the small pelvis. The incidence of these lesions in laparoscopic hysterectomy varies between 0.6%-4%. In most cases, these injuries are not recognized during primary surgery and often leads to a secondary surgical procedure. Furthermore, delayed recognition can lead to a higher morbidity, due to the development of a urinoma or even loss of the renal unit. Several attempts, to lower ureter injury rates have been proposed. Unfortunately, Uro-CT and urography do not offer real-time information during surgery and radiopharmaceutical agents expose patients and health care professionals to radiation. Ureteral stents have the disadvantage that they can’t be palpated during laparoscopic procedures. Therefore, lighted ureteral stents were developed. However ureteral stent placement is not without complications. Moreover, although they may have a role in early detection of injuries, their effect on lowering urinary tract injury rate has not yet been established.

Near Infrared Fluorescence (NIR) imaging offers a dynamic, real-time in-surgery visualization of the ureters without the use of stents or radiopharmaceutical agents. Exogenous NIR fluorescent contrast agents, such as Methylene Blue (MB), can be detected intra-operatively. NIR fluorescent light offers good tissue penetration, making it suitable for a number of clinical applications, including the visualization of the ureters. The latter was demonstrated during laparoscopy and laparotomy in animal models.More recently, a test in 12 humans during laparotomy for gynaecologic oncological procedures proved successful.MB was used as exogenous NIR fluorescent contrast agent. The department of Surgery at the Leiden University Medical Centre has extended this trial to laparoscopic gynaecological procedures.

Methods

Current methods of visualising the ureter, their advantages and disadvantages will be presented. Furthermore our experience with NIR imaging in visualizing the ureter in the first laparoscopic cases will be demonstrated.

Results

By dynamical real time visualisation of the ureter we expect a positive effect on prevention of ureter injuries, including secondary injuries caused by lateral thermal damage. If NIR imaging in laparoscopy

is a promising new technology, follow up trial in more complicated, advanced laparoscopic procedures, such as endometrioses or extensive adhesions will be evaluated.

Conclusions

Current methods to visualize the ureter are reviewed and our experience with a new dynamic real time technology to visualize the ureter intra-operatively is introduced and discussed.
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ES23-0057
Free Communications 11: Innovations

RUSSIAN EXPERIENCE IN ROBOTIC SURGERY (DA VINCI) IN GYNECOLOGY
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Objectives
The surgical robot «Da Vinci» (DV; Intuitive Surgical, USA) is the biggest technological development of the recent decades. Currently, over 1300 robotic surgical systems in 40 developed countries have been used successfully.
Methods

In Russia, the first surgery with a robot DV was performed in Ekaterinburg in November 2007. Now there are 20 centers in seven cities (Moscow, St. Petersburg, Ekaterinburg, Khanty-Mansiysk, Novosibirsk, Vladivostok, Tuapse) equipped with DV. Today the leader of this technology is «Pirogov» National Surgical Institute (Moscow), where by the end of 2013 about 1000 operations had been performed in urology, gynecology, oncology, abdominal and thoracic surgery. In gynecological surgery the DV-robotic complex is used in six medical centers of the country. From March 2009, 311 women were operated. The type of gynecological interventions is variable.

Results
Since 2011 76 DV-assisted procedures have been performed in St. Petersburg: myomectomy - 12, endometriosis surgery – 64. Since 2011 16 DV-assisted procedures have been performed in Khanty-Mansiysk: myomectomy – 10, hysterectomy – 6. Since 2012 12 DV-assisted procedures have been performed in Ekaterinburg: hysterectomy – 12. Since 2013 3 DV-assisted procedures have been performed in Clinic EMC (Moscow): hysterectomy – 3. Since 2012 33 DV-assisted procedures have been performed in Moscow Regional Institute of O/G: SVP – 27 (10 of these with supracervical hysterectomy; hysterectomy - 5; myomectomy – 1). Since 2009 181 DV-assisted procedures have been performed in «Pirogov» National Surgical Institute (Moscow): hysterectomy – 66, hysterectomy with lymphadenectomy – 32, hysterectomy with omentectomy – 2, myomectomy – 39, resection of rectovaginal endometriosis – 14, SVP– 14, peritoneal colpopoiesis – 8, simultaneous operations -2, others – 4.
Conclusions

The surgical system DV allows to go beyond the limitations of open and conventional Laparoscopic surgery, expanding the surgeon's capacity, due to technical innovation, improvement of visualization and manipulation in difficult surgical areas. The surgeon's ergonomy is also important.
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ES23-0315
Free Communications 11: Innovations

VALIDATION OF RECORDED TRANSVAGINAL ULTRASOUND STRAIN ANALYSIS FOR UTERINE PERISTALSIS IN NON-PREGNANT UTERI.

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Objectives

Normal and abnormal uterine peristalsis in a non-pregnant uterus has proven to play a role in natural fecundity. Uterine disorders can change uterine peristalsis and decrease fertility. Many methods have been used to measure the uterine movements. Transvaginal ultrasound (TVUS) is used most frequently for this purpose; however, quantification of uterine movement is yet not performed. In this feasibility study we measure myometrial uterine movement by strain analysis. Since now strain analysis has been only been used to evaluate myocardial contractility. In this study we validate movements of non-pregnant uteri by strain analysis of ultrasound recordings.

Methods

Prospective observational comparative study in a Dutch non-university teaching hospital. 8 patients with regular menstrual cycles, whose uteri were previously sonographically described as active uteri were record using transvaginal ultrasound (TVUS). the videos were analyzed using strain analysis of two sites (cervix-corpus) of the longitudinal uterus.

Results
Measurement of strain in the cervix area revealed no activity. Searching for the number of movements, the cervix showed almost no contractions (median=0 contractions /20 seconds; [range 0-1]). In contrary, the fundus area showed significant more contractions (median 7 contractions /20 seconds [2-14]: (p=0,012). The median velocity of fundal contractions was 11,11 pixels/sec demonstrating no significant difference in speed between patients. in addition, amplitude of movements showed no significant difference between women(0,45 pixels/sec [0.4-0,5]).
Conclusions

Current transvaginal sonographic measurement of uterine contractions is subjective and time consuming. This feasibility study shows that transvaginal sonographic strain imaging is able to measure the movement in the fundus of active uteri. We didn’t found movement in the cervix area of the active uteri, caused by absence of muscular fibers in the cervix. preliminary conclusion is that strain analysis can provide objective information on uterine peristalsis. This objective measurement can help evaluating uterine disorders.
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ES23-0224
Free Communications 11: Innovations

TRIAGING ELECTIVE GYNAECOLOGY REFERRALS – BIRTH OF A NEW SERVICE, ONE STOP MENSTRUAL DISORDER CLINIC.

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Objectives

The aim was to evaluate the number of out patient gynaecology referrals to the unit and to estimate the proportion of Heavy Menstrual Bleeding(HMB) related referrals to the unit, in other words to estimate existing demand for One stop menstrual disorder clinic(OSMD) incorporating out patient hysteroscopy services.

The objective was to use triaging to streamline the out patient gynaecology referrals and therefore to make the service delivery more efficient and help plan the development of a new service, One stop menstrual disorder clinic and to expand our out patient hysteroscopy services.

Methods

Pilot study
Prospective data collection using a Triage form, as below.
All elective out patient gynaecology referrals via admissions office, between the period of Jan & Mar 2012 – 12 weeks

Results
Total no. of referrals – 741
HMB related referrals - 154 (21%) and other gynaecology referrals – 587 (79%)
One fifth of gynae referrals were HMB related referrals and over 70% of these referrals were appropriate for referral to OSMD or Out patient hysteroscopy clinic.

Conclusions
Benefits of triaging are:
1) Streamlines referrals to Out patient hysteroscopy, OSMD clinic, general Gynaecology clinics and to other specialist clinics.2) Quicker access to specialist advice and treatment. 3) Referral to treatment time, reduced (patient pathway)
4) Reduces the number of clinic visits. 5) Improves patient experience and satisfaction
6) Significant economic benefits
Education and effective communication between the multidisciplinary colleagues in the unit and to the primary care/ GPs about the triage process, detailed patient information leaflets and clinic help lines to give information and allay anxiety of patients are pivotal to make this work effectively.

This along with the hysteroscopy audits established the need for the successful development of One stop menstrual disorder clinic and the expansion of our out patient hysteroscopy services.

With the structural and the financial challenges the NHS is facing, new treatments and innovations are important to make our health care more effective than ever.
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ES23-0529
Free Communications 11: Innovations

TRANSVAGINAL ENDOSCOPY IMPLEMENTATION AND LEARNING CURVE IN INDONESIA

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Objectives
Transvaginal Endoscopy (TVE) is a modification of culdoscopy that can be used to evaluate the posterior uterus, pelvic sidewalls, and adnexae. Combined with diagnostic hysteroscopy and chromotubation, it can replace hysterosalpingography (HSG) as the first-line diagnostic test for the infertile woman. The simplicity of this technique and its cost effectiveness is really suitable for low income country like Indonesia. This is a case series of Indonesian experience with 100 cases of Transvaginal endoscopy in outpatient setting, We evaluate feasibility and difficulty of TVE in outpatient setting.

Methods
We conduct this study at Kartika Fertility Center Gatot Soebroto Central Army Hospital (affiliated teaching hospital of the University Indonesia) and Budhijaya Hospital in Jakarta Indonesia. Only 2 obstrician gynecology who are able to perform TVE in outpatient setting. Women with anteverted uterus,without obvious pelvic pathologic nor history of PID that came to our centerfor infertility treatment are performed office hysteroscopy continue with TVE in outpatient setting.

Results
We have 100 TVE Patients from October 2012 to June 2014, and on all patients wehave successful entry into the peritoneal cavity. For first attempt entry into the peritoneal cavity we devided into 2 periods : the first 20 patients from October 2012 to March 2013 as the preeleminary study and the next 80 patients from April 2013 to April 2014. In the pre eleminary study we failed 7 out of 20 (35 %) patients. And down to 2 out of next 80 (2.5%)patients. TVE find pathological pelvic in 57 patients (9 with 1 side tubal pathology (9%), 24 with 2 sides tubal pathology (24%) and 24 with adhesions : 20 out of 24 was found with endometriosis lesion (20%). We performed mechanical adhesiolisys in all patients with adhesion. Tubal patency was tested on all patients before end the procedure and only 50 patients had normal patent both tubes, and 6 patients had bilateral tubal obstruction. Only 30 patient had previous HSG and 8 had contradictory result with TVE findings. We observed 8 pregnancy in duration 4to 6 months after TVE procedure : three normal conception in patient without pelvic pathologic, one normal conception after TVE adhesiolisys (patient withhistory of appendectomy) and four pregnancy after IUI with chlomifene sitratestimulation. All pregnant patients are with patent both tubes and without any male factor (sperm problem).

Conclusions
Transvaginal endoscopy in outpatient setting provide adequate evaluation of the pelvic pathologic in selected case. A review of the current literature shows that the minimally invasive techniques of TVE and office hysteroscopy are efficient and safe for pelvic exploration and can replace the traditional techniques of hysterosalpingography and laparoscopy. We all need to find a better, affordable learning kit to be able to spread this technique more.
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ES23-0216
Free Communications 11: Innovations

AUGMENTED REALITY: A NEW PERSPECTIVE IN GYNECOLOGICAL SURGERY

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Objectives
Uterine incision is the starting point to gain access to interstitial myomas in laparosurgery. Optimization of this incision is crucial to facilitate the best access to the myoma. This means determining the correct incision length, orientation and position, and also to decrease the number of incisions required for access (and thus decrease the risk of adhesion and uterine rupture). However myomas are not always easy to correctly localize when they do not significantly deform the surface of the uterus, or are at multiple locations. MRI (Magnetic Resonance Imaging) provides a good cartography of myomas but using it for intra-operative navigation remains challenging. Objectives: To develop and test an intra-operative myoma visualization system using augmented reality (AR).
Methods
In the MRI, the outer surface of the uterus and any myomas are delimited and a 3D mesh model is constructed. This 3D model is then automatically positioned and fused with the laparoscopic view of the uterus. This blending gives the impression that the uterus is semi-transparent and the surgeon can see myomas inside it. For one year we conduct a prospective study evaluating the potential benefit of this AR system for myomectomy. We tested the system using a 3D uterus model (or phantom) which included a series of virtual myomas located inside. 10 surgeons were asked to perform a task to evaluate how accurately they could locate these myomas when either using the AR system, or using only the raw laparoscope images. The task was to touch the point on the uterine surface that they believed was closest to the myoma. The depth from this point to the myoma's surface was then measured to assess accuracy. This was computed when the AR system was used (d1mm) and when it was not used (d2mm). We compared these distances to the true shortest distance (d0mm).
Results
The accuracy of the group tested with AR had mean |d1-d0|=0.64mm and range: 0.01mm to 0.09mm. This was more than twenty times better than without AR, that had mean |d2-d0|=16.80mm, range: 5.32mm to 52.17mm, (p<0,000001)
Conclusions

AR in gynecology laparosurgery has the potential to vastly enhance accuracy of the initial incision for myomectomy. This is the first use of AR for a gynecological pathology and this technique could be used in most gynecological surgeries, including endometriotic nodules and ovarian cysts.
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ES23-0274
Free Communications 11: Innovations

INTRODUCTION OF 3D LAPAROSCOPIC SURGERY AND ITS USEFULNESS

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Objectives
A high definition laparoscope has enabled us to perform more precise surgery. Now it is expected that 3-Dimensional (3D) laparoscope systems may bring about further accuracy and safety, and alleviate surgeons' burdens. It is also considered to be helpful to reduce the time required for

studying laparoscopic skills. Our department has introduced the Olympus 3D laparoscope system at January, 2014. We evaluated its usefulness with laparoscopic tasks using a box trainer and surgeons' impression of initial cases.
Methods

We recruited volunteers including novices (n = 5), trainees (n = 3) and board-certified laparoscopists (n = 2) for dry-box tasks. We measured time required for suturing and transferring beads.

Results
All surgeons except one certified laparoscopist showed shorter time required for transferring beads using the 3D laparoscope system. Suturing under the 3D system also needed shorter time than conventional 2D system. We found that the 3D system made it possible to hold the objects more precisely. The surgeons who performed laparoscopic myomectomy and hysterectomy using the 3D system feel that this system possesses advantage in suturing and lymphadenectomy because of easier perception of realistic 3D view.
Conclusions

3D laparoscope systems can possibly improve learning curves for laparoscopic training. However, this system might be less advantageous for the surgeons who already obtained the surgical skills of conventional 2D laparoscope.
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ES23-0369
Free Communications 11: Innovations

GYNAECOLOGICAL OPERATION REGISTRY
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Objectives

Minimal access surgery in Gynaecology is very common today and seems established, but indication for the operation, performing and results are different on regional,national and international level. The goal is to create a tool for health service research, quality management and medical research in gynaecological minimal access surgery.

Methods

We developed a new web-based registry for minimal invasive access surgery in Gynaecology for international use. The legal background for the international gynaecological registry is the European Human Rights Law article 8 and the European Directory for Data Protection,article 16 (95/46/EG).

The registration in the web database includes demographic and social factors, general health parameters, data to comorbidity, previous surgery, documentation of the present procedure with general data as primary surgery / reoperation, indication and intraoperativ diagnosis classified by ICD-10, anaesthetics and procedure time. It is also relevant if the operationis elective or acute and if the operation is conducted during normal operation schedule or on call. The operation procedures are classified by a new created catalogue for minimal access surgery in Gynaecology. More specific data of minimal access surgery procedures as used instruments, access mode, intraoperative complications gets documented. After four weeks postoperatively a questionnaire is sent to register

postoperativ complications and in cases with failure to respond, a second questionnaire is sent, thereafter the patient is contacted by telephone to secure a highest possible response rate.

The questionnaire includes as well Patient Reported Outcome Measures (PROM). The self-evaluation of the patient has a high relevance ranking for the operation result.

Results

The first results are based on the existing national Norwegian Gynaecological Endoscopic Registry and shows regional significant differences in indication, performing of the different operation prosedures and intra- and postoperative complications. The preliminary results shows significant differences according to previous surgery, demographic factors, general healthfactors and co morbidity.

The responserate of postoperative complications is more than 90%. Therefore the evaluation of complication rates is powerful.

Conclusions

The elected parameters allows evaluation of indicators for quality of health care. Therefore is the web-based international gynaecological operation registry a sufficient tool to control health care with regards to efficiency and quality. The register can adapt quickly to changed needs and demands in health care system, medical research and quality control.
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ES23-0218
Free Communications 11: Innovations

SURGEON PREFERENCE WHEN PURCHASING INTEGRATED LAPAROSCOPIC THEATRES.
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Objectives

Technological advancements have resulted in improved theatre design. The integrated theatre is a state-of-the-art system where the laparoscopic equipment is installed in columns attached to a ceiling-mounted suspension system that facilitates positioning, with multiple permanently installed screens. The theatre team is able to control the laparoscopic and theatre room equipment using a central monitor.

An ergonomic theatre design may result in enhanced team performance and reduces risk of harm to theatre personnel. Stressful theatre environments impair dexterity and increase the incidence of errors. Integrated theatres potentially result in reduced stress for the operating team and enhanced intra-operative efficiency. A less stressful environment potentially improves patient safety.

Each fully integrated theatre costs approximately 0.6 million Euro and the cost of wide spread adoption would run into billions of Euros. There are many different features on offer, yet no research has been directed towards understanding the importance of each aspect.

The aim of this study was to establish the use of integrated theatres amongst UK gynaecological surgeons and determine what features are considered desirable. In addition we assessed whether there are preference differences between those surgeons who use these theatres regularly and those who never use them.

Methods

This was an email survey of British gynaecological laparoscopists. Demographic data were collected and information regarding laparoscopic workload and access to integrated theatres. Participants were asked to rank 14 features of an integrated theatre by order of importance. They also rated the individual features by importance.

Results

121 people responded. 58(47.9%) performed major laparoscopic surgery every week. 66(54.6%) had never operated in an integrated theatre with 24(19.8%) using one occasionally and 31(25.6%) regularly. There were regional variations in the use of integrated theatres with the South of England having higher usage.

The three features most highly rated were: (1) ceiling mounted stacks and monitors with wire free connection; (2) more than two screens; and (3) surgeon control of image capture / video recording. The three features ranked least highly were: (12) Nurse ability to control all devices via a central point; (13) Integrated audio system; and (14) Surgeon controlling music levels.

There were some differences in rating for certain features between never and regular users of integrated theatres.

Conclusions

Some features of integrated theatres are consistently rated more highly than others. This information will enable manufactures to offer theatres which are fit for purpose and purchasers to choose the most appropriate system. There are differences in the ratings of certain features depending on the degree of usage of integrated theatres by surgeons. Therefore it may be worth consulting with surgeons with experience of using these theatres in order to get the most appropriate system both in terms of cost and ergonomics.
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ES23-0052
Free Communications 11: Innovations

DEVELOPING A NEW SOFTWARE, AN ENDOMETRIOSIS MAP.
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Objectives
Developing a new software, an endometriosis MAP (visual representation), that corresponds to the sites of endometriosis.
Methods
Design and development of a software based on "the diagram to map the locations of endometrisis". That´s a digital aplication, with simple interface and easy to fill out.
Results

The surgeon with the MAP at the time of surgery, has a special tool that concentrates all the details of the case. This MAP can be checked at any time in surgery and may guide the surgical team, even in the absence of medical records. The software allows to show the patients the extent of the disease before and after surgery. Postoperatively, the MAP allows an evaluation of our propaedeutics in cases of endometriosis, comparing all the sites identified in the diagram preoperatively with the surgical findings.

Conclusions

The MAP is an important tool for the physician self-evaluation, both on physical examination, as in the imaging, and helps the surgeon on intraoperative time, by the easy visualization of all desease sites. This software is ready for instalation and use.

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ES23-0397

Free Communications 11: Innovations

MINILAPAROSCOPIC SINGLE-SITE TOTAL HYSTERECTOMY

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Objectives

We here present our preliminary experience with 13 cases of minilaparoscopic single-site total hysterectomy, an innovative technique, which combines minilaparoscopy and single-port surgery.

Methods

Thirteen consecutive women with a uterine volume of less than 12 weeks of gestation underwent single port minilaparoscopic total hysterectomy (SPmTLH) at the Obstetrics and Gynecology Department of the University of Insubria, (Varese, Italy) in the period between March and September 2013. All the operations were performed by a skilled laparoscopic surgeon with the aid of two assistants.

Only two 3-mm trocars inserted in the umbilicus were used to complete the operation: one to insert a 3-mm scope and the other for the alternative insertion of 3-mm bipolar forceps and scissors. A uterine manipulator was used to reach a better exposure of the anatomical structures and to obtain adequate counter-traction. After the complete detachment of the uterus from its surrounding structures, colpotomy at the vaginal fornices with 3-mm electrified scissors. The vaginal cuff was sutured using a transvaginal approach. After trocars' extraction, neither stitches nor adhesive tapes were required.

Results

Patients' median age was 46 (34 – 53) years. Median BMI was 20.7 (17.9-27.5), with no obese patient included.

The indication for surgery was simple or complex hyperplasia, abnormal uterine bleeding, fibromatosis and adenomyosis.

Median operative time was 46 (20–80) minutes; estimated blood loss was 30 (10–200) mL, the total amount of CO_2 inflated during the procedure never exceeded 150 liters (median 63.5, range 30–130).

All procedures but one were completed using the minilaparoscopic single-site approach. In one case (7.7%) it was necessary to add two 3-mm ancillary trocars and convert the single-site procedure to conventional minilaparoscopic surgery due to dense adhesions related to adenomyosis.
The median uterus weight was 100 (70–500) grams. When morcellation of large uteri was needed, it was accomplished through the vagina. Neither intra- nor post-operative complications were registered.
In general, women complained of very low pain after surgery: median VAS score at 1, 3 and 8 hours after surgery were 2 (range, 1 – 3), 2 (range, 1 – 3) and 0 (range, 0 – 2).
Ten women (76.9%) were discharged within 24 hours and no patient was discharged more than 48 hours after surgery.

INTRA-OPERATIVE CHARACTERISTICS
Operative Time (minutes) 45 (20-80)
Estimated Blood Loss (mL) 30 (10-200)
CO_2 (liters) 63.5 (30-130)
Uterus Weight 100 (70-500)
Hospital Stay (hours) 22.5 (13-44)
Women Discharged Within 24 Hours 10 (76.9%)
Intra-Operative Complication
-Conversion to Conventional Minilaparoscopy
1 (7.7%)
-Conversion to Open Surgery /Conventional Laparoscopy

Conclusions

The present study suggests that, in selected cases and in the hands of an experienced minimally-invasive surgeon, hysterectomy can be effectively and safely accomplished using a minilaparoscopic single-port technique.
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ES23-0292
Free Communications 12: Other Benign Gynaecology

UNILATERAL OVARIECTOMY, IS THERE A RISK FOR EARLY MENOPAUSE?
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Objectives

Women with early menopause experience an increased risk forserious diseases like cardiovascular diseases, osteoporosis, dementia and M.Parkinson. The aim of this study is to examine whether unilateral ovariectomyaffects the risk for early menopause.

Methods

We performed a multicentrum prospective cohort study. Women with a historyof unilateral ovariectomy for benign reasons at age between 30-45 years were included. Ascontrol group also women with laparoscopic sterilisation in history during thesame period were included; these women were matched for age during surgery. Surgicalprocedures should be performed 7-14 years ago. After informed consent wasreceived, the women completed aquestionaire. Primary outcome was the

amount of postmenopausal women at themoment of questionaire and the mean ageof menopause. We performed a power analysis and calculated a study populationof 100 women in each group.

Results

We just finishedinclusion of all 100 women with unilateral ovariectomy for benign reasons in history an also 100 women with laparoscopicsterilisation in history. They all completed the questionair. Results areanalysed at the moment and will be available for presentation at the congres.

Conclusions

Untill now just some small studieshave been performed to evaluate the affect of unilateral ovariectomy on earlymenaopause. The largest study included 39 women and primary outcome wasincreased FSH (> 20IU/L)(Cooper GS, Thorp JM. Obstetrics&Gynaecology1999; 94(6): 969-972). Our current study will learn us whether unilateralovariectomy increases the risk for early menopause and if so, will emphasizethe need for cystectomy instead of oavriectomy in case of benign adnexal massesin premenopausal women.
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ES23-0029
Free Communications 12: Other Benign Gynaecology

LAPAROENDOSCOPIC SINGLE-SITE SURGERY (LESS) FOR HUGE OVARIAN CYSTS
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Objectives
The benefits of LESS when compared to conventional laparoscopy include better cosmetic results and possibly less pain and reducing the potential morbidity from using multiple ports. We present our experience with 10 Patients who had LESS for large ovarian cysts (ranging from 20 to 30 cm in diameter). The objective is to assess the feasibility, safety and operative outcome for the management of huge ovarian cysts by LESS.

Methods
We performed a retrospective chart review of patients who underwent LESS at our hospital for huge ovarian cysts. All patients had cysts that were more than 20 cm in diameter. We analyzed the patient's age, body mass index (BMI), tumor maximum diameter as measured by ultrasound, operative time, estimated blood loss and the histopathology result.
All patients had normal tumor markers and the radiologic evaluations were in favor of a benign nature of the cysts (figure 1). The procedures were done through a 2.5 cm umbilical incision using the open technique. Initially the cyst surface was evaluated, that was followed by drainage of the cyst fluid if the initial evaluation supports a benign nature of the cyst. The operation was then done similar to procedures performed using the conventional technique. The specimens were retrieved through the umbilical incision.

Results

Age (years)	BMI (Kg/m2)	Size (cm)	Surgery time (min)	Hgb drop (gm/dl)	Fluid drained (ml)	Procedure performed	Pathology
22	25.7	30	109	-1.3	8500	salpingooopherectomy (SO)	Mucinous cystadenoma
24	29.6	20	76	-0.1	500	cystectomy	Teratoma

25	26.2	28	88	-1.4	5400	salpingooopherectomy	Teratoma
25	28.2	20	56	NA	2500	cystectomy	Mucinous cystadenoma
27	21.9	23	71	0	2000	cystectomy	Serous cystadenoma
27	27.6	27	95	0.1	8000	salpingooopherectomy	Serous cystadenofibroma
24	27	20	88	0.2	1300	cystectomy	Teratoma
31	28.2	20	58	-1.7	1100	salpingooopherectomy	Mucinous cystadenoma
34	28.3	22	65	-0.2	3500	salpingooopherectomy	Mucinous cystadenoma
Median: 25	Mean: 26.9	Mean: 22.3	Mean: 78.4	Mean: -0.55	Mean: 3644		

Figure 1
All patients had benign ovarian cysts. The median patient's age was 25 years. The mean BMI was 26.96 (21.9-29.6). The mean tumor size was 22.3 cm (20-30). The mean mount of fluid aspirated from the cysts was 3644 ml (500-8500). The mean surgery time was 78.4 minutes (56-109) and the mean drop in hemoglobin was 0.5 gm/dl (0-1.3).

Conclusions
We believe that LESS may be a safe and feasible alternative to conventional laparoscopy for patients with huge ovarian cysts and provides a great cosmetic benefit. The short-term operative outcome evaluated by the operative time and blood loss was satisfactory. Proper patients selection and expertise are essential to perform these cases.
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ES23-0022
Free Communications 12: Other Benign Gynaecology

TISSUE ADHESIVE VERSUS SUTURE FOR THE CLOSURE OF LAPAROSCOPIC WOUNDS. A PROSPECTIV RANDOMIZED TRIAL
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Objectives

Satisfaction with the cosmetic result after laparoscopic surgery is important for patients. We conducted a study to evaluate the cosmetic outcome 3 months after a laparoscopic procedure and compared skin adhesive (SA) vs. transcutaneous suture (TS).

Methods

A randomized, controlled, prospective study was conducted at a single study centre in Hamburg, Germany. 77 patients undergoing laparoscopic surgery with 2 lower abdominal port sites met the study requirements. It was decided randomly which port site would be closed with SA. The opposite site was closed with TS. Wounds were assessed after 7-12 days and after 3 months.Cosmetic outcome was measured by a visual analogue scale (VAS) filled out by the patient, the Hollander Wound Evaluation Scale (HWES) and by the blinded investigators' judgment.

Results

77 subjects were randomized. Complete data from the 3 month follow up visit was available from 56 patients (72.7%). The VAS-Scale ranged from 0 to 100mm with "0" representing the best possible cosmetic outcome. Median satisfaction was 2mm in the TS group and 3mm in the SA group. The

mean was high in both groups (3.8mm (s=4.6) vs. 4.6mm (s=13.1). The outcome was neither clinically nor statistically different. Cosmetic outcome assessed by an investigator and the HWES showed no difference. In regards to complications no difference was found between SA and TS, either.

Conclusions
The study demonstrates that wound closure of laparoscopic port-site wounds leads to equivalent outcomes whether skin adhesives or transcutaneous sutures are used. Complications are rare in both methods
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ES23-0271
Free Communications 12: Other Benign Gynaecology

ANTIBIOTIC PROPHYLAXIS IN LAPAROSCOPIC GYNAECOLOGICAL PROCEDURES
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Objectives

The purpose of the study was to assess the compliance of antibiotic prophylaxis in laparoscopic gynaecological procedures against local protocols and national guidance.

Methods

499 patients booked for gynaecological procedures were identified prospectively, over a 4 week period, by three independent data collectors, over 7 different hospital sites. 61 patients (13%) represent the laparoscopic procedures subgroup. Analysis of compliance looked at the appropriateness of indication, choice, dose, timing and documentation of the prophylactic antibiotic.

Results

The overall compliance with antibiotic prophylaxis guidelines was 57% (n=35). Six patients had a laparoscopic hysterectomy and the correct antibiotic was prescribed and administered in 4 out of 6 patients. Four patients had the dose recorded appropriately and only one patient had a time recorded. Prophylactic antibiotics were inappropriately prescribed in 6% (1/17) of laparoscopic sterilisation procedures and 53% (20/38) of other laparoscopic procedures not involving opening the uterus or vagina.

Conclusions

There is a lack of good quality studies on the use of prophylactic antibiotics for laparoscopic hysterectomy. The lack of a definition for advanced laparoscopic procedures affects compliance. Compliance with the protocol for laparoscopic sterilisation was high. The compliance for patients undergoing other laparoscopic procedures was poor. Correct identification of patients requiring antibiotic prophylaxis and increase awareness of guideline recommendations is likely to reduce surgical morbidity.
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ES23-0504
Free Communications 12: Other Benign Gynaecology

THE LONG TERM FOLLOW UP RESULTS OF WOMEN UNDERGOING AN OFFICE BASED THERMABLATE ABLATION FOR THE TREATMENT OF MENORRHAGIA

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Objectives
To determine the efficacy of an office based local anaesthetic Thermablate Endometrial Ablation System (TEAS) as a long term treatment for women with menorrhagia.
Methods
All patients who underwent a local anaesthetic endometrial ablation at the Ambulatory Menstrual Disorder Clinic at the CIRCLE Treatment Centre on the Queens Medical Centre Campus between 2008 and 2014 were recorded on a database and the outcomes documented at their review. These were the women who were offered a local anaesthetic endometrial ablation after failed conservative management of their menorrhagia. Long term follow up and outcomes were determined by reviewing a hospital based database and contacting their primary care physician.
Results
176 women underwent TEAS at the Ambulatory clinic performed by the same surgeon. No patients were admitted immediately following the procedure. All women received a 24 hour post ablation nurse telephone consultation. 1 patient was treated for post operative infection 48 hours after the procedure. At a median follow up of 19 months (0.5-5 years) 93 patients (53%) had lighter periods and 34 women (19.5%) became amenorrhoeic after TEAS. 125 women (75.6%) had no interventions following TEAS. Added hormonal and non-hormonal medical interventions also produced satisfactory results in a further 6% of patients post TEAS. 26% of the women went on to have surgical intervention due to ongoing bleeding and cyclical pelvic pain. Of these 8% of women had a hysterectomy eventually whilst 17.7% had other surgical interventions including diagnostic laparoscopy, laparoscopic drainage of ovarian cyst, hysteroscopy, hysteroscopic drainage of haematometra, transcervical resection of fibroid/endometrium.
Conclusions
TEAS has been demonstrated to be an extremely well tolerated device ideal to be employed in an ambulatory office setting. The long term results also show a high satisfaction rate and a low intervention rate in the form of hysterectomy, which has important consequences in terms of major complications of surgery and cost implications for the health service.
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ES23-0374
Free Communications 12: Other Benign Gynaecology

TO FIX OR NOT TO FIX: WHEN SHOULD LAPAROSCOPIC OOPHOROPEXY BE UNDERTAKEN IN WOMEN WITH RECURRENT OVARIAN TORSION

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Objectives

To investigate and recommend when laparoscopic Oophoropexy (fixation of the ovary to a pelvic anchor) should be undertaken in women with recurrent ovarian torsion. Prompt diagnosis of ovarian torsion enables ovarian conservation but this introduces increased risks of further torsion as ovaries

that have undergone torsion have increased risks of recurrent torsion. There is a lack of consensus on how to manage this increased risk of recurrent torsion.

Methods

Case study and review of relevant literature. The index case was a 28-year-old nulliparous woman presenting with acute pelvic pain due to her third episode of right ovarian torsion presumably predisposed to by large polycystic ovaries. She had presented twice before with right sided lower pelvic pain and found to have right ovarian torsion on laparoscopy and so had undergone two previous episodes of laparoscopic untwisting of the ovaries without Oophoropexy (as no other ovarian pathology was found) in 2012 and 2013. During the index admission, she presented with similar right sided lower pelvic pain. Pelvic ultrasound suggested a 3x4cm right adnexal mass. The severity of her pain prompted emergency diagnostic laparoscopy. Medline entries from 1992 were searched with the MESH terms 'ovarian torsion' and 'Oophoropexy' and relevant articles included in the review.

Results

The index laparoscopy demonstrated torsion involving the right ovary and fallopian tube both of which still appeared viable with no other adnexal/pelvic pathology. The decision was taken to perform untwisting of the right adnexal torsion as well as ipsilateral Oophoropexy to potentially prevent further torsion. Detorsion of the adnexum was achieved laparoscopically and the right ovarian ligament was plicated to the right uterosacral ligament using PDS suture material.

Ovarian torsion presents an acute gynaecological emergency with the potentially devastating consequence of loss of the affected ovary and so prompt diagnosis and management is essential. Recommended surgical methods to prevent recurrent torsion include suturing the ovary/pedicle to the pelvic sidewall or to the round ligament or plication of the utero-ovarian ligaments. These have however been reported to increase risks of pelvic pain and adhesions and their effectiveness in reducing recurrent torsion after one episode of torsion remains uncertain. There is evidence to support performance of Oophoropexy after two or more episodes of torsion both from published literature and as a good practice principle.

Conclusions

Oophoropexy is an effective surgical method to prevent recurrence after two or more episodes of ovarian torsion. Plication of utero-ovarian ligaments remains the most anatomically feasible method.
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ES23-0073
Free Communications 12: Other Benign Gynaecology

THE EFFECT OF ULIPRISTAL ACETATE/ESMYA ON PRE-MENSTRUAL SYNDROME AND THE EFFICIENCY AND SIDE EFFECTS IN A CLINICAL SETTING.
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Objectives

To determine the efficacy, side effects including pre-menstrual syndrome (PMS) of ulipristal acetate or Esmya for the treatment of uterine fibroids prior to surgery outside research setting.

Methods
A questionnaire was sent to patients who completed the 3-month course of 5 milligrams once daily of Esmya. The questionnaire covers the bleeding pattern and pain severity prior and during taking Esmya based on the numeric rating scale. They were asked would they like to take Esmya long-term and the effect of taking Esmya have on their opinion of surgical intervention. The side effects of Esmya and a modified Daily Record of Severity of Problems (DRSP) to score pre-menstrual syndrome before and during the Esmya intake were also recorded
Results

86 women with symptomatic fibroids, awaiting surgical intervention, took Esmya for 3 months in the unit since the introduction of Esmya in clinical setting.

Our preliminary result shows 80% of patients showed improvement in their bleeding pattern where all of them had >50% reduction in the severity of their bleeding. Half of them became amenorrheic as a result of taking Esmya. The average days of the patients becoming amenorrheic is 14 days and 56% became amenorrheic within 10 days (from immediately to 3 months), which is consistent to the Pearl 1 study result. Menses returned within 4 weeks of stopping the Esmya. 16% of the patients showed no improvement at all.

56% showed improvement in their pain score and of those, 70% had their pain symptoms returning within 4 weeks after stopping Esmya. Majority of the patients have no or rare side effects. The side effects suffered most were hot flushes. Hot flushes occurred in 28% of the women as compared to <3% in the Pearl 1 study. In the secondary outcome, 76% of the patient demonstrated improvement in their PMS whilst on Esmya. However, one patient had worsening PMS with suicidal thoughts despite the improvement in the bleeding pattern and pain score.

50% of the patients would like to continue on Esmya long-term and 25% would change their mind about having surgery if allowed to continue on Esmya. 2 patients stopped Esmya after 1 week as one patient had worsened menometrorrhagia and another patient had severe headaches.

Conclusions
Treatment with Esmya is effective to control excessive bleeding and pain with tolerable side effects. The preliminary data showed new evidence of improvement in PMS
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ES23-0198
Free Communications 12: Other Benign Gynaecology

TREATMENT OUTCOMES FOLLOWING UTERINE ARTERY EMBOLISATION. ARE PATIENTS AVOIDING MAJOR SURGERY?
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Objectives
- To determine the re-intervention rates following uterine artery embolisation (UAE) for fibroids, in particular the rates of myomectomy and hysterectomy.

- To gauge effectiveness of uterine artery embolisation on symptom severity as well as overall quality of life including pregnancy outcomes.

Methods
This study looked at all patients who have undergone UAE between May 1999 and September 2013 at Nottingham University Hospitals (n=452). Using the hospital information system we looked back at patient documents to ascertain what, if any, further intervention a patient had had following uterine artery embolisation. Intervention was taken as non-conservative management and included hysterectomy, myomectomy, second UAE and transcervical resection of fibroids (TCRF). Reasons for hysterectomy were also documented to separate those done for fibroids and those done for other reasons. Patients having uterine artery embolisation are followed up by one Consultant in a Fibroid clinic to ensure continuity of care and appropriate management of symptom recurrence following the procedure.
A fibroid-specific quality of life questionnaire was sent out to all patients having undergone UAE asking about symptom severity, complications of UAE and pregnancy outcomes.
Results
Of those patients undergoing uterine artery embolisation 369 out of 452 had no further intervention, giving a re-intervention rate of 18.3%. Of the 83 patients who had re-intervention 34 (7%) had a subsequent myomectomy, 19 (3.9%) had subsequent TCRF, 10 (1.9%) had a second uterine artery embolisation and 20 (4.4%) had a hysterectomy. Of those having a hysterectomy 5 were done for another reason, giving an overall rate of 3.3%
The results of the patient questionnaire are still awaited.
Conclusions

There are very few large studies looking at outcomes of uterine artery embolisation over a long follow up period. This study shows an overall re-intervention rate of 18.3% over a 14 year period and only a 3.3% rate of hysterectomy following UAE. The most common re-intervention is myomectomy which is often done to remove pedunculated fibroids which are treated less effectively with UAE.
We have shown that uterine artery embolisation significantly improves the symptoms of fibroids, so much so that 81.7% of patients are avoiding further intervention and 90% are avoiding major surgery. This study will show an overall improvement in patient outcomes following UAE, including improvement in quality of life. We feel this is, in part, attributed to patients being treated in a specialist clinic with good continuity of care.
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ES23-0126
Free Communications 12: Other Benign Gynaecology

PREGNANCY AFTER NOVASURE ENDOMETRIAL ABLATION
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Objectives

NovaSure endometrial ablation is a successful therapy for patients with heavy menstrual bleeding, that do not want to preserve fertility. This technique shows higher amenorrhea rates in comparison to other endometrial ablation techniques. Yet, endometrial ablation is not a contraceptive treatment. However, little is known about NovaSure and the need for contraception. An update of

the most recent literature of pregnancies after endometrial ablation in general and for NovaSure endometrial ablation in specific will be given.

Methods

A MEDLINE, PubMed and MAUDE search of pregnancy after endometrial ablation was performed using the keywords ‘pregnancy, ‘endometrialablation’ and ‘NovaSure’.

Results

The incidence of spontaneous pregnancy after endometrial ablation is estimated between 0.24%-2.41%. Possible risk factors for pregnancy after endometrial ablation are the absence of amenorrhea and age at time of the ablation, with the highest risk for women under the age of 40 years. Obstetric complications included spontaneous abortion (28%), premature delivery (31%), premature rupture of the membranes (16%) and placenta adherence complications (25%). The ectopic pregnancy rate after endometrial ablation was reported in 6.5%.

So far, 25 cases of pregnancy after NovaSure could be identified. For merely 10 cases data were available. Age at conception was between 26 and 41 years and occurred between 6 and 36 months after the procedure. One pregnancy was terminated, two pregnancies ended in a spontaneous abortion, seven pregnancies resulted in preterm birth and were complicated by intra uterine growth restriction, preterm premature rupture of membranes, placenta accreta, vasa praevia and uterine rupture following hysterectomy.

Conclusions

Data about pregnancies after NovaSure are limited. More evidence is required to assess whether NovaSure endometrial ablation gives a different risk of pregnancy and obstetric complications when compared to other endometrial ablation techniques. Therefore, contraception is yet recommended for all women who undergo NovaSure endometrial ablation.
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ES23-0261
Free Communications 12: Other Benign Gynaecology

ENDOMETRIAL RECEPTIVITY IN PATIENTS WITH ASHERMAN SYNDROME.

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Objectives

Dysmenorrhea or pain in women with Asherman Syndrome (AS) is often explained by the theory that myometrial contractions try to evacuate blood trapped in the uterine cavity. However, haematometra is very rare in patients with AS. Endometrial biopsies and serum hormone level samples were taken at the same moment to study endometrial receptiveness.
Methods

Descriptive study. 18 patients with amenorrhea and AS.Endometrial biopsies and serum hormone level samples were taken at the same moment during conventional hysteroscopic adhesiolysis.

Results

Endometrium hidden above adhaesions rests in a phase that can be best described as luteal with early (simple tubes) and late (stromal decidualisation) aspects in most cases. Endocrinologically, however, 6 of these biopsies are actually taken during the follicular phase, 3 during the mid-cycle and 9 during different stages of the luteal phase.

Conclusions

It seems that in endometrium in patients with AS looses its normal respons and receptiveness to estradiol and progesterone. We do not have any idea about the biological mechanism behind this phenomenon. We do, however, now understand clearly why a haematometra is so uncommon in patients with AS. Future research should be focussed on which mediators, factors, proteins and genes are involved in the etiology of this typical clinical situation.
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ES23-0341
Free Communications 12: Other Benign Gynaecology

NEGATIVE HISTOLOGY IN TUBAL ECTOPIC PREGNANCY MANAGED SURGICALLY.

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Objectives
Tubal ectopic pregnancy remains one of the leading causes of maternal mortality. Prompt diagnosis and treatment significantly reduces the mortality and improves the outcome. The gold standard treatment remains surgical. Removing a non – affected tube in an attempt to treat the ectopic pregnancy is devastating especially in young women where the fertility is paramount, as well as it can lead to litigation.
Methods

We searched the theatre records for all slapnigectomies preformed in University Hospital Bristol from January 2007 – December 2012. We excluded slapingectomies performed for pathologies other than the tubal ectopic pregnancy.
Histology reports from operations were obtained through the two intranet reporting systems used by the Trust. The presence of a tubal ectopic pregnancy was confirmed by evidence of an implatation site or chorionic villi. If there was no evidence of a tubal ectopic pregnancy on the histology report the hospital notes were reviewed for clinical presentation prior to surgery, the operative findings and data from the follow up.
Results
There were 359 laparoscopic salpingectomies for presumed ectopic pregnancy over a 6-year period in Saint Michael's Hospital. It was not possible to find the histology reports for 3 cases (0.83%) and therefore there were excluded. Ectopic pregnancy was not confirmed by histology in 17 cases (4.7%)(ranging from 2.3 – 8.9% a year). After a thorough review of these case notes and follow up appointments we came to conclusion that 12/17 cases were consistent with ruptured ectopic pregnancy and the specimen was probably aspirated with the blood clots from the pelvis. We

concluded that 5 cases (1.39%) were not consistent with tubal ectopic pregnancy, and therefore represent the figure of true negative histology for tubal pregnancies managed surgically
Conclusions

1.The majority of cases were histology didn't confirm presence of pregnancy within the tube, were actually true ectopic pregnancies. We hypothesised that the specimen fell out the tube through tubal abortion or by manipulation during the surgical procedure. This hypothesis is supported by the features of tube on histology as well as clinically postoperatively.
2.In the remaining 5 cases, we concluded that these were not consistent with tubal ectopic pregnancy. This hypothesis was supported by the histological features as well as the trend of HCG postoperatively.
3.there were few publications about the risk of negative laparoscopy where surgeons could not positively identify a pregnant tube in presence of USS suggestive of such pathology, Despite it is importance, there was no single study or publication to discuss the risk of removing healthy tube during the procedure
4.A thorough follow up of the patients with serum B HCG is needed
5.NHS litigation authority stated that there were 30 complaints related to this issue during the period of 2007-2012.
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ES23-0491
Free Communications 13: Reproductive Medicine and Surgery

FACTS & FICTIONS IN CONTRACEPTIVE MANAGEMENT - CURRENT EVIDENCE & PRACTICE
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Objectives

With the emergence of new research findings, contraceptive practice had undergone a marked change recently. There is update on the medical eligibility, drug interactions and emergency contraception. Introduction of new contraceptive methods into clinical practice added more options to the contraceptive choice for low risk and complicated high-risk patients.

The aim of the current study is to review the conflicting recommendations regarding contraceptive eligibility and efficacy, and demonstrate how the uptake of the best available research recommendations can affect patient options and outcome.

Methods

A comprehensive review of the available literature and current international guidelines with stress on practice issues was conducted and discussed in this review.

Results

There is a wide variation in the understanding and application of the contraceptive recommendations. This results in unnecessary restriction to contraceptive prescription, with subsequent inconvenience and limitation of available options.

Conclusions

Awareness of the limitations and availability of the updated contraceptive methods is crucial to appropriate counseling to the patients for their options.
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ES23-0337
Free Communications 13: Reproductive Medicine and Surgery

LAPAROSCOPIC MANAGEMENT OF A CERVICAL NICHE (SACCULATION) PRESENTING WITH POST-MENSTRUAL BLEEDING AND SUB-FERTILITY
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Objectives
Cervical Niches or Sacculations are out-pouchings of cervical tissue and are a known complication of caesarean section delivery. It has been shown to be present in 64.5 percent of women 6-12 weeks after having a caesarean section with examined by gel instillation sonohysterography (van der Voet et al 2013) A niche can present with post-menstrual bleeding, dysmenorrhoea, pelvic pain or be incidental findings on imaging. Here we present a case of a 41 year old female who has had two previous caesarean sections and presented with post-menstrual bleeding and sub fertility. A pelvic MRI was performed which demonstrated a prominent cervical niche and following a multi-disciplinary discussion she subsequently underwent laparoscopic correction.
Methods
A laparoscopic excision was undertaken with a closed umbilical entry using a Veress needle, 10mm umbilical port and three further 5mm ports. The bladder was found to be densely adherent to the uterine lower segment. Cautious bladder dissection was performed by initially opening the anterior leaf of the broad ligament and using hydro-distension of the bladder to delineate the anatomy. The uterus was manipulated using a Spackman cannula and methylene blue dye was used to identify the cervical canal.
Once identified the niche was excised and repaired with interrupted monocryl and vicryl sutures. The patient had a urinary catheter for 24 hours and was discharge on day 2.

Results
There were no short or long term complications and at follow up the patient was asymptomatic. A repeat pelvic ultrasound was performed 12 weeks following surgery and did not reveal any cervical defect.
Conclusions
With the prevalence of caesarean section deliveries increasing worldwide, the incidence of cervical niches and the associated symptoms are likely to also increase. Laparoscopic management of such niches represents a safe and efficient management option.
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ES23-0024
Free Communications 13: Reproductive Medicine and Surgery

MINIMALLY INVASIVE MANAGEMENT OF 14-16 WEEK ABDOMINAL ECTOPIC WITH HEMOPERITONEUM; AN EMERGENCY LAPAROSCOPIC PROCEDURE
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Objectives

Since the first laparoscopic cholecystectomy on a pregnant lady in 1991, a plethora of articles and case studies have been published addressing laparoscopy and their role in pregnancy. The Royal College of Obstetricians and Gynecologists Green-top Guidelines recommend laparoscopic surgery as the preferred approach in early ectopic tubal pregnancies. Laparoscopic versus laparotomy management of abdominal ectopic is still a controversy to an already physically and emotionally traumatic experience.

Methods

A case study of 36 years old gravida 2 with history of a previous ectopic in which the emergency ultrasound revealed moderate hemoperitoneum at 14-16 weeks of gestation.

Results

Upon urgent diagnostic laparoscopy, massive hemoperitoneum was detected, despite no clinical signs of hemodynamic instability. Uterus was found to be malformed with multiple myomas . During formal laparoscopic pelvic and abdominal exploration for ectopic pregnancy, a fetus of 14-16 week was detected attached to the omentum.

Conclusions

Operative laparoscopy for abdominal ectopic in skillful hands, can be considered a safe and feasible management technique carrying all the advantages of a minimally invasive procedure.

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ES23-0133

Free Communications 13: Reproductive Medicine and Surgery

A VERY RARE CASE OF ECTOPIC INTRAMURAL PREGNANCY AFTER IVF-ET

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Objectives

This case report shows the successful use of early medical treatment ectopic intramural pregnancy with ultrasound-guided laparoscopic methotrexate (Mtx) injection. A 28-year old woman, gravida 1, para 0, with a history of laparoscopic cystectomy of an endometriotic cyst of the left ovary 2 years ago was referred to our clinic. The patient was treated with IVF-ET because of tubal occlusion. Transvaginal ultrasonography showed an ectopic gestational sac (GS) with presence of yolk sac and embryo with a heartbeat in the posterior uterine wall, completely surrounded by myometrium.

Methods

We successfully treated her with US guided injection of methotrexate into the GS cavity by laparoscopic approach.

Results

Two days after the procedure the levels of HCG began to decrease.

On day 50-th after the operation HCG was negative.

Conclusions

The use of Methotrexate injection inside ectopic intramural gestational sac under US guidance by laparoscopic approach is way of succesfull treatment of this very rare and dangerous condition.
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ES23-0242
Free Communications 13: Reproductive Medicine and Surgery

CESAREAN SCAR DEFECT. MANAGEMENT AND UPDATE. A 10 YEAR EXPERIENCE.
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Objectives
To evaluate our experience in the diagnosis and management of cesarean scar defects.
Methods
Retrospective evaluation of 52 consecutive patients diagnosed of cesarean scar defect in a single institution. 30 of them underwent a surgical repair and in 22 cases an expectant behaviour was chosen. The variables described were degree of cesarean scar defect, clinical discomfort (spotting, pelvic pain) and subsequent fertility. The dehiscent scars were evaluated by ultrasound according to the remaining miometrium and divided into three groups (minor defect, major defect and uterine rupture). Surgery was indicated in case of major defect with desire of pregnancy or discomfort.
Results
Most cases were diagnosed in the last five years. For those who underwent a surgical procedure, a major defect was found in 50% of the patients in front of 20% where a minor defect was described. 5 patients were diagnosed of cesarean scar ectopic pregnancy, out of 7141 cesarean sections performed during the study period. They were treated by 2 hysterectomies, 2 local injections of metothrexate and one laparoscopic removal of ectopic tissue and defect suture. In 5 cases the ultrasound evaluation was not assessable. One patient had a complete uterine rupture during the puerperium, which required a surgical repair. No cases of scar defect during pregnancy, abnormal placentation or gestational uterine rupture were found. 5 of them had had preterm cesarean sections. Excluding ectopic pregnancies 6 patients without gestational desire underwent a hysterectomy for clinical discomfort. 18 patients seeking future pregnancies underwent surgical reparation of the defect as well as 3 patients who wanted to preserve their uterus. Concerning all patients, 66.7% had clinical discomfort. 6 pregnancies were obtained after surgical repair. Two months after the operation, an ultrasound evaluation was performed and in one case the defect was still present. This patient had reappearance of spotting and pelvic pain and requested a hysterectomy. On 77.8% of the patients the postoperative ultrasound evaluation was normal. In 4 patients who had been diagnosed of a major defect, it remained unchanged in 2 cases and became minor in the rest. Out of the remaining successful operations, all symptoms were solved ($p<0.02$). All surgical procedures were performed laparoscopically without major complications. For those who did not require a surgical management, a major defect was found in the 57.2% of the patients in front of the 42.8% where a minor defect was found. 77.3% were asymptomatic and the other patients had mild symptoms. One patient became pregnant.
Conclusions
Vaginal ultrasound and laparoscopy seem to be powerful tools to diagnose and manage cesarean scar defects.
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ES23-0076
Free Communications 13: Reproductive Medicine and Surgery

RADIOWAVE AND ARGON PLASMA OVARIAN RESECTION, ADHESIONS PREVENTION, UTERINE TUBES STIMULATION, L-ARGININE ROLE IN TREATMENT OF PATIENTS WITH COMBINATION OF PCOS AND TUBOPERITONEAL INFERTILITY

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Objectives
to evaluate theefficiency of radiowave and argon plasma ovarian surgery, use of Intercoat gelfor abdominal adhesions prevention and use of rehabilitation activities (fallopiantubes myostimulation, intake of L- arginine) in the treatment of patients with pcosand tubal-peritoneal infertility
Methods
the polycystic ovariansyndrome (pcos) and abdominal adhesions were modeled in 42 female Wistar ratsaccording to techniques of A. Ruiz's [1996] and A. S. Durmus et al. [2011]. We investigatedlaparotomical Wistar rats' radiowave ovarian resection and mechanical resectionwith argon plasma hemostasis, abdominal Intercoat gel application to preventadhesions formation and recover reproductive function. Laparoscopic radiowave ovarianresection, tuboplasty by Bruhat method,hydroperitoneum technique of abdominal adhesions prevention was used inmanagement of 30 patients with combination of pcos and tuboperitonealinfertility – the 1st clinical group. Radiowave ovarian resection, tuboplasty by Bruhat method and Intercoatadhesion barrier gel were used for laparoscopic management of 30 patients in 2ndgroup. The mechanical ovarian resection with argon plasma hemostasis, suturing tuboplasty and Intercoat applicationwas used in laparoscopic treatment of 30 patients in 3rd group. Thepost-operation rehabilitation for the 2nd and 3rdclinical groups included L-arginine intake to normalize the endotheliumfunctions and the low-frequency (12,5 Hz) myostimulation of uterine tubes viaposterior vaginal fornix.
Results
radiowave rats' ovarianresection and abdominal hydroperitoneum leaded to formation of IIIrddegree abdominal adhesions in 42,86%, the IVth degree – in 57,14%. Intercoatapplication reduced development of dense adhesions to 14,3%, IInddegree adhesions – 28,6%, Ist degree – 57,1% of species. Using nothingbut the mechanical rats' ovarian resection with argon plasma hemostasis and Intercoatleaded to only Ist degree adhesions in 85,7% of the animals andrevealed no statistically significant difference in number of rats' fetus aftersurgery. The use of Intercoat and proposed rehabilitation technique in patientsof 2nd group insignificantly increased the reproduction function recoveryto 40%, comparatively to 1stgroup – 36,7%. Using the argon plasma ovarianhemostasis and suturing tuboplasty leadedto reproduction function recovery in 56,7% – 3rd group, reduced the number of patients with subsequenttubal pregnancy to 9,1% (1st – 25,0, 2nd – 13,3%).
Conclusions
experimentally establishedthat abdominal hydroperitoneum is ineffective as a technique of the abdominal adhesionsprevention. The Intercoat application after radiowave or mechanical ovarianresection with argon plasma hemostasis prevents severe adhesions. The use of scissorsovarian resection with argon plasma hemostasis, Intercoat application, suturingtuboplasty and designed rehabilitation technique is preferable
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Best selected Posters (36) *

ES23-0059
Posters

COMBINATION OF A SIMPLE CLINICAL MANEUVER AND INTRAPERITONEAL BUPIVACAINE FOR THE REDUCTION OF POSTOPERATIVE SHOULDER PAIN IN GYNECOLOGIC LAPAROSCOPY: A RANDOMIZED, CONTROLLED TRIAL

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Objectives
This study was designed to compare the efficacy of a simple clinical maneuver using lower airway pressure (30 cm H_2O) and intraperitoneal bupivacaine, alone or in combination, to reduce shoulder pain after gynecologic laparoscopy.

Methods
287 patients were randomized to one of four groups: group A, placebo; group B, intraperitoneal instillation of bupivacaine; group C, CO_2 removal by a pulmonary recruitment maneuver consisting of five manual inflations of the lung with a maximum pressure of 30 cm H_2O ; group D, combination of intraperitoneal bupivacaine and pulmonary recruitment maneuver. The interventions were performed at the end of surgery. Shoulder pain was recorded on a visual analog scale (VAS) at 1, 6, 12, and 24 hours postoperatively.

Results
The overall incidence of shoulder pain was 49.8%, and the incidence tended to gradually decrease from group A to group D; 59.0% in group A, 54.8% in group B, 44.4% in group C, and 41.5% in group D ($P = 0.026$). In addition, the VAS scores gradually decreased from group A to D, though statistical significant difference was found only at 6 hours ($P = 0.03$). There were no complications related to the interventions.

Conclusions
Combination of simple clinical maneuver with intraperitoneal bupivacaine significantly reduced shoulder pain after gynecologic laparoscopy
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ES23-0258
Posters

LAPAROTOMIC REPAIR OF UTERINE SCAR DEHISCENCE AFTER CORPOREAL CESAREAN SECTION FOR ABNORMALLY INVASIVE PLACENTA (AIP)

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Objectives

Introduction:
During the past few decades, there has been a significant increase in the number of cesarean deliveries, and thus an increase in the number of complications. Placenta praevia, abnormally

invasive placenta (AIP) or placenta accreta and uterine dehiscence are one of the most serious complications of cicatricial uterine for the follow pregnancy.

Methods

Case report:
We present a case of a patient that developed these three majors complications. The patient was 28-year-old, gravida 4 para 3 with a history of three cesarean delivery, when she developed a placenta praevia percreta diagnosed early in the second trimester by ultrasound and magnetic resonance imaging techniques during her fourth pregnancy. Unfortunately, secondary of important bleeding at 17 weeks of gestation, we offered medical pregnancy interruption. After fetocide, a fundal corporeal cesarean section at distance to placenta allows extraction of the fetus. Diagnoses of a severe placenta percreta was made per-operatively. A conservative approach leaving the placenta in situ was decided. The patient had regular follow-up by ultrasound, laboratory control and MRI. We observed a regression and after 12 month's a disparition of the necrotic placenta, followed by an atrophic scar and at the end a dehiscence of the cesarean scar. After 2 years, the patient wanted another pregnancy, the myometrial defect was operated by laparotomy, including excision of fibrotic tissue and closure of the anterior uterine wall. The patient became pregnant by IVF (indication tubal ligation) two years after the surgery. At the end of a dangerous but normal pregnancy, we realized a fifth cesarean section at 36 weeks of gestation. Normal newborn and maternal outcome.

Results

Discussion:
Our experience indicates that conservative method can be considered as an option in the management of placenta praevia percreta for the patients who want to conserve their fertility. Others teams realized laparoscopic and robotic repair of post-cesarean section uterine scar defect.

Conclusions

Conclusions:
Evaluation of placenta praevia percreta and uterine scar dehiscence after cesarean section can be performed by ultrasound and magnetic resonance imaging. Further studies are needed to develop the most appropriate management option for the most severe cases of abnormal placenta and cesarean dehiscence. Surgical repair may be performed with good postoperative anatomic outcomes.

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ES23-0385
Posters

IMPACT OF SEPTUM MORPHOLOGY ON ADVERSE REPRODUCTIVE OUTCOMES: AN OBSERVATIONAL STUDY OF 180 SEPTATE UTERI EVALUATED WITH 3D TRANSVAGINAL ULTRASOUND

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Objectives

The aim of the study was to correlate 3D transvaginal sonography (3D TVS) morphology (width and length) of uterine septum with adverse reproductive outcomes to improve the counseling with women who experience reproductive failure.

Methods
180 patients who performed a 3D TVS with diagnosis of septate uterus were retrospectively evaluated. Classification criteria were according to the modified American Fertility Society classification proposed by Salim (2003) and confirmed by ESHRE/ESGE classification (2013). On 3D TVS coronal view of the uterus, septal length (L) and width (W) were measured. Recorded reproductive history was evaluated considering: infertility (inability to conceive after 12 months contraceptive-free intercourses), miscarriage (pregnancy loss before 20-22 weeks of gestations), recurrent miscarriages (2 or more miscarriages), premature (before 36 weeks of gestation) and term deliveries. Complete septate uterus was diagnosed when the septum goes down to the level of the internal cervical os, otherwise it was considered as partial septate uterus.

Results
Of the 180 septate uteri 51 were complete (group A) and 129 partial (group B). Patients in group A were significantly younger than patients in group B (31,9±5,3 vs 34,7±6,6 years; p=0.006). The percentage of women with at least one miscarriage was significantly higher (p=0.04) in group B (45.8%) than group A (26,7%) while no difference was observed in other reproductive outcome and infertility. Septa were small and long in infertile women and large and short in women with spontaneous miscarriages in both groups. In particular, infertile women in group A had septa smaller (W: 27.5±8.7mm vs W: 31.8 ±7.2mm; p=0.02) and in group B longer (L: 39.0±8.7mm vs L: 32.4±6.8mm; p= 0.04) than the ones who experienced at least one miscarriage. Preterm deliveries in group B were higher with L≤10 mm (16,7% vs 5,7%; p<0.05).

Conclusions
Complete and partial uterine septa showed both normal and abnormal reproductive outcomes. The 3D TVS morphology of partial uterine septa suggests that pathogenesis of infertility and miscarriages in those patients could be also correlated to septal form and myometrial tissue component. This knowledge can improve the counseling with patients on whether to recommend the metroplasty or not.
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ES23-0181
Posters
HYSTEROSCOPIC MANAGEMENT IN SUBMUCOUS FIBROIDS TO IMPROVE FERTILITY, BLEDDING AND PELVIC PAIN
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Objectives

To evaluate retrospectively the reproductive performance and symtomatic improvement following hysteroscopic myomectomy in women with submucous fibroids.

Methods
We report a retrospective review (Canadian Task Force classification III) of 30 women with a previously diagnosed symptomatic submucous fibroid treated by hysteroscopic myomectomy. 7 women suffered from primary infertility and 5 women had previous pregnancies with a poor obstetric outcome. 16 cases referred pelvic pressure and 4 patients heavy menstrual bleeding. The myomas were intracavitary class 0 (n = 9, 30%) and intramural class 1 (n = 18, 60%).

Results
Mean age was 41,07 SD 6,4 years. Mean body mass index was 24,7 SD 2,9 (range 19-29 kg/m2). 34 myomas were removed by hysteroscopy. Mean size of the myomas was 21,6 SD 8,5 mm (range 10-51). Mean myoma volume was 5,56 SD 10,6 cm3. Mean operating time was 29,14 SD 15,3 (range 10-66 minutes). Mean blood loss was 218,71 SD 188,6 ml (range 0-780 ml). Mean number of myomas removed/patient was 1.13 SD 0,4 (range 1-3 myomas); 3 patients (10%) had multiple myomectomy. No complication was reported during myomectomy, and the mean hospital stay was shorter than a day.
Our results reported after myomectomy were: 4 women (57,1%) experienced pregnancies, where 50% of deliveries were vaginal. The 100% of patients with pelvic pain reported to be asymptomatic, and 75% of patients with bleeding improved clinically.

Conclusions
This retrospective study demonstrates that hysteroscopic myomectomy at present is the method of choice to improve reproductive outcome as well as the symptomatic improvement in women with submucous fibroids.
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ES23-0040
Posters
A NEW EXCISION PROCEDURE FOR LOW AND MID RECTAL ENDOMETRIOSIS NODULES USING COMBINED TRANSANAL AND LAPAROSCOPIC APPROACH: THE ROUEN TECHNIQUE
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Objectives
Performing systematic colorectal resection in women with deep endometriosis involving the low- and mid-rectum may lead to less favorable digestive functional outcomes than use of conservative procedures, as patients may continue to experience unpleasant digestive symptoms related to rectal removal.

To minimize postoperative functional morbidity, we introduced a new technique combining deep rectal shaving and transanal disc excision. We report preliminary results of our original procedure, in terms of quality of rectal function.

Methods
We report a prospective series of 12 patients with mid- and low-rectal endometriosis having undergone the combined laparoscopic and transanal excision of rectal nodules using the Contour Transtar stapler. The procedure was performed by combined laparoscopic and transanal route, and

required a multidisciplinary team involving a gynecologist and a general surgeon. The laparoscopic step was performed by deep shaving of the rectal area infiltrated by the nodule, aiming to render it soft and thin. Then, the general surgeon seized the shaved area into the stapler jaws and carried out a large disc excision. The quality of the rectal suture was checked by both laparoscopic and transanal route. To assess the outcomes, we used intra- and post-operative data, and standardized gastro-intestinal questionnaires.

Results
The largest diameter of specimens varied from 40 to 80 mm (55±11 mm). Postoperative follow-up varied from 6 to 43 months. Patients estimated their digestive function as good and very good in 10 cases out of 12, and these estimations were confirmed using standardized gastrointestinal questionnaires. Median postoperative value for the Gastrointestinal Quality of Life Index and the Knowles-Eccersley-Scott-Symptom Questionnaire was 114±15 (range 90-137) and 8±7 (range 1-20) respectively, corresponding to a very satisfactory rectal function. One rectovaginal fistula was recorded in a patient undergoing large vaginal resection and colostoma, she subsequently underwent new surgical procedure with efficient reparation of the fistulae and favorable outcome.

Conclusions
Our data suggest that our new technique of transanal rectal disc excision using the contour stapler may be applied in patients with infiltrating endometrial nodules of the rectum up to 10 cm from the anal margin and up to 5 cm in diameter, thus it specifically avoids unfavorable outcomes related to low colorectal resection.
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ES23-0003
Posters

CLINICAL STUDY ON NOVASURE IMPEDANCE CONTROLLED ENDOMETRIAL ABLATION SYSTEM IN THE TREATMENT OF PATIENTS WITH ABNORMAL UTERINE BLEEDING AND LIVER DISEASES

Objectives
Discuss the efficacy of Novasure Impedance Controlled Endometrial Ablation System (hereinafter referred to as Novasure) in the treatment of patients with abnormal uterine bleeding and liver diseases. Methods: 37 cases of patients, consisting of 14 cases in the cirrhosis group, 11 cases in the chronic hepatitis group and 12 cases in the non-liver disease group, from the Obstetrics & Gynaecology Centre of the People's Liberation Army 302 Hospital who received Novasure endometrial ablation procedure from August 2012 to August 2013 were enrolled. Patient information including preoperative assay results of blood, fibrinogen and cholinesterase, work efficiency and work-time of the surgery, intra-operative blood loss and postoperative therapy results were recorded. Results: There were no differences between the chronic hepatitis group and the chronic hepatitis group or the non-liver disease group in surgery time, work efficiency, blood loss and cure rate. Conclusions: Novasure is a safe and effective therapy method in the treatment of patients with liver diseases and abnormal uterine bleeding.

Methods
Grouping: The patients were grouped in accordance with their liver status. 1) Non-liver disease group: 12 uterine bleeding patients who also suffer from other diseases instead of liver diseases (1 case of postoperative breast cancer, 2 cases of syphilis, 1 case of hypersplenism complicated with hypertension and 2 cases of cerebral infarction and hypertension). 2) Chronic hepatitis group: 11

uterine bleeding patients complicated with chronic hepatitis (9 cases of hepatitis B, 1 case of hepatitis C and 1 case of drug-induced hepatitis); 3) Cirrhosis group: 14 uterine bleeding patients with cirrhosis (7 cases of compensated cirrhosis and 7 cases of decompensated cirrhosis).

Results

Efficacy Results. All 37 patients had less menstruation or amenorrhea in 6 months of follow-ups except that 2 patients in the chronic hepatitis group had a small amount of menstrual blood dripping and got improved after traditional Chinese medicine therapy. The treatment efficacies were 100% in these 3 groups.

Conclusions

In conclusion, Novasure endometrial ablation procedure is effective in the treatment of uterine bleeding. This procedure requires merely a short period and is easy to complete. It is effective not only to ordinary patients but also to chronic hepatitis patients and cirrhosis patients. Even for decompensated cirrhosis patients, this procedure is still effective and there is no statistical difference between these patients and the rest. Repeated postoperative bleeding due to coagulation disorders and severe anemia in cirrhosis patients was not observed in postoperative follow-up. Hence, Novasure endometrial ablation procedure is an excellent choice for the treatment of liver disease patients who are also suffering from abnormal uterine bleeding.
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ES23-0254

Posters

TWELVE CASES OF UNEXPECTED OVARIAN MALIGNANCY AFTER LAPAROSCOPIC SURGERY

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Objectives

The aim of this study was to analyze and describe cases of unexpected ovarian malignancy after laparoscopic surgery for an ovarian tumor at our hospital.

Methods

This retrospective study was performed by collecting data from records of patients who underwent laparoscopic surgery for ovarian tumor not suspicious for malignancy preoperatively at Japan Red Cross Kumamoto Hospital between October 1999 and April 2014. Ultrasonography and MRI imaging were routinely applied for patients with ovarian tumor. At laparoscopy, any solid component or papilla was sent for rapid frozen section. The rate of unexpected malignancy, histopathological type of the ovarian neoplasm and follow-up after surgery were reviewed.

Results

1,153 patients underwent laparoscopic surgery. Of these, twelve (1.0%) had ovarian malignancy after reviewing histopathological reports postoperatively. The histopathological diagnosis was serous borderline tumor in five patients, mucinous borderline tumor in two patients, clear cell adenocarcinoma, immature teratoma, mixed germ cell tumor, mature cystic teratoma with thyroid carcinoma, mixed epithelial cystadenoma of borderline malignancy in the other five patients. Reviewing records of those with unexpected malignancy revealed suspicious findings such as wall thickness in three out of twelve cases. Neither additional laparotomy nor chemotherapy followed for six cases, the others were treated by additional laparotomy and/or chemotherapy. Eleven patients are alive after 2-116 months follow-up, and one died of cancer after 9 months of first treatment.

Conclusions

The rate of unexpected malignancy is low enough to enjoy the benefits of laparoscopic surgery for most of patients with ovarian tumors. The rate could be minimized with careful patient selection

preoperatively. Adequate training on laparoscopic oncology is prerequisite for laparoscopic treatment of ovarian tumors.
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ES23-0260
Posters
RUPTURED UTERUS IN A PATIENT WITH A BICORNUATE UTERUS.
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Objectives
Introduction:
Mullerian anomalies concern about 3 to 4 % of the female population. Pregnancy in such patients can be hindered by adverse obstetrical outcomes such as miscarriages, preterm labor or ruptured uterus.

Methods
Case report:
We report the case of a 26 year-old woman, 254/7 weeks pregnant woman (Gravida 3 Para 2) that presented to our labor and delivery room for acute abdominal pain. Her first pregnancy was marked by an Intra-Uterine Fetal Demise (IUFD) at 394/7 weeks and her second by a cesarean section (C/S) at 37 weeks for a breech presentation. She was known to have a bicornuate uterus (blind left uterus) because of an ultrasound and a subsequent MRI prescribed for post-partum secondary amenorrhea. Both previous pregnancies were located in the right uterus.

Her third pregnancy was located in the left uterus and the follow-up was unremarkable (unless unspecific abdominal pain) until admission. At physical exam, the patient was pale, tachycardiac and had low blood pressure (70/30 mmHg). Abdominal palpation revealed a diffused tender abdomen and vaginal examination could find no cervical dilatation. Emergency ultrasound performed revealed a fetus presenting a severe bradycardia and a placenta abruption was suspected. The patient was transferred in the operating room for an emergency C/S under general anesthesia. Intra-operative findings assessed an abundant hemoperitoneum, an intra-abdominal fetus and a left ruptured hemi-uterus. Because of the severity of the fundus tear, a hemi-hysterectomy was performed. Post-operative follow-up was unremarkable.

Results
Discussion:
Mullerian duct anomalies concern 3 to 4 % of the population, are usually asymptomatic and unrecognized at birth. They are the consequence of a default in the embryogenesis of the female tract and are categorized by the American Society of Reproductive Medicine according to the major uterine anatomic defect. Ovarian function is usually normal as their development is not dependent on the Mullerian ducts. Symptoms, when present, can consist in dysmenorrhea and recurrent miscarriages. Surgery such as hysteroscopic resection can be considered in some cases to improve fertility.

Uterine ruptures, with 5% of maternal mortality and 64% of fetal demise, constitute obstetrical emergencies. They are usually seen in scarred uterus or in multiparous patients, often during labor. In bicornuate uterus, rupture may occur because of the impossibility of the small uterus to expand.

Conclusions
Conclusion:

In case of pregnancy in a bicornuate uterus, patients should be considered at high risk of adverse obstetrical outcome. They should therefore receive proper obstetrical follow-up and counseling. Attention should be drawn to those patients with recurrent abdominal pain. In some selected cases, surgery can be considered.

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ES23-0230
Posters

LAPAROSCOPIC APPROACH TO DIAGNOSE IMMUNOLOGIC IMPACT ON INFERTILITY IN WOMEN EXPOSED TO CHLAMYDIAL INFECTION

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Objectives
Chlamydia trachomatis is one of the primary causes for Pelvic inflammatory disease with minimal symptoms and subsequent tubal infertility The present prospective case control study was designed to detect changes of the immune response in women exposed to chlamydial infection and correlate them to changes in immune status and tubal pathology found at laparoscopy.
Methods
All 67 patients were examined for the presence of serum specific IgG chlamydial antibodies. Women in Group 1 (n= 23) had tubal obstruction but no serum chlamydial IgG antibodies. Group 2 (n=30) had tubal pathology and presence of Chlamydial antibodies The control Group 3 (n=14) had no tubal pathology at laparoscopy and were negative for Chlamydia IgG antibodies All the patients had no evidence of active chlamydial infection with negative endocervical PCR test. T and B lymphocytes and IgG, IgM, IgA ceruloplasmin and alpha-2 macroglobulin were examined in serum. Peritoneal washings were examined for inflammatory cells as well as for Ig G IgA IgM
Results

The patients with laparocsopically proven tubal pathology (group 1 and 2) compared to the control group 3 had a diminished trend in the number of T-lymphocytes but the number of the B-lymphocytes was increased There were no significant changes in the levels of IgG, IgM, ceruloplasmin and alpha-2 macroglobulin in the sera and peritonel washings in all three groups The values of IgA in the peritoneal washings in patients with chlamydial infection (group 2) were higher compared to the patients with tubal pathology (group 1). Cytological changes in the imflammatory cells (lymphocytes, macrophages, plasma cells) in peritoneal fluid were present more frequently in women with tubal pathology, although there was no difference between group 1 and group 2.

Conclusions
Laparoscopy is the gold standard for diagnosing tubal pathology The increase of the B-lymphocytes could be described as a compensatory mechanism in women with tubal pathology whose cell-mediated immunity might be compromised
The results show that the changes in the cellular and humoral immunity are not always parallel. Studies on the changes of immune response are valuable at initial evaluation laparoscopy to adjust therapeutic strategy in infertile women to avoid failures in subsequent tubal surgery or deteriorate the outcome of the later ivf procedures
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ES23-0406

Posters

COMBINING LAPAROSCOPIC VENTRAL MESH RECTOPEXY & SACRO-HYSTERO/COLPOPEXY IN TREATMENT OF PROLAPSE AND OBSTRUCTED DEFECATION

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Objectives
Laparoscopic surgery for genital and rectal prolapse is well established. More recently, the indications for performing laparoscopic ventral mesh rectopexy has expanded to include selected cases of obstructed defecation. The idea of combining the above operations to restore structure and function at the same time for all pelvic organs is interesting. We present our experience in combining laparoscopic sacro- hysteropexy/colpopexy and ventral mesh rectopexy.

Methods
We retrospectively reviewed the notes of 16 patients who have had this procedure performed. Pre and post-operative data was available from 13 patients. Type one polypropylene mesh was used to support genital organs while biological mesh was used to support the rectum. Patients were assessed objectively using POP-Q system and subjectively using electronic pelvic assessment questionnaire (ePAQ) pre operatively, at 3 months and 6 months post operatively.

Results
Average BMI =26. 5 patients underwent a hysteropexy and 8 patients had a sacrocolpopexy. All patients had ventral mesh rectopexy. In all 16 patients, the combined procedures was completed laparoscopically. There were no intra-operative complications. For the 13 patients with available pre and post operative data, all had an improvement in middle compartment vaginal prolapse (no patient had more than stage 1 apical prolapse on follow up). There was no recurrence of rectal prolapse. No intraoperative complications were recorded. Average hospital stay was 2.5 days (range 1.5-7 days). There were 2 readmissions to hospital (one for diarrhoea and vomiting and one for repair of port site hernia). 5 patients continued to suffer with slow transit constipation after the procedure, but there were no patients with obstructed defecation. One patient developed de novo stress incontinence and one patient developed faecal incontinence. A summary table of symptom scores will be presented.

Conclusions
Laparoscopic Ventral Rectopexy combined with Hysteropexy/Sacrocolpopexy is a safe procedure. All patients had improvement in their presenting symptoms.

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ES23-0323
Posters

EFFICACY OF ESSURE HYSTEROSCOPIC STERILISATION

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Objectives
Essure is a female transcervical sterilization procedure. 3 months after the procedure a confirmation test is performed to evaluate microinsert location or tubal occlusion. During this period the tubal lumen is occluded by benign tissue ingrowth stimulated by the microinsert. More than 50 procedures are performed in University Medical Centre Maribor every year. The objective of our study was to evaluate efficacy of the procedure.

Methods
100 consecutive patients were included in a prospective study. All procedures were performed between August 2012 and January 2014 by the same experienced hysteroscopist in an outpatient setting. 3 months after the procedure transvaginal 2D ultrasound was performed to asses the microinsert position, which was defined as correct, indeterminate or incorrect. In cases with indeterminate or incorrect microinsert position, tubal patency test was performed. Hysterosalpingo Foam Sonography (HyFoSy) was performed in the same setting in 7 cases with indeterminate and in 1 case with incorrect microinsert position. Hysterosalpingography (HSG) was performed in 2 cases with indeterminate microinsert position.

Results
100 patients with 198 Fallopian tubes were included. In 4 patients sterilisation wasn't attempted due to pain or technical difficulties at hysteroscopy. Essure microinsert was successfully placed in 190 Fallopian tubes in 96 patients (96,0%). Transvaginal ultrasound demonstrated a correct placement of 180 microinserts (180/190, 94,7%). Tubal occlusion was confirmed in 8 of 9 cases with indeterminate microinsert position and in 1 case with incorrect microinsert position. No complications were reported during HyFoSy or HSG. In a patient with patent Fallopian tube laparoscopy was performed due to suspicion of microinsert migration; migration was not confirmed and laparoscopic salpingectomy was performed. Almost all patients (95/96, 99,0%) could rely on Essure for pregnancy prevention.

Conclusions
Essure is a method for permanent female contraception that has a very high rate of success, is well tolerated and has a low rate of complications. In cases of indeterminate or incorrect position of microinserts on transvaginal ultrasound, HyFoSy could be an alternative to HSG.
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ES23-0191
Posters

LAPAROENDOSCOPIC SINGLE-SITE SURGEY OF SALPINGECTOMY FOR ECTOPIC PREGNANCY COMPARISON WITH MULTI-PORT SURGERY

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Objectives
The aim of this study is to compare surgical outcomes of laparoendoscopic single-site surgery of salpingectomy with conventional multi-port laparoscopic salpingectomy for ectopic pregnancy.
Methods

his is retrospective single-center study comparing surgical outcomes of laparoendoscopic (LESS) salpingectomy with conventional multi-port laparoscopic salpingectomy (MPLS) for tubal pregnancy. LESS was introduced into our hospital in November 2011. From May 2009 to October 2011, there were 20 cases of multi-port laparoscopic salpingectomy (MPLS group), and we had 12 cases of LESS salpingectomy after November 2011 (LESS group). Surgical outcomes include operative time, postoperative hemoglobin drop, hospital stay and complications.

Results
There was no significant between the two groups in terms of mean operative time (LESS: 75.0±28.0 min vs MPLS: 74.0±14.7 min; p=0.857), mean hemoglobin drop from pre- to postoperation (1.3±0.9 g/dl vs 1.3±0.7 g/dl; p=0.871), but postoperative hospital stay of LESS group was shorter in MPLS group (7.4±1.8 days vs 5.2±1.3 days; p<0.001). No perioperative complication was observed in both groups and there was no case switched to laparotomy.

Conclusions

LESS appears to be feasible for surgical treatment of tubal pregnancy in terms of efficacy and safety, but doesn't offer any advantages comparing with MPLS. Larger studies are necessary for conclusion.
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ES23-0088
Posters

LAPAROSCOPIC EXCISION OF VAGINAL FORNIX ENDOMETRIOSIS WITH SUDDEN ONSET OF MASSIVE GENITAL BLEEDING DURING CRYOPRESERVED-THAWED EMBRYO TRANSFER IN A HORMONE REPLACEMENT CYCLE. A CASE REPORT.
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Objectives
Infertility is one of the symptoms in approximately one-quarter of women with endometriosis. Deep infiltrating endometriosis (DIE) is one of the clinical presentations of endometriosis and some of the patients with DIE suffer from associated infertility. We report the case of a 30-year-old, gravida 0, para 0 woman who presented to the emergency department with the sudden onset of massive genital bleeding.
Methods
A case report.
Results
She had a 2 year history of primary infertility and she had IVF treatment for the first time at another clinic. The transfer of frozen-thawed embryo was scheduled to be performed in a hormone replacement cycle, and the patient was given an estrogen preparation. One week after she started an estrogen preparation, she presented with abnormal vaginal bleeding. On vaginal speculum examination, hemorrhagic nodule was visible in the posterior vaginal fornix. A biopsy at the posterior fornix was performed and histopathology demonstrated endometriosis. An estrogen preparation was canceled and she started GnRH agonist for 3 months. As hemorrhagic nodule disappeared, she restarted infertility treatment. The first cryopreserved-thawed embryo transfer in a hormone replacement cycle was performed without any trouble, but she did not conceive. During her second hormone replacement cycle, she presented with sudden onset of heavy vaginal bleeding and hemoglobin level was 7.0 g/dL. It was found to be impossible to continue infertility treatment without resection of posterior vaginal fornix endometriosis. Laparoscopic approach was undertaken.

The anterior rectum was separated from the posterior vaginal wall. The posterior vaginal fornix was opened by vaginal access. All the recognizable endometriotic nodule in the posterior vaginal fornix and uterosacral ligament was excised by laparoscopy and subsequently closed by both laparoscopic and vaginal access. The patient was discharged on postoperative day 4 without any complications. After the operation, the patient was treated with GnRH agonist for another 2 months. 2 Months after the final GnRH agonist treatment, menstruation restarted and the patient did not show any recurrence of vaginal fornix endometriosis. The patient restarted the hormone replacement cycle, but she doesn't present with abnormal vaginal bleeding for now. This patient was asymptomatic before starting infertility treatment, and posterior vaginal fornix endometriosis was found incidentally in this case.
Conclusions
The cause of heavy vaginal bleeding was probably due to breakthrough bleeding with hormone replacement therapy, and maybe it was impossible to continue infertility treatment after conservative therapy (GnRH agonist etc.). Despite the dissection of the rectovaginal space laparoscopically is technically demanding, especially when the uterus is to be preserved, laparoscopic excision of posterior vaginal fornix endometriosis should be considered before IVF treatment.
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ES23-0241
Posters

LAPAROSCOPIC-ASSISTED UTEROVAGINAL ANASTOMOSIS IN CONGENITAL UTERINE CERVIX APLASIA AND UPPER VAGINAL ATRESIA: A CASE REPORT
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Objectives
Congenital aplasia of the uterine cervix accompanied by functional endometrium is a rare müllerian anomaly. Patients with this anomaly are usually suffered hematometra and cyclic abdominal pain. The management of this anomaly have not been established. Abdominal hysterectomy has been often recommended for the patients with this anomaly to improve abdominal pain. However, fertility preserving surgery seems feasible and could provide better QOL for the patients. We performed a conservative operation, uterovaginal anastomosis, combined laparoscopic and vaginal approach for this anomaly.

Methods
This is a case report. The patient visited our hospital, when she was 16 years old, because of primary amenorrhea and cyclic lower abdominal pain. MRI (magnetic resonance imaging) showed no hematometra. Her pain was controllable by pain killers and thence, she had not undergone any operation at this time. Seven years later, she visited us again because of severe abdominal pain, and desired operation for the anomaly. Pelvic examination revealed that the vagina was blind-ended. We checked MRI again with gauge packing in vagina for making vaginal atresia clear.

Results
MRI showed aplasia of uterine cervix, upper vaginal atresia, and therefore, absence of communication between cervix and vagina. Uterine corpus looked originally normal but mildly swelling with evidence of adenomyosis and mild hematometra.

We performed the operation for attempting of uterovaginal canalization to improve cyclic abdominal pain and to avoid the progress of adenomyosis. We performed laparoscopy and observed the abdominopelvic cavity. It showed uterine body swelling, evidence of endometriosis on the surface of ovaries, bloody ascites and aplasia of uterine cervix. We couldn't recognize the visible external os and cervical canal with vaginal approach. Then, under the laparoscopy, we made a small incision on the uterine fundal wall, and inserted forceps into uterine cavity as a recognizable marker from vaginal approach. It enabled us to make uterovaginal canal in the appropriate position. After the operation, she started to have vaginal blood flow and the abdominal pain was improved.

Conclusions
We performed safe and effective uterovaginal anastomosis by combining laparoscopic and vaginal approach for the patient with cervicovaginal atresia. This approach may be considered as a choice of treatment for this anomaly.
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ES23-0113
Posters

SUBJECTIVE VALIDATION OF THE COMPONENTS OF A LAPAROSCOPIC TRAINING PROGRAM FOR GYNAECOLOGISTS
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Objectives
Our objective was to obtain an evaluation of the didactic elements included in the laparoscopic training courses designed by our centre
Methods
Twenty-one novice gynaecologists were included in this study. They attended an intensive course consisting of a short theoretical session (1 hour) and a 20-hour hands-on session. The latter included a progressive basic skills training on a physical simulator (7 hours), and several in vivo laparoscopic techniques (tubal ligation, ovariectomy, myomectomy, etc.) on animal model (13 hours). After the course, attendants evaluated the training program and the usefulness of its components by completing a questionnaire scored on a 5-point Likert scale.
Results
Course length was considered as very adequate (highly satisfactory), with an average score of 4.24 ± 0.77. Usefulness of the suturing task on simulator for skills acquisition obtained the highest score (4.95 ± 0.22). The animal model obtained better scores than the physical simulator for both learning new techniques (4.81 ± 0.4 vs 4.05 ± 0.86) and skills maintenance (4.76 ± 0.54 vs 3.95 ± 0.97). Regarding skills assessment, expert evaluation was considered more useful than virtual reality simulators assessment (4.33 ± 0.66 vs. 3.24 ± 0.94)
Conclusions
A very positive subjective evaluation of the training program elements was obtained. Animal model training was rated as the more useful component for skills acquisition, considering its practice very necessary before clinical application of laparoscopic surgery
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ES23-0373
Posters

LAPAROSCOPIC OSADA TECHNIQUE FOR ADENOMYOMECTOMY
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Objectives
To demonstrate a laparoscopic interpretation of the 'Osada' technique, reported by Prof H Osada et al in Reproductive BioMedicine online, Sept 2010. This open approach was proposed as a uterine preserving surgery for women with adenomyosis. We will demonstrate how it can also be applied at laparoscopic adenomyomectomy.

Methods
The patient had a history of multiple second trimester losses and a large 10x10cm adenomyoma in the anterior uterine wall confirmed by MRI imaging. After port placement, the uterine arteries were first temporarily ligated, just distal to their origin. Infiltration of the adenomyoma with Vasopressin solution was performed prior to marking the proposed incision site with bipolar energy. After radical excision of the adenomyoma (leaving a 1cm margin of tissue above the endometrium and a 1cm margin of tissue below the serosal surface) the defect was subsequently reconstructed with a triple-flap approach.
Results
The surgery and initial post-operative course were uncomplicated. This is an effective technique for women with a clear diagnosis of adenomyoma who which to retain their uterus for fertility reasons. Closure of the large uterine defect following laparosopic adenomyomectomy using this triple flap approach creates a robust and neat closure.
Conclusions
Laparoscopic excision of a focal adenomyoma is feasible, and the repair of the uterine defect may be effectively undertaken using this, previously reported, open approach, at laparoscopy.
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ES23-0395
Posters

PRESET AND THE ACTUAL PRESSURE IN THE UTERUS. HOW ACCURATE ARE OUR HYSTEROPUMPS?
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Objectives
Maintaining pressure at the minimum level that ensures adequate visualization of the uterine cavity, is the basic property of hysteropump. In turn, the accuracy of matching the actual parameters to the preset, provides good tolerance during office hysteroscopy (the minimum pressure of 40-50 mm Hg) and safety during resectoscopy (pressure greater than 80 mm Hg). We have studied the correspondence of the preset to real pressure at 2 models hysteropumps (A, B), 2 models of hysteroscope (a, b) (external diameter (ED)3.5 mm and 6 mm) and 1 resectoscope (c) (9 mm ED) .
Methods
Hysteropumps have roller pump and had their own system for monitoring parameters of the fluid. Tests were conducted on the cavity volume of 95 ml, which had a pressure sensor and was connected to the computer to check the parameters in numerical and graphical form. The flow rate was set at 500 ml min. The results obtained are compared with the preset data.

Results
Hysteropump A. At a predetermined pressure of 50 (mmHg), the actual pressure in the cavity for different models of hysteroscopes were (d3, 5 mm) = 41 mm Hg (-9), B (d6 mm) = 20 mm Hg (-30) To (d9 mm) = 64 mm Hg (+14). At a predetermined pressure 70 mm Hg, the real pressure was a = 47 (-23), b = 25 (-45), c = 93 (+23) . At a predetermined pressure 100 (mm Hg), and the real pressure was (3.5) = 60 (-40), S (6) = 38 (-62) to (9) = 117 (32). At a predetermined pressure 140 (mm Hg), and the real pressure was a = 62 (-58), b = 50 (-90), c = 120 (20). Hysteropump B. For a given pressure of 50 (mm Hg), the real pressure was a = 38 mm Hg (-9), b = 40 mm Hg (-10), c = 60 mm Hg (+10). At a predetermined pressure of 70 (mmHg), the real pressure was a = 50 (-20), b = 55 (-15), c = 85 (+15) . At a predetermined pressure of 100 (mm Hg), the real pressure was a = 82 (-18), b = 90 (-10), c = 120 (+20) . At a predetermined pressure of 140 (mm Hg), the real pressure was a = 98 (-42), b = 122 (-18), c = 160 (+20) .
Conclusions
Real pressure differs from predetermined in the studied hysteropumps. The difference ranged from -90 to + 32 mm. Hg. due to the settings and algorithm to maintain a given pressure on certain models of hysteropumps, and internal design of particular hysteroscopes. This results indicate the need to develop universal algorithms for manual or automatic compensation of the difference in preset and actual pressure while maintaining a predetermined pressure within the cavity.
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ES23-0290
Posters

A STUDY INTO QUALITY OF DOCUMENTATION IN ELECTIVE LAPAROSCOPIC GYNAECOLOGY PROCEDURES IN A DISTRICT GENERAL HOSPITAL IN WALES.
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Objectives

It has been identified that documentation of laparoscopic procedures in a District General Hospital (DGH) is poor even when a template is provided. Accurate documentation in the medical profession is increasingly important as more emphasis is put on clinical governance and litigation becomes more common.

A study of operative notes of elective laparoscopic procedures was carried out to assess the quality of documentation. Data was collected from a DGH that has an operation note template for laparoscopic procedures based on Royal College of Obstetricians and Gynaecologists (RCOG) guidance. It is suggested in the DGH that this be used as a basis for all elective laparoscopic gynaecological procedures. This study aimed to assess if the template was used, and if all elements of an operation were recorded.

Methods
A list of operations was obtained by finding all elective laparoscopic gynaecological procedures undertaken by consultants over a six month period. All our notes are electronic. A total of 37 case notes were analysed. Collection of data was based on the operation note template that is used in the department. This template is based on guidance from the RCOG. Collection of results was divided into categories. These included incisions, findings, entry/procedure and exit/closure. These categories were then further subdivided. Data was collected and recorded purely based on if a

comment had been made in each category, rather than assessing the exact content of this information.
Results

Operation details about the type of incisions, entry details and exit details were largely well documented. Exceptions to this included; number of attempts of Verres needle insertion (43%), head down and pressure decreased to 15mmHg (41%), rectus sheath closure (41%) and local infiltration (68%). A comment was made about operative findings in relation to uterus, fallopian tubes and ovaries in most cases (>89%). However, documentation regarding findings of other structures in the pelvis was poor (<57%).

Conclusions

This study has shown that documentation of operative technique and findings in laparoscopy is often poorly done. Without good documentation, there is no clear record of what has been found. This can have an impact on future management and operative decisions. In addition to enhancing patient care, complaints and litigation are increasing more prevalent within medicine. Without good documentation, defense in these situations is very difficult. This study shows how there can be poor documentation even when an operation note template is provided for clinicians to use. Documentation could be improved by assessing trainee's documentation in work based assessments. Clinical governance could more strongly emphasise the need for careful documentation at laparoscopy and agree on a template that is incorporated onto computer theatre systems.
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ES23-0095
Posters

PREVENTING TUBAL SPASM DURING ESSURE PROCEDURE
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Objectives
Essure is a method of vaginal sterilisation. 5% of patients experience tubal spasm that can lead to procedure failure and perforation. Use of NSAIDs orally 1hr prior to procedure is recomended as prevention. Our aim was to compare 150 mg of ketoprophenum vs. 5 mg trospium choride, as trospium chloride intravenously is suggested to resolve prolonged tubal spasm.
Methods

We included 82 patients in double-blinded study. All recieved 2 mg of diazepam and randomly 150mg ketoprophenum or 5 mg trospium chloride orally 1 hr prior to procedure. We defined tubal spasm as inability to pass implants through tubal ostium after more than 30 seconds of gentle pressure. Patients were asked to evaluate pain during procedure using visual analogue scale (VAS). Success was evaluated 3 months after using ultrasound or hysterosalpingography in complicated cases.

During the study a surprising finding occured, as one patient after 8 minutes of persistant spasm performed emotional freedom therapy (EFT), after which spasm resolved in 20 seconds. EFT is a form of psychological accupressure. While gently tapping with fingerpoints on certain points of the body, person identifies the problem and verbally transforms negative feelings into positive. Since discovering this technique, we have asked patients with tubal spasm to use it.

Results

From 82 patients, 39 recieved trospium chloride and 40 ketoprophenum, 3 refused any medication.

In trospium chloride group, 29/39 (82%) patients had uneventful successful procedure, avg. VAS was 3,4. 7/39 (18%) had tubal spasm, avg. duration of spasm was 235 seconds, avg VAS 4,3. In 3 procedures with tubal spasm we asked patients to perform EFT. 2(5%) were unsuccessful, one due to tubal spasm before learning about EFT, one despite using EFT which on laparoscopy afterwards turned out to be due to chronic salpingitis.

In ketoprophenum group (40 patients), 2 were excluded due to pathological findings during hysteroscopy. 28/38 remaining patients (76%) had a successful uneventful procedure with avg. VAS 2,7. 9/38 (23%) had tubal spasm, avg. duration of spasm was 115 seconds, avg. VAS 4,5. 3(7,8%) procedures were unsuccessful, 2 due to spasm and one due to perforation, all before starting to use EFT.

3 patients with no premedication had uneventful successful procedures, avg. VAS was 3.

Conclusions

We noticed a high incidence of tubal spasm, probably due to our liberal definition (inability to pass implants through ostium after more than 30 seconds of gentle pressure). Ketoprophenum and trospium chloride orally prior to procedure have comparable effect in preventing tubal spasm, although avg. duration of spasm was significantly longer in trospium group. Ketoprophenum is probably better in alleviating pain during the procedure.

EFT might be a valuable technique in resolving tubal spasm, but persevering applying gentle pressure could give the same results. Method needs further research.
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ES23-0501
Posters

SINGLE-PORT LAPAROSCOPIC MYOMECTOMY
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Objectives

We report our experience with 50 cases of single-incision laparoscopic myomectomy with operative outcomes.

Methods
Between May 2011 and December 2011, a total of 46 patients underwent single-port laparoscopic myomectomy to remove single or multiple myomas measuring greater than 5 cm in diameter.

Results

All procedures were successfully completed without conversion to either multiport myomectomy or abdominal myomectomy. The mean maximum diameter of the largest myoma was 7.2 (5-13) cm and the mean number of myomas was 1.8. No patients developed postoperative ileus and neither bowel injury nor urinary tract injury occurred in any patient. The postoperative hospital stay was 1.5 days.

(A) Transumbilical morcellation
(B) The suture is pulled around to form a loop in the shape of an 'O' and grasper holding the end of the suture is passed through the 'O'.
(C) intracorporeal suturing and tying

Conclusions
We have successfully performed SPL myomectomy without short-term complication and performed suturing and tying with conventional rigid straight instruments without complication. We also showed that SPL myomectomy is a safe and feasible technique.
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ES23-0101
Posters

EXCLUSION OF HYDROSALPINX BY LAYING ESSURE® MICRO-INSERTS IN IMMUNOSUPPRESSED WOMEN
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Objectives

The presence of hydrosalpinges is a factor of failed attempts at in vitro fertilization.The treatment is difficult in patients with contraindications to abdominal surgery or in immunosuppressed patients which can reduce the fibrosis of the tubal lumen induced by Essure® micro-insert . The aim of this study is report our experience regarding the use of Essure® micro-insert
to exclude hydrosalpinges in immunosuppressed women before in vitro fertilization.

Methods
We report two cases of tubal occlusion with Essure® micro-insert in women with hydrosalpinges, pelvic adhesive disease
and receiving immunosuppressive medications before in-vitro fertilization.
Results

The placement of micro-insert was feasible. Successful placement of the Essure® devices and tubal occlusion was controlled on a pelvic X-radiography and 3D-Ultrasound 3 months after the procedure and on hysterosalpingography 5 months after insertion.

Conclusions

We report 2 cases of of tubal occlusion with Essure® micro-insert in women with hydrosalpinges before in-vitro fertilization, receiving immunosuppressive medications for Crohn disease and with long history of abdominal surgery.

The favorable results in two cases are in favor of the efficiency of Essure process. This process allow to reduce the risk of a recurrent abdominal surgery. It's necessary to collect anothers cases to validate the use of the process in this context.
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ES23-0053
Posters

THE APPLICATION OF HYPER-SPECTRAL (HDHS) HYSTEROSCOPY IN WOMEN WITH PREMENOPAUSAL VAGINAL BLEEDING.

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Objectives
We present results from the clinical validation of the recently developed High Definition, Hyper-Spectral (HDHS) hysteroscopy in women with premenopausal vaginal bleeding.
Methods

HDHS hysteroscopy captures and displays several narrow band live images, spanning both visible and non visible bands of the spectrum. In an automated operation the HDHS system captures more than 15 narrow band images in 2s time and calculates a full spectrum per image pixel. The total number of spectra that are collected in each (2s) scan is 2.5 millions. The HDHS system was used as an investigational platform in order to display high definition color images for visualization and documentation and to identify spectral bands of normal and pathologic conditions. 84 women with premenopausal vaginal bleeding were examined. During hysteroscopy took place endometrial biopsy and the sample was sent for histology. The examination with HDHS did not change by no means the procedures followed in regular hysteroscopy or the instruments that came in contact with the patient.

Results

No change in patient’s comfort was observed associated with the use of this technology. The user could scan the entire spectrum investigating suspicious areas. Spectral analysis showed that different spectrae were collected from different pathologies. The system could recognize polyps, submucous fibroids, hyperplasia and endometritis. It could also differentiate the functional and non functional polyps with a sensitivity of 90% and specificity 75%. The number of the other cases was small to have statistical analysis, however the system recognized the 3 out of 4 submucous fibroids, the difference between simple and complex hyperplasia and all the cases of endometritis.

Conclusions

HDHS hysteroscopy is an emerging technology with great potential in assisting clinical diagnosis and in guiding biopsy sampling and treatment. HDHS hysteroscopy is an objective quantitative method which could make clinical diagnosis objective. More clinical studies are necessay. Due to these unique the new technology could in the future become an indispensable tool for screening for women at high risk of developing endometrial malignancy.
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ES23-0089
Posters

LAPAROSCOPIC MANAGEMENT AND OBSTETRIC OUTCOMES FOR WOMEN WITH INTERSTITIAL HETEROTOPIC PREGNANCY AFTER IVF-ET

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Objectives
To investigate the clinical efficacy and obstetric outcome of laparoscopic treatments for women with interstitial heterotopic pregnancy(HP) after IVF-ET.

Methods
We retrospectively included the women who had interstitial heterotopic pregnancy after fresh or frozen-thawed embryo transfer treated with laparoscopic surgery at the Center for Reproductive Medicine of Peking University Third Hospital from January 1st, 2010 to February 28th, 2014. Surgical procedures:Confirmed the diagonosis by laparoscopic,opened the interstitial pregnancy mass and removed the gestational tissure, electrodessicated the inner wall of interstitial cavity and sutured the cornual. Patients' genenral characters ,peri-surgical data and pregnancy outcomes were reviewed

Results
All 12 women with the diagnosis of interstitial heterotopic pregnancy were successfully treated by this type of laparoscopic surgery. 10 of them experienced pelvic operation at least once, and 7 of them had the history of ectopic pregnancy before IVF-ET. Ruptured interstitial pregnancy and internal bleeding were found in 7 cases, the volume of blood loss before surgery range from 200mL to 1500mL,the mean time of interstitial rupture was 30 days after embryo transfer,the earliest one was only 19 days.Among these 7 cases,5 of them had the history of salpingectomy at the same side. The mean operating time was 64 min, the mean blood loss in operation for the 5 unruptured cases was 37 mL.There were no intra-operative or postoperative complication. The mean hospital stay was 4.5 days.Among those women, 9 delivered 10 healthy babies(1SVD,8 CS), the average birth weight was 3352±497g, the remaining three women have ongoing pregnancies. During pregnancy, delivery and CS,no signs of persistent ectopic pregnancy and uterine rupture were found.
Conclusions
This laparoscopic technique is feasible and safe for interstitial heterotopic pregnancy with satisfactory obstetric outcome. To the patients who had the history of salpingectomy and undergoing interstitial pregnancy in same side, more attention and earler intervention should be taken.
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ES23-0513
Posters

A CASE OF LAPAROSCOPIC CONSERVATIVE SURGERY BY MICROINVASIVE SINGLE-PORT ACCESS(SPA) FOR AN INTRAMURAL ECTOPIC PREGNANCY

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Objectives

This study aimed to show a accecptable procedure of one assisted single-port three-channel systemfor an intramural ectopic pregnancy in the gynecologic field.
Methods
A 33-year-old woman, gravida 2, para 0 with uncommonhistory of a left conual wedge resection after a left salpingectomy for eachectopic pregnancy was admitted for treatment of a presumed ectopic pregnancy,again. Transvaginal sonography revealed no gestational sac and no fetal heartbeat within uterine cavity with left adnexal hamatomatous mass. One assistedsingle-port access(SPA) laparoscopy was performed for an hemoperitoneum andsuspected active bleeding from unknown original ectopic pregnancy. For anassistant hand, mini-laparoscopic grasper was used in the suprapubic areawithout incision.
Results

Under the laparoscopic field, a papillarybleeding focus 2.5 cm in diameter was visible within the left fundalmyometrium. There was no left tube but, the both ovaries and right tubeappeared normal. One assisted single-port laparoscopic removal of thegestational mass was performed, and the uterus was preserved. For setting themini-laparoscopic grasper, it take 1 minite at most. The total operating timewas 120 minutes, and the estimated blood loss was 1500 ml. But most of theblood loss was counted from previous hematoma and the patient did not require atransfusion of any blood products during operation. Pathologic evaluation ofthe excised mass demonstrated myometrium with products of conception.

Conclusions

Intramuralpregnancy is one of the rarest types of ectopic pregnancy. Only several reportsexist describing the laparoscopic resection of an intramural pregnancy. But thelaparoscopic technique was under conventional multi-port system. The proposalof new laparoscopic technique with one assisted single-port system is.an accecptableprocedure for an intramural ectopic pregnancy in the gynecologic field withoutthe technical difficulties.
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ES23-0351
Posters

CONSERVATIVE SURGICAL MANAGEMENT OF DEEP INFILTRATING ENDOMETRIOSIS IS SAFE, EFFECTIVE AND SUFFICIENT FOR TREATING PELVIC PAIN.
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Objectives
Deep infiltrating endometriosis (DIE) is associated to severe pelvic pain in over 90% of cases. Surgical management to alleviate symptoms consists in total resection of endometriotic lesions. When there is DIE affecting the rectosigmoid colon some more agressive schools usually perform intestinal resection. We believe that a less agressive approach, such as shaving, offers similar results in regards to pain relief and risk of symptom recurrence. The objective of this study is to evaluate the safety and effectiveness in treating pain when performing conservative surgery for DIE.
Methods
Retrospective study of all cases of DIE operated in our Hospital, Pontificia Universidad Catolica de Chile, during the years 2006 through 2013. Patient demographic information, operating time, conversion to laparotomy, major complications, need for reintervention and symptomatic relief were analyzed.

Results

785 cases of pelvic endometriosis were operated during the study period. 26% (n=204) were for DIE (79% rectovaginal and 21% uterosacral). Biopsies confirmed endometriosis in 84% of cases (n=171). Average age was of 33 years (Median 33, range 19-59). Pelvic pain (dysmenorrhea, dyspareunia and/or dyschezia) was the main indication for surgery in 100% of patients. 99% of surgeries were performed laparoscopically. Nodule size varied from 1 to 5 cms. During surgery 12,7% (n=26) of patients needed vaginal opening and/or resection. 1,5% (n=3) needed rectosigmoid opening or partial resection. Average surgical time was of 175 minutes (Median 170, range 50-575 min). Major complication rate was of 5% (n=10); one bladder rhexis, 6 infectious complications, one case of pulmonary embolism and 2 intestinal lesions, one of which presented at post op day 7 with peritonitis due to rectal perforation requiring reintervention and a Hartmann colostomy. Conversion to laparotomy occurred in 1,5% of patients secondary to disease extension and surgical difficulty. Average postoperative hospital stay was of 2,9 days (Median 3, range 2-6). Three months after surgery 94% of patients referred significant symptomatic improvement, and follow up over 12 months showed an 82% of symptomatic relief.

Conclusions

Laparoscopic surgery is the treatment of choice for DIE when symptomatic. The most feared complications are urologic and rectal lesions. To date in our center we perform about 40 to 50 DIE surgeries a year, all laparoscopic with a major urologic and intestinal complication rate of 1,5% supporting our experience. We do not routinely perform intestinal resection. Our findings show that privileging a conservative surgical approach when operating DIE is safe and effective with a low rate of urologic and intestinal complications and with significant symptomatic improvement.
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ES23-0114
Posters

PREGNANCY ON A COMPLETE SEPTATE UTERUS WITH DUPLICATION OF THE CERVIX AND LONGITUDINAL VAGINAL SEPTUM

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Objectives

To describe a pregnancy in a rare uterine anomaly of a septate uterus with double cervix and vagina.

Methods

Retrospective revision of the patient’s clinical profile.

Results

A 32 years old woman with a history of three years of infertility and a past history of a spontaneous first trimester abortion.

She had a vaginal septus and a complete septate uterus was diagnosed by ultrasound and later confirmed by pelvic magnetic resonance imaging. Laparoscopic diagnosis and removal of pelvic adhesion, hysteroscopic examination of both hemicavities and resection of the vaginal septum were performed.

The patient was discharged well after 2 days. She had an uneventful spontaneous pregnancy.

Conclusions

The combination of laparoscopy and hysteroscopy are imperative in the diagnosis and treatment of this rare cause of infertility. Correct diagnosis of a rare uterine anomaly, successful resection of a vaginal septum and subsequent spontaneous pregnancy were accomplished.
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ES23-0229
Posters

POST-ESSURE® PREGNANCY – A RARE COMPLICATION: REPORT OF 2 CLINICAL CASES
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Objectives
To report 2 clinical cases of post- Essure® pregnancies.
Methods
Literature review. Retrospective analysis of 306 hysteroscopic procedures performed in our institution between 2005 and 2013.
Results

Clinical Reports:

- 34 years, irrelevant medical history, IIGIIP, desire of permanent sterilization. Submitted to Essure® with difficulty in the progression of the right coil. X-ray inconclusive after 1 month. Bilateral tubal occlusion was documented on the 3-months HSG. Spontaneous pregnancy documented 1 year after the procedure.

- 36 years, erythema nodosum, IIIGIIIP, desire of permanent sterilization. Essure® procedure performed without complications. X-ray inconclusive after 3 months. Pelvic ultrasound revealed correctly placed micro-inserts. Spontaneous pregnancy documented after 6 months.

We performed pregnancy termination followed by laparoscopic tubal ligation, as patients wish. During the laparoscopy we recognized inserts malposition (intramyometrial).

Conclusions

The Essure® is a hysteroscopic sterilization procedure, approved since 2002 by the FDA, in which a dynamically expanding micro-insert is placed in the proximal section of the fallopian tube. The insertion of the coils promotes a benign localized tissue-in-growth resulting in occlusion of the tubal lumen in 96% of the cases after three months and a 5 year rate of effectiveness of 99,74%. The 5-year cumulative pregnancy rate is about 2.6 per 1,000 procedures. A 3-month hysterosalpingogram (HSG) is still the goldstandard to assess the placement of the micro-inserts and tubal occlusion with a

specificity of 95%. When other methods are used the pregnancy rate slightly increases (as ultrasound or x-ray).
Hysteroscopic tubal occlusion is presented as a safe, effective and minimally invasive procedure that has been gaining popularity. The main causes of failure are related to malposition of the inserts and incorrect follow-up protocols. The interpretation of imaging techniques used for confirming adequate positioning of the inserts can be difficult and may lead to erroneous conclusions. This is true especially when one of the devices is in an intramural position or when perforation occurs near tubal ostia, what may have happened in the cases described above.
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ES23-0388
Posters

UNSUPECTED MALIGNANCY IN ENDOSCOPIC TREATMENT OF BENING UTERINE PATHOLOGY USING POWER MORCELLATOR IN A SPANISH TERCIARY HOSPITAL

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Objectives
The aim of this study is to evaluate the incidence of unsuspected malignancy in pacients who underwent endoscopic treatment for bening uterine pathology (laparoscopic hysterctomy or myomectomy) with power morcellation.

Methods
In a retrospective observational study we included 148 patients, and we realized 67 laparoscopic supracervical hysterectomies and 81 laparoscopic myomectomies between january 2010 and december 2013. In every cases we used Rotocut G1 (Karl Stortz) 12 mm morcelator, 500-1200 rpm. Age, BMI, principal symptom, evolution time, radiologic characteristic, endometrial biopsy, time to surgery, myoma or uterus size, morcelation specimen weigh, surgical complications, and anatomopathological results were analizhed.

Results
Medium age was 40.5 (16-75 ages), medium BMI was 24.1, principal symptom was abnormal uterine bleed, medium lengh of myomas was 76.6 cm, medium long diameter in cases of hysterctomy was 161.7 cm, and medium weigh of morcelation in cases of histerectomy was 252,4 gr. There was no difference between the sizes estimated before surgery. In all cases, the endometrial biopsy was negative for malignancy.
We don't have any morcellator-related injuries. We only have one case of excesive bleeding that needs blood transfusion. It was the same case with the diagnosis of leiomyosarcoma.
Anatomopathological results were 138 leiomyomas, 7 adenomyosis, 1 bizarro myoma, 1 uncertain significance myoma, 1 leiomyosarcoma. There was no endometrial sarcoma estroma and no other endometrial malignancies.
The patient who result a leiomyosarcoma was a 42 old woman with a 90 mm lesion, diagnosed as an intramural myoma, and with excesive uterine bleed.

Conclusions
Use of power morcellation in the treatment of bening uterine pathology is sure, and offer women the advantages of minimally invasive surgery. Nowadays we don't have preoperatory elements sensible enough to diagnose uterine sarcoma, because it is an infrequent malignancy. We must be awere on the clinical suspect, and inform the patients on the risk before offer morcellation procedure.
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ES23-0152
Posters

SUBSEQUENT INTERVENTION RATES FOLLOWING THERMABLATE AND NOVASURE ABLATIONS
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Objectives
To determine intervention rates following either Thermablate Endometrial Ablation System (TEAS) or NovaSure Endometrial Ablation System (NEAS)

Methods
A retrospective study over 5 years from January 2008 to November 2013 comparing the outcomes of the two types of endometrial ablations performed at the Nottingham CIRCLE Treatment Centre, Nottingham University Hospitals NHS Trust. Women who were referred to secondary care for menorrhagia were offered an ambulatory TEAS or a NEAS either as ambulatory or with general anaesthetic. The records were reviewed to ascertain additional information on interventions that were subsequently performed post endometrial ablations.

Results
There were 133 patients treated with NEAS and 175 patients treated with TEAS respectively. They had a median follow up of 19 months ranging from 6 to 60 months. In relation to interventions post procedure, there is a statistical difference between the two types of ablations (p=0.001) where 62% in the NEAS group had no subsequent interventions as compared to the TEAS group of 29%. 6% of TEAS group had non-hormonal and hormonal treatment as compared to 15% of the NEAS patients. Hysteroscopic resection of the residual endometrium was performed in 11 (8%) of NovaSure patients as compared to 31 (17.7%) of theThermablate. The odds ratio of women having hysterectomy in the NEAS ascompared to TEAS group is 2.8 with 95% confidence interval of 1.37 and 5.71.

Conclusions

Thermablate patients had a lower rate of conservative intervention and hysterectomy compared with the NovaSure group despite higher intervention rate. This can be due to mechanism of the NEAS destroying the uterine cavity more than the Thermablate so fewer interventions such as a resection are possible. Therefore with persistent symptoms of bleeding or cyclical pelvic pain after a NovaSure, a hysterectomy may be the only available option.This has implications for everyday practice when making a decision as to what initial treatment is appropriate and cost implications for the National Health Service.

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ES23-0296
Posters

INCIDENCE AND OUTCOME OF SARCOMAS IN A CONTINUOUS COHORT OF FIBROIDS TREATED BY LAPAROSCOPIC MORCELLATION AND OTHER MINIMALLY INVASIVE TECHNIQUES

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Objectives
To assess the incidence and outcome of uterine sarcomas diagnosed among a continuous cohort of 2824 patients referred for fibroid treatment in an academic setting with minimally invasive procedures.

Methods
Prospective study (Canadian Task Force classification II-3)
2824 patients were referred for treatment of uterine fibroids between 01.01.2002 and 31.12.2013. Patients were from over 20 different ethnical origins. All patients had an ultrasound, MRI, and a multidisciplinary discussion prior to surgical treatment (laparoscopy, vaginal surgery, laparotomy) or Uterine Artery Embolization (UAE). Endometrial sampling and hysteroscopy were performed when needed and on all women over 40. All suspected cases were thouroughly reviewed prior to surgery or UAE by a specific panel of oncologic radiologists. All specimens operated had pathology examination and all sarcomas were reviewed by a panel of pathologists specialized in sarcomas.

Results

579 patients were treated by laparoscopy, 263 patients by a vaginal procedure, and 262 patients by UAE. Six patients had a final diagnosis of uterine sarcoma. None of them was treated by a minimally invasive procedure nor had a uterine morcellation. One patient had a ruptured uterine sarcoma and operated in emergency. No hazard due to uterine or myoma morcellation by laparoscopy or vaginal route with an unrecognized sarcoma was reported.

Conclusions

The incidence of uterine sarcoma in a continuous population of 2824 patients of diverse ethnical origins referred for treatment of fibroids in a tertiary center was 0.21%. All sarcomas had a suspected diagnosis of malignancy or cellular fibroid prior to surgery. No hazard was reported due to the morcellation of an unrecognized sarcoma. A thourough workup prior to surgery including MRI and office hysteroscopy could help in counseling and preventing from accidental morcellation of a malignancy.
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ES23-0083
Posters

INTEREST OF A THREE-DIMENSIONAL VISION SYSTEM IN LAPAROSCOPIC SUTURING ON PELVI-TRAINER: A PROSPECTIVE COMPARATIVE STUDY AMONG NAÏVE MEDICAL STUDENTS

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Objectives
Three-dimensional (3D) vision appears as an important factor influencing the quality of a controlled gesture. The purpose of this prospective and randomized study is to obtain subjective and objective data on the contribution of the 3D vision in laparoscopic surgery training.

Methods
Seventy-eight naïve medical students were randomly assigned to group A (2D vision, n = 39) and group B (3D vision, n = 39). They were trained for 3 consecutive days to achieve intra-corporeal sutures on pelvitrainer. Every day, the making of a stitch with the right and the left hand was recorded on video. On the last day, after their third day evaluation, the same exercise was recorded with the other vision system. Following each suture, students gave their impression on the two techniques through questionnaires and two experts evaluated blindly the gesture (operating time and technical scores).

Results
A significant increase of performance in terms of time and score was observed in both groups. There was no time difference between them (p=0,23). The technical score of both subjective and objective evaluation of video were significantly higher in group B at each assessment (p<0,001). As the group A switched to 3D, their operating time and scores were similar to those of group B on day 3 (p= 0,51 and p=0,78 respectively). And vice versa when group B switched to 2D (p = 0,27 and p =0,98 respectively). Participants considered the suture technique to be significantly easier in 3D. Eighty-three percent of students preferred 3D to 2D. However the group B showed significantly more visual strain (46% vs 21% at day 1, p =0,01).

Conclusions

This study confirms that 3D vision facilitate complex tasks execution by novices and is superior to last generation 2D HD systems. Further studies in clinical practice are necessary in order to translate these results to experienced surgeons.
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ES23-0421
Posters

PRIMARY AMENORRHEA DUE TO GENITAL TUBERCULOSIS- LAPAROSCOPIC AND HYSTEROSCOPIC FINDINGS
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Objectives

Tuberculosis remains a global health problem and the abdominal and pelvic cavity is one of the common sites for extra pulmonary tubercular infections. While female tuberculosis is endemic in developing countries and cause amenorrhea and infertility it is a rare finding in countries where a national program of vaccination is established. We present a clinical case of primary amenorrhea and infertility due to genital tuberculosis, that posed some diagnostic difficulties.

Methods

A 23-year-old patient presented to gynecologist for primary amenorrhea. General physical and gynecological examination detected no abnormality, external genital organs being normal. Ultrasound revealed normal ovaries with the presence of follicles. In the uterine cavity a round shape, 25 mm, hyperecogenic well-delimited structure was present, resembling a calcified uterine myoma. The hormonal profile and the karyotype were normal.

Results
A laparoscopically assisted hysteroscopy was performed. The laparoscopy revealed adhesions in the pelvis and the adhesiolysis was performed. The hysteroscopy revealed the uterine cavity completely filled with a snow-like mass. The diagnosis of tuberculosis was suspected and culture of the endometrium was positive for Mycobacterium tuberculosis. The patient received antituberculosis treatment.
Conclusions

Genital tuberculosis could embrace different clinical forms and minimally invasive surgery is an important step for diagnosis and management.
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ES23-0105
Posters

A COMPARISON OF THE OUTCOMES OF LAPAROSCOPIC HYSTERECTOMY IN A DISTRICT GENERAL HOSPITAL IN THE UNITED KINGDOM- LEARNING CURVE
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Objectives
To compare two sequential groups of 50 women (100 in total) undergoing Laproscopic Hysterectomy, for improvements in Surgical outcomes at a District General Hospital. Specific outcomes for comparison were average duration of the procedure in each group, immediate intraoperative complications (such as blood loss, visceral injury, conversion to open procedure), post operative pain, length of hospital stay and any problems at six weeks post operation appointment.
Methods
A standardised proforma was used to gather information on 100 women who underwent Laparoscopic Hysterectomy by the same Surgeon at Epsom General hospital and two other local hospital sites between November 2011 and March 2014. The outcomes of the first 50 women were compared to those of the second 50 women. The indication for each operation and surgical outcomes were documented using retrospective case note review and Microsoft Excel was used for Data analysis. Outcomes were recorded as percentages and compared using simple graphs.
Results
Our data showed that the median duration of Laparoscopic Hysterectomy was shorter in the second group of women than the first. Furthermore, we encounteredlower immediate intraoperative complication rate, post operative pain and shorter hospital stay in the latter group. There were fewer problems at the post operation appointment and the time from the first to the 50th patient was also shorter in the second group. None of the cases was converted to open surgery.
Conclusions

This small and simple study shows that it is possible to develop Laparoscopic Hysterectomy service safely in a District General Hospital using existing resources. There is also evidence of improved outcomes and the Learning curve improves steeply with increasnig number of cases.
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ES23-0522
Posters

DISCOVERY OF A COMPLETE SEPTATE UTERUS IN A PATIENT WITH A SECONDARY INFERTILITY
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Objectives
Introduction:
The prevalence of congenital uterine anomalies is 3 to 4 % in the general population. Although the majority of them are asymptomatic, we can often enhance a history of miscarriage, preterm delivery, pregnancy with presentation anomalies, primary amenorrhea, dysmenorrhea, dyspareunia and infertility.

Methods

Case report:
We report the case of a 25 year-old woman with a secondary infertility. Her medical history is unremarkable. She is gravida 2 para 1 (one caesarean section (C/S) for breech presentation in Spain and one miscarriage). Salpingo-hysterography (SHG) performed for infertility investigation showed two different uterine cavities and a blind left Fallopian tube. During the physical examination, abdominal palpation was painless. The speculum revealed the presence of two vaginas and two cervices. Bimanual vaginal palpation was painless without any uterus enlargement or adnexal mass. Transvaginal 2D ultrasound (US) confirmed the presence of two uterine cavities while abdominal ultrasound showed the presence of two kidneys. Diagnostic hysteroscopy showed a thick uterine septum. A pelvic MRI made it possible to confirm the diagnosis of a complete septate uterus and to exclude a bicornual uterus. It also confirmed the presence of two cervices and a vaginal septum. Because of the patient's desire for pregnancy, an operative hysteroscopy was decided. A coelioscopy was performed in the same time to check the pelvic status. Intra-operative findings confirmed the septate uterus with no other pelvic anomalies. Vaginal, cervical and uterine septums were resected with no immediate complications.

Results

Discussion:
Congenital uterine anomalies result from abnormal formation, fusion or resorption of the Müllerian ducts during fetal life. According to the new ESHRE/ESGE classification, the patient was classified as follow: U2b, C1, V1. In the general population, the prevalence of all anomalies is about 3-4%. In patients with infertility, the prevalence of Mullerian anomalies is increased. The management of those malformations begins with an accurate gynaecological examination. The transvaginal 2D ultrasound seems to be the basic imaging method of diagnostic. SHG and office mini-hysteroscopy can provide additional information. 3D US and MRI provide supplementary information for cases of complex anomalies. Endoscopic methods (laparoscopy and hysteroscopy) should be kept for the

patient's treatment or for the elucidation of rare and unclassified cases. Septal resection may improve the reproductive outcomes in patients with infertility but it can also involve irreversible damage to the endometrium.

Conclusions

Conclusion:
Due to the prevalence of Mullerian anomalies, it seems that such malformations should be research in high risk patients like those with infertility. Moreover, different imaging techniques are available for the diagnostic. In some selected cases endoscopic diagnostic or surgical techniques should be considered. However, in patients with infertility, we need further randomized controlled trials to know the safety of septal resection.
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ES23-0356
Posters

OVARIAN TORSION: CAN WE OPERATE EARLIER!
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Objectives
To evaluate the risk factors, clinical findings, diagnosis methods and treatment of ovarian torsion in premenopausal women and to determine the appropriate approach for early treatment.
Methods
A retrospective case review. 36 patients, who were underwent laparoscopic ovarian torsion operation between 2010-2014 years, were retrospectively reviewed.
Results
36 cases of ovarian torsion operated by laparoscopy in our university hospital in 4 years were identified. Average age of our patients were 27. The main presenting symptoms were acute abdominal pain, vomiting and adnexal masses. All patients had abdominal tenderness and 13 patients (%36) had positive peritoneal signs. None of the patients had fever more than 38,3 0 C. All the patients had adnexal masses. Ovarian color Doppler ultrasound imagining has done by radiology physician to 28 patients, no blood flow has visualized in 14 patients (%50) and decreased blood flow has visualized in 8 patients (%28). The median time interval from emergency room admission to operation was 9 hours and 20 minutes. Conservative management, mainly detorsion with additional cyst drainage or cystectomy was performed 27 patients (%75), oophorectomy was performed to 6 patients and oophoropexy was performed to 3 patients.
Conclusions

Ovarian torsion is a rare but a real gynecological emergency. Every minute is important for tissue viability. Ovarian torsion should be thought as differential diagnosis patients with acute abdomen especially with a history of fertility treatment. Diagnosis is the biggest problem because of the non-specific symptoms and lack of gold standards imagining and laboratory. Ultrasound is preferred imaging method. Ovarian enlargement is mostly visualized. Doppler blood flow can support diagnosis but has a high false-negative rate. In emergency rooms there are too many patients for one doctor thus this is the main reason of the delayed operation time. If all patients are evaluated by physicians (emergency, surgeon, gynecologist and radiologist) at the bedside, the operation time undoubtedly will be reduced. Laparoscopic surgery should be performed and conservative management must be

the first choice of the operation. Ultrasound guided cyst aspiration is a new method for conservative management. To prevent the recurrence, cystectomy or adnexal fixation could be performed.
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ES23-0066
Posters

„LAPAROSCOPIC BREECH DELIVERY“ OF A TUBAL ECTOPIC PREGNANCY @ 11. WEEKS

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Objectives
Ectopic pregnancy occurs in around 1-3% of all pregnancies and is still the most common cause of first trimester maternal death accounting for 73% of early pregnancy mortality. The incidence of ectopic pregnancy has increased markedly over the last three decades. Cases may be mislead by asymptomatic patients and the absent of common clinical findings.

Methods

Case report

Results

A 28-year-old woman was referred with a tubal ectopic pregnancy @ 11. weeks of gestation detected at her first visit for antenatal care. On admission vital signs were stable and no abdominal guarding or rebound tenderness was present. She had no history of a previous ectopic pregnancy.

Transvaginal ultrasound scan revealed a vital right-sided tubal ectopic pregnancy with a CRL of 45 mm (Fig. 1) and an empty uterus with a thickened endometrium (Fig.2).

Laparoscopic intervention demonstrated a large unruptured ectopic pregnancy in the right fallopian tube. After spontanesouly rupture in the isthmic segment a „laparoscopic breech delivery“ of the fetus was carried out (Fig.3)
. With a total length of 50mm the fetal body could be removed in toto (Fig.4). followed by salpingectomy.

Conclusions

Three findings can be drawn from this case:

1. Patient with an advanced tubal ectopic pregnancy can present asymptomatic and common clinical findings can be absent leading to misdiagnosis

2. the mucosal layer of the fallopian tubes is capable to provide an environment for implantation and supply for fetal growth up to 11. Weeks of gestation

3. advanced tubal ectopic pregnancy can be managed laparoscopically
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ES23-0131
Posters

LAPAROSCOPIC TREATMENT IN HIGH RISK ENDOMETRIAL CANCER. SURGICAL OUTCOME AND SURVIVAL

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Objectives

To study and critical evaluation of the laparoscopic surgery boarding in the treatment of high risk endometrial cancer (HR-EC).

Methods

A descriptive retrospective study was made (Canadian Task Force classification III). Comparative analysis of the laparoscopic versus laparotomic approach in 47 HR-EC cases treated between April 2004 and May 2014. Mean age was 66,9 years (47-87). The most frequent histological type was the endometrioid (type I) of high risk (IbG3, II-IV stage) (31 cases). Carcinosarcoma was the most frequent of 16 cases of high degree histological types (type II). 23 cases underwent laparoscopic approach (LPS) and 24 cases by laparotomic route (LPM). Surgical outcome and survival according to type of surgery were evaluated.

Results

No significant differences between LPS and LPM groups were found in the mean body mass index (31,7 vs 31,5 kg/m2 respectively, p=1,0), mean operating time (292,4, vs 223,4 minutes, p=0,24), mean blood loss (1275 vs 1180 ml, p=0.75) and mean hospital stay (5,3 vs 5,8 days respectively, p=0.16). The complication rate and reintervention rate were similar in both groups. The histological study (linfovascular infiltration, miometrial invasion and tumour size) were similar en both groups. No significant differences were found between LPS and LPM groups of the mean removed pelvic nodes (16 nodes (6-32) vs. 15,1 nodes (7-28) respectively; p=0,73) and the mean removed paraaortic nodes (12,5 nodes (6-20) vs. 20,3 (9-51) respectively; p=0,43).

	LAPAROSCOPY (N=23)	LAPAROTOMY (N=24)	p
BMI (kg/m2)	31,77 SD 7,62 (range18-48)	31,55 SD 7,05 (range 21-50)	1,000
OPERATING TIME (min)	292,45 SD 123,6 (range 150-565)	223,42 SD 81,9 (range 125-430)	0,242
MEAN BLOOD LOSS (mL)	1275 SD 866,4	1180,78 DS 581,55	0,757
HOSPITAL STAY (days)	5,30 SD 4,85 (range 1-26)	5,88 SD 1,89 (range3-12)	0,166
Mean PELVIC nodes	16 (range 6-32)	15,2 (range 7-28)	0,734
Mean PARAAORTIC nodes	12,54 (range 6-20)	20,38 (range 9-51)	0,434
Following-up	35,74 SD 18,6 (range 5-67)	39,58 SD 46,7 (range 1-193)	0,886

With mean follow-up of 59,3 months in the LPS group and 158,1 months in the LPM group., there were no significant differences between both groups in 2-year and 5-year estimated recurrence-free survival rates (89,5% vs. 90,2% and 53,7% vs. 72,9%, respectively, p=0,82); as well as similar 2-year and 5-year overall survival rates (89,5% vs. 90,2% and 83,5% vs. 78,9%, respectively) (p=0,87).

Conclusions
The surgery of maximal debulking improves the global survival. The radicality was similar by laparoscopic than laparotomic route, but decrease the postsurgical morbility.
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ES23-0039
Posters

POSTOPERATIVE RECURRENCE AND FERTILITY AFTER ENDOMETRIOMA ABLATION USING PLASMA ENERGY: ASSESSMENT OF A 4-YEAR EXPERIENCE
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Objectives
To assess recurrence and pregnancy rates in women with ovarian endometrioma treated via ablation using plasma energy.
Methods

We performed a non-comparative pilot study including 124 patients treated during 48 months, with prospective recording of data.
124 consecutive women with pelvic endometriosis in whom ovarian endometriomas were managed solely via ablation using plasma energy, from January 2009 to December 2012 at Rouen University Hospital, Rouen. The minimum follow-up was 1 year.
Information was obtained from the database of the North-West Inter Regional Female Cohort for Patients with Endometriosis, based on self-questionnaires completed before surgery, surgical and histologic data, and systematic recording of recurrences, pregnancy, and symptoms.

Results

Mean (SD) follow-up was 32 (13) months (range, 13 to 48 months). Preoperative infertility was recorded in 34% of patients. The patients presented associated deep endometriosis in 72%, rectal endometriosis in 35% and sigmoid colon nodules in 17%. bilateral ovarian localizations were recorded in 56%, while 3% of women previously had unilateral oophorectomy.

Recurrences were assessed using pelvic ultrasound examination. The rate of postoperative recurrence was 16% for the entire series.

Of 81 women who wished to conceive, 62% became pregnant. Among them, 65% of pregnancies were spontaneous, 30% were obtained by IVF, 2% by inseminations and 2% using frozen embryos.

Conclusions
Recurrence and pregnancy rates are encouraging in that they seem comparable if not better than the best reported results after endometrioma cystectomy in series of women with associated deep endometriosis. Consequently, we believe that plasma energy may play a role in the management of

ovarian endometriomas in women seeking to conceive. On the basis of these results, we have planed the design of a new randomized trial (PREPA) comparing the rates of pregnancies following respectively the cystectomy and the ablation using plasma energy, which full results will be available in 2018.

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ES23-0130
Posters

LAPAROSCOPIC TECNIQUES TO REDUCE HAEMORRHAGE DURING MYOMECTOMY FOR FIBROIDS.

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Objectives
To assess the effectiveness, safety and tolerability of interventions to reduce blood loss during myomectomy.
Myomectomy can be associated with life-threatening bleeding and prolonged postoperative stay. Knowledge of the effectiveness of the interventions to reduce bleeding during myomectomy is essential to enable evidence-based clinical decisions.

Methods
A descriptive retrospective study was made (Canadian Task Force classification III) of 42 cases with uterine fibroids. In 28 cases laparoscopically and 14 cases laparotomically a myomectomy was made. Mean age was 35,07 (range 22-46 years). Mean body mass index was 22,9 (range 16-51 kg/m2). Comparative analysis of with or without simultaneous laparoscopic uterine artery ligation and laparoscopic myomectomy for symptomatic uterine myomas (70% cases) with and without in situ morcellation (while it is attached to the uterus, 20% cases) and the peri-cervical tourniquet (10% cases).

Results
We found significant reductions with this manegement (first group) versus without this technique (second group) in the mean blood loss 784,64 SD 386 mL. vs 550,55 SD 557,5 mL (p=0,03) and the mean hospital stay 2 SD 0,9 (range 1-5 dyas) vs 2,9 SD 0,9 (range 2-5 days) (p=0,01). There were no significant differences between two groups in the mean myoma size, number of removed myomas and mean operating time (88,3 SD 42 minutes vs 70,9 SD 25,6, p=0,19). In 3 patients blood transfusions was necessary. Overall minor complication rate was 9,5%. None of the interventions significantly increased myomectomy-related complications.

	First group	Second group	p
Laparoscopy/laparotomy (cases)	4/7	24/8	
Operating time (minutes)	70,9 +/- 25,6 (40-120)	88,23 +/- 42,3 (20-240)	0,198
Complications	2	4	
Mean Blood Loss (ml)	784,64 +/- 386,16 (348,9-1467,7)	550,55 +/- 557,40 (-558,3-2465)	0,036
Blood transfusion	1	2	
Hospital stay (days)	2,9 +/- 0,9 (2-5)	2 +/- 0,9 (1-5)	0,014
Size (mayor diameter) (mm)	87,8 (30-220)	60,4 (25-150)	0,048

Following surgery in patiens with after infertility, 8 pregnancies occurred (72,72%) and the postoperative delivery rate was 63,63%.

Conclusions

Laparoscopic myomectomy and modifications of the technique (simultaneous uterine artery ligation and enucleation of the myoma by morcellation in situ during myomectomy) are safe and reduce blood loss and hospital postoperative stay.

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ES23-0132

Posters

IMPACT OF THE LAPAROSCOPY IN THE COMPLICATIONS AND SURVIVAL IN THE SURGICAL TREATMENT OF ENDOMETRIAL CANCER

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Objectives

To evaluate surgical outcome, complications and survival with a comparative analysis the laparoscopic (LPS) and laparotomic (LPM) management for the endometrial carcinoma (EC)

Methods

We report a retrospective review (Canadian Task Force classification III) of 160 cases of EC treated between April 2004 and May 2014. Mean age was 64,1 years (27-88). In 141 patients surgical management were made. The most frequent histological type was the endometrioid (85%). In 80 patients the surgical intention was LPS staging, in 46 patients underwent LPM staging. In 15 cases vaginal hysterectomy was made. In 93 cases pelvic lymphadenectomy and in 37 cases pelvic and paraaortic lymphadenectomy were made.

We separated in three groups where the impact of laparoscopy was greater: Group 1, 47 patients with high risk EC; group 2, 15 older patients with 80 years old or greater; and group 3, 39 obese patients with BMI equal or greater than 35. Surgical outcome, complications and survival according to type of surgery and to group were evaluated.

Results

We describe only the significant differences. Overall, the mean hospital stay was significantly shorter for the LPS staging (3,61 SD 2,9 vs 5,84 SD 2,6 days, p<0,01). In the group 1, no significant differences between both surgical approaches were found. In group 2, the mean blood loss was shorter significantly in the LPS staging (701,7 SD 156 ml vs. 1469,4 SD 413 ml) (p=0,02). In group 3, mean removed paraaortic nodes was greater in the LPM group (21,6 nodes (10-45) vs. 11 nodes (7-14), p=0,01); and the mean postoperative hospital stay was significantly shorter for the LPS group (4,3 SD 5,3 vs 5,2 SD 1,4 days, p=0,01). Similar complications and reintervention rate were reported in all groups.

Overall, with a median follow-up of 35,6 months in LPS staging, and 46,5 months in LPM staging, there were no significant differences between both groups in 2-year and 5-year estimated recurrence-free survival rates (98,6% vs. 94,7% and 84,7% vs 73,8% respectively) (p=0,63); as well as similar 2-year and 5-year overall survival rates (98,6% vs. 94,7% and 93,2% vs 88,8% respectively) (p=0,54).

Conclusions

In LPS staging the postsurgical morbidity and hospital stay were significantly shorter in overall and obese patients, and the blood loss was significantly shorter in older patients. The complication rate, recurrence-free time and survival were similar with both approaches.
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ES23-0295
Posters

PATIENT SATISFACTION AFTER SUBTOTAL VERSUS TOTAL LAPAROSCOPIC HYSTERECTOMY
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Objectives

Objective: A unselected cohort study of patients satisfaction after subtotal (LSH) versus total laparoscopic hysterectomy (TLH) comparing the rate of complications, re-admission rate, use of analgesic, convalescence (body sensation as before surgery), resuming exercise habits, length of sick leave, body sensation in general, influence on sexual, bowel, and urinary function and general satisfaction.

Methods

Methods: Retrospective questionnaires were sent a minimum of 3 months after surgery, by postal service to all patients (n=254) who underwent a LSH (n=124) or TLH (n=130) between 2010 - 2013.

Results

Results: A total of 149 (59%) returned the questionnaire. Primary outcome measures (LSH (n=75) vs. TLH (n=74): Patient experienced uncomplicated surgery (87% vs. 81 %) p=ns. Readmission to hospital or general practitioner (GP) (9% vs. 17%) (p=ns). Analgesic after 4 weeks (3 % vs. 12%) p=0,036. Convalescence after 1 week (15 % vs. 5%) p= 0,048, after 3 weeks (58% vs. 45%) p=ns. Resuming exercise habits after 2 weeks (24% vs. 12%) p= 0,035. Length of sick leave (back to work after one week (10% vs. 1%) p= 0,017, after 3 weeks (63% vs. 58%) p=0,436. Body sensation in general (unchanged/better) (91% vs. 93%) p=ns. Sexual function (unchanged/better) (87% vs. 86%) p=ns. Bowel function (unchanged/better) (90% vs. 92%) p=ns. Urinary function (unchanged/better) (87% vs. 76%) p=ns, and fulfilled expectations to surgery in general (85% vs. 82%) p=ns.

Conclusions

Conclusions: No parameters in our study showed statistical significant benefits in favor of total hysterectomy. In general following parameters showed statistical significance (p<0,05) in favor of

subtotal hysterectomy; ceased analgesic use after 4 weeks, convalescence, resuming exercise habits, and length of sick leave. Urinary function showed a trend (p<0, 1) toward increased benefits in subtotal hysterectomy. Nonetheless general patient satisfaction at least 3 months after either types of hysterectomy was the same. The laparoscopic approach in subtotal hysterectomy and in total hysterectomy in case of large uteri includes morcellation. This procedure is at the moment under discussion at Herlev Hospital as probably in the rest of the world, and is actually only performed when morcellation of uterus can be carried out in an intact container. This prevents morcellated and/or left chips of tissue, benign or seldom malignant, to implant in the abdominal cavity or give rise to suspicion of later metastatic disease. Therefore, even though our study showed benefits in favor of subtotal hysterectomy this minimal invasive approach is at the moment a technique not recommended without safe removal of tissue from the abdominal cavity or thorough information to the patient regarding risk.
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ES23-0335
Posters

CAN WE IDENTIFY THOSE FOR WHOM HYSTERECTOMY SHOULD BE FIRST LINE IN THE SURGICAL MANAGEMENT OF MENORRHAGIA?

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Objectives

The success of second generation endometrial ablation (EA) has contributed to the decline in the number of hysterectomies performed for menorrhagia. However for some women, it does not provide them symptomatic relief and further treatment is necessary. Assessment of these women can present a diagnostic challenge. We conducted a review of the cases of endometrial ablations carried out in our department to identify those who required definitve hysterectomy. We sought to ascertain the characteristics common to those for whom EA failed, and so enable us to better select patients, reduce failure rates and ultimately improve patient outcomes.

Methods

We conducted retrospective chart review of 332 women who had in patient endometrial ablation between July 2007 and August 2012, in the Gynaecology department of a district hospital in Northern Ireland. Our primary aim was to identify those who had a hysterectomy for treatment of menorrhagia. We collected data regarding age, parity, mode of delivery and BMI. Symptoms of dysmenorrhea, timing of hysterectomy, weight and uterine pathology were also recorded, when available.

Results

44/332 (13.25%) of women required definitive hysterectomy for recurrent or persistent symptoms following endometrial ablation. Endometrial adenocarcinoma was identified in one patient. The average age of those requiring hysterectomy was 44.5 years (range 31 to 52 years). The difference

between the two groups, those who have had hysterectomy and those who have not, is not statistically significant p=0.3682. The average BMI was 30.17kg/m2 (range 21 to 44kg/m2), again the difference between the two groups is not statistically significant p=0.8822. In those who had a hysterectomy, the average parity was 4.27 (range 0-6), 23/44 (52.27%) had a previous caesarean delivery. The average duration between ablation and hysterectomy is 13.14 months (range 2- 50 months). Pathology was identified in 34/44 (75%) uteri; endometrial carcinoma in one, adenomyosis in 19/44 (43.18%), fibroids in 7/44 (15.9%) and both adenomyosis and fibroids in 8/44 (18.18%). Dysmeorrhoea was a feature in 13/19 (68.42%)of those with adenomyosis.

Conclusions

The failure rate of second generation EA was 13.25%. Age, BMI or parity was not statistically different between the two groups. Pathology, most commonly adenomyosis, was identified in 77.27% of uteri after failed endometrial ablation. One case of malignancy was identified in a patient with several risk factors for endometrial carcinoma. Potentially better use of pre-operative investigations such as MR or ultrasound imaging may help identify pathology and therefore those at risk of failure. Ablation of the endometrium may hinder further evaluation in patients with recurrent symptoms. Careful risk assessment should be taken to appropriately expedite definitive treatment.
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ES23-0461
Posters

DESTRUCTION OF THE UTERINE CAVITY PATHOLOGIES USING THE 1470 NM LASER

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Objectives
One of the most important features of the1470 nm laser is very high-energy absorption by water. This makes it a very safe device to use in precise contact vaporization of various uterine cavity pathologies. Moreover, the laser is much more precise and less invasive than the conventional diathermy due to the lower energy needed to achieve the effect of vaporization and the high safety of surrounding tissues. No energy influence effect was observed

Methods

We present the usefulness of the 1470 nm laser (Metrum Cryoflex, Poland) in the office hysteroscopy procedures in destruction of the uterine cavity pathologies.

Results

The 1470nm laser is much more precise and less invasive than the conventional diathermy. The low energy is needed to achieve the effect of vaporization. No energy influence effect of surrounding tissues was observed.The use of the laser was safe for the patient as well as for the team.

Conclusions
The 1470 nm laser is an extremely effective and safe device to use in the treatment of various uterine cavity abnormalities (e.g.: polyps, myomas, intrauterine adhesions, uterine septum and other) in the mini-hysteroscopy procedures. The laser was extremely useful in destruction of the

uterine cavity pathologies located in the fundus of the uterus and in the uterus mouths of the fallopian tubes (polyps, small myomas, fragments of the trophoblast) in the diagnostic and treatment of infertility.
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ES23-0328
Posters

UTERINE RUPTURE AFTER LAPAROSCORIC MYOMECTOMY. REVIEW OF THE LITERATURE
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Objectives
To evaluate the risk of uterine rupture after laparoscopic myomectomy
Methods

Publications were identified via electronic search of the terms “Laparoscopic myomectomy” and “Uterine rupture” and later reviewed.

Results

Laparoscopic myomectomy was first described in 1970s for subserous myomata and developed in the 1990s to include intramural. Many studies have demonstrasted that the laparoscopic technique is more advantageous than laparotomy in postoperative pain, recovery time, blood loss and postoperative adhesions especially when pregnancy is desired. However there is concern about the obstetric quality of the uterine scar and the risk of subsequent rupture during pregnancy.Several factors may contribute to pregnancy related uterine rupture after laparoscopic myomectomy. Single layer closure of uterine wall is associated with a 4-fold risk of rupture compared to double layer closure. Secondary formation of haematoma within myometrium, excessive use of electrocautery for coagulation and carbon dioxide pneumoperitoneum may also affect wound healing. Additional, individual patient related healing characteristics may predispose to uterine rupture in a non predicable way.

Conclusions

Despite common belief that laparoscopic myomectomy has a higher risk of pregnancy related uterine rupture than laparotomy, review of the literature shows that the risk is minimized when the operation is performed by well trained and experienced surgeons.
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ES23-0035
Posters

DIGESTIVE COMPLICATIONS AND RECURENCE AFTER SURGICAL TREATMENT OF DEEP INFILTRATING ENDOMETRIOSIS
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Objectives

The aim of our poster is to evaluate intra-and post-operative digestive complications and recurence associated with surgical manangent of deep infiltrating endometriosis, treated by nodule excision or segmental resection, with or without omentoplasty.
Methods
We conducted a retrospective study including women who undergone surgical therapy (by laparoscopy or laparotomy) for deep infiltrating endometriosis, from january 1997 to september 2013. We excluded women on early stages of endometriosis, as we defined "deep infiltrating endometriosis " as endometriosis involving muscular, submucosal and mucosal tissu.
Results
Digestive complications such as stenosis (in 9.17% of cases of nodule excision) or fistula (in 3.67% of cases of nodule excision) occurs more offten after segmental resection (6% of stenosis). The role of omentoplasty was also significant to our evaluation of digestive post-operative complications.There was also found that 53.33% of our cases had no complications after omentoplasty, compared to 33.33% who had at least one. Last but not least, the risk of recurence has been estimated in 22% of cases after nodule excision and 8.26% after segmental resection.
Conclusions
By compairing two different surgical manangements of deep infiltrating endometriosis ' treatment, we found out more frequent digestive complications in segmental resection , but less risk of recurence, than in the nodule excision treatment.
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ES23-0145
Posters

LAPAROSCOPIC SURGICAL TREATMENT FOR ENDOMETRIAL CARCINOMA. RISK FACTORS FOR PARAAORTIC AFFECTATION.
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Objectives

To report surgical outcomes and comparative analysis in the laparoscopic and laparotomic management for the endometrial carcinoma between April 2004 and May 2014. To evaluate the risk factors for paraaortic affectation in endometrial carcinoma.

Methods

We report a retrospective review (Canadian Task Force classification III) of 160 cases of endometrial neoplasias. Mean age was 64,1 years (27-88). The most frequent histological type was the endometrioid (85%). The histological types of high degree were 22 cases. 73,1% cases were diagnosed in early stages (stage IA and IB) and 52.9% was low degree (G1). In 141 patients surgical management were made. In 80 patients the surgical intention was laparoscopic management (LPS), 46 patients underwent laparotomic staging (LPM). In 15 cases vaginal hysterectomy was made. In 93 cases, pelvic lymphadenectomy and in 37 cases pelvic and paraaortic lymphadenectomy were made.

Results

No significant differences between the LPS group and the LPM group were found in the mean body mass index (31.4 vs 31,7 kg/m2 respectively; p=0,66), the mean operating times (213,6 +/-105,6 vs 119,2 +/- 79,7 minutes; p=0,92), the mean removed pelvic nodes (17,48 nodes, (8-29) vs. 16,38 nodes, (7-29) (p=0,95) and the mean removed paraaortic nodes (12,24 nodes (6-32) vs 19,15 nodes (9-51) respectively) (p=0,46). Mean postoperative hospital stay was significantly shorter for the LPS group (3,61+/-2,9 vs 5,84 +/- 2,6 days, p <0,01). Similar complications and reintervention rate were reported in both groups.
We found paraaortic node affectation in: 45,4% stage III-IV; 25% when pelvic nodes were positive; 20% for high risk endometrial cancer; 17,2% with lymphovascular infiltration; 14,2% with tumour size bigger than 50 mm.; 9% for histologic type II; 7,1% with high grade (G3); 6,5% when miometrial invasion was more than 50%; 5,8% for histologic type I; 1,7% when histologic grade was G1 or G2 and only 1% when miometrial invasion was less than 50%.

Conclusions

The laparoscopic surgical staging for endometrial cancer has more advantages over the open approach. Advanced stages, lymphovascular infiltration and big tumour size were the risk factors which mostly defined paraaortic node affectation. In 5,8% of cases with positive paraaortic affectation, no pelvic nodes were positive (jump).
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ES23-0236
Posters

OUTCOMES OF TOTAL LAPAROSCOPIC HYSTERECTOMY: IMPACT OF UTERINE SIZE

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Objectives

To analyze surgical results of women having total laparoscopic hysterectomy to determine whether differences in outcomes exist on the basis of uterine size.

Methods

A retrospective chart review of women who underwent total laparoscopic hysterectomy with or without, salpingectomy or salpingo-oophorectomy: 220 cases performed from April 2012 and February 2014 were analyzed, women having lymphadenectomy were excluded. Clinical, demographic and surgical data where stratified by uterine weight: less than 250 g (n= 116) and 250g or more (n=104). Deviation from a normal intra-perioperative course and readmission were compared between two groups. Complications were graded by Dindo morbidity scale.

Results

Median age of patients in two groups was 53y in the first and 49y in the second group. Two groups were different in menopause state (50,9 % of the patients in the first group vs 9.6 % of the patients in the second group) and co-morbidity such as hypertension (25.9% vs 15.4%), heart disease (6.0% vs

1%), and surgical indication: fibromatosis (44.8% vs 89.4%) and endometrial carcinoma (25.9% vs 2.9%).

Median operative time was 110’ for uteri < 250 g (range 45’-210’) and 120’ for uteri ≥ 250g (range 60’-218’). Mean extimated blood loss was respectively 31 ml (range 10-300 ml) and 67 ml (range 10-500ml). Median length of hospital stay was similar in two groups 2 days(range 2-6 days) in the first group and 2days (range 1-14 days) in the second one.

Mean uterus weight was 142g (20-246g) and 492g (range 250-1800g).

Life threatening (Dindo IV) complications did not occurred, complications requiring surgical intervention and general anesthesia (Dindo IIIB) occurred in 1 patient (0.9%) in the group of uterus < 250g (cuff dehiscence) and in 1 patient (1.0%) in the group of uterus ≥ 250g (ureteral stenosis). Surgical intervention not requiring general anesthesia (Dindo IIIA) occurred in 3 patients (2.6%) of the first group (1 wound bleeding, 1 vaginal cuff bleeding, 1vaginal laceration)

Dindo II complications occurred in 8 patients (6.9%) of the first group (5 urinary infection, 1 infection of the cuff, 1 urine retention, 1 atrial fibrillation) and in 9 patients (8.7%) of the second group (4 urinary infections, 1 infections of the cuff, 1 cuff dehiscence, 1 wound infection and 2 other infections).

Dindo I complications occurred in 6 patients (5.2%) with uterus < 250 g and in 4 patients (3.9%) with uterus ≥ 250g.

Readmission was necessary in 4 patients (3.5%) of the small uterus group and 3 patients (2.9%) of the other group.
Blood transfusions were necessary in 2 patients (1.9 %) with uterus ≥ 250g

Conclusions
Laparoscopic hysterectomy is feasible and safe, with minimal blood loss and operating time, few complications resulting in a short hospital stay regardless of uterine weight
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ES23-0520
Posters

UTERINE LEIOMYOSARCOMA DIAGNOSED BY OPERATIVE HYSTEROSCOPY
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Objectives

Postmenopausal bleeding (PMB) is a stressful complaint that needs to exclude uterine malignancies. However, PMB may have a benign origin. Leiomyosarcoma, accounting for 2% to 5% of all uterine malignancies, is a rare tumor arising from uterine smooth muscle.

Methods

A 62 year-old woman presented to our emergency department for PMB. Her medical history was unremarkable. Her gynecological follow-up didn't show anything particular. She had had 2 vaginal births deliveries and was currently on hormonal replacement therapy for climacteric symptoms. Physical examination revealed no hemodynamic instability vaginal bleeding coming from the internal os. Bimanual vaginal palpation revealed an enlarged uterus with no adnexal masse. Pipelle biopsy was attempted in the emergency room but was impossible because of patient's discomfort. Emergency ultrasound revealed a six centimeters uterine mass which ultrasonic characteristics suggesting a myoma.

After failure of acid tranexamic treatment and because of a worsening hemorrhage, an operative hysteroscopy was decided. Examination under anesthesia confirmed the presence of a mass protruding through a 2 centimeters cervical dilatation. Hysteroscopic imaging confirmed the aspect of a myoma and a resection was attempted. Given the volume of the lesion, complete resection could not be performed. However samples were sent to the pathology department. Final diagnosis revealed a high grade leiomyosarcoma for which the patient was sent to our gyne-oncology department for further treatment and follow-up.

Results

Differential diagnosis between benign and neoplastic lesion can be difficult. Clinical examination and imaging characteristics for uterine sarcoma are nearly identical to those for benign uterine leiomyomas, as well as for atypical leiomyoma variants. Although they are sometimes diagnosed preoperatively based upon endometrial sampling or biopsy of the mass that prolapses, it is rarely the case. Final diagnosis for uterine sarcoma is often made after myomectomy or hysterectomy. Leiomyosarcoma must remain a possible differential diagnosis when a woman present PMB, especially if appearance of a new myoma or if a pre-existing leiomyoma rapidly grows.

Conclusions

PMB constitutes a symptom that needs prompt investigation. Even a throughout preoperative analysis cannot always exclude malignancies. Exploration usually consists in ultrasonography, biopsy and hysteroscopy. Hysteroscopy associated with lesion biopsy or endometrial sampling may help to distinguish malignant and benign disease.
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ES23-0474
Posters

EFFECTIVENESS OF EMBOLISATION AND LIGATION OF PELVIC/ OVARIAN VEINS FOR REDUCING CHRONIC PELVIC PAIN: A SYSTEMATIC REVIEW
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Objectives

To systematically review the evidence for the effectiveness of sclerotherapy, embolization or ligation of pelvic veins in women with chronic pelvic pain.

Methods

All major bibliographies were searched using words and terms for chronic pelvic pain, pelvic congestion syndrome, pelvic vein incompetence, embolization and schlerotherapy. Citations were screened initially and categorised into randomised controlled trials, controlled studies, prospective and retrospective case series. Meta-analysis was not possible.

Results

Of 2858 citations reviewed, 23 articles reporting on 1182 women were selected as appearing to be of prospective design. Nine involved embolization with metal coils or particulate embolic agents, 6 used a schlerosant and the method was unclear in the remainder. There was one randomised trial, with hysterectomy as the comparator.

All eight studies comparing pelvic pain before and after randomisation reported a statistically significant decrease. Twelve studies reported changes in symptoms, with improvements ranging from 69-90%. Two studies where venous reflux was measured post-operatively reported near total reduction in statis or reflux. Procedural success rates were very high and recurrence rates low.

Conclusions

Data indicate significant reduction in pelvic pain, but the quality of evidence for embolization of pelvic or ovarian is poor. Well-designed randomised studies of pelvic/ ovarian vein occlusion using modern schlerotherapy techniques, with long term follow-up, are required to determine effectiveness.
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ES23-0302
Posters

TOTAL LAPAROSCOPIC HYSTERECTOMY – EXPERIENCE OF A PORTUGUESE UNIVERSITY HOSPITAL
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Objectives

To assess laparoscopic hysterectomy indications, clinicopathological factors, operative time, blood loss, surgical complications and sequelae of laparoscopic hysterectomy procedures in a Portuguese university hospital.

Methods
Descriptive prospective study of 245 consecutive cases of total laparoscopic hysterectomy performed in our centre between January 2010 and February 2014. Parameters registered: surgical indications, clinicopathological factors, operative time, blood loss, surgical complications and sequelae.
Results

Our study included 245 patients with an average age of 48,4 years (28- 76 years) The most common indication for hysterectomy was abnormal uterine bleeding (41,4%) followed by symptomatic leiomyomas (37,3%) and pelvic organ prolapses (6,0%). The median body mass index was 24,99 kg/m2 (±2,96 kg/m2). 43,3% had undergone previous abdominal surgery. The mean operative time

was 65 minutes (±19 minutes) and there was a decline in the average length of surgery with increased surgeon experience. There was necessity to convert to laparotomy or vaginal hysterectomy in 1,6% of surgeries and post-operative complications occurred in 2,4% of cases. The average duration of hospital stay was 2,6 days (2-10 days). Of the 245 patients who completed surgery and follow up, there were no long term sequelae.

Conclusions

With the adoption of the laparoscopic hysterectomy technique by our centre, an increasing number of patients are benefiting from the advantages of laparoscopy. In the last three years, our centre passed from a mostly classical technique to a majority of interventions being done by laparoscopy. We can say that it is a safe procedure, with low complication rates with good overall results and therefore it is more often the chosen method in selected patients.
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ES23-0429
Posters

DELIVERY AND PREGNANCY OUTCOME IN WOMEN WITH BOWEL RESECTION FOR DEEP ENDOMETRIOSIS: A RETROSPECTIVE COHORT STUDY

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Objectives

Endometriosis affects women in reproductive age and can involve bowel in 6-12% of patients. In case of bowel occlusion or deep pain, radical laparoscopic endometriosic surgery associated with bowel resection is recommended. The purpose of this study was to analyze the conceptions rate, the obstetric complications and the pregnancy outcome.

Methods

This is a retrospective study, we investigated 51 patients with endometriosis who underwent surgical treatment with bowel resection during the period between 2000-2007. Among the 30 patients who had at least one alive child after surgery we considered only the first pregnancy following the bowel resection and we investigated the incidence of pregnancy disorders, the gestational age at delivery, the baby birth weight and the complications related to the different ways of delivery. We compared the results with a control group of 93 patients with no previous surgery.

Results

The whole group of 51 patients tried to conceive after surgery and 35 (68.6%) obtained at least one pregnancy. Miscarriages were observed in 5 patients while 30 women had at least one pregnancy with the birth of an alive baby. Considering only the first pregnancies after the surgery, 6 (20%) experienced gestational hypertensive disorders, 3 (10%) had placenta praevia, 6 (20%) had preterm birth (< 37 weeks), while in one patient (3,3%) gestational diabetes was found. In this group the average newborn birthweight was 3000±545 gr. Compared with the control group, women with previous bowel resection for deep endometriosis had higher risks of hypertensive disorders ($p < 0.05$), placenta praevia ($p < 0.05$) and lower newborn birthweight ($p < 0.05$); while the association with preterm birth and gestational diabetes was no statistically significant. There patients

experiences 20 vaginal deliveries (40%) and 30 caesarean sections (60%). Comparing with the cesarean rate in the control group (29.3%), the incidence of cesarean section in the study population was substantially higher ($p<0.01$) with one third of the sections performed because of the previous bowel surgery. No differences in severe complication rates were observed between vaginal (8.3%) and caesarean deliveries (11.1%) (ns).

Conclusions

Complete removal of endometriosis with bowel segmental resection seems to improve the pregnancy rate but in this group there is an increased incidence of hypertensive disorders, placenta praevia and lower newborn birthweight. Despite the small number of patients we couldn't observe more complications in the vaginal group than in the caesarean group, so we hypothesize the previous radical surgery shouldn't influence the choice of the method of delivery.
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ES23-0305
Posters

LAPAROSCOPIC MYOMECTOMY - EXPERIENCE OF OPORTO HOSPITAL CENTER
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Objectives

Analyse laparoscopic myomectomy indications, surgical complications, number of fibroids removed, their localization and average diameter of all laparoscopic myomectomies carried out at our centre during the last three years

Methods

Descriptive prospective study, that included all patients who underwent laparoscopic myomectomy during 2011-2013 in our centre. Parameters registered: myomectomy indications, surgical complications, number of fibroids removed, their localization and average diameter

Results

Our study included 66 patients with an average age of 36,4 years (21-55 years). The main indications were abnormal uterine bleeding, lower abdominal pain and infertility. In the majority of cases (91%) only one fibroid was removed (maximum of four), with an average size of 5,3cm (maximum of 10cm). In 78% of cases fibroids presented an intramural/subserous component. Mean hospitalization time was 2,5 days. There were no intra or post operative major complication. There was necessity to convert to laparotomy in 1 case

Conclusions

Laparoscopic myomectomy is a safe procedure with good results. It presents a short hospitalization time and a low complication risk and should therefore be a valid surgical procedure recommended in selected cases
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ES23-0436
Posters

LEARNING CURVE OF A SURGEON IN TOTAL LAPAROSCOPIC HYSTERECTOMY
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Objectives

All laparoscopic procedures have an important learning curve which is the period of higher risk of complications. The aim of this study was to evaluate the first years of practice, of a laparoscopic surgeon in total laparoscopic hysterectomy. We compared the frequency of complications and other clinical results in different periods.

Methods

Retrospective comparative analysis of 250 total laparoscopic hysterectomies (in 5 groups of 50 hysterectomies) performed by a single surgeon, between 2009 and 2013. Several clinical parameters were analyzed: time of surgery, peri and postoperative complications, uterine weight, body mass index (BMI) of patients, previous surgeries and estimated blood loss.

Results

No differences were found between the 5 groups, concerning patient age, parity, BMI, menopause status and previous abdominal surgeries. The operative time was reduced from 84 minutes in the first group to 66 minutes in the last group (p=0,021), reaching a plateau after 100 procedures. No statistically significant differences in median uterine weight (p= 0,21) or peri and postoperative complications (p=0,32 and p=0,15) were found. The major perioperative complications were 2 excessive bleeding and 2 bowel lesions. There was only 1 conversion to laparotomy (0,4%) in the second group. There was an increased difference between postoperative and preoperative hemoglobin (p=0,02).

Conclusions

Laparoscopic hysterectomy is a safe, effective and reproducible technique with a low rate of complications, with the adequate training. The increase of estimate blood loss was due to higher complexity of the clinical situations in the last years.
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ES23-0449
Posters

CLEAR CELL CARCINOMA IN THE UTERINE CAVITY WITHOUT SIGNS OF MALIGNANCY: A CASE REPORT
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Objectives

Introduction
Endometrial polyps are located growth, pedunculated or sessile and consist of variable amount of glands, stroma and vessels sanguineos.

In women with abnormal uterine bleeding, the prevalence ranges from 10 to 30%, according to the hormonal status. It can manifest as excessive vaginal bleeding or finding of ultrasound examination

With the use of ultrasound for routine the investi-gation of abnormal uterine bleeding or postmenopausal bleeding over the last 20 years, the diagnoses of endo-metrial thickening and endometrial polyps have been more frequently.

Hysteroscopy showed 95.6% agreement of finding endometrial polyp compared to diagnosis by imaging.

It is well known that the rate of malignancy associated with endometrial polyps is low , 0.8 to 8% of the patients. In postmenopausal women, there is a direct rela-tionship between the size of endometrial polyp and the existence of atypical hyperplasia and endometrial cancer. A study performed by Rahimi et al. deter-mined that polyps measuring >1.5 cm carry a 3.6-fold higher risk of malignancy compared with lesions with a smaller diameter.

Malignant endometrial cancer can coexist with benign endometrial polyp findings. For this reason, resection of endometrial polyps accompanied by guided biopsy of the adjacent endometrium is recommended in patients at risk.

Objective: case report in which the visual appearance during a diagnostic hysteroscopy showed only two polypoid formations with no signs of malignancy and the final pathologic diagnosis demonstrated a clear cell endometrial carcinoma.

Methods

ARTR, 66, menopause at 47, refers vaginal bleeding in small amounts once a month lasting 2 to 3 days for 1 year. Transvaginal ultrasonography was visualized uterus with regular contours, volume of 90 cc with heterogeneous endometrial of 21mm; ovaries without abnormalities. Diagnostic hysteroscopy was performed with Hamou hysteroscope showing two nodular formations suggestive of endometrial polyp with fibroglandular aspect, pediculated and typical vascularization, one in fundic wall occupying 2/3 of the cavity and the other in the right anterolateral wall near the isthmus occupying less than 1/3 of the cavity; atrophic endometrium standard, visualized and free tubal ostia. Guided biopsy was performed using Novak curette was diagnosed endometrial clear cell adenocarcinoma grade III. The patient is on medical monitoring in oncology ambulatory.

Results
This case report clearly demonstrates the field of endometrial/polyp biopsies during a diagnostic procedure such as ambulatory diagnostic hysteroscopy. In our department we always perform biopsies during a diagnostic hysteroscopy, even when looks like benign lesions.
Conclusions

Endometrial/polyp biopsies associated with individual evaluation of clinical symptoms and risk factors and can play an important role in the screening of malignant lesions.
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ES23-0405
Posters

HYSTEROSCOPIC PROCEDURES: A 16 YEARS EXPERIENCE IN A MEDIUM SIZED COMMUNITY HOSPITAL

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Objectives
Over the years, hysteroscopy has been increasingly performed for various gynaecological disorders. In this study, we present a review of hysteroscopic procedures performed over a 16-year period.

Methods
Retrospective analysis of the 4609 hysteroscopic procedures performed in our hospital between January of 1998 and December of 2013. Data on patients' age, medical or surgical indications, type of anesthesia, intraoperative diagnosis, hysteroscopic procedures and acute complications were collected.

Results
Of the 4609 procedures, 53,6% were performed without general anesthesia (14,7% with local anesthesia). 26,7% were diagnostic hysteroscopies and we were able to access the uterine cavity in 99,02% of the cases. The global average age of patients was 52,3 years (53,8 years with anesthesia and 51 years without it). The most common indications for the procedure were suspicious ultrasound for endometrial disease (67,5%), abnormal vaginal bleeding (15,8%) and family planning (7,8%). The more frequent findings were endometrial polyps (41,4%), hyperplastic endometrium (7,6%) and submucous myoma (7,5%). The main operative procedures were directed endometrial biopsies (32,8%) and mechanical excision of the lesions in (32,6%). The complication rate was very low (1,1%) and the majority occurred in procedures performed under general anesthesia (1.9% vs 0.5%).

Conclusions

The development of hysteroscopy has provided a minimally invasive approach to common gynaecologic problems. Increased clinician training and the introduction of smaller hysteroscopes have led to the widespread use of this technology allowing the well-known 'see and treat' approach, with less need for the presence of an anesthesist and less complications rate. The use of this approach, in specific cases, has been replacing more aggressive surgical interventions with reduced morbidity, shorter convalescence period and lower costs.
With our analysis we were able to verify that it is possible to have a very high success rate with outpatient hysteroscopy, especially when certain pre and peri-operative care are adopted.
Our data are consistent with reports from other studies supporting that hysteroscopy, diagnostic and operative, is a safe and minimally invasive procedure with a very low rate of complications.
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ES23-0214
Posters

VAGINAL HYSTERECTOMY, ABDOMINAL HYSTERECTOMY, & ROBOTIC LAPAROSCOPIC HYSTERECTOMY COMPARATIVE STUDY INCLUDING THE CLINICAL OUTCOMES AND THE COST.

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Objectives

To compare the effect of different methods of hysterectomy on length of hospital stay, operative time, post-operative outcome (patient pain level, days until self care, days of pain analgesics use, days first bowel movement, days returning to work, weeks until first intercourse), and total hospital charges.

Methods

Retrospective study for all consecutive hysterectomy cases performed by the author from 1/1/2008 to 07/31/2013. Data collected from the EMR of the office and the hospital. Two hundred and eleven cases were reviewed, and a hundred and forty nine questionnaires were completed.

Patients were divided into three surgical groups: Total vaginal hysterectomy (TVH), abdominal hysterectomy (TAH), and Robotic laparoscopic hysterectomy (RLH). Patient records were used to determine patient demographics, length of hospital stay, operative time, estimated blood loss (EBL) and total hospital charges. Patient surveys were used to determine the following patient outcomes: post-operative pain level, days of analgesics use, days until first bowel movement, days until self care, days until returning to work, and weeks until first sexual intercourse. No operative or postoperative complication in the study cases to report.

Results

TAH had a significantly higher hospital stay at 2.88 days (95% CI 2.74-3.02) versus TVH at 1.66 days (1.29, 2.02), and RLH at 1.39 days (1.22, 1.57). RLH has a significantly higher operative time (207 minutes, 95% CI: 196-218) than TVH (101 minutes, 95% CI: 77-125) and TAH (175 minutes, 95% CI: 165-184).

No significant differences in hospital charges between RLH ($17672, 95% CI: 16750-18595) and TAH ($19198, 95% CI: 18458-19938). TAH had significantly higher total charges than TVH ($13342, 95% CI: 11428-15257). RLH charges are significantly higher than TVH.

TAH has higher reported post-operative pain level than TVH (the lowest), and RLH. No significant differences in patient demographics (age, ethnicity, BMI, parity) or the remaining patient survey results (days of analgesics use, first bowel movement, days until self care, days until returning to work, and weeks until first intercourse).

TAH had significantly higher EBL (217 mL, 95% CI: 174-260) than RLH (110 mL, 95% CI: 57-162). No significant difference in EBL for other methods.

Conclusions

Our study findings reveal a significant difference in hospital stay in TAH versus all other methods of hysterectomy. TAH & RLH have a significant difference in hospital charges versus TVH. No significant difference between TAH & RLH in hospital charges. TAH had higher level of post operative pain than RLH, and TVH. TAH had significantly higher EBL than RLH

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ES23-0071
Posters

HYSTERECTOMY BY TRANSVAGINAL NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (NOTES): A SERIES OF 137 PATIENTS.

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Objectives
To evaluate the feasibility and safety of hysterectomy in benign disease with transvaginal natural orifice transluminal endoscopic surgery (NOTES).
Methods

It was a prospective observational study in a tertiary referral medical center. From May 2010 to August 2011, consecutive patients who were scheduled for laparoscopic hysterectomy and without virginity or the suspicion of pelvic inflammation, or cul-de-sac obliteration were included. All there patients underwent total hysterectomy with transvaginal NOTES.

Results
All included patients were 137, with mean age 46.0±0.4 years and BMI 24.7±0.4 kg/m2 ([±SEM]), respectively, and transvaginal NOTES was successfully completed in 130 (94.9%) patients. 15 patients underwent concurrent adhesiolysis and 17 with adnexal procedures. Mean uterine weight was 450.0±24.1 gm, where 45 (34.6%) patients had weights >500gm, and 7 (5.4%) patients >1000gm. Mean operative time was 88.2±4.1 minutes, with mean blood loss 257.7±23.9 mL. Two patients encountered intraoperative hemorrhage or unintended cystotomy, another 5 with failure of transvaginal colpotomy due to a very narrow vagina, cul-de-sac obliateration by bowel adhesions, or mass obstruction, and all these 7 (5.1%) patients were successfully dealt with transabdominal laparoscopy. Five (3.6%) patients experienced postoperative urinary retention or febrile morbidity, and recovered uneventfully with conservative treatments.
Conclusions
Transvaginal NOTES is feasible to perform hysterectomy and can undergo procedures hardly completed in conventional vaginal surgery, given that posterior colpotomy is achievable. This procedure was not impeded by the voluminous size of uterus, and was advantaged by the absolution of any abdominal incision.
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ES23-0280
Posters

TREATMENT OF ENDOMETRIOSIS-ASSOCIATED PAIN ACCORDING TO THE 2014 ESHRE GUIDELINES.

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Objectives
The ESHRE 2014 Guideline on the management of women with endometriosis was recently published and offers best practice advice on the diagnosis of endometriosis, and treatment of endometriosis-associated pain and infertility. Furthermore, information is provided on incidental finding, primary prevention, menopausal symptoms, and on the association of endometriosis and cancer.
Methods
The guideline was developed based on the ESHREmanual for guideline development. In short, key questions and key words, written by the guideline development group (GDG), were used to search PUBMED and the Cochrane database. Content and quality of the retrieved papers were evaluated, after which the evidence was summarized and translated into recommendations.
Results

In the guideline, four treatment-options for endometriosis-associated pain wereevaluated in key questions assessing the efficacy of hormonal therapies,analgesics, surgery, and alternative medicine.

Evidence on hormonaltherapies, summarized in recent Cochrane reviews, has shown the efficacy ofprogestagens, anti-progestagens, and GnRH agonists for pain relief in womenwith endometriosis. Hormonal contraceptives, although widely used, were onlyassessed in a few studies. From the body of evidence, clinicians arerecommended to prescribe hormonal treatment [hormonal contraceptives,progestagens, anti-progestagens, or GnRH agonists) as one of the options, as it reduces endometriosis-associated pain. Furthermore, the GDG recommends clinicians to take patient preferences, side effects, costs, and availability into consideration when choosing hormonal treatment for endometriosis-associated pain.

Although widely used as first line treatment, there is no evidence on the use of NSAIDs for relief of pain in endometriosis, except for one study from 1985. Therefore, the GDG recommends, in a good practice point, that clinicians should consider NSAIDs or other analgesics to reduce endometriosis-associated pain.

There is evidence supporting recommendations on the use of surgery for painful symptoms associated with endometriosis. In general, when endometriosis is identified at laparoscopy, clinicians are recommended to treat endometriosis surgically, as this is effective for reducing endometriosis-associated pain, i.e. see and treat. For deep endometriosis, referral to a centre of expertise is advised in a good practice point.
Finally, the evidence on alternative medicine is limited, and potential benefits and/or harms are unclear. Therefore, the GDG does not recommend the use of nutritional supplements, complementary or alternative medicine in the treatment of endometriosis-associated pain. However, they acknowledge that some women who seek these treatments may feel benefit from this.
Conclusions

Different treatment options for endometriosis-associated pain have been explored in the recent ESHRE guideline. In general, hormonal treatments, analgesics, and surgery are effective for treating endometriosis-associated pain. However, which of the options is superior for an individual patient depends on patient preferences, including side effects, costs, and desire for pregnancy, the severity of symptoms and type of endometriosis and the clinicians preferences.The guideline and the recommendations therefore try to stimulate shared-decision making and future research.
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ES23-0339
Posters

MAJOR COMPLICATIONS ASSOCIATED WITH OVER 1000 OPERATIVE GYNAECOLOGICAL LAPAROSCOPIES.

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Objectives

Increasingly more gynaecological conditions, traditionally managed by laparotomy or vaginally are being carried out laparoscopically. The benefits of this approach are now well established and the initial perceived association with a higher complication rate is no longer true. Audit of practice is essential to ensure standards are maintained and to be able to quote relevant statistics when counselling patients. We undertook to review the rate of major complications of laparoscopic gynaecological surgery carried out in our units.

Methods

We carried out a multi centre, retrospective review of the major complications in 1021 operative gynaecological laparoscopies, over 70 months, by three experienced advanced laparoscopic surgeons. Cases were identified from the surgeons operative log, followed by a chart review.

Results

Major complication rate (CR), defined as visceral, ureteric and vascular injury was 17/1021, 1.67% (including one death from pulmonary embolism). The rate of conversion to laparotomy was 9/1021(0.88%). In 6%, complication occurred on entry, 30% intraoperatively and in 64% there was delayed recognition. Of the major complications 10/17 (58.8%) were managed laparoscopically and 41.1% (7/17) were successfully managed by the gynaecologist. The most frequently performed procedure was laparoscopic hysterectomy 39.2% (410/1021). This group also had the highest CR, 70.1% (12/17) of all major complications. Second and third commonest procedures were salpingoophorectomy 20.9%, 214/1021, CR 11.7% (2/17) and excision of endometriosis 14.2% (146/1021), CR 5.88% 1/17).

Conclusions

Major complication rate is low, these rates compare favourably to rates reported in literature for open and vaginal equivalent procedures. Many major complications can be managed by the gynaecologist using a laparoscopic approach thereby avoiding the morbidity associated with laparotomy. Versus setup phase injury, this series reveals a higher number of complications intraoperatively and highlights the dilemma of the ominous delayed presenting injury.

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ES23-0410
Posters

IMPACT OF THE LAPAROSCOPIC TREATMENT OF DEEP ENDOMETRIOSIS IN INFERTILE PATIENTS.

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Objectives

The main aim of this study is to evaluate the impact of surgical treatment for deep endometriosis on pregnancy rate in patients with primary infertility associated with deep endometriosis. A secondary aim is to determinate whether the localization and dimension of endometriotic nodules plays a significant role in associated infertility.

Patients were subdivided into different groups according to the use of ART prior the to surgery in order to determine if surgery plays a role in spontaneous conception.

Methods

From March 2007 to September 2012, we retrospectively selected all patients of childbearing age (under 40 years old) with primary infertility that underwent laparoscopic treatment for deep endometriosis.

The patients were divided into two groups according to whether a pregnancy was achieved in order to identify the determinant factor of infertility.

Each group were further divided into sub-groups according to the diseases localization and nodule size.
To determine if disease localization plays a role in infertility the patients were divided into four groups: anterior, posterior midline, uterosacral and multiple localization

Results

Among 138 patients initially identified 23 (15.9%) were lost to follow up and subsequently excluded. 115 patients were therefore included in the study.

The overall pregnancy rate was 54,78 % (n=63) with a live-birth rate of 42,6% (n=49)

Regarding the group with failed IVF prior to surgery (n = 45) a total of 18 patients conceived, 7,5 % (n=3) became pregnant spontaneously whilst awaiting medically assisted reproduction. Among this group, excluding the patients that became pregnant spontaneously, the pregnancy rate achieved with IVF was 35,7 % (15/43).

In the group without failed IVF prior to surgery (n=70) the overall pregnancy rate was 60 %, (n = 42) and 38,57 % (n=27) of the women became pregnant spontaneously.

The live birth rate was 28,8% and 54,4% in the group with and without preoperative failed IVF respectively.

Comparing the differences between the pregnant and not-pregnant group the only factor influencing the pregnancy rate, which reached a statistically significant difference is the comparison between single and multiple lesion (p = 0,01) (OR 2,74).

Conclusions

Even if the impact of surgical treatment in endometriosis related infertility is not yet clarified this study suggest, that laparoscopic treatment of endometriosis may enhance fertility.

Moreover our data demonstrates that infertility is associated with multifocal localization of the disease.
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ES23-0371
Posters

BLADDER ENDOMETRIOSIS: SONGRAPHIC FEATURES USEFUL FOR SURGICAL TREATMENT
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Objectives
The aim of this study was to review the sonographic aspects of bladder endometriosis and to establish their usefulness for surgical management.
Methods
51 patients with histologically confirmed bladder endometriosis underwent sonographic evaluation prior to surgical treatment. 2D and 3D transvaginal sonography was performed with moderate filled bladder and had a diagnosis of infiltrative bladder endometriosis. A mapping of the disease extension was evaluated, vescical nodules were measured in three diameters, position, echostructure and tissue infiltration of the mucosa were accurately described. Distances from the ureteres were measured. Presence of sonographic signs of endometriomas, posterior deep infiltrating endometriosis and adenomyosis were also noted. Excision of the suspected endometriotic lesion was performed by laparoscopic partial cystectomy or transperitoneal cystotomy. Presurgical cystoscopic application of ureteral stent was notified.
Results
44 patients had dysmenorrhea, 15 macroscopic haematuria and 48 painful urinary symptoms. In 42 cases the lesion appeared as an inhomogeneous hyperechoic, solid, nodular mass of the vescical wall, in 31 cases also extending in the lumen of the bladder. These nodular masses showed small hypoechoich cystic areas inside in 28 cases and at power Doppler evaluation few vascularization in 42 cases. All the endometriotic nodules were found on the posterior bladder wall and in two patients also an extension to the fundal wall was noticed. Mean diameter of the bladder lesions was 23.1±8.1mm. Mean distance from the closest ureter was 9.1±8.3mm. 26 patients had a previous uterine surgery, of these 18 had a cesarean section and 8 a myomectomy. 32 patients had previous surgery for pelvic endometriosis. Sonographic signs of adenomyosis were found in 28 out of 44 patients.
Conclusions
History of pelvic endometriosis and adenomyosis, nodule size and distance from the ureters are important features to guide surgical management of bladder endometriosis.
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ES23-0252
Posters

TRANSVAGINAL HYDROLAPAROSCOPY: OUR INITIAL RESULTS
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Objectives

Aim of transvaginal hydrolaparoscopy is to visualize the tuboovarian structure and to evaluate the tubal patency. The main role of this operation is in the investigation of infertility, but it is effective in the visualization of the early stage of endometriosis as well. Under appropriate conditions this technique can be used despite of diagnostic laparoscopy.
Methods

Since the transvaginal hydrolaparoscopy was introduced in our department 10 operations has been performed. Indication was infertility in all cases. Operation was performed in itravenous narcosis. All patients had a negative pelvic ultrasound and physical examination findings.

Results
In 8 cases the tubes were patent and there was no pathology found. In one case both sided blocked tubes was the result and we had one complication which could be treated by conservative way. The average time of the operation was 20 minutes and the blood loss was minimal.

Conclusions

Due to the scientific literature and our results the transvaginal hydrolaparoscopy is an effective method in the evaluation of infertility, quick and cost-effective. The method is a minimally invasive safe procedure which can be an alternative to diagnostic laparoscopy in selected patients.
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ES23-0382
Posters

MANGESHIKAR RETIARIUS: THE SWISS ARMY KNIFE AT LAPAROSCOPY
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Objectives
The Mangeshikar Retiarius is a multi function reusable laparoscopic instrument that was developed by me to function like a Swiss Army Knife.
Methods
The Mangeshikar Retiarius allows multiple actions with one instrument usage thereby reducing instrument exchange . It works as:
1.Grasper: Grasps tissue firmly in an atraumatic grip eg ovarian tissue, peritoneum, vagina.

2. Dissector: Dissects tissue along the plane of cleavage. It also spreads tissue to facilitate bloodless and atraumatic effortless dissection.

3. Needle holder: Serves as needle holder as well as an assistant needle holder. It grasps suture as effectively as the needle in its correct position.

4. Scissors: Encompasses a scissors in its proximal end of the insert.

5. Knot Pusher: Has two different types of knot pushers:
A. Clarke knot pusher
B. Closed knot pusher

Results

Use of the instrument allows ergonomic during surgery reducing instrument exchange.
Conclusions
The Mangeshikar Retiarius serves multiple functions as a 5 mms reusable instrument instrument and is ergonomic : One for All and All for One!
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ES23-0189
Posters

HOW TO IMPROVE THE PREOPERATIVE STAGING OF PRESUMED EARLY-STAGE ENDOMETRIOID ENDOMETRIAL CANCER?
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Objectives

Two recent trials finding that systematic pelvic lymphadenectomy provided no benefits in terms of survival in women with early-stage endometrioid endometrial cancer (EEC) have led to changes in practices. Nonetheless, a discrepancy between the preoperative and the final staging may require the patient to undergo a second surgical procedure for pelvic lymphadenectomy. Accurate preoperative staging of EEC is necessary to reduce the reintervention rate.

The aim of our study is, first, to determine the rate of understaging and to evaluate the accuracy of different preoperative staging methods: hysteroscopy-curettage + pelvic magnetic resonance imaging (MRI) versus endometrial biopsy + MRI in predicting the final pathology stage.

Methods
This retrospective single-center study included women with EEC preoperatively assessed at presumed low- or intermediate-risk who had surgery between 2000 and 2010. The preoperative risk was staged by endometrial biopsy or hysteroscopy-curettage, both combined with MRI. Understaging was defined as a postoperative FIGO stage>1 or a determination of high risk after the final histopathologic diagnosis.
Results

101 women were treated for a preoperative early stage of EEC at our institution: 75 preoperatively considered at low-risk and 26 at intermediate-risk. Final diagnosis was upstaged for 26 of them (rate of discrepancies = 25.7%). The understaging rate was significantly higher in the presumed intermediate-risk disease, compared with the presumed low-risk group (57.7% vs 14.7%, $p < 0.001$). The rate of preoperative understaging was higher in the women with endometrial biopsies + MRI than those with curettage + MRI (34.5% versus 15.2%, $p=0.04$).

Conclusions
Hysteroscopy-curettage combined with MRI may improve preoperative staging of early-stage EEC, especially for presumed intermediate-risk disease.
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ES23-0153
Posters

NATURAL ORIFICE SPECIMEN EXTRACTION DURING LAPAROSCOPIC BOWEL RESECTION FOR COLORECTAL ENDOMETRIOSIS

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Objectives

With the present study we aimed to evaluate the outcome of a consecutive series of 97 radical laparoscopic resection of bowel endometriosis and to compare the feasibility of different specimen extraction techniques.

Methods

Between 10/07/2009 and 01/06/2014 at the 1st. Dept.of OB/GYN, Semmelweis University, Budapest a series of 97 multidisciplinary CO2-laser laparoscopic bowel resection was performed for colorectal DIE by the same surgical team. The main outcome measures assessed were operative duration, conversion rate, incidence of early complications, length of hospital stay, morbidity and mortality. The differences between the used natural orifice specimenn extraction (NOSE) techniques, namely the transvaginal, the transanal so called ”pull-through” and the transrectal-intraabdominal method were also assessed.

Results

Operative time (min, median, range) was: 166 (65-580). Non-colorectal DIE (number, %): 31(32), Laparoconversion (number, %): 4(4.1) Hospital stay (days, median, range): 6(3-10). Early major postoperative complications, Clavien-Dindo grade III or higher, (number, %) Total: 8(8.2). For specimen extraction NOSE technique was used in 21(21.6) of all cases 16(16.4) transvaginal, 1(1) transanal and 4(4.1) transrectal-intraabdominal respectively. The occurence of rectovaginal fistula 3(3) is significantly higher when colpotomy is performed regardless the modality of specimen extraction.

Conclusions

Multidisciplinary nerve sparing laparoscopic colorectal resection for endometriosis is feasible and can be advised for selected patients who are informed of the potential risks of complications. The NOSE technique offers better cosmetic results and reduced risk for incisional hernias.
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ES23-0390
Posters

MICROLAPAROSCOPY FOR OPERATIVE GYNECOLOGY: PRELIMINARY EXPERIENCE

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Objectives

Microlaparosopy is conventionally defined as an operation in which the entire procedure is accomplished using trocars with a caliber of 2-mm are used, with the only possible exception of a 3-mm umbilical port. The use of microlaparosopy has been traditionally limited to exclusive diagnostic purposes. Our aim was to describe our preliminary experience with the use of microlaparoscopy to perform operative gynecologic procedures. We here report a series of microlaparoscopic operations, including five bilateral adnexectomies and three total hysterectomies. After a systematic review of the available literature, no case was found of removal of genital organs before the present series.

Methods

We prospectively collected perioperative data regarding all cases in which operative microlaparoscopy for hysterectomy and/or bilateral salpingo-oophorectomy was attempted at the Obstetrics and Gynecology Department of the University of Insubria.
All the operations were performed using a combination of 2- and 3-mm instruments. The devices used included: one 3-mm 0-degrees or 30-degrees and one 2-mm 0-degrees scopes, 3-mm bipolar forceps and bipolar scissors, a 2-mm atraumatic grasper and a 2-mm monopolar hook. For bipolar coagulation, an Autocon II generator was used.
After creation of the pneumoperitoneum using a Verres needle, an umbilical 3-mm port was inserted, to introduce a 3-mm scope. Under direct vision, two 2-mm suprapubic ancillary ports were positioned. Then a 2-mm scope was inserted in one of the two suprapubic trocars and the operation was completed using a 2-mm suprapubic grasping forceps to obtain adequate traction and triangulation, and 3-mm bipolar forceps or scissors from the umbilicus to coagulate and cut ligaments and supporting structures.
After adnexectomy, the specimen were extracted transvaginally through a posterior colpotomy. In case of hysterectomy, the uterus was removed through the vagina after colpotomy at the fornices using monopolar hook.

Results

Since we started with this innovative technique, a total of 8 women underwent operative microlaparoscopy at our Department: 5 (62.5%) had bilateral adnexectomy and 3 (37.5%) had hysterectomy with concomitant bilateral salpingoophorectomy. No intra-operative complications occurred, as well as no conversions to standard laparoscopy or to open surgery. Median hospital stay was 0 (range, 0-1) days. All women underwent at least 2 post-operative visits at 1 and 3 months after surgery. At the time of the last follow-up, no post-operative complication was observed.
Figure1. A 2-mm operative trocar.

Conclusions

For the first time we report cases of microlaparoscopic operative technique in the gynecological field. All the operations were performed exclusively using 2-mm ancillary ports. This microsurgical approach appears promising in the perspective of decreasing surgical trauma to a minimum and deserves further evaluation.
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ES23-0439
Posters

ROBOT-ASSISTED LAPAROSCOPIC HYSTERECTOMY USING ENSEAL® TISSUE SEALER: OPTIMIZING THE MINIMALLY INVASIVE HYSTERECTOMY

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Objectives

To describe the outcomes and optimization analysis of a hybrid technique of robot-assisted, laparoscopic hysterectomy using ENSEAL® Tissue Sealing Devices by an experienced, high-volume robotic gynecologic surgical team.

Methods

Retrospective, consecutive, observational case series performed in a single, tertiary healthcare center in Miami.

Results

Over a 45 month period, 590 robot-assisted total laparoscopic hysterectomies +/- USO/BSO for benign and malignant indications were performed and analyzed. The overall complication rate was 5.9% with 35 patients experiencing 69 complications. No deaths were reported in this series. Overall, the mean (SD) surgery time, OR time, EBL, and LOS for this cohort was 75.5 (39.42) minutes, 123.8 (41.15) minutes, 83.1 (71.29) milliliters, and 1.2 (0.93) days respectively for the entire series. The impact of performing secondary procedures in addition to hysterectomy was also analyzed. Surgeries requiring concomitant adhesiolysis or enterolyisis reported longer mean surgery times [14.7 minutes ($p < .02$)], longer mean operating room times [13.9 minutes ($p < .05$)], and greater mean EBL [41.2 ml ($p < .02$)]. Need for lymphadenectomy and uterine morcellation also increased mean surgery time by 18.7 ($p < .02$) minutes and 12.8 ($p < .02$) minutes respectively as well as longer operating room time by 12.8 ($p < .02$) minutes and 12.7 ($p < .02$) minutes. No meaningful differences due to lymphadenectomy and morcellation were observed for EBL or LOS. (Table 1)
Using surgery time as a surrogate marker for surgeon and operative team proficiency, the cumulative sum method was used to evaluate an optimization curve for surgery time (Graph 1). Three (3) differentiated optimization phases were observed. Compared to Phase I, mean surgery and OR times were reduced in combination with introducing more complex cases across both Phase II and III. Mean surgery time was greatest in the first year of the series, 91.6 minutes, and declined each subsequent year by 18.0 minutes, 19.0 minutes, and 24.3 minutes [$p < .001$] for 2010, 2011, and 2012 respectively. Estimated blood loss and LOS did not vary significantly across the entire series. After an overnight stay in the hospital, 87.3% and 5.6% of the patients were discharged on postoperative day 1 and 2 respectively with 7.1% being discharged between postoperative day 3 and 11.

Parameter
Phase I (n=102)
Phase II (N=236)
Phase III (n=252)
Surgery time (min)
94.2 (3.76)
74.1 (2.46)*

69.4 (2.39)*
Operating room time (min)
143.3 (3.87)
124.3 (2.54)*
115.4 (2.46)*
Estimated blood loss (ml)
80.4 (7.67)
79.7 (5.23)
87.4 (5.08)
Length of stay (days)
1.27 (0.09)
1.28 (0.06)
1.20 (0.06)
Adhesiolysis or enterolysis
0 (0.0)
14 (5.9)*
29 (11.5)*
Lymphadenectomy
8 (7.8)
22 (9.3)
8 (3.2)
Morcellation
0 (0.0)
41 (17.4)*
36 (14.3)*

Conclusions
The use of an advanced laparoscopic tissue-sealing device by a bedside surgical assistant led to improved operative efficiency and reliable vessel sealing during robotic hysterectomy. Procedural optimization as characterized by reductions in operative time continued to occur over a 3 year period despite an increase in overall case complexity. This analysis suggests that procedural optimization may continue to occur well past previous learning curve estimates.
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ES23-0437
Posters

THE ROLE OF HYSTEROSCOPY AGAINST ULTRASOUND IN POLYPS
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Objectives

The prevalence of endometrial polyps among the population is within 7.8% and 34.9%. This wide range is due to the high frequency of asymptomatic cases. The ultrasound diagnosis seems unspecific and the reccommendations on the hysteroscopy treatment rely on the symptomatology and size, following the latest clinical guidelines.

The objective of our study is evaluate the utility of the hysteroscopy in signs of endometrial polyps detected through ultrasound depending on the menopause stage, size and symptomatology.

Methods

The medical histories of patients who underwent the diagnosis hysteroscopy for suspected endometrial polyp through ultrasound in our hospital during 3 years (2010-2012) were retrospectively analysed.

Results

A total of 250 cases were analised, the 37% were menopausic and the 46% asimptomatic. The most common symptom was the metrorrhagia (44%) followed by sterility (7%). The presence of polyps was confirmed by hysteroscopy in the 67% of cases from which 73% were bigger than 15 mm in ultrasound readings.

The clinical-ultrasound correlation shows that 63% of the patients that presented metrorrhagia had polyps bigger than 15 mm. However, in the 67% of cases with sterility were smaller than 10 mm.

The pathological exam showed polyps in 84.3% of cases and adenocarcinoma in only one case (0.6%), which was a post menopause metrorrhagia with an ultrasound exam showing a polyp above 15mm size.

Conclusions

Results indicate that when an asimptomatic endometrial polyp is identified through ultrasound and the recorded size is smaller than 15 mm a conservative approach should be considered. When the patient is post menopausic, the new molecular methods (GynEC®-DX), could be useful to discard endometrial cancer and, therefore, avoid hysterecopy.
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ES23-0363
Posters

A CASE OF SERIOUS INCISIONAL HERNIA AT TROCAR PORT-SITE
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Objectives
Trocar-site hernia is a serious complication in laparoscopic surgery with incidence of 1% to 2%. Trocar size, particularly larger than 5-mm, leaving fascial defect open and inserting site of the large trocar at the lower quadrants may be related to the problem among several factors regarding the technique and the host. It is crucial to consider hernia through trocar site and to perform further intervention when suspected clinical findings due to obstruction of small bowel or omentum such as pain and distension are detected.
Methods
A 44-year-old woman with abnormal uterine bleeding and fibroid underwent an uncomplicated laparoscopic hysterectomy using two 10-mm ports, one at the infraumbilical and the other at the right lower quadrant; two 5-mm ports, one at the suprapubic region and the other at the left lower quadrant. The patient was discharged on the third postoperative day after an uneventful course.

Three days after discharge, she presented with pain and swelling at the right lower quadrant trocar site. Ultrasonography and computerized tomography demonstrated small bowel hernia at the right portsite.
Results
Diagnostic laparoscopy was performed and small bowel herniated through right 10-mm trocar site was detected. The skin and fascial incisions were extended and hernia was reducted. Fortunately, small bowel was identified viable so no further intervention was required. The abdominal layers were repaired primarily and the patient was discharged on the third postoperative day.
Conclusions
Inserting trocar larger than 5 mm at the lower quadrants may increase the risk of small bowel herniation even if closing all layers of the abdominal wall. Therefore, it seems to be reasonable to avoid using lower quadrants for larger trocars and close all trocar sites in order to prevent the trocar-site hernias which can cause serious morbidity and mortality so that need prompt diagnosis and intervention.
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ES23-0354
Posters

SUPRACERVICAL VERSUS TOTAL LAPAROSCOPIC HYSTERECTOMY. WHAT SHORT-TERM IMPACT ON SEXUALITY AND WOMEN'S SATISFACTION. SINGLE-CENTER RETROSPECTIVE COMPARATIVE STUDY ABOUT 24 CASES.
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Objectives
The aim of our study was to assess the short-term impact of supracervical laparoscopic (SCLH) or total laparoscopic hysterectomy (TLH) on women’s sexuality, pain, satisfaction and urinary function.

Methods

24 women who underwent hysterectomy were included in a comparative retrospective observational study. All women completed a self-questionnaire including PISQ 12 (Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire), PGI-I (Patient Global Improvement) and ICIQ-SF (frequency and severity of urinary incontinence). The main objective was to compare the two groups (SCLH and TLH) for overall satisfaction, sexual function, pain and urinary symptoms one year after surgery.

Results

Satisfaction score (ENS) was not statistically different between the 2 groups (9.1 for SCLH vs 8.9 for TLH, p=0.70). Sexual function (PISQ 12) was also similar in both groups (39 vs 35, p =0.17). Nine patients (75%) reported feeling “much better” in the SCLH group and only 6 (50%) in the TLH group, but this result was not statistically significant. 3 women suffered from “de novo” dyspareunia in the TLH group versus 1 in the SCLH group (NS). Only one patient in each group reported a “de novo” SUI. 100% of patients would “undergo the same operation” and “would recommend the procedure to a friend”.

Conclusions

Despite a higher rate of dyspareunia in the TLH group and a trend for a higher satisfaction in the SCLH, differences in terms of sexuality and quality of life of both groups were similar. A prospective randomized study including a larger number of patients is needed to confirm the trends found in our study.
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ES23-0087
Posters

COMPARATIVE STUDY OF SINGLE PORT VS. MULTIPORT LAPAROSCOPIC MYOMECTOMY
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Objectives

We report our experience with single port and multiple port laparoscopic myomectomy with operative outcomes.

Methods

Between May 2011 and December 2011, 104 patients underwent single-port laparoscopic (SPL) myomectomy to remove single or multiple myomas measuring greater than 5 cm in diameter. During the same time period, a total of 69 multi-port aparoscopic (MPL) myomectomy were performed and the operative outcomes were compared between two methods.

Results

All procedures were successfully completed without conversion to abdominal myomectomy. The mean maximum diameter of the largest myoma was 7.4 (5-13) vs. 6.8 (5-12) cm and the mean number of myomas was 1.7 vs. 1.6 in SPL and MPL myomectomy group, respectively. Mean operative time was 134.2 vs. 122.9 mins in SPL and MPL group ($p = 0.109$). There was no differences of VAS 24 hour score of postoperative pain. Two patients developed postoperative ileus in each group and neither bowel injury nor urinary tract injury occurred in any patient.

Conclusions
We have successfully performed SPL myomectomy without long-term complication and showed that SPL myomectomy is a safe and feasible technique compared to MPL myomectomy with respect to postoperative pain, mean operating time, mean estimated blood loss, and length of stay.
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ES23-0119
Posters

THE ROLE OF AGNRH IN TREATMENT OF MYOMA
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Objectives
To evaluate the effectiveness of integrated treatment for women with myoma wishing to conceive.
Methods

Comprehensive treatment included laparoscopic myomectomy using gonadotropin-releasing hormone (aGnRH) postoperatively for 4 - 6 months. The study included 102 women with myoma at the age of 22 to 44 years who underwent laparoscopic myomectomy. All patients were divided into 2 groups. The first group consisted of 67 patients who received aGnRH (buserelin) postoperative therapy for 4-6 months. The second group included 35 women who did not receive postoperative therapy, due to contraindications to these drugs or their own reluctance. Key indications for the surgery included: infertility, the presence of large tumor size (size of uterus up to 14 weeks), the rapid growth of the tumor, i.e. myoma. These are the main or only pathologies requiring surgical treatment. Both groups had no statistical difference ($p < 0.05$) for mean values, age, size of fibroids, frequency of anemia before surgery, etc. Age of group 1 patients was 31, 3 ± 0,5 years, group 2: of 29, 2 ± 0,4. Tumor size in 1 group - 12,5 ± 0,4 weeks, in group 2: - 9,4 ± 0,4 weeks.

Results

Through examination of 102 women after 2-5 years after treatment recurrence of the disease was detected in 12 cases (11.8%): 3 patients of group 1 and 9 patients not receiving hormonal treatment (group 2).

Diagnosed relapse: myoma in 7 cases (6.9%), endometrial hyperplasia in 2 cases (1.96%), myoma and endometrial polyp in 3 cases (2.9%). All patients performed repeated surgical interventions in adequate volumes. In 23 (22, 6 %) cases, uterine pregnancy occurred within 6-24 months after surgery. In 12 cases: patients underwent ??caesarean section after full-term pregnancy period. In 7 cases: caesarean section after 36-37 weeks of pregnancy. In 2 cases: spontaneous uncomplicated childbirth. Extrauterine pregnancy was diagnosed in 1 case. During the pregnancy and childbirth, none of the operated and we observed no women insolvency scar in the uterus after myomectomy.

Conclusions

Results of the study indicate a high efficiency of the combined treatment (laparoscopic approach combined with aGnRH postoperative).
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ES23-0055
Posters

ROLE OF ?-CHEMOKINES AND CRP IN THE DEVELOPMENT OF ENDOMETRIOSIS
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Objectives

Endometriosis is a pelvic in?ammatory process with an altered function of immune-competent cells. In particular, macrophages represent the predominant cells in the peritoneal ?uid and could play an important role in the development of endometriosis. Immunological dysfunction observed in women with endometriosis may be either a causative agent or simply a result of the disease. We try to assess levels of MCP-1, RANTES and ?-reactive protein (CRP) in the peritoneal ?uid and blood serum are assessed as a marker of immunological dysfunction in patients with different forms of endometriosis using ELISA. MCP-1 is known for its ability to act as a potent chemoattractant and activator of monocytes/macrophages, but it also chemoattracts and activates T lymphocytes, NK cells, basophils and mast cells. RANTES, also known as CCL5, plays a primary role in the inflammatory immune response

Methods

40 women of reproductive age were divided into 2 groups: 16 patients severe endometriosis group (8 with woman endometriomas, 8 with DIE) and 24 woman control group (8 woman with superficial endometriosis, 16 no endometriosis). Peritoneal fluid and serum were obtained during laparoscopy. In all cases the endometriosis was confirmed histologically. We understand DIE as endometrioid infiltration more than 5 mm in the smooth muscle layer (i.e. vagina, rectum, bladder, or ureter). The age of patients was 30±4 years. Pain were common in patients with endometriosis (69%) than in patients in the control group (18%). MCP- 1 level in the peritoneal fluid of controls (1231±874,4 pg/ml) was slightly lower than in the group of patients with endometriosis (1284±946,5 pg/ml). RANTES level in peritoneal fluid in the control group (2551±2480 pg/ml) is significantly higher than in the group with endometriosis (1918±1706,6 pg/ml). There is no correlation in the levels of the proteins content of MCP-1 and RANTES in both groups. In particular patients with DIE serum CRP are numerically higher, but the number not statistically significant p<0,09.

Results

It was found that no statistical differences in the concentration of MCP-1 and RANTES in the peritoneal fluid and serum between groups. However, it should be noted that the level of CRP group with endometriosis is numerically higher compared with the control group. That means that the level of CRP could be the marker of activity or severity of the process.

Conclusions

The absence of differences in the levels of MCP-1 and RANTES could be an argument of immune disorder, since no adequate activation of macrophages. Thus, in contrast to tissue macrophages, the peritoneal ?uid macrophages that are not attached to extracellular matrix components, despite their differentiated status, may not be competent scavengers which leads to progression of lesions. Further research is necessary to investigate the role of the immune mechanism in the pathogenesis of the disease.
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ES23-0350
Posters

IS IT REALLY SAFE TO PERFORM FERTILITY-SPARING SURGERY IN PREMENOPAUSAL WOMEN WITH STAGE I MUCINOUS EPITHELIAL OVARIAN CANCER?
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Objectives
To evaluate the oncologic safety and to assess pregnancy outcomes of premenopausal women with stage I mucinous epithelial ovarian cancer (mEOC) who underwent fertility-sparing surgery (FSS).

Methods
A total of 97 patients, who were premenopausal at the time of surgery and diagnosed with stage I mEOC, were divided into 2 groups according to the type of surgery they received: group A (FSS) and group B (hysterectomy and/or bilateral salpingo-oophorectomy). Oncologic outcomes were compared between two groups and pregnancy outcome were assessed in group A.

Results
The median age was 33 (range: 13-50) years at the time of surgery. Fifty-three (54.6%) patients were in group A and 44 (45.4%) were group B. Sixty-three (64.9%) patients were stage Ia, and 34 (35.1%) were Ic. During 73.7 (range: 7.1-243.5) months of the median follow-up duration, 13 (13.4%) patients recurred and 8 (8.2%) of them died of disease. Noticeably, 10 (10.3%) recurred and 6 (6.2%) died among group A. In multivariate analysis, a significantly poorer prognosis was noted in group A (HR: 6.26, 95% CI: 1.53-25.53, p=0.011) and in patients with higher LN of preoperative CA-125 (HR: 1.98, 95% CI: 1.26-3.11, p=0.003). In patients with high preoperative CA-125, FSS caused significantly higher recurrence rate (HR: 5.73, 95% CI: 1.22-27.03, p=0.027). In subgroup analysis among patients older than 35 (n=46), FSS was associated with a significantly poorer prognosis (HR: 20.9, 95% CI: 2.73-160.55, p=0.003). Of group A, 10 women tried to be pregnant, and there were 7 live births, 2 pregnancies with no congenital anomalies, and 3 nulliparas.

Conclusions
The current study suggests that FSS in stage I mEOC may worsen the clinical course of patients with high preoperative CA-125, particularly in patients older than 35, whose fertility would not be guaranteed. Prospective randomized study with larger cohort needs to be performed.
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ES23-0399
Posters

MULTILAYERED CONTINUOUS CLOSURE SUTURING TECHNIQUE @ LSK MYOMECTOMY
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Objectives
Laparoscopic Myomectomy requires perfect hemostasis and closure of the bed after enucleation of the myoma. Particular care is taken to avoid dead space to allow healing of the scar and maintaining its integrity to withstand pregnancy and labor. With this in mind, the ipsilateral technique advocated by Koh to enable suturing in the vertical zone was employed with multilayered continuous closure of the myometrial bed.
Methods
Laparoscopic Myomectomy was performed in a prospective study involving 235 women with intramural myomas between January 2011 and December 2013. The technique employed:
1. Diluted vasopressin injected sub capsular (1:200 dilution)
2. Transverse incision using Ultrasonic Energy
3. Enucleation of the Intramural Myomas

4. Multilayered closure in a continuous mode using Polysorb 1 on CT1 needle with a baseball suturing technique in the final layer to achieve perfect haemostasis with elimination of dead space.
5. Delivery of the myomas using Morcellation technique or via laparoscopic colpotomy

Results

Size of Myoma in cms.	No. of Patients	No. of Fibroids
≤ 4	74	141
5 to 9	156	177
10 to 12	5	13

There was one conversion to laparotomy.

Conclusions

Multilayered continuous closure of the myoma bed in case of intramural myomas using the ipsilateral approach of Koh mimics the techniques employed at a laparotomy myomectomy. It enables good approximation with achieving haemostasis and avoiding dead space formation.

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ES23-0376
Posters

THE GYNECOLOGIST'S PATH SIMPLIFIES UTERINE REMOVAL DURING TOTAL LAPAROSCOPIC HYSTERECTOMY

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Objectives

The removal of the large uterus at Total Laparoscopic Hysterectomy using Power Morcellators is Time consuming and the incision often larger than 15 mms. is painful for several days. In recent times, Power Morcellators are a cause of concern for upstaging in view of the rare possibility of leiomyosarcomas.

Methods

The Mangeshikar Endosteak Knife was developed by the authors to facilitate ergonomic removal of the large uterus via the vaginal route. It is a reusable instrument that has a stout handle as in a kitchen knife enabling the surgeon to grasp the knife within the palm of the hand . The distal end facilitates use of disposable blades of different sizes e.g. Blade no 11, 15 or 23. The large uterus can be debulked vaginally using coring techniques, sectioning or debulking into chunks after the TLH.

Results

This is faster in time and saves large incisions than the power morcellators. There is no dissemination of tumor tissue causing parasitic fibroids or upstaging in case of leiomyosarcomas.

Conclusions

The Mangeshikar Endosteak Knife is a low cost reusable autoclavable device that renders faster debulking of the uterus via the vaginal route that is the oft trodden familiar path of the gynaecologist and with the added advantage of avoiding abdominal spillage.

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ES23-0219
Posters

AN EVALUATION OF SAFETY TESTS BY CREATING PNEUMOPERITONEUM AT CLOSED LAPAROSCOPY AND OF RISK FACTORS FOR INTRA- AND POSTOPERATIVE COMPLIACATIONS IN GYNECOLOGIC LAPAROSCOPY

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Objectives
To evaluate the benefit of safety tests to confirm the placement of the Veress-needle during closed laparoscopy and to examine the influence of other factors on intra- and postoperative complications in gynecologic laparoscopy
Methods

We conducted a retrospective Analysis of 405 patients who underwent laparoscopic surgery from two surgeons at our department between January 2010 and December 2011. Patients were divided into two Groups . By the Group 1 with 222 Patients operated from a high qualified surgeon (MIC-III, highest level of laparoscopic experience) the insertion of the Veress-needle was performed under continuous CO_2-Insufflation without performing safety tests as NaCl instillation, hanging drop test or aspiration test after Placement of the Veress-needle . By the Group 2 with 183 Patients operated from a qualified Surgeon (MIC-I, lowest level of laparoscopic experience) were all these safety tests performed before starting of CO_2-Insufflation. Assessments included also age, BMI, operative time, number of previous abdominal surgeries, haemoglobin change, intra- and postoperative complications and hospital stay

Results
In comparison of intraoperative complications there were no significant differences between two Groups. Concerning the difference of postoperative complications, severity of which was classified according to Clavien-Dindo classification, was found to be significant (Group 1: 6,3% Vs. Group 2: 12,6 %, $p \leq 0,05$). There were no significant differences between the first and the second group in Age, BMI, number of previous abdominal surgeries, changes in hemoglobin level, hospital stay. The operative time different significantly (Group 1: 98,07 Min Vs. Group 2: 137,52Min. , $p \leq 10^{-3}$)
Conclusions

Safety tests like NaCl instillation, the hanging drop test and the aspiration test after placing of the Veress-needle and before insufflation of CO_2, do not seem to decrease the rate of intraoperative complications and therefore failure to perform these tests should no longer be considered as substandard care or negligence.Operative laparoscopy requires a higher degree of technical training and skill. Experienced surgeons demonstrated better laparoscopic performance as beginners with quicker operative time and less postoperative complications
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ES23-0249
Posters

WHAT IS THE OPTIMAL TECHNIQUE FOR THE REMOVAL OF ENDOMETRIOMA FROM CONSIDERATION OF THE NUMBER OF RETRIEVED OOCYTES IN ART AFTER SURGERY?

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Objectives

Objectives: This study aimed to propose the optimal tissue-sparing technique during endometrioma removal, according to the number of retrieved oocytes after surgery.
Methods

Methods: Patients were 30 infertile women who underwent in vitro fertilization– embryo transfer (IVF-ET) after laparoscopic removal of endometrioma. The operative video images of these patients were evaluated from the view point of operative findings and surgical technique.

Results

Results: 5 patients were diagnosed with ovarian adhesions of >2/3 enclosure in R-ASRM score. The number of retrieved oocytes tended to be fewer and one patient suffered from post-operative severe ovarian failure.

The number of retrieved oocytes was greater in 6 patients. In these patients, the swollen cyst walls looked like 'blisters', when vasopressin was injected into the right cleavage plane. On the other hand, the number of retrieved oocytes was fewer in 6 patients whose swollen cyst walls do not look like 'blisters'.

Among 13 patients without injection of vasopressin, 4 patients underwent a 'peeling technique', which means stripping the normal ovarian tissue and capsule both right and left stretch-wise by holding the grip forceps with both hands. The procedure was considered to give the ovarian cortex a strong grip and traction, and cause physical damage to the cortex, resulting in a reduction in the number of retrieved oocytes. The remaining 9 patients underwent the technique of holding the edge of the normal ovarian tissue and cutting the connective tissue between normal ovarian tissue and capsule with the tip of shears forceps, in order to avoid too much traction. This procedure was considered to be the optimal technique, because more oocytes were retrieved after surgery in these cases.

12 patients underwent cystectomy by the same surgeon according to the above mentioned optimal procedure. Median level of serum antimüllerian hormone (AMH) was significantly decreased from 2.55 ng/mL (interquartile range [IQR], 1.67-4.42) before surgery to 2.00 ng/mL (IQR, 1.00-3.08) 1 month postoperative (P=0.023). Decline of serum AMH levels were milder than the past several reports.

Conclusions

Conclusions: Endometrioma are 'extraovarian pseudocysts', developing close to the ovarian cortex, containing a primordial follicle. Therefore, the decline of ovarian reserve is unavoidable in the removal of endometrioma. However, it may be possible to reduce the degree of decline.
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ES23-0355
Posters

IS URSODEOXYCHOLIC ACID CRUCIAL FOR ISCHAEMIA/REPERFUSION INDUCED OVARIAN INJURY IN RAT OVARY?
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Objectives

Ursodeoxycholic acid is frequently used in cholestatic liver diseases. Also it protects hepatocytes against oxidative stress which induced by hydrophobic bile acids. We investigated anti-oxidative effect of ursodeoxycholic acid on reperfusion injury after ovarian de-torsion in rats.

Methods

We designed five study groups. Group 1 (n=6):Sham-operated group; group 2 (n=6):Torsion group; group 3 (n=6):Torsion and ursodeoxycholic acid, group 4 (n=7):Torsion/de-torsion group; group 5 (n=7): Torsion/detorsion and ursodeoxycholic acid. After that ovarian samples were obtained and examined histologically and tissue level of malondialdehyde were measured.

Results
Follicular degeneration, edema and inflammatory cells were significantly decreased in group 3 and group 5 in comparison with group 2 and group 4. Also group 4 and group 5 were compared in terms of vascular congestion and hemorrhage and they were significantly decreased in group 5. In addition levels of malondialdehyde were significantly decreased in group 3 and group 5 in comparison with group 2 and group 4.

Conclusions
We concluded that ursodeoxycholic acid might useful in order to protect ovary against ischemia and reperfusion injury.
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ES23-0174
Posters

THE EFFECT OF PRIOR LAPAROTOMY ON GYNECOLOGICAL LAPAROSCOPY
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Objectives

Abdominal wall adhesions are common following laparotomy. Abdominal adhesions can increase trocar insertion injury and increase conversion to laparotomy. We performed the study in order to review the success and morbidity of laparoscopic major gynecologic surgery in patients with prior laparotomy

Methods

The records of 846 consecutive laparoscopic gynecologic procedures performed at Gachon University Gil Medical Center were reviewed. We compared results from patients without prior laparotomy (group I) with patients with prior laparotomy (group II).

Results

645 women without previous surgery were included in group I, and 205 women were included in group II. There were no significant differences in age, height, body weight and body mass index between the two groups. Complications are as follows; ureteral serosal injury (2 cases), rectal injury (1 case), infection at vaginal stump (5 cases), readmission due to gastroenteritis (4 cases), readmission due to fever (2 cases), readmission due to bleeding at vaginal stump (2 cases), re-operation due to bleeding at 5mm trocar site (1 case). There was no significant difference in the complication rate between the two groups.

Conclusions

The complication rate was not significantly different between patients without prior laparotomy and patients with prior laparotomy. Gynecological laparoscopy in patients with prior laparotomy is feasible for experienced laparoscopic surgeons.
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ES23-0298
Posters

ABDOMINAL WALL ENDOMETRIOMA, A POSSIBLE MISDIAGNOSE?
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Objectives

To evaluate and compare pre-surgical characteristics of abdominal wall endometriomas (AWE) versus desmoids tumor, because of a misdiagnose.

Methods
All patients with pre-surgical radiological suspicious of AWE referred to our Clinic of Endometriosis were included. Medical board of four patients with AWE and one patient with desmoid tumor were evaluated and reviewed. Information was gather of the last 5 years from a tertiary care center in Spain.
Results

50% patients with AWE had history of endometriosis surgery by laparoscopy, 75% had laparotomy (c-section or hysterectomy), 75% had endometriosis symptoms before surgery, 25% had null parity, 100% had CA 125 less than 200UI, 75% had between 2 to 4 years since last surgery (1 patient had no surgeries), 100% had echographic diagnosis of AWE, 100% had AWE as possible diagnosis in the magnetic resonance, 100% had intralesional hemorrhage in the magnetic resonance, 100% had non-discrepancy between radiological and surgery size. The patient with a Desmoid tumor had a positive answer to all of this questions except to intralesional hemorrhage and non-discrepancy between radiological and surgery size.

Conclusions

Desmoid tumor is a diagnosis that has to be in the differential diagnosis process of an AWE workup.

Discrepancy between radiological and surgery size has to make the surgeon suspect of a desmoid tumor.

The presence of intralesional hemorrhage in the magnetic resonance is a finding highly suggestive of AWE.
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ES23-0481
Posters

PAN-ENDOSCOPIC APPROACH IN INFERTILITY STUDY – CASE REPORT AND LITERATURE REVIEW
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Objectives

Tubal/peritoneal pathology is responsible for about 40% cases of infertility. Hysterosalpingography (HSG) and laparoscopy are the methods available to evaluate tubal pathology and can be a complement to each other. Traditionally, major intrauterine pathology is excluded by pelvic sonography and HSG, which reveals, in some cases, indirect signs of tubal/peritoneal pathology. However, minor uterine, tubal or peritoneal pathology are better diagnosed with laparoscopy and hysteroscopy.

The aim of this presentation is to underline the advantages of performing combined endoscopic techniques – hysteroscopy and laparoscopy– over HSG and pelvic ultrasound.

Methods
We present an infertility case of a 41-year-oldwoman, 0GP0, with normal standard fertility screening tests in which it was performed both laparoscopy and hysteroscopy after a normal pelvic ultrasoundand HSG result. In its past history it should be noticed that the couple had already undergone assisted reproductive technology (ART) twice, without success. The endoscopic procedures, which pictures are presented, excluded uterine cavity pathology and diagnosed subtle tubal and peritoneal adhesions and endometriosis, with tubal permeability conserved. One month after the endoscopic procedures, this woman was pregnant. A healthy term newborn was born 39 weeks after.
Results

Conclusions

The combined endoscopic approach can be an advantage in selected cases of infertility, because it provides the possibility of performing simultaneous diagnosis and treatment. Differently of other diagnostic methods such as HSG and pelvic ultrasound, it is associated with anesthetic risks and higher costs that cannot be forgotten. These reasons and the fact that some infertility cases remain to clarify after the performance of all possible diagnostic methods explain why it should only be recommended in selected cases.
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ES23-0420

Posters

HYSTEROSCOPY IN AN OUTPATIENT SETTING – 14 MONTHS EXPERIENCE

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Objectives
Hysteroscopy is one the main diagnostic and therapeutic tools of modern Gynecology, allowing a direct visualization of the uterine cavity for diagnosis and minimally invasive intervention with sampling or removal of any structural abnormalities. At our institution, office-based diagnostic hysteroscopy is not available; as such the pre-operative imaging diagnosis is largely based on transvaginal or pelvic ultrasound, often with hysterosonography. The authors' main objective was to evaluate the correlation between the pre-operative diagnosis, hysteroscopic findings, and histological analysis. With that purpose, demographics, clinical information, diagnostic approach, technical aspects and intra-operative findings were reviewed, concerning all hysteroscopies performed at our Outpatient Surgery Unit during 14 months of activity.
Methods
The authors performed a retrospective study based on the review of medical files from patients who underwent hysteroscopic procedures at our institution's Outpatient Surgery Unit from November 1st 2012 to December 31st 2013.
Results
During the study period 255 hysteroscopies were performed, all under sedation. The patients' average age was 55 years (30 to 81), 62% were post-menopausal and 75% presented co-morbidities, 9% having a history of breast cancer with current or previous treatment with tamoxifen. All patients had an ultrasound evaluation, 70% at our ultrasound unit, and 35% with hysterosonography. The main indications for hysteroscopy were: suspected post-menopausal asymptomatic polyps (36%); suspected pre-menopausal polyps (32%); suspected post-menopausal symptomatic polyps (12%); post-menopausal endometrial thickening (11%); retained trophoblastic products (2%). The main findings were: endometrial polyp(s) (71%); endometrial thickening/irregularities (15%); polypoid/secretory endometrium (5%); submucosal leiomyoma (3%); suspicious vegetative formations (0,8%); no abnormalities, normal endometrium (8%). Cervical dilation was used in 13% of the procedures; in 3% the endometrial cavity was not accessed due to cervical stenosis. Globally, intra-operative findings were concordant with the presumptive diagnosis by ultrasound in 76% of cases, 81% when hysterosonography was previously used. Bipolar energy was used in 49% of the operative procedures; curettage was performed in 43% of the cases. There was one case of endometrial adenocarcinoma and one of complex hyperplasia with atypia. The diagnosed complications were: uterine perforation (n=3); bowel injury (n=1); moderate uterine bleeding (n=1).
Conclusions
The indications and complications rate were similar to other centers described in literature. The previous detailed ultrasound study with hysterosonography resulted in a high rate of agreement between the presumptive diagnosis and intra-operative findings, resulting in a more accurate referral to operative hysteroscopy and obviating a previous diagnostic hysteroscopy. This strategy has been previous advocated by other authors, which reduces the number of hysteroscopies per patient, and is particularly relevant in centers without the possibility of office-based procedures.
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ES23-0383
Posters

LAPAROSCOPIC DISSECTION OF THE PARARECTAL SPACE AND URETEROLYSIS FOR TOTAL LAPAROSCOPIC HYSTERECTOMY

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Objectives
Total laparoscopic hysterectomy (TLH) has increasingly been adopted for the treatment of benign and malignant uterine disease. Ureter injuries are the most dreaded complication for performing TLH, however laparoscopic ureterolysis is a delicate procedure that requires advanced laparoscopic skills. When performing TLH, we inevitably identify and dissect the ureter. The aim of this study was to present our approach and estimate the feasibility of our method for TLH.
Methods
Between April 2008 to March 2014, 112 patients undergoing TLH for benign disease were included in this study. A detailed description of our technique is as follows: Firstly, the retroperitoneal space is opened and the pararectal space is dissected. The ureter is identified into the posterior leaf of the broad ligament and is dissected from it partially. The ureter is dissected until to the ureteral tunnel. The uterine artery is ligated selectively. We reviewed records and evaluated surgical outcomes. The main concern of the study was ureteral complications.
Results
There were no readmission and no transfusion in the study period. The rate of conversion was 2.7%. We have never had ureteral injuries related to the ureterolysis procedure and during TLH.
Conclusions
With our method we can always identify the ureter during TLH and prevent ureteral injuries absolutely. We consider that it is the most important point for TLH. Our approach is safe and feasible procedure in performing TLH.
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ES23-0404
Posters

SPONTANEOUS HAEMOPERITONEUM FOUND DURING A CAESAREAN SECTION IN A WOMAN WHO HAS SEVERE ENDOMETRIOSIS

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Objectives
To be aware of the possible rare life threatening complication of spontaneous haemoperitoneum caused by endometriosis during pregnancy and delivery

Methods
I am presenting a case of spontaneous haemoperitoneum caused by ruptured utero - ovarian vessels found during a caesarean section in a woman known to have severe endometriosis

Results
Endometriosis is a common inflammatory disease in gynaecology, commonly presenting with dysmenorrhea, dyspareunia, pelvic pain and subfertility. Generally, symptoms associated with endometriosis improve during pregnancy and rarely cause complications. Spontaneous haemoperitoneum is a rare complication but potentially life threatening to both the mother and

foetus. This complication can happen in any trimester but most commonly during the third trimester. Ginsburg et al reported that 61 % of unprovoked peritoneal bleeding happen antenatally and 19 % intrapartum.
A 34 year old woman in her second pregnancy was induced at 40 weeks as she had gestational diabetes which was well controlled with diet. Her previous pregnancy, 3 years earlier ended by a vaginal delivery with no complications. She was also known to have long standing history of pelvic pain, dysmenorrhea and haematuria. Two years earlier she had a miscarriage in the first trimester. During investigations of the miscarriage she was found to have a bladder mass visible on ultrasound which was thought to be an invasive hydatidiform molar pregnancy invading the bladder. Surgical evacuation of the uterus jointly done with a laparoscopy and a cystoscopy to assess the pelvis and bladder found severe endometriosis in the utero-vesical fold, Pouch of Douglas and a mass in bladder which was confirmed histologically to be endometriosis, not a hydatidiform mole.
Following induction of labour, an emergency caesarean section was indicated because of failure to progress at 5 cm. After entering the abdominal cavity spontaneous haemoperitoneum with clots was found with no signs of uterine rupture. After delivery of the baby and suturing the uterine segment incision, heavy bleeding was noted posteriorly, bilaterally from both utero-ovarian vessels. The tissue surrounding the vessels was friable endometriotic tissue, tearing easily when suturing. The bleeding was controlled with fine haemostatic sutures and haemostatic agents. The estimated blood loss was 3000 mls and the patient had an uneventful recovery after 4 units of blood transfusion.

Conclusions
Endometriosis generally improves during pregnancy and rarely causes complications. Spontaneous haemoperitoneum is a life threatening complication mostly caused by ruptured utero - ovarian vessels. Obstetricians need to be aware of this complication and its multidisciplinary management especially after the increased number of women with endometriosis getting pregnant with the help of assisted conception.
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ES23-0300
Posters

HYSA - A NEW METHOD OF UTERINE SUSPENSION WITH BILATERAL SACROUTERINE LIGAMENT RECONSTRUCTION
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Objectives

Uterus removal is not a prerequisite to treat the uterine prolaps. In the absence of pathological findings uterus may be preserved, founding a good fixation site for mesh, avoiding the risks associated with hysterectomy, and sparing operation time.There is also a growing body of evidence that the reconstruction of the sacrouterine ligaments alleviates the overactive bladder symptoms frequently accompanying uterine prolaps. We present a new method of laparoscopic hysterosacropexy (HYSA) for uterine prolaps using mesh tape to bilaterally reconstruct sacrouterine ligaments.

Methods

A softly packed vaginal tamponade is applied preoperatively for intraabdominal uterus exposure in pelvis at its physiological level. The whole procedure is performed laparoscopically. The peritoneum of the posterior cervix wall is opened and the uterine cervix muscle is exposed.The pararectal peritoneum over sacral bone at S2/S3 level is bilatarally identified and opened. The extraperitoneal tunnels between the posterior cervix wall and the peritoneal openings at S2/S3 sacral bone level are formed at the left and the right side using laparoscopic blunt dissecting forceps. The mesh tape (Seratex A2,Serag-Wiessner, Naila, Germany) is placed extraperitoneally in the prepared tunnels beginning with the left pararectal peritoneal opening towards posterior cervix wall, and then continuously to the right pararectal peritoneal opening. The mesh tape is sutured in the middle of ist length to the posterior cervical wall, and then to the anterior longitudinal ligament on the both sides of the sacral bone at S2/S3 level using non-resorbable polyester sutures. No tension is applied to the mesh tape. The peritoneum over left and right pararectal openings, as well as the peritoneum over fixation site on the posterior cervix wall is always closed using resorbable sutures to avoid contact of the intestine with the mesh tape and the risk of incarceration. The vaginal tamponade is removed at the end of the operation.

Results

The HYSA procedure is easily performed by experienced surgeon within 90 minutes and associated with no, or only minimal bleeding, because the risk of the injury to the median sacral artery is considerably lower at S2/S3 level than at the promontory level. The patients improve quickly with only minor discomfort related to the laparoscopy. They are discharged on the first or on the second postoperative day, as they resume their normal activity.

Conclusions

The HYSA with the mesh tape reconstruction of the sacrouterine ligaments by creating bilateral extraperitoneal tunnels between cervix and sacral bone provides a stable prolaps repair with a little uterine mobility, which may contribute to alleviating of overactive bladder symptoms. It protects from depressing rectum, and the extraperitoneal tunneling saves suturing time. In our still limited 6-month observation the patients have no operation-associated pelvic pains, and the preoperative overactive bladder symptoms improve importantly.
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ES23-0445
Posters

ELIMINATING THE RUPTURE RISK OF OVARIAN CYSTS. A NEW OPTION.
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Objectives

It is well known that endometriosic, hemorrhagic, thin walled, fragile cysts, during their manipulation or their suction may be ruptured with consequent content spillage.

Our aim is to assess the role of reinforcement of the cystic wall in eliminating the rupture risk.

Methods

We investigated the behavior of the ovarian cystic wall after application of human fibrinogen-thrombin patch (Tachosil), on 10 resected cystic masses.

The patch was applied as follows:

1. Sponge the surface area of the cyst.

2. Apply 2 cm2 of the patch over the weakest area.

3. A second layer of the patch is applied over the first one, forming a cross, so as to obtain a dense, reinforced cystic wall.

4. The cystic wall is well prepared for aspiration without any spillage from the insertion point. The sealed area will follow the shrinkage of the cystic wall.

Results

The human fibrinogen-thrombin patch provided safer manipulation of the cystic wall. No content spillage occurred. The density of the sealed area was not affected by grasping, thus the method may be applied in laparoscopic cystectomy.

From the histopathological point of view, no distortion or deterioration of the specimen was noticed. The patch application did not affect either the estimation of the capsule integrity or the grading of the tumor.

Multi-site aspiration can be performed if necessary.

Conclusions

Initial results are very encouraging. Contribution and cooperation of more surgeon gynecologists is necessary for them to be confirmed and to increase the level of evidence.

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ES23-0176
Posters

ESSURE PERFORATION; AN INTRA ABDOMINAL SEARCH

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Objectives
Our goal is to describe the difficulties during the search of an intra abdominally perforated Essure® device after hysteroscopic sterilization.

Methods
This is a case report of a patient who had a hysteroscopic sterilization with Essure® devices.
Only after 3 months the left device was not detected in a normal position by ultrasonic examination.
The patient was asymptomatic.
Results
At first a hysterosalphingogram (HSG) was performed and it showed no contrast in contact with the left device.
Also 4 markers of de left device were not aligned. This strongly indicated a perforation of the left Essure® device.
Therefore a diagnostic laparoscopy was performed. Only the distal part of de left device was detected and removed. A left tubectomy was performed. There was no remnant of the device seen by hysteroscopy.
After consultation of the Essure®-expert team a second laparoscopy with guidance of X-ray was planned.
During a hard search we found the Essure® device in the omentum fully encapsulated.
The Essure® device was removed by laparoscopic surgery. The covery of the patient was uneventful.

Conclusions
A perforation of an Essure® device intra abdominally can lead to a long and hard search.
We would strongly advise to perform a laparoscopic procedure in combination to X-ray.
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ES23-0427
Posters

OPEN LAPAROSCOPY VIA DIRECT INTRA-UMBILICAL ENTRY: A MODIFICATION OF THE HASSON METHOD.
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Objectives
The center of the umbilicus represents the area where the peritoneum is in direct contact with the skin with out inter-position of any other layer of the abdominal wall. Performing the initial incision over the center of the umbilicus could facilitate entry into the peritoneal cavity.

To describe a modification of the Hasson open laparoscopy technique and to compare it with the conventional Hasson technique

Methods

Setting: University institution.

Material and methods: 10 patients scheduled for laparoscopic surgery were included in the study. The umbilicus was grasped with two Kocher clumps and exteriorized. A 10 mm incision was performed with a #11 blade. A Kelly clamp was used to enter the peritoneal cavity. This was confirmed by the introduction of two S retractors through the incision and direct inspection of the abdominal viscera. Successful entry was accomplished without interference of any of the layers of the abdominal wall. The skin edges were supported with a #1 vicryl full thickness suture which was also used to attach the Hasson trocar. At the completion of the procedure the same suture was used

to approximate the umbilical opening. Time from the skin incision to the attachment of the Hasson trocar was measured and compared to 15 patients that had traditional open laparoscopy with an infra-umbilical incision.

Results

Time required to confirm entry into the peritoneal cavity and fixation of the Hasson trocar was significantly longer in the traditional technique as compared to the modified (5+4 vs 2+2 min P< 0.05). Short-term cosmetic results were superior with the modified technique since the entire incision was located within the umbilical fossa.

Conclusions

Performing the initial incision over the center of the umbilicus during open laparoscopy provides direct access to the peritoneal cavity, eliminates tissue trauma, and saves time. This method could be particularly useful for patients with increased BMI.
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ES23-0136
Posters

REPRODUCTIVE OUTCOME AFTER HYSTEROSCOPIC TREATMENT OF UTERINE SEPTUM

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Objectives

Congenital uterine anomalies may arise from any malformation of the Muller development process. It is reported in up to 4% in the general female population. Septate uterus is one of the most common forms of congenital uterine malformation. It increases the incidence of miscarriage and infertility. Hysteroscopy is known as the most accurate test for diagnosing intrauterine pathology. Hysteroscopic metroplasty is the gold standart for assessing uterine septa. The aim of this study was to evaluate the reproductive outcomes after hysteroscopic resection of the uterine septum.

Methods

36 women with septate uterus were enrolled in the study. Diagnosis was established by three-dimensional ultrasonography, hysterosalpingography, magnetic resonance imaging and hysteroscopy. In all cases we performed hysteroscopic metroplasty and then we analyzed the reproductive efficiency of it.

Results

We treated a group of patients between 23 and 42 years old. The mean age of the women was 31.3 ± 5.1 years. 12 (33.3%) patients consulted for primary infertility. The mean duration of infertility was 3.8 ± 1.6 years. Recurrent miscarriage had 22 (61.1%) and 2 (5.6%) of all patients were asymptomatics. Uterine metroplasty was performed using an operative hysteroscope under general

anaesthesia and laparoscopic supervision. All procedures were performed in the follicular phase of the menstrual cycle with monopolar electrosurgery. No intraoperative or postoperative complications occurred. Mean follow-up time was 25.6 ± 8.2 months. All of the patients tried to become pregnant. The overall pregnancy rate after hysteroscopic metroplasty was 47.2% (17/36): 19 patients (52.8%) did not achieve pregnancy, 15 (41.7%) achieved spontaneous pregnancy and 2 (5.6%) got pregnant by in vitro fertilization. From all pregnant patients 3 (17.6%) had miscarriage, 10 (58.8%) ended in term deliveries, 2 (11.8%) ended in preterm deliveries before 37 weeks gestation. Two pregnancies are now in progress. Termination was by caesarean section in 29.4%.

Conclusions

Hysteroscopic septum resection is an effective and safe approach for the removal of septum. Hysteroscopic metroplasty in women with septate uterus significantly improves the reproductive outcomes and the live birth rates.
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ES23-0163
Posters

UNUSUAL APPEARANCE OF COMPLEX GLANDULAR HYPERPLASIA ON HYSTEROSCOPY – CASE REPORT
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Objectives

Introduction:
The development of hysteroscopy has provided a minimally invasive approach to common gynecologic problems. Diagnostic hysteroscopy is considered "the gold standard" in investigation of abnormal uterine bleeding (AUB) in order to rule out endouterine causes of AUB. Generally the appearance of the endometrium gives us a first diagnosis which will subsequently be confirmed by histology. But sometimes, certain appearances of the endometrium on hysteroscopy are uncommon and leave us without a presumptive diagnosis. This case is about an unusual appearance of complex glandular hyperplasia on hysteroscopy.

Methods

Case Report:
41 years old women, previously healthy, with a history of tubal ligation and two cesareans. She was submitted to a diagnostic hysteroscopy by presenting abnormal uterine bleeding and an endometrial thickness of 10 mm (after menstrual bleeding) on transvaginal ultrasound. In histeroscopy were visible multiple brownish spiral lesions, coating the entire cavity.

Results
The histology revealed a complex glandular hyperplasia without atypia. Currently she is doing a continuous progestative.
Conclusions

This case is about an unusual appearance of complex glandular hyperplasia on hysteroscopy.
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ES23-0435
Posters

ACCURACY OF ULTRASOUND AND MAGNETIC RESONANCE FOR THE DIAGNOSIS OF DEEP PELVIC ENDOMETRIOSIS

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Objectives

Although the diagnosis is made by histological identification, deep pelvic endometriosis is suspected by clinical evaluation and diagnostic imaging procedures such as transvaginal ultrasound (TU) and magnetic resonance (MR). Surgical strategy is defined according to the results of these diagnostic tools. Consequently they play an important role in the treatment of these patients.
The goal of this study was to evaluate the accuracy of MR and TU for the diagnosis of deep pelvic endometriosis in our reality

Methods

Retrospective study of 134 women undergoing laparoscopy for suspected deep pelvic endometriosis in the period between 2009 and 2014. Calculation of sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and accuracy (proportion of true positive and true negative in the study population) of TU and MR for the diagnosis of deep pelvic endometriosis (uterosacral ligaments, rectovaginal septum, ureter, bladder and bowel).

Results
Concerning the location of endometriosis, the sensitivity, specificity, PPV, NPV, and accuracy of MR was generally greater than the TU for all locations studied, except the bowel.
Sensitivity
Specificity
PPV
NPV
Accuracy
Transvaginal Ultrasound
69/78 (88,5%)
3/46 (6,7%)
69/112 (61,6%)
3/12 (25%)
74/124 (59,7%)
Magnetic Resonance
97/106 (91,5%)
2/14 (14,3%)
97/109 (89,0%)
2/11 (18,2%)
99/120 (82,5%)

Table – Diagnostic Accuracy for ET and MRI. Legend: PPV – positive predictive value; NPV –negative predictive value,

Conclusions
Both MR and TU are dependent on operator and in our series, they were both carried out by experienced doctors. MR showed a higher diagnostic accuracy in deep pelvic endometriosis. Our experience allows us to conclude that although the TU remain the first line on the evaluation of women with suspected endometriosis, for a good surgical planning, MR is essential in these patients.
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ES23-0366
Posters

HYSTEROSCOPIC MYOMECTOMY IN OUTPATIENT SETTING - ONE YEAR EXPERIENCE AT CENTRO HOSPITALAR VILA NOVA DE GAIA/ESPINHO, E.P.E.
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Objectives

Uterine leiomyomas are the most common pelvic tumor in women. Abnormal uterine bleeding is the most common symptom associated with fibroids. This is likely due to distortion of the uterine cavity and to an increase in the bleeding surface of the endometrium. Submucosal tumors account for approximately 15 to 20 percent of fibroids.

Historically, hysterectomy was performed to remove submucosal leiomyomas. This has been largely replaced by hysteroscopic myomectomy, a minimally invasive surgical procedure that effectively and safely removes these lesions.

We will review the cases submitted to ambulatory hysteroscopic myomectomy between the period of November 2012 and December 2013, with special attention to agreement between pre and intra-operative findings, technical procedure, need of secondary intervention, complications, patient satisfaction and resolution of clinical complaints.

Methods

Review of the clinical files of the patients submitted to hysteroscopic procedures in ambulatory regimen between November 2012 and December 2013 in which there was histological evidence of leiomyoma.

Results

We will refer to 29 cases of hysteroscopic myomectomy between November 2012 and December 2013.

The mean age of the patients was 43; 3 of them were post menopausal and 13 have had previous vaginal births. The main referral motive for consultation was abnormal uterine bleeding (N=24) and ultrasound finding of abnormal endometrial thickening.

Most patients (N=21) were observed in our ultrasound sector and the findings were: submucosal myoma type 0 (N=10); submucosal myoma type 1 (N=2); submucosal myoma non specified (N=7);

intracavitary formation (N=1); endometrial polyp (N=8) and endometrial thickening (N=1). Hysterosonography was performed in 12 cases.

These 29 patients were oriented to hysteroscopyc procedure and the main reason was symptomatic submucosal myoma.

There were no registered complications and cervix dilation was necessary in 20 cases. Intra-procedure findings were: 23 submucosal myomas, 5 endometrial polyps and 1 endometrial thickening. Resectoscope was used in 23 patients, resection with scissors in 3 patients and with versapoint in 3 others.

Incomplete resection occurred in 4 patients (15,3%), one of them was later submitted to hysterectomy.

There was diagnostic agreement in 22 patients.

Conclusions

Series of 200 or more hysteroscopic myomectomy procedures report a complication rate of 0.8 to 2.6 percent. The rate of incomplete myoma resection ranges from 5 to 17 percent in retrospective series. The wire loop resectoscope technique is the most commonly used for hysteroscopic myomectomy. This technique is efficient for most Intracavitary leiomyomas, especially those that protrude entirely or more than 50 percent of their mass into the uterine cavity (type 0 or 1).
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ES23-0192
Posters

RECTAL NON-STEROIDAL ANTI-INFLAMMATORY DRUG IN PAIN RELIEF DURING OUTPATIENT OFFICE HYSTEROSCOPY OF MENOPAUSAL WOMEN: A RANDOMIZED CONTROLLED TRIAL

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Objectives
To evaluate the effectiveness of rectal non-steroidal anti-inflammatory drugs (NSAIDs) prior to office hysteroscopy in terms of pain relief in menopausal patients by using 10-cm visual analog scale (VAS) compared to placebo group.
Methods
52 menopausal patients’ candidates for office hysteroscopy due to irregular endometrial thickening on TV-USG were included to the study and randomized into two groups. Group 1 patients (n=26) randomized to rectal placebo 60 min before the procedure and group 2 patients (n=26) randomized to 100 mg diclofenac sodium rectally 60 min before the procedure. Office hysteroscopy was performed with vaginoscopic approach. Patients were asked to record the severity of pain, which was the primary outcome of the study, during the procedure by using 10-cm VAS ranging from 1(very favorable) to 10(very unfavorable). Secondary outcomes were time of the procedure, rate of the vasovagal symptoms and requirement of analgesia after the procedure.
Results

Totally 1 patient did not receive the allocated intervention and the results of group 1 (n=26) and group 2 (n=25) patients were compared. As a primary outcome of our study, we evaluated VAS

scores between groups. Mean scores were 4,2 (2,9-6,4) and 2 (2-5) for rectal placebo and rectal NSAID groups, respectively. There was no significant difference between groups according to VAS values (p=0.135).
Only 10 patients (19.6 %) need any analgesic drug after the procedure and 1 patient (1.9 %) experienced vasovagal symptoms after procedure. Among medication groups any analgesic drug requirement and vasovagal symptoms were 6 (19.2%), 5 (20%) for analgesic requirement and 1 (3.8 %), 0 (0%) for vasovagal symptoms as placebo and vaginal misoprostol respectively. Additionally, mean time of the procedure was 3 (2-5) min vs. 2 (2-4) for control group and study group respectively and there was no significant difference.

Conclusions
Pain relief is an important circumstance for patients' prior to invasive procedures like office hysteroscopy. According to literature, NSAIDs are the most potential drugs that can be used to relief of pain in office H/S procedure and rectal route is also probable to decrease side effects. In our study we evaluated the effectiveness of rectal NSAID prior to office hysteroscopy in terms of pain relief in menapausal patients and we didn't establish any significant effect compared to control. Future trials with larger sample sizes will probably clarify this subject.
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ES23-0417
Posters

LAPAROSCOPIC MYOMECTOMY: COMPARISON WITH ABDOMINAL MYOMECTOMY
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Objectives

We present a comparison of these two techniques (laparotomic/laparoscopic) through our experience between December 2012 and February 2014.

Methods

We evaluate laparoscopic and laparotomic techniques for myomectomy in this retrospective study. We compared the outcomes of 382 patients who underwent laparotomic (n=324) or laparoscopic myomectomy (n=58).

Results

Laparoscopic myomectomy ratio was 15.1% in this retrospective analysis. Longer operative times (119 minutes versus 83.6 minutes) were observed in the laparoscopy group. There was no significant difference in mean preoperative and postoperative hemoglobin levels between 2 groups. However number of patients who required postoperative erythrocyte suspension was slightly higher in the laparotomy group (10.8% versus 3.4%). The rates of 'women with previous laparotomy' and 'women have more than 3 leiomyoma' were significantly higher in laparotomy group. There was no complication in the laparoscopy group whereas abscess formation was observed in one patient in the laparotomy group.

Table 1: Patients characteristics and perioperative outcomes of the groups. (NS; Non significant)
Patient characteristics and

Perioperative outcomes
Laparoscopic myomectomy
Laparotomic myomectomy
Mean age (years)
36.4±7.7
38.5±6.0
NS
Nulliparity
18 (31.0%)
130 (41.4%)
NS
Women with previous laparoscopy
2 (3.4%)
17 (5.2%)
NS
Women with previous laparotomy

1 (1.7%)
35 (10.8%)
0.02
Indications of myomectomy
Pelvic Pain
28 (48.2%)
174 (53.7%)
NS
Infertility
18 (31.0%)
72 (22.2%)
NS
Menometrorrhagia
12 (20.6%)
78 (24.0%)
NS
Number of the leiomyoma n (%)
1
49 (84.4%)
148 (45.6%)
<0.001
2
5 (8.6%)
36 (11.1%)
NS
>=3
4 (6.8%)
140 (43.2%)
<0.001
Mean operative time (minutes)
119±47.7
83.6±37.7
0.003

Mean diameter of leiomyoma (cm)
5.8±4.2
10.9±5.8
<0.001
Mean preoperative hemoglobin (g/dl)
12,8±1.2
12,5±1.6
NS
Mean preoperative hematocrit (%)
38.4±3.7
37.9±4.8
NS
Mean postoperative hemoglobin (g/dl)
11.6±3.1
10.8±1.5
NS
Mean postoperative hematocrit (%)
33.4±4.7
32.7±4.2
NS
Number of patients requiring ES transfusion
2 (3.4%)
35 (10.8%)
NS
Conclusions

Uterine leiomyoma is the most common pelvic neoplasm among women of reproductive age. Although many treatment options are available, myomectomy seems to be the most sensible one especially for those who wish to preserve future fertility. Different operative techniques have been described for the surgical approach to leiomyoma. Abdominal myomectomy is the standard and traditional approach for the removal of leiomyoma in patients who wish to retain uterus for future childbearing. Laparoscopy may be feasible for selected patients. Candidates for laparoscopy may benefit from the quick recovery, better wound healing and less adhesion formation. Inability to palpate and remove small leiomyoma during the procedure and longer operative times are the major disadvantages of laparoscopy. Laparoscopy has become a valid alternative to traditional laparotomic myomectomy.
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ES23-0197
Posters

THE USE OF NARROW BAND IMAGING IN HYSTEROSCOPY FOR DIAGNOSIS OF HIGH RISK ENDOMETRIAL PATHOLOGY. 5 YEARS OF EXPERIENCE.
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Objectives
To determinate the sensibility and specificity of Narrow Band Imaging (NBI) in the identification of high risk endometrial pathology (adenocarcinoma and atypical hyperplasia).

Methods

Retrospective clinical study (Canadian Task Force II-3). We analyzed the histological results of 1046 hysteroscopic procedures in which NBI was applied systematically between march 1st 2009 and February 28t 2014, and compared the NBI diagnostic orientation with the histopathology findings.

Results

High risk histopathology diagnosis were found in 43 cases (4.1%). Adenocarcinoma in 32 cases, atypical hyperplasia in 6, 2 cases of polyp with adenocarcinoma and 3 polyps with atypical hyperplasia. False negatives in 7% (3/43) and false positives in 0.9% (9/1046). Specificity of 99.1% (98.5-99.7) and sensibility 93% (85.4-100). PPV 81.6% (70.8 - 92.5) and NPV 99.7% (99.4 – 100).

Conclusions
Narrow-band imaging hysteroscopy can accurately predict a histologic diagnosis of endometrial cancer or hyperplasia
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ES23-0056
Posters

LAPAROSCOPIC SACROCOLPOPEXY VS VAGINAL SACROSPINOUS LIGAMENT FIXATION FOR SURGICAL TREATMENT OF APICAL PROLAPSE
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Objectives
Support for the apex of the vagina plays an important role in pelvic organ prolapsed (POP) surgery. A surgical correction for vaginal apical support should provide a durable suspension, have minimal complications, and not affect sexual function. Predominantly used laparoscopical and vaginal accesses to correct apical prolapse. Sacrospinous fixation is the most common among vaginal operations, sacrocolpopexy is among laparoscopic POP procedures.

The purpose of this study was to compare the vaginal sacrospinous colpopexy and laparoscopical sacrocolpopexy in the treatment of vaginal apical prolapse.

Methods
Seventy one women with stage 2 to 4 (pelvic organ prolapse quantification system/ International Continence Society) apical prolapse, that underwent vaginal sacrospinous colpopexy (n=41) and laparoscopical sacrocolpopexy (n=30) between November 2010 and December 2012 were included in to the study. Main outcome measures included the operation time, complication rate, inpatients days, patient satisfaction, anatomical success rate, functional outcomes and quality of life.
Results
Two years after the operation (range, 6-39 months) the subjective success rate was 90,2 % in the vaginal and 93,3% in the laparoscopic group. The average age of women in both groups was comparable. Analysis of the age patients in the vaginal group revealed that 73.1% of those older. Only 31.7% of patient in the vaginal group and almost 90% in laparoscopical group were sexually active patients under the age of 60 years. Operation time was significantly shorter in the vaginal group (median: 62,6 min) compared to the laparoscopical group (median:148,1 min). The vaginal

sacrospinous fixation became a repeat surgery for 9,7% patient, because of recurrent prolapse and laparoscopical sacrocolpopexy became a repeat surgery for 26,6% patient. At the follow-up visit, there was no recurrence of vault prolapse in laparoscopical group. Four women (9,7%) who underwent a vaginal sacrospinous colpopexy had a stage 4 prolapse before surgery. All these women were diagnosed with a recurrent apical prolapse within one year, and underwent repeat surgery. The inpatients days were similar, with 3.7 days and 4.0 days in the vaginal and laparoscopical group, respectively. The complication rate in both groups was minimal. Both surgeries significantly improved the patient's quality of life ($p < 0,05$).

Conclusions

This study indicates that vaginal sacrospinous colpopexy and laparoscopical sacrocolpopexy are two equally effective surgical procedures for vaginal apical prolapse correction. Transvaginal sacrospinous fixation is the procedure of choice for patients of older age group, and may be no less effective than laparoscopical sacrocolpopexy to treat apical prolapse

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ES23-0368

Posters

LAPAROSCOPIC-ASSISTED PRIMARY AND SECONDARY CYTOREDUCTION FOR ADVANCED OVARIAN CANCER: RATIONALE, TECHNIQUE AND PROSPECTIVE SINGLE-INSTITUTION REVIEW.

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Objectives

The objective of this study is to analyze safety and efficacy of laparoscopic cytoreduction reporting a single-Institution prospective series for primary or recurrent advanced ovarian cancer (AOC) patients.

Methods

All patients undergoing major gynaecologic surgery for primary or recurrent AOC were entered into a prospective surgical database. Demographics were obtained and entered preoperatively, surgical outcomes were entered immediately postoperatively and follow-up was collected after each office examination. All patients were preoperatively evaluated by PET-CT scan with FDG; assessment of CA125, CEA, CA15.3 and CA19.9, and clinico-anamnestical data were collected. All patients with presumed advanced stage disease and clinical conditions suitable for aggressive surgery underwent attempt to laparosopic cytoredution. Patient not eligible for primary cytoreduction were candidated to neo-adjuvant chemotherapy (NACHT).

Surgery always started with a careful laparoscopic exploration of the abdomino-pelvic cavity and, if the patient was considered laparoscopically cytoreducible, the procedure was started. Hand-assisted laparoscopic palpation of the abdominal cavity and pelvic and lumboaortic retroperitoneum was performed for every procedure. General Surgeon attended at surgery bowel resections and upper-abdominal hepatic and splenic surgery.

Every patient received adjuvant chemotherapy postoperatively. Postoperative complications were classified in early and late when occurred before or after 30 days from operation, respectively. Data on overall survival and time-to-relapse are reported.

Results

From January 2008 to June 2014, 35 consecutive patients were enrolled in the study. Median age was 57 years old (range 34-79). ASA score was 1 in 45.7%, 2 in 51.4% and 3 in 2.8% of the patients. Six patients (17.1%) were at FIGO stage IIC, three patients (8.5%) at stage IIIB, 23 patients (65.7%) IIIC and three patients (8.5%) had IV stage disease. Primary cytoreduction was performed on 21 patients (60%), whereas nine patients (25.7%) were previously submitted to 3 cycles of NACHT. Laparoscopic cytoreduction for recurrence was performed in 5 patients (5.7%). Residual Tumor (RT) was microscopic in 34 patients (97.2%); one patient had a RT of 5mm (2.8%). Median operative time was 266 minutes (120-480) and median blood loss 237 ml (50-800). Median hospital stay was 10 days (range 4-30) with very fast recovery. Postoperative early complications occurred in 5 patients (14.2%). One patient had a persistent monolateral hydronephrosis treated by ureteral stenting. Seven patients (20%) recurred, with median time to relapse of 14.8 mts (range 10.9-22.2). Median follow-up period was 23.8 months (range 1-68).

Conclusions

laparoscopic primary or secondary cytoreduction of AOC seems to be feasible, safe and with similar results in terms of recurrences and overall survival with respect to abdominal debulking. However, careful preoperative selection of the patients, an explorative evaluative laparoscopy by expert surgeons, and hand-assisted laparoscopic guided palpation of the abdomen and retroperitoneum are mandatory for this kind of procedure.
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ES23-0146
Posters

SURGICAL OUTCOME OF LAPAROSCOPIC PELVIC LYMPHADENECTOMY IN GYNECOLOGICAL CANCERS. COMPARATIVE BETWEEN LAPAROSCOPIC VERSUS LAPAROTOMIC APPROACH.

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Objectives

To compare the pelvic lymphadenectomy performed by laparoscopy or laparotomy route in 171 cases for gynecological cancer between April 2006 and May 2014.

Methods

A descriptive retrospective study was made (Canadian Task Force classification III). Previous indications were 93 cases for endometrial cancer, 55 cases for ovarian cancer, 25 cases for cervical cancer and 2 cases for uterine sarcoma. In all cases, additional staging surgical processes were made. Mean age was 57,7 years. Transperitoneal laparoscopic boarding was made in 82 cases (LPS). Mean removed pelvic nodes was 16.4 nodes (5-48). In 30 cases, pelvic nodes were positive. Indication, diagnosis, and surgical outcome according to type of surgery were evaluated and comparative analysis between laparoscopic and laparotomic groups was made.

Results

Mean body mass index (BMI) was greater for laparoscopic group (29,3 vs 28,3 kg/m2, p=0,60). Mean operating time was greater for laparoscopic group (260,4 vs 244,1 minutes, p=0,89). Mean blood loss was similar in both groups, but 18 patients in the laparotomic group and 4 cases in the laparoscopic group, blood transfusion was necessary (p=0,04). Mean postoperative hospital stay was significantly greater for laparotomic group (6,8 vs 4 days, p<0,01).

	LPS	LPM	p
BMI (kg/m2)	29,35SD 6,5(range 17-49)	28,36SD 7,43(range 16-58)	0,601
OPERATING TIME (min)	260,45SD 112,9(range 40-565)	244,19SD 85,11(range 65-445)	0,891
MEAN BLOOD LOSS (mL)	1181,54SD 895,9	1017,26SD 732,83	1,00
Blood transfusion	4	18	0,042
HOSPITAL STAY (days)	4,06SD 2,94(range 2-26)	6,84SD 4,0(range 3-30)	0,000
Mean nodes	18,75SD 9,06	14,13SD 5,21	0,010
Positive nodes	14	15	

In 89 cases, the lymphadenectomy was made by laparotomy (LPM). Mean removed nodes was higher significantly in the laparoscopy group (18.7 nodes (6-48) versus 14.1 nodes (5-29) (p=0,01). The positive nodes rate was similar in both groups. No complication referred for the technique was reported.

Conclusions

The postoperative hospital stay days were significantly shorter by laparoscopy than by laparotomy route and the number of removed pelvic nodes were higher in the laparoscopy group. The pelvic lymphadenectomy by laparocopy enables a correct staging.
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ES23-0273
Posters

MAYER-ROKITANSKY-KUSTER-HAUSER SYNDROME (MRKHS): A CASE REPORT
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Objectives
The aim of this case report was to describe one possible management option of patients with MRKHS. MRKHS is a condition characterized by congenital aplasia of the uterus and upper part (2/3)

of the vagina in women showing normal development of secondary sexual characteristics and a normal karyotype. Prevalence of MRKHS has been estimated as 1 of 4500 female births.

Methods

Case report: 21-year old woman was admitted to hospital with severe pelvic pain, fever and moderate rise in C-reactive protein. The primary physical examination raised the suspicion for acute peritonitis.

At the age of 14 the patient presented with cyclical abdominal pain and amenorrhoea. Physical examination showed normally developed secondary sexual characteristics and external genitalia. Vaginal dimple measuring 3 cm without a normal vaginal orifice was found, thus raising the suspicion of MRKHS. Normal hormonal levels and normal karyotype 46XX excluded Turner and androgen insensitivity syndromes. Ultrasound (US) and magnetic resonance imaging (MRI) findings confirmed MRKHS. The patient had vaginal atresia, agenesis of the uterine cervix, hypoplastic uterus, normal ovaries and tubes and renal malformation – horseshoe kidney.

Treatment with combined oral contraceptives (COC) on continuous regimen was started to prevent haematometra and cyclical abdominal pain. For 6 years the patient had no severe symptoms with the treatment.

Having gained weight over the last year the patient discontinued the treatment with COCs on her own will and soon the severe cyclical abdominal pain commenced. Thereafter she presented with progressing symptomatology that lead to admittance with the suspicion of acute peritonitis.

US findings suspected left side haematometra and haematosalpinx. MRI suspected an endometrioma measuring 3,1 x 6,6 cm.

As the patient presented with severe symptomatology and refused further therapy with any hormonal medication, laparoscopy was recommended. After counseling she agreed to laparoscopic removal of uterine remnants.

Results

Laparoscopic findings: There is no uterine cervix. Left uterine horn is enlarged, measuring 3,5 x 4 cm, left tube filled with blood and enlarged, measuring 6 x 3 cm. A thick fibrous band measuring 4 cm connects the left and right uterine horn (measuring 2 cm). The right tube and both ovaries look normal. No endometriosis is seen. Both tubes and uterine horns with the connecting fibrous tissue were removed.

The patient was discharged postoperatively in good condition on day 4.

In the future the operation to create neovagina is planned.

Conclusions

MRKH syndrome consists of vaginal aplasia with Mullerian duct abnormalities. It is a congenital disorder that is present at birth but may remain undiagnosed until adolescence. The symptoms and the treatment may vary depending on whether the patient has uterine remnant(s) or not. Presence

of endometrium in uterine remnants is associated with pelvic pain and may need medical or surgical care.
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ES23-0392
Posters

PREGNANCY AFTER LAPAROSCOPIC URETEROLYSIS FOR DEEP ENDOMETRIOSIS
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Objectives

The impact of surgery for ureteral endometriosis on pregnancy outcomes is unknown. Our aim was to evaluate the results in terms of fertility, obstetrical complications in a large series of women who underwent laparoscopic ureterolysis for deep endometriosis.

Methods

Surgical characteristics of women who underwent laparoscopic surgery for ureteral endometriosis at the Obstetrics&Gynecology Department of the University of Insubria in the period from January 2004 to February 2013 were retrospectively abstracted by our institutional surgical database.. From April to September 2013 we tried a complete patients' follow-up, by using a telephone interview, with specific questions regarding medical therapy after surgery, late post-operative complications, recurrence of symptoms, fertility and pregnancy (if any). The data were matched with our institutional obstetrical database, which contains full details of all women delivering at our hospital. The attempted 'assisted reproduction techniques' data were controlled and integrated by using our institutional Infertility Clinic's database.

Results

Out of a total of 109 consecutive patients who underwent laparoscopic ureterolysis during the study period, only 36 (33%) women wished to conceive after surgery. Twenty of them (55.6%) were referred to IVF, whereas 16 (44.4%) women tried a natural conception. Comparing patients who got pregnant to those who did not, we could not find any difference in terms of age (P=0.49), BMI (P=0.67), pre-operative presence of hydronephrosis (P=0.30), occurrence of peri-oprative complications (P=0.25), and rAFS score (P=1.00). Surgical procedures and characteristics were well comparable in the two groups. Pregnancy was significantly less likely among patients who had sigmoid resection vs. those who did not (P=0.01) and in those who were administered hormonal adjuvant therapy after surgery (P=0.01). No differences were found between the two groups in terms of reoperation rates (p = 0.47), but considering re-ureterolysis, there was a higher probability of new ureteral surgery in women who did not obtain pregnancy (p = 0.07).
Twenty-six pregnancies were observed among the 20 women who got pregnant (55.6% of the 36 who attempted). Four 1sttrimester miscarriages occurred (15.6%). Nine women (45%) got pregnant using Assisted Reproductive Technology (ART) (6 [30%] with IVF and 3 [15%] with ICSI).
Considering the 22 pregnancies >1sttrimester, 9 (40.9%) women complained of abdominal pain during gestation. Gestational age at birth was 38 (33-41) weeks. Seven (26.9%) women had induction of labor and 9 (40.9%) had cesarean section (4 elective and 5 during labor). Median birthweight was

2940 (1930-3750) grams, and umbilical artery pH was 7.285 (7.131-7.404). Overall, pregnancy and neonatal outcomes were very good and no admission to Neonatal intensive care Unit was observed

Conclusions

Deep endometriosis reduces fertility rates. However, once pregnancy is established, a positive history of laparoscopic ureterolysis for deep endometriosis does not seem to have an heavy effect on pregnancy outcomes.
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ES23-0225
Posters

HYSTEROSCOPY INDICATIONS AND HYSTOPATHOLOGICAL RESULTS
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Objectives

Diagnostic hysteroscopy is the ideal mean for assessing the uterine cavity when there is a gynaecological suspicion, such as abnormal bleeding, infertility, abnormal ultrasound, as others. This exam allows direct visualization of the uterine cavity, identification and treatment of pathology and in other cases performing directed biopsies.
The objective was to evaluate indications and hystopathological results of hysteroscopies in our service during 2013.

Methods

It was performed a research based on reports and hystopathological results of all women submitted to hysteroscopy in our service during 2013.

Results

During the year of 2013, 115 hysteroscopies were performed. In 111 cases the cause for the exam was pre or post-menopausal abnormal uterine bleeding, in 3 cases primary infertility and in 1 case presence of ovular membranes.
During the exams, the intracavitary images found were: polyps in 54 cases; leiomyomas in 3 cases; ovular membranes in 1 case. The exams performed to study primary infertility did not reveal any abnormality.
During the procedures, 92 biopsies were performed revealing 5 cases of endometrial cancer (endometrioid type), 4 cases of complex atypical hyperplasia, 4 cases of simple hyperplasia, 2 cases were inconclusive and in 74 cases there was no abnormality.

Conclusions

Although this study was based in a small sample of cases, it was possible to identify an abnormal intra-uterine formation in 58 exams, corresponding to 52% of the cases. Even though the majority of biopsies didn't reveal any abnormality, it was possible to diagnose five cases of endometrial

carcinoma and eight cases of lesions that can evolve to malignancy, corresponding to 5,4% and 8,7% of the biopsies respectively.
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ES23-0120
Posters

HOW SILS-PORT USE MAKES LAPAROSCOPIC SUBTOTAL HYSTERECTOMY FASTER AND SAFER PROCEDURE?
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Objectives
Single Incision Laparoscopy Surgery (SILS) is a relatively new technique of laparoscopy.
Methods
Eighty-seven SILS surgeries on various gynaecological diseases (fibroid, adenomyosis, endometrial hyperplasia, ovarial cystadenoms) were performed in total. In our opinion, usage of SILS-port is optimal for laparoscopic subtotal hysterectomy (in fifty-five cases).
Results

The following conditions need to be met:

1) Medical indications and contraindications are correctly established:

- Uterus size must not exceed 10 weeks of pregnancy

- No adhesive process must take place

- No cervix diseases must exist

2) It is appropriate to utilize the following methods and instruments:
- A cut of up to 2 cm is made on the left side of the navel
- 10-mm LigaSure with a knife is used for blood vessels ligation
- Supraloop is used for Uterus amputation
- “Endo Stitch” with absorbable suture is used for peritonization
- Uterus is removed through port incision
- Absorbale Adgesion Barrier Gel (ETHICON Intercoat) is used for prevention of the adhesive process

Conclusions

Average surgery length could be reduced to 30-45 minutes if the above conditions are respected. No sequel has been reported. Our experience confirms that SILS-port use is recommended for laparoscopic subtotal hysterectomy.
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ES23-0402
Posters

DUAL-PORT MINILAPAROSCOPIC TOTAL HYSTERECTOMY: PRELIMINARY RESULTS

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Objectives

Many efforts have been made by endoscopic surgeons to further minimize surgical trauma and invasiveness of their procedures in the last years. The present study describes our preliminary experience with 5 cases of dual port minilaparoscopic total hysterectomy, an experimental laparoscopic technique, in which the entire operation is accomplished using only two 3-mm trocars.

Methods

Five consecutive women with a uterine volume of less than 14 weeks of gestation underwent dual-port minilaparoscopic total hysterectomy at the Obstetrics and Gynecology Department of the University of Insubria, (Varese, Italy) in the period between 1st March 2014 and 31st March 2014. All the surgical operations were carried out by a skilled laparoscopic surgeon with the help of two assistants.
To establish pneumoperitoneum a Verres needle was inserted intra-umbilically. Once a 12-mm Hg intra abdominal pressure was reach, a 3-mm trocar with its relative scope (a 3-mm 0-degrees optical camera) was inserted through the umbilicus. A second 3mm trocar was inserted soprapubically. A 3-mm straight-stick bipolar forceps, 3-mm straight-stick scissors and a 3-mm monopolar hook were inserted alternatively through this site to accomplish the all procedure. As soon as the uterus was removed, the vaginal cuff was performed transvaginally.

Results
Dual-port minilaparoscopic total hysterectomy (Figure) was effectively completed in all cases with no intra-operative complication; median operative time was 40 (35-55) minutes and estimated blood loss was 10 (10-50) mL. There was no need of inserting a supplementary laparosopic port in any case. No conversion to standard minilaparoscopic, to conventional laparoscopic technique, nor to open surgery was necessary. All women were discharged home within 24 hours after surgery, with a very low level of perceived post-operative pain. No post-operative complication was registered at the 1-month follow-up visit.

Conclusions

In experienced hands, dual port minilaparoscopic total hysterectomy, is a safe and feasible technique. The present pilot experience describes a new surgical approach for removing a uterus and opens new perspectives in the field of the possible applications of minilaparoscopic surgery.
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ES23-0415
Posters

PATIENT'S ACCEPTANCE OF THE HYSTEROSCOPIC ENDOMETRIAL BIOPSY TO RULE OUT ENDOMETRIOSIS.

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Objectives

The development of non-invasive or less invasive methods for the earl diagnose endometriosis is the aim of an increasing number of research studies. There is evidence that the eutopic endometrium of women with endometriosis is different from women with no disease. Many studies are therefore focused to the search of specific and sensitive biomarkers in the eutopic endometrium of affected women, including nerve fibers, hormonal receptors, microRNA and stem cells.
A very important complementary aspect, particularly for young girls, is to establish painless, easy and quick procedures to obtain endometrial biopsies in the office, as out patients and without anesthesia.

Methods

We use a vaginal approach with a 2.9 mm hysteroscope, with the Bettocchi operative sheath, and saline solution as distension medium. Neither speculum nor tenaculum in the cervix were used. With 5 fr. Scissors, we prepare the sample and take it out with 5 fr. Grasping.
To assess the acceptance of the procedure, we ask the patients: (A) The tolerability (?) of the vaginal approach, (B) The grade of pain, in the 1 to 10 visual analog scale (VAS); and (C) If they would recommend this procedure to a close person suffering the same symptoms.

Results

All the patients (100%) found the vaginal approach acceptable. Pain scores were: 50% no pain; 40% mild pain (3 or 4 in the VAS), and 10% more than 5 in the analog scale. A hundred percent of patients replied that they would recommend the procedure to a potential endometriosis patient.

Conclusions

We conclude that if studies on endometrial biopsies show to be an effective method of predicting endometriosis, the vaginal approach in the office will be well accepted by young patients.
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ES23-0284
Posters

STRATEGY OF LAPAROSCOPIC SURGERY MINIMALIZING INTRAOPERATIONAL COMPLICATIONS – BASED ON THE EXPERIENCE OF DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, WROCLAW MEDICAL UNIVERSITY.

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Objectives
to estimate the strategy which is used in Dep Ob & Gyn for minimalizing the rate of serious complications in laparoscopy.
Methods

Between January 2009 and May 2014 there were 637 laparoscopic surgical procedures performed in the clinic, of which 100 (16%) were cases of diagnostic laparoscopy, 467 (73%) laparoscopic surgery of adnexa including cystectomy (n=316), adnexectomy (n=25), ovariectomy (n=3), salpingectomy (n=75), laparoscopic guided evacuation of ectopic pregnancy (n=42), hemorrhage in the peritoneal cavity in case of ovary rupture (n=6); 65 (10%) laparoscopic surgery of uterus including supracervical hysterectomy (n=37), vaginal hysterectomy (n=3), total hysterectomy (n=7), myomectomy (n=16); and 7 (1%) laparoscopic surgery for abdominal adhesions.

Results

The most frequent complication was conversion to laparotomy. During the study period it was observed in 29 (4,5%) of 637 laparoscopic surgeries. In 2009 - in the first year of observation 5 of 65 cases (7.6%) occured. In the next years the numbers of this adverse event were as follow: in 2010 -7 of 81 (8,6%), in 2011-1 of 123 (0,8%), in 2012- 3 of 154 (2%), 2013 - 10 z 152(6.5%), and in 2014-3 z 62 (4.8%). The significant factors that influenced laparoscopy results were purchase of new equipment in 2011 and broadening of laparoscopic procedures by performing more complicated and advanced surgeries in 2012 and 2013.

Rate of conversions to laparotomy in diagnostic procedures was 1 of 100 cases (1%), while in laparoscopic surgeries of adnexa and uterus was 24 of 467 (5%) and 5 of 65 (7.6%) respectively. In the first years of the study complications were caused by equipment and technical difficulties. Later, in case of laparoscopic surgeries of adnexa the conversion was dependent on diagnostic difficulties and in case of laparoscopic surgeries of uterus - massive myomas with poor mobility of uterus.

Other complications were also reported. One case of damage to the bladder occurred in the group of laparoscopic salpingectomy (1,3%, n=75) and laparoscopic surgery of adnexa (0,2%, n=467). One case of damage to the ureter occurred in patients who underwent adnexectomy (4%, n=25) and another one during laparoscopic surgery of adnexa (0,2%, n=467). One case of damage to the bowel was reported during laparoscopic cystectomy and was caused by insertion of Verese needle (0,15 %, n=637).

Conclusions

1. Conversion to laparotomy is the most frequent complication of laparoscopic surgery. The incidence rate depends on procedure difficulties and gynecologist's experience. The number of this complication decreases with increasing experience of the team of surgeons.

2. Other complications by frequency are damage to the ureters, bladder, and intestines.

3. In difficult cases decision to convert to laparotomy reduces the rate of other serious complications considerably. Such approach proves experience of medical team.

4. Surgeon's capability of estimating his own skills reduces the rate of incidence of severe complications in laparoscopy.

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ES23-0213
Posters

ULTRASOUND DIAGNOSIS OF ADENOMYOSIS, LEIOMYOMA OR COMBINED WITH HISTOPATHOLOGICAL CORRELATION

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Objectives
To evaluate the accuracy, sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of the diagnosis of adenomyosis, leiomyoma and combined by the use of transvaginal ultrasound (TVS) in comparison to the histopathological findings.
Methods
This is a retrospective study of 163 patients with a preoperative transvaginal ultrasound diagnosis of adenomyosis, leiomyoma and combined (adenomyosis and leiomyoma). All patients underwent surgery for the treatment of adenomyosis, leiomyoma, or both. Patients with symptomatic adenomyosis only or both adenomyosis and leiomyoma had a hysterectomy. Symptomatic patients diagnosed via TVS with both adenomyosis and leiomyoma had a myomectomy with excision of the surrounding myometrium which presumably contained adenomyosis. Of the 163 patients included in this study, 130 patients diagnosed with adenomyosis or both adenomyosis and leiomyoma via TVS, underwent hysterectomy. Thirty-three symptomatic patients diagnosed with adenomyosis and leiomyoma via TVS underwent myomectomy with excision of the surrounding myometrium which contained possible adenomyosis. Following surgery, a histopathological examination was performed by the hospital pathologists. The microscopic diagnosis of the specimen was recorded.
Results
Histopathological confirmation of the TVS diagnosis of adenomyosis (n=123) was positive in 93 patients (75.61%) and negative in 30 patients (24.39%). The sensitivity, specificity, and accuracy of TVS in the diagnosis of adenomyosis was 84.55% (p<.0001), 43.40% (p=0.41), 71.17% respectively. TVS diagnosis of adenomyosis is sensitive but not specific. Histopathological confirmation of the TVS diagnosis of leiomyoma (n=134) was positive in 133 patients (99.25%) and negative in 1 patient (0.75%). The sensitivity, specificity, and accuracy of TVS in the diagnosis of leiomyoma was 96.38% (p<0.0001), 96.00% (p<0.0001), and 96.32% respectively. TVS was also sensitive, specific, and accurate in the diagnosis of coexisting adenomyosis and leiomyoma.
Conclusions
This study demonstrated that transvaginal ultrasound is a valuable non-invasive method that should be utilized in the diagnosis of adenomyosis, leiomyomata and combined adenomyosis and leiomyomata. It is sensitive in the diagnosis of adenomyosis only but not specific. It is sensitive and specific in the diagnosis of leiomyoma and combined adenomyosis and leiomyomata.
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ES23-0357
Posters

HYSTEROSCOPIC ENLARGMENT OF CERVICAL CANAL: A NEW WAY TO IMPROVE THE OPERATIVITY OF OFFICE HYSTEROSCOPY

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Objectives
improving the measure of cervical canal is possibile to remove out of the cavity more easily the uterine polips or fragments of them
Methods
with the use of bipolar knife twizzle versapoint we do lateral incision of the diameter of cervical canal at 3 and 9 hour of 3-6 millimeters each
Results
through a careful anatomical study, we demonstrated that laterally expand the cervical canal of 3-6 mm is safe and effective to remove more easily intracavitary polypoid growths and to solve problems of stenosis of the cervical canal
Conclusions
hysteroscopic enlargment of cervical canal through incision of twizzle versapoint aims to improve the operativity of office hysteroscopy
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ES23-0045
Posters

MINIMALLY INVASIVE MANAGEMENT ROLE IN CHRONIC PELVIC PAIN SYNDROME
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Objectives

Modern management strategies of gynaecological patients with abdominoplevic adhesions and pain range from conservative symptomatic treatment to more extensive surgeries such as hysterectomies and colectomies, but the degree and evidence of benefit of these treatments specially the surgical adhesiolysis is a matter of twenty years debate that is still questionable. Pelvic adhesions are found in up to 50% of women with Chronic pelvic pain (CPP) during investigative surgeries, and adhesiolysis is often performed as part of their management. Laparoscopic adhesiolysis was first described by a gynecologist for the treatment of CPP and infertility in 2004 but the clinical benefit of laparoscopic adhesiolysis in this context is still unclear and controversial.

Methods

A 39 years old female, G6 P3+3 with severe persistent lower abdominal pain of 4 years duration, unresponsive to medical treatment. Patient had a history of previous 6 laparotomies; CS with a resultant infected scar for 2 months (2000), 2 ovarian cystectomies (2005–2007), Right adenexectomy for tubo-ovarian complex (2008), Appendectomy for a ruptured appendix (2009) and finally a Paraumblical hernia repair (2009). Diagnostic Laparoscopy done on March 2012 showed extreme pelvic adhesions with a pelvic abscess, adhesiolysis was done, pelvic abscess was removed and a drain was left in place for 3 days with intensive antibiotic therapy. Patient responded well and was discharged 3 days after laparoscopy.

Results
A 2nd look laparoscopy was done on April 2013 due to a recurrent abdominal pain showed healthy pelvis except for minimal right sided colonic adhesions, adhesiolysis was done. Follow up sessions 6

months after, on October 2013 then March 2014 showed no abnormalities, with no adhesions, good color and morphology of the abdominal contents. No further complaints from the patient who is back to normal life. On March 2012 showed extreme pelvic adhesions with a pelvic abscess, adhesiolysis was done, pelvic abscess was removed and a drain was left in place for 3 days with intensive antibiotic therapy. Patient responded well and was discharged 3 days after laparoscopy.
Conclusions
Chronic pelvic pain (CPP) is a debilitating condition with a heterogeneous aetiology and a high disease burden worldwide. The Clinical benefits of adhesiolysis in the context of CPP are still unclear, and despite the current debate, laparoscopic adhesiolysis can still offer an easier and non hazardous way for symptomatic pain relief specially in patients with multiple previous abdominal operations. The potential benefits of adhesiolysis still need to be further evaluated in terms of better quality of life.
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ES23-0486
Posters

ROLE OF PREOPERATIVE BIOPSY IN ADNEXAL MASSES OF LOW MALIGNANCY PROBABILITY IN PRESURGICAL ASSESSMENT

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Objectives

To evaluate the utility of peroperatory histopathological analisis in the surgical management of the adnexal masses with a low and intermediate malignancy probability in the preoperatory and intraoperatory evaluation in our University Hospital.

Methods

A retrospective descriptive study was performed reviewing 364 cases of laparoscopic interventions for diagnosed adnexal masses with low and median malignancy preoperatory probability. We collected clinical, surgical and hystopathological data from the medical history. The data was analysed through a descriptive study with SPSS 21.0.

Results

The mean age of the patients was 43,5 (range 15-84); 71,7% of the cases were premenopausal women. Previous abdominal surgery was noted in 48% of the patients. The most common surgical technique was cystectomy (58,7%) followed by adnexectomy of which a 31,8% where bilateral. Postoperative complications where registered in 5,6% of patients (wound infection, bleeding or ileum) Median postoperative hospital stay was 1,16 days, with a 41,3% of patients into outpatient surgery program.

Of the 364 adnexal masses diagnosed by ultrasound exam, 86 of them (23.6%) where assessed as an intermediate malignancy probability. Peroperatory histopathological analysis was considered necessary after suspicious surgical findings in 21 of them, finding a malignant result in the 28.5%. Among patients where it wasn’t considered the need of peroperatory biopsy, we found unexpected

malignant results in 4 patients, and borderline tumors in 10 patients which represented a sensitivity of 97%.

Conclusions

Experience shows that the presurgical assessment of the adnexal mass enables a high predictive capacity as there were only 4 invasive unexpected processes and 10 tumorations with low malignity potential.

The utility of the preoperatory biopsy in this series may be limited as from the 21 cases with signs only 6 were malignant.
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ES23-0352
Posters

SIMULTANEOUS OCCURRENCE OF THYROID CARCINOMA AND THYROID CARCINOMA OF THE OVARY: A CASE REPORT

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Objectives

The malingnant transformation in mature cyst teratomas is only to 1-2% of cases, and malignant transformation of thyroid tissue is rare. In our article, we present an extremely rare case of thyroid carcinoma developed in ovarian teratoma with simultaneous occurrence of primary thyroid carcinoma in 66-year-old patient.

Methods

She presented our outpatient clinic with right lower abdominal pain and pointed out the right ovarian mass. Preoperative studies including transvaginal ultrasonography and MRI imaging showed right ovarian cystic tumor with fat component, no malignant findings were suggested.Then, laparoscopic right salpingo-oophorectomy was performed. Pathological diagnosis revealed mature cystic teratoma with malignant transformation of the thyroid tissue. Subsequent systematic examinations revealed papillary thyroid carcinoma.

Results

Additional operations included total abdominal hysterectomy, pelvic lymph node dissection, omentectomy and right thyroidectomy were performed. After 4 months follow up, there is no evidence of reccurence.

Conclusions

We experienced a very rare case of Simultaneous occurrence of thyroid carcinoma and thyroid carcinoma in ovary and we suggest taking into account coexistence of other carcinoma when we see malignant transformation of mature cystic teratoma.
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ES23-0061
Posters

THE PROJECT OF RECOMMENDATIONS FOR CLINICAL MANAGEMENT OF PATIENTS WITH UTERINE MYOMA

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Objectives
Since the end of 2013 till now in Russia a large expert group of gynecologists under the leadership of Academician L.V.Adamyan has worked intensively to develop National clinical guidelines for the management of patients with uterine myoma. The task of these guidelines is to develop recommendations for management of patients with uterine myoma for the practitioner.
Methods

We searched for articles in PubMed Medline, The Cochrane Library and other databases on various aspects of uterine myoma (since January 1999 to December 2013), reviewed the results of all available evidence-based studies in Russian and English, meta-analyzes and systematic reviews of randomized controlled trials that allowed to prepare these recommendations for the treatment of uterine myoma by consensus expert opinion.

Results

In these recommendations data about etiology, pathogenesis, clinical aspects, diagnosis (including ultrasound, spiral computerized tomography, magnetic resonance imaging of the pelvic organs), new opportunities of surgical treatment (laparoscopy, uterine artery embolization, focused ultrasound ablation, etc.) and the role of hormonal therapy (agonists of gonadotropin releasing hormone, ulipristal acetate, etc.) in the complex treatment of uterine myoma are presented, with levels of reliability of the methods. Particular attention is paid to special questions - the management of patients with uterine myoma and infertility, during pregnancy, during the peri-and postmenopause, as well as taking into account the risk of cancer. A separate chapter is devoted to uterine myoma and cancer.

Conclusions

Clinical guidelines will help a practitioner to manage patients with uterine myoma. The guidelines are designed for obstetricians and gynecologists, endoscopists, endocrinologists, general surgeons, urologists, oncologists, family doctors, teachers of medical universities.
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ES23-0169
Posters

OUR EVOLUTION: FROM TRADITIONAL TOWARDS MINIMALLY INVASIVE APPROACH TO THE HYSTERECTOMY. 13 YEARS' PERSPECTIVE.
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Objectives
The aim of the analysis was to look back to thepast 13 years and compare our approach towards hysterectomy due to benign aswell as malignant conditions. Theoverview was supposed to illustrate the evolution we have experienced both interms of our surgical philosophy and its application in the theatre - thus our real learning curve.
Methods

We analyzedthe indications for hysterectomies, number of procedures, coexisting pelvicorgan prolapse, time of surgery, length of hospitalization for all patients whounderwent hysterectomy in the Department of Surgical, Endoscopic andOncological Gynecology, Polish Mother's Memorial Hospital – Research Institute,Lodz, Poland between January 2001 and December 2013.

Results

In theanalyzed period we performed 2885 hysterectomies. Irrespective of the indicationsor concomitant pelvic floor or adnexal pathology, the overall rate of abdominalprocedures was 17,75% (512 hysterectomies), vaginal – 67,52% (1948 procedures)and laparoscopic - 14,73% (425 cases). Atthe beginning of analyzed period the proportions were markedly differenthowever: the abdominal approachconstituted up to 85% of hysterectomies, whereas the vaginal (13%) andlaparoscopic (2%) were seldom chosen. After 13 years the results were quite theopposite – we did 22 abdominal hysterectomies (9%, for oncological reasons inmost cases), 169 vaginal (69%) and 54 laparoscopic (22%). Which is important, such a proportion wasachieved only after 3 years of the learning curve and the plateau remainsstable for 10 years now.

Conclusions

The reportis a large analysis of the process of evolution both of the surgical philosophyand surgical skills of our team in terms of hysterectomy. We believe itreflects an ideal proportion of hysterectomy techniques in general gynecologydepartment, including all indications. It is also a reliable record of thelearning curve of the whole team of surgeons, which seems a valuableinformation for other departments wishing to improve their hysterectomy technique.
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ES23-0143
Posters

BENEFITS OF LAPAROSCOPY IN SURGICAL TREATMENT FOR ENDOMETRIAL CANCER IN ELDER
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Objectives

To report surgical outcomes and comparative analysis of laparoscopic and laparotomic management for the endometrial carcinoma in patients with 80 years old and greater. Surgical outcome, complications and survival according to the type of surgery were evaluated.

Methods

We report a retrospective review (Canadian Task Force classification III) of 160 cases of endometrial neoplasias treated between April 2004 and May 2014. We evaluate the surgical management in 5 patients with 80 years old or greater. Mean age was 83,5 years (80-88). The most frequent histological type was the endometrioid (87,5%). 41,7% of cases were diagnosed as high risk (G3, myometrial invasion >50 %, histological types of high degree). In 4 patients, the surgical intention was laparoscopic management (LPS), 4 patients underwent laparotomic staging (LPM). In 7 cases vaginal hysterectomy was made for medical surgical risk. In 3 cases pelvic lymphadenectomy and in 3 cases pelvic and paraaortic lymphadenectomy were made.

Results

No significant differences between the LPS group and the LPM group were found in the mean body mass index (29,2 vs 30,3 kg/m2 respectively; p=0,48), the mean operating times (183 +/- 41,7 vs 190,7 +/- 65,5 minutes; p=1) and the mean postoperative hospital was similar (3,5 +/- 1,7 vs 4,7 +/- 0,5 days respectively, p =0,48). Mean blood loss was greater significantly in the LPM group (1469,4 +/- 413 ml) than in the LPS group (701,7 +/- 156) (p=0,02). The mean removed pelvic nodes was similar in both groups (19,5 nodes (11-30) vs 28,5 nodes (28-29) (p=0,40). Mean removed paraaortic nodes in the LPM group was 15 nodes (10-25). Similar complications rate was reported in both groups. No blood transfusion and reintervention was reported.

With a median follow-up of 39,2 months in LPS group, and 36,7 months in LPM group, there were no significant differences between them in 2-year and 5-year overall survival rates (100% vs. 75,8% respectively) (p=0,38).

Conclusions
The outcome was similar in both groups, but in LPS group the postsurgical morbidity and blood loss were significantly shorter. Our analysis showed no difference with the survival between both groups. The laparoscopic approach may be considered for endometrial malignancy when abdominal staging is necessary in old patients.
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ES23-0403
Posters

THE ROLE OF COMPUTED TOMOGRAPHY COLONOGRAPHY (CTC) AS PREOPERATIVE INVESTIGATION IN WOMEN WITH PELVIC ENDOMETRIOSIS

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Objectives

Bowel endometriosis affects 3.8 to 37% of women with endometriosis and recto-sigmoid tract is involved in 70% of cases. The evaluation of symptoms and clinical examination underestimate the number of patients with intestinal endometriosis. Computed tomography colonography (CTC) is a robust and reliable imaging test of the colon and it's efficiently used to detect both large and small lesions with a good sensitivity.

Methods

We included in this study 30 women undergoing surgical management for endometriosis from January to April 2014. Preoperative evaluation included: presence of clinical symptoms (dyschezia, rectal tenesmus and chronic constipation), measurement of Ca-125 serum value (> 35 µg/mL) and the presence of bowel lesions assessed by trans vaginal snography (TVS). CTC was performed in 14/30 patients (46.7%). A 3D reconstruction of images was carried out, to allow visualization of the lumen of the rectum and the colon. Data provided by virtual colonoscopy were compared to the other preoperative criteria and to surgical exploration. Intestinal lesions detected during Laparoscopy were treated with bowel resection only if an appropriate counseling was performed before surgery and patient's consensus was given.
Results

Women with bowel endometiosic lesions confirmed by surgery are 17/30 (56,6%). Eight in seventeen patients (47%) complain preoperative intestinal symptoms, 5/13 (38,5%) women without intestinal lesions seen during laparoscopy were complaining dyschezia, tenesmus and constipation during clinical investigation. There is no positeve correlation between symptoms and bowel involvement ($p > 0,05$). Ca-125 was positive in 10/17 (58,8%) women with intestinal deep endometriosis, negative values were observed in 92,3% women without intestinal involvements ($p < 0,05$). Despite TVS was negative in all the patients with negative intestinal finding, only in 4/17 (23,5%) is diagnostic for intestinal lesions subsequently confirmed by surgery ($p > 0,05$). As regards the 14 patients processed to CTC, 8/14 are involved by intestinal endometriosis. In this group CTC revealed deep bowel endometriosic lesions in 6/8 (75%) of women. CTC wasnegative for intestinal involvement in 4/6 (66,6%) women, data confirmed during the surgery. Further investigations needed to confirm the data ($p> 0,05$). Unaspected intraoperative bowel lesions occured in 9/16 (56,2%) patients not undergone CTC during preoperative evaluation. In 2/6 (33,3%) patients with negative CTC, surgery confirm bowel involvement of deep endometriosis.

Conclusions

In our pilot study, CTC seems to be an accurate and low-invasive imaging modality. Performing CTC to all the women who undergo surgery for endometriosis can permit a correct counseling with the most adequate surgical treatment in order to avoid a second-time surgery for unattended bowel involvement.
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ES23-0396
Posters

CERVICAL MUCOCELE FOLLOWING LAPAROSCOPIC SUBTOTAL HYSTERECTOMY
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Objectives

We present the uncommon finding of a cervical mucocele which developed after a laparoscopic sub-total hysterectomy and sacrocolpopexy were performed for menorrhagia and middle vaginal compartment prolapse.

A 43 year-old lady underwent an uncomplicated laparoscopic subtotal hysterectomy with conservation of the ovaries and simultaneous laparoscopic sacrocolpopexy. This was performed attaching the cervical stump to the sacral promontory using a polypropylene mesh and nylon sutures. Endometrial sampling prior to the procedure showed no abnormal cell types and her cervical smear was normal.

Methods

The technique for the laparoscopic subtotal hysterectomy used the PK Gyrus for dissection, coagulation and division of the pedicles, the LINA mono-polar loop to separate the body of the uterus from the cervical stump and the Morcellex morcellator to remove the uterus from the abdominal cavity. A strip of polypropylene mesh was attached to both the posterior and anterior aspects of the cervical stump and attached to the sacral promontory. The peritoneum was closed burying the mesh entirely. The post-operative recovery was uneventful and histological analysis revealed no abnormal findings.
Results

Two years after the initial procedure the patient presented with pelvic pain. Urine culture was negative and re-examination showed all compartments to be well supported. Pelvic examination revealed normal vaginal capacity and cervix was macroscopically normal. Trans-vaginal USS showed a mucocele 2cm in diameter within the remaining cervical stump and an otherwise normal pelvis. The ecto-cervical os was easily dilated and a copious amount of cervical mucus was drained. Repeat scan confirmed the mucocele to be completely drained. The patient was reviewed six months later. The mucocele had re-accumulated and required further drainage.

The patient was keen for definitive treatment so Examination under Anaesthesia and diagnostic laparoscopy was performed. The cervix was not visible at laparoscopy due to re-peritonisation and at speculum examination the cervix was too high to be easily removed vaginally. The ecto-cervical os was therefore removed with mono-polar loop diathermy and the endocervical canal was cauterised.

Conclusions

Recognised complications of sub-total hysterectomy include cyclical or irregular vaginal bleeding and discharge as well as the risk of cervical cancers. Chronic relapsing cervical mucocele is an infrequently reported long-term complication of subtotal hysterectomy and treatment can be difficult.
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ES23-0127
Posters

COMPARISON BETWEEN UMBILICAL APPROACH AND PALMER`S POINT FOR PNEUMOPERITONEUM IN LAPAROSCOPIC HYSTERECTOMIES,EXPERIENCE IN THREE YEARS

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Objectives

To determine the statistical impact of the incidence of access complications in generating penumoperitoneum through the umbilical approach versus Palmer's point.

Methods

All the protocols of women who underwent laparoscopic hysterectomy were reviewed. Age of the patients, preoperative diagnosis, method to access the abdominal cavity, number of attempts to access the cavity, necessity of changing the technique or the puncture site and the incidence of access complications (intestinal, vascular and others) were registered.

Results

91 protocols obtained between January 2011 and December 2013 were analyzed. The sample was divided into two groups: group 1, corresponding to women in whom umbilical approach was performed (n = 32, 36.4%) and group 2 of women in whom Palmer's point was used to generate peumoperitoneum (n = 56, 63.6%). Three cases in which it was impossible to obtain pneumoperitoneum due to multiple adhesions and it was necessary to perform open surgery were excluded. Demographic data were recorded. In group 1, the access to the abdominal cavity was successful upon the first attempt in the vast majority of cases (96.9%), requiring only in one case, three attempts (3.1%); in group 2, a first attempt was successful in 98.2% of cases, with only one patient which required a second attempt (1.8%). No access complications were seen for any of the two groups.

Conclusions

There were no significant differences in the incidence of access complications in generating pneumoperitoneum between the two different techniques.

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ES23-0477

Posters

CASE REPORT OF CLASSICAL LAPAROSCOPIC STAGING, OPERABILITY ASSESSMENT AND DIAGNOSIS OF ADVANCED OVARIAN CANCER. THE PROCEDURE ALLOWED A DIRECT ACCURATE EVALUATION OF UPFRONT SURGERY FEASIBILITY.

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Objectives

To report use of laparoscopy to assess upfront surgery feasibility or neoadjuvant chemotherapy indication in advanced ovarian cancer, using the RMI and the Leuven criteria.

Methods

A patient was submitted to laparoscopy to evaluate, diagnose and stage advanced ovarian cancer, and ultimately assess feasibility of upfront surgical cytoreduction, which remains the backbone therapy. The preoperative diagnosis was based on the "Risk of Malignancy Index" (RMI) as described by Jacobs et al (Table 1), and operability criteria was the "Leuven criteria for neoadjuvant chemotherapy" as described by Vergote et al (Figure 2).

Results

A 73-year-old woman without personal or family history of ovarian cancer, presenting classical symptoms of the disease over the previous 6 months. Initial diagnostic workup revealed an increased CA-125 (1,368 U/mL), an ultrasound with a solid unilateral adnexal mass showing increased vascularity, ascites and signs of carcinomatosis, as well as an abdominal CT with signs of omental metastasis ("omental cake"). She had no relevant comorbidities.

The RMI was well above the cut-off level of 200 (12,312), evidence provided by imaging was suggestive and physical symptoms pointed at ovarian cancer.

Laparoscopy revealed a solid left adnexal tumour of 5 cm, with uterus and right adnexa disease – free. There were several small and large bowel tumour plaques with serosal invasion, and a 10 cm diameter mass in the omentum, compromising the superior mesenteric artery. Therefore bowel resection could lead to short bowel syndrome due to extensive tissue loss. Upper abdominal viscerae were free from macroscopically invasive disease, with small spots of carcinomatosis in the diaphragm. These findings and her generally poor condition supported recommendation for neoadjuvant chemotherapy according to the Leuven criteria. We took biopsies from peritoneal plaques and the left adnexal mass, with minimal bleeding and short surgical time of 30 minutes. Recovery from the procedure was benign, and hospital discharge occurred in less than 24 hours. Pathology result was a poorly differentiated adenocarcinoma with diffuse papillary growth, immunohistochemistry suggested Müllerian origin, reassuring our hypothesis of a primary genital tract tumor. Staging was IIIc (FIGO 2014).

A control CT showed total remission with no visible disease after 3 cycles of well tolerated chemotherapy (Carboplatin AUC 5 + Paclitaxel 175 mg/m2). Interval debulking surgery is scheduled, but not yet performed.

Conclusions

Applicability of the RMI has been externally validated in different populations, and incorporated to a number of official guidelines for the management of ovarian masses. In this reported case it was precise in the preoperative diagnosis of ovarian cancer. The Leuven criteria allowed a pragmatic and objective assessment of operability improving the possibility of obtaining optimal results in an interval debulking surgery to be performed after an important reduction in disease volume was obtained with neoadjuvant chemotherapy.

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ES23-0025

Posters

A NEW HYSTEROSCOPIC TECHNIQUE FOR THE SUSPENSION OF BIOACTIVE SUBSTANCES IN THE UTERINE CAVITY FOR CONTRACEPTION AND TREATMENT

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Objectives
Toretain an IUD in the uterine cavity, many IUD frames have been developed overtime. The most popular ones are the T-frames (i.e., Paragard® andMirena®). However, as these frames are too big for many uterinecavities, problems (e.g., bleeding, pain, expulsion) often occur. Theobjective of this presentation is to demonstrate a new technique for thehysteroscopic insertion of 'frameless' intrauterine devices for the sustainedrelease of bioactive substances in the uterine cavity for contraceptivepurposes, as well as for the treatment of certain gynecological conditions. The hysteroscopicinsertion technique of the frameless GyneFix IUD will be shown in a video film.
Methods
Patientsconsulting with IUD problems were evaluated by hysteroscopy to establish thecause of the complaint and exclude possible uterine anomalies. It was examined ifreplacement by frameless IUD could solve the problem.
Results
The patients were evaluated by hysteroscopy. Disproportion between theIUD and the uterine cavity was found to be the main reason for the complaintsresulting in embedment of the IUD. The IUDs were replaced by a frameless IUDand the relationship with the uterine cavity was evaluated by visualinspection.
Conclusions
The 'frameless' IUD GyneFix is proposed as a solution for these problems.
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ES23-0190
Posters

CASE REPORT: AN ALTERNATIVE APPROACH TO ACUTE OVARIAN TORSION

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Objectives

This case report describes a woman of reproductive age with acute ovarian torsion who was managed with conservative surgery, in support of the growing body of evidence for less invasive surgical management of this condition. Our aims are to show that expert and timely radiological input can assist in the diagnosis of ovarian torsion, and that less invasive surgical management can be a successful and beneficial option for women with this condition.

Methods

Case report of acute ovarian torsion managed with laparoscopic untwisting of the affected ovary and comparison with similar case report outcomes.

Results

A 27-year-old woman, with a history of Polycystic Ovarian Syndrome, presented with a three day history of worsening left iliac fossa pain and vomiting. On admission she had a mild neutrophilia. Trans-vaginal ultrasound with colour-flow Doppler revealed a grossly enlarged left ovary, with reduced vascularity. Her clinical condition subsequently deteriorated, and an urgent diagnostic laparoscopy was performed. At laparoscopy a long left ovarian pedicle was noted, which had twisted three times. The left ovary was enlarged, congested and oedematous. No other pelvic pathology was identified. The left adnexa was untwisted resulting in restoration of blood flow – subsequently the ovary and fallopian tube appeared less congested. The patient was asymptomatic and discharged 24 hours later. Follow-up ultrasound four weeks later revealed a healthy, normal looking left ovary.

Conclusions

Ovarian torsion remains a relatively rare but potentially serious gynaecological emergency, with complications that include ovarian ischaemia, infection, peritonitis, pelvic adhesions and chronic pelvic pain. Traditionally the condition has been treated by oophorectomy of the affected ovary, with or without salpingectomy. This operation is more recently being challenged in favour of more conservative management options, such as ovarian/adnexal de-torsion with or without oophoropexy, that allow preservation of the ovary and its function. Delay in surgical correction of the torted ovary is thought to increase the likelihood of adnexal ischaemia, with an inverse relationship between duration of symptoms and ovarian viability. Evidence is now emerging that even the grossly ischaemic-looking ovary at laparoscopy will re-gain some perfusion when un-twisted.

This case supports the growing evidence for less invasive management of acute ovarian torsion, particularly in young women of reproductive age. It supports the use of imaging by experienced radiologists using colour-flow Doppler to allow for timely diagnosis. One of the main diagnostic dilemmas is lack of consensus for imaging and clinical criteria to diagnose ovarian torsion, as history, examination and investigation findings can be vague and non-specific. Multi-disciplinary management with expert radiological input can help to delegate these patients to appropriate laparoscopic specialists, allowing for possibly less invasive surgical options.
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ES23-0469
Posters

USEFULNESS OF THE CRYOADHESION PROBE IN REMOVING LARGE TISSUE FRAGMENTS DURING OFFICE HYSTEROCOPY

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Objectives
One of the major problems encountered during minihysteroscopy treatments are difficulties with the removal of large tissue fragments out of the uterine cavity. Used, so far, classical hysteroscopic tools are extremely fragile and easy to damage. In our clinic, we successfully use extremely durable, reusable cryoadhesion probe in 4FR diameter (Metrum CryoFlex, Poland), for this purposes
Methods

We demonstrate the applicability of the cryoadhesion probe in removing large tissue fragments during minihysteroscopic treatments.
Results
The cryoadhesion probe is a highly useful, safe, easy to use and cheap to operate a useful tool in minihysteroscopy, especially in the cases of difficult to remove large tissue fragments from the uterine cavity, in cases when others traditional tools usable in office hysteroscopy fail. Thanks to its durability and high connection strength to the removed tissue, significantly shorten treatment time
Conclusions
Cryoadhesion probe is a highly useful tool in large tissue pieces extraction (polyps, fibroids, etc.) during office hysteroscopy procedures. The use of the cryoadhesion probe significantly enhances the capabilities of office hysteroscopy in removing large pieces of tissue than before used tools. It's both easy to operate and safe for use in an outpatient settings.
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ES23-0196
Posters

DIAPHRAGMATIC DOME ENDOMETRIOSIS- AN UNUSUAL LOCATION
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Objectives
The authors describe a case of an unusual location of endometriotic lesions. Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity. It is frequently associated with chronic pelvic pain, infertility, dyspareunia and dysmenorrhea, although it can be assymptomatic. The prevalence in the general population is unknown. Nuliparity, early menarche, long menses and mullerian defects are known risk factors. The most common sites involved are the ovaries, anterior and posterior cul-de-sac, uterine ligaments and fallopian tubes. Other rare places such as ureters, kidneys and gallbladder may be involved as well. Laparoscopic surgery is currently the gold standard for diagnosis and treatment of endometriosis
Methods
Case Report
Results
PCTM, 22 years, female, prior history of multiple
drug allergies (with Allergology follow up), menarche at 12 years, irregular menses lasting between 7 and 10 days, with moderate dysmenorrhea, no history of oral contraception, nulligravida, presented at the emergency department with right hypochondrium pain with 48 hours of evolution, coinciding with the first day of menses. Patient refered several similar prior episodes over the last 5 years. Patients abdomen was painful at palpation of the right hypochondrium, with no underlying fever ou jaundice. Bloodwork revealed normal values of hepatic, renal and gallbladder function. A upper abdominal ultrassound was performed, revealing a infundibular septation in the gallbladder. Due to progressively aggravating pain in spite of analgesic therapy, a diagnostic laparoscopy was performed. During this procedure, multiple endometriotic foci were seen on the right diaphragmatic dome, ovaries and tubes as well as hepatic adhesions (see picture below). A small volume hemoperitoneum was also verified. The hystological examination of the foci byopsies confirmed the diagnosis of endometriotic implants. Presently, patient attends regular Gynecology consults, medicated with a continuous oral contraceptive.

Conclusions

Endometriotic implants in the diaphragmatic dome are a rare condition and also a challenge in the differential diagnosis of abdominal upper quadrant pain in reproductive age female patients, especially when of cyclic appearence with menses. The therapeutic options available are analgesic drugs, hormonal therapy and surgical therapy, preferably with a
laparoscopic approach (conservative treatment- ablation or excision of lesions and adhesions by laser, eletrocoagulation or ultrassonic energy; definitive treatment- oophorectomy, anexectomy and/or hysterectomy).
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ES23-0408
Posters

MINI LAPAROTOMY AS AN ALTERNATIVE OPTION

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Objectives

To study convenience, safety and cost effectiveness of mini laparotomy in gynecological surgery.

Methods

We have been performing mini laparotomy (surgical incision of approximately 6 cm) since 2002, teaching all series of young gynecology trainees.

Since 2008 the technique has been applied on 120 patients, 18-55 years old, for serosal and/or intramural myomas (max diameter up to 10 cm), abnormal uterine bleeding non responding to conservative treatment and early endometrial malignancies.
Adnexal masses with any suspicion of malignancy were first evaluated by mini laparotomy under laparoscopic co-evaluation, either transumbilically, or by wriggling the Alexis wound retractor around a 10 mm laparoscopic trocar. If malignancy was confirmed, exploratory laparotomy was performed.
Adnexal masses greater than 5 cm with no suspicion of malignancy were either extracted intact, or by using a method of controlled aspiration, first emptied and then extracted, assuring no content spillage. This way better surgical field was obtained and adhesiolysis of the mass to the intestine and/or the peritoneum was safer and more effective.

Results

Compared to laparotomy, no difference has been noted as far as intra and post-operative complications are concerned.

Conversion to laparotomy (extension of the margins of the surgical incision to the length of a Pfannestiel occurred in 6 patients due to over-staging (positive frozen section) or severe adhesions to the bowel.

All patients have been mobilized within the first 24 h from surgery and median hospital stay was 48h. No repeat operation, readmission or wound complication has occurred.
Five operative cases are considered to be the learning curve of mini laparotomy.

Conclusions

Mini Laparotomy with conventional surgical instruments is a safe and trustworthy, easy to learn, low cost option in minimally invasive gynecological surgery.
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ES23-0207
Posters

PREGNANCY RATES AFTER LAPAROSCOPIC TREATMENT OF MINIMAL OR MILD ENDOMETRIOSIS - 2 JEARS EXPERIENCE

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Objectives
Minimal or mild endometriosis is frequently diagnosed in infertile women. It is often treated by coagulation of the lesions. Some studies establish that this improves fertility rates. We carried out a retrospective analysis of our patients from January 2012 to December 2013 to determine the frequency of endometriosis in infertile women and whether laparoscopic surgery enhanced fecundity in infertile women with minimal or mild endometriosis.
Methods
We studied 297 infertile women 20 to 39 years of age who undergo laparoscopy due to infertility and determined the percentage of existence of minimal or mild endometriosis among these women (according to rASRM classification of endometriosis). During laparoscopy they undergo coagulation of visible endometriosis. We observed the percentage of pregnancies during 26 weeks after laparoscopy among these women.
Results

During 2 years there were 297 laparoscopies due to infertility. In 132 cases (44.4%) we found minimal or mild endometriosis. All of them underwent bipolar coagulation of endometrial lesions. There also were 22 cases of endometriosis of higher severity and 4 cases of minimal or mild endometriosis accompanied with tubal occlusion.

Among the 128 women with minimal or mild endometriosis and passable tubes, who had coagulation of endometrial lessions 40 (31.25%) became pregnant during 26 weeks after operation. There was no control group and the cases accompanied with other pathologies were not excluded (Myomas 24.2% , paratubal cyst of 'Morgagni' 54.7%, endocervical and endometrial Polyps 9,4% and 7,8%).

Conclusions

According to this retrospective Analysis presense of endometriosis in infertile women reaches 51.85% (154 women with various degrees of endometriosis from 297 infertile cases). Among them 85.7% - minimal or mild endometriosis, 14.3% - moderate or severe endometriosis.

In infertile patients with minimal or mild endometriosis and normal fallopian tubes, pregnancy rate after laparoscopic coagulation of endometrial lesions with 26 weeks follow up were 31.25% (40 pregnancies from 128 women).

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ES23-0204
Posters

LAPAROSCOPIC SURGERY OF RUDIMENTARY HORN WITH CAVITY COMMUNICATING TO UNICORNUATE UTERUS: A CASE REPORT

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Objectives

Unicornuate uterus accounts for 2.4 to 13 % of all Müllerian duct anomalies. Unicornuate uterus is divided into four subgroups according to the American Fertility Society classification of Müllerian anomalies: rudimentary horn with cavity communicating to unicornuate uterus (Class IIa), with cavity non-communicating (Class IIb), with no cavity (Class IIc) and with no horn (Class IId). Urinary tract anomalies are commonly associated and have been reported to be more frequent with unicornuate uterus than the other Müllerian duct anomalies.

Methods

We report the case of a 21-year-old nulligravid woman presenting with a unicornuate uterus with a communicating rudimentary horn.

Results

The patient had previously been diagnosed with left renal agenesis at around age 10 and she was followed up by another clinic. At age 21, she first visited nearby doctor with irregular menstruation and she was referred to our university hospital for a complete gynecological exam. Pelvic ultrasound, magnetic resonance imaging and hysterosalpingography showed rudimentary horn of unicornuate uterus, with communicating cavity horn at the left side of the uterus. We followed closely with painkiller, however, dysmenorrhea lasted for two years and was getting worse. At age 23, following 3 months of gonadotropin-releasing hormone agonist therapy, we performed operative laparoscopy with the three-dimensional (3D) system. During operation, the uterine horn, which was enlarged over fist size, was observed on the left side of the uterus. Adhesions were observed between the uterus and the omentum. Following dissection of these adhesions, the rudimentary horn removal and the left salpingectomy were performed. The patient recovered well from the operation and was discharged without any trouble. The patient reported that her dysmenorrhea improved dramatically after surgery.

Conclusions

In this case, subgroup of unicornuate uterus was Class IIa (rudimentary horn with cavity communicating to unicornuate uterus). However, the patient’s dysmenorrhea was very severe. Maybe this is because the menstrual blood’s outflow tract is very narrow, and her dysmenorrhea was getting worse. Resection of the rudimentary horn not only offers symptomatic relief in case unresponsive to painkiller, but also prevents the possibility of pregnancy in the rudimentary horn. In this case, because right tube was normal, the left fallopian tube was also removed to prevent ectopic pregnancy. Although laparotomy was used previously, laparoscopic surgery has other advantages such as minimally invasiveness, well cosmetic result, shorter hospital stay and decreased adhesion.

Our experience from this case suggests that laparoscopic resection of the rudimentary horn is a feasible procedure.
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ES23-0202
Posters

MINIMALLY INVASIVE BUT MAXIMALLY UNCERTAIN - IS ORGAN PRESERVATION JUSTIFIED IN VERY RARE TUMORS? HYSTEROSCOPIC TREATMENT OF 'UTERINE TUMOR RESEMBLING OVARIAN SEX-CORD-LIKE-TUMOR' IN A 22-YEARS-OLD WOMAN

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Objectives

Rare tumors in young patients, who wish organ and fertility preservation, are particularly difficult to manage. The rarity of the tumor limits the experience concerning biology and prognosis, while the desire for fertility preservation limits the therapeutic options.

Methods
Case Report

Results

We report on a 22-years-old Caucasian woman, nulligravida, nullipara, presenting with uterine bleeding. A round, well demarked intrauterine mass, appearing as a type 1 submucous myoma, was detected on ultrasound. A macroscopically complete hysteroscopic resection of the intrauterine tumor was performed. The postoperative course was uneventful.

The initial histological diagnosis was 'atypical leiomyoma'. However, infiltration of the myometrium was described. The immunohistochemistry revealed strong and diffuse positivity for calretinin, CD99, estrogen receptor, vimentin and WT1, and a focal positivity for melan A. Therefore, the tumor was defined as 'uterine tumor resembling ovarian sex cord-like tumor' (UTROSCT). In the follow-up period of 16 months, the patient showed no evidence of recurrence.

Conclusions
UTROSCT belongs to the rarest uterine tumors. Since the description of Clement and Scully (1976), 69 cases have been reported so far. The tumor is characterised by presence of variable features of ovarian sex-cord-like differentiation. The diagnosis is made by immunohistochemistry. A panel of 4 sex cord markers: calretinin, inhibin, CD99, and Melan A has emerged as the most reliable diagnostic tool (Czernobilsky 2008). Positivity for calretinin and at least for 1 of the other above-mentioned markers may thus confirm the diagnosis of UTROSCT.

UTROSCT seems to have a favourable prognosis. However - similar to our case - invasive growth into myometrium can be observed, indicating low-malignant potential. Also, two metastasizing malignant cases have been reported. The most cases were treated with hysterectomy with or without bilateral salpingo-oophorectomy. In only 4 out of 69 reported cases UTRISCT have been treated conservatively (three times via hysteroscopy, once via laparoscopy). Because of typical high expression of estrogen

receptors, an experimental adjuvant therapy with anastrazol has also been proposed. Nevertheless - because of the rarity - there is no established treatment protocol and no reliable prognostic factors for UTROSCT.
Summarizing, this is the 4th reported case of hysteroscopic treatment of UTROSCT. In light of the probably less aggressive tumour biology and with respect to the patient's autonomy, this treatment strategy can be seen as justified. However, further case reports and long follow-ups are needed to prove the safety of organ preserving strategy. Our case supports the role of case reports in building evidence for therapeutic decisions in extremely rare tumors.
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ES23-0201
Posters

LAPAROSCOPIC HYSTERECTOMY: OUR INITIAL EXPERIENCE ON 73 PATIENTS
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Objectives
To analyze the indications, type of procedures, conversion rate in an abdominal hysterectomy and complications rate in a tertiary university hospital deserving to introduce this technique.
Methods
Till now, 86 patients were submitted for a laparoscopic hysterectomy. In 73 of them, surgery was finalised by laparoscopy; in another 13 patients (15.1%), the procedure was abandoned and converted to an open one.
Results
Out of the 73 laparoscopic hysterectomies, 56 (76.7%) were total (TLH), 16 (21.9%) were laparoscopic-assisted vaginal hysterectomies (LAVH), and one (1.3%) was subtotal (SLH). The indications for laparoscopic hysterectomy were uterine myomas (in 24 patients - 32.8%), CIN 3 or stage 0-IA1 cervical cancer (in 18 - 24.6%), stage IA endometrial adenocarcinoma or atypical endometrial hyperplasia (in 13 - 17.8%), benign adnexal pathology (in 6 - 8.2%) and prolapsed uterus (in 12 - 16.4%). The abandoned laparoscopic procedures were more frequent during the first 20 planned laparoscopies and were caused by unsolved intraoperative incidents/complications, as follow: one bladder injury, bleeding difficult to control in one patient, a technical problem in one case and, for the rest of 10, difficult surgical conditions (large of fixed uterus, extensive adhesions, extremely obese patients, etc).
Conclusions

The laparoscopic hysterectomy is a feasible technique, but patients' selection is mandatory at the beginning of the learning curve (small and mobile uterus, slim patients, no previous abdominal surgery, etc.).
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ES23-0036
Posters

EFFECTIVENESS OF HYSTEROSCOPIC POLYPECTOMY IN WOMEN WITH ABNORMAL UTERINE BLEEDING
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Objectives

The goal of this work was to evaluate the effectiveness of the hysteroscopic polypectomy in terms of the decrease of the abnormal uterine bleeding.

Methods

This was an observational study with patients to whom a hysteroscopic polypectomy was done for treating the abnormal uterine bleeding, between January 2009 and December 2013. The response to the treatment was evaluated via a survey given to the patients about the behavior of the abnormal uterine bleeding after the procedure and about overall satisfaction.

Results

The results were obtained after a hysteroscopic polypectomy was done to 128 patients and were as follows:

67.2 percent of the patients reported decreased abnormal uterine bleeding and 32,8% persisted with abnormal bleeding.

On average 82.8 percent of the patients were satisfied with the treatment.

There were no short or long term complications.

The follow-up time of patients averaged 33 months.

In bivariate and multivariate analysis showed no association enters the variables studied and no improvement of abnormal uterine bleeding after surgery (polypectomy).

Conclusions
Hysteroscopic polypectomy is a safe surgical treatment and improves the abnormal uterine bleeding in two of three women with an acceptable level of satisfaction.
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ES23-0495
Posters

PUTTING CHRONIC PELVIC PAIN ON THE AGENDA – OUR EXPERIENCE FROM THE SOUTH OF ENGLAND
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Objectives

Chronic pelvic pain (CPP) is a common problem and presents a major challenge to health care providers because of its unclear aetiology, complex natural history, and poor response to therapy. Chronic pelvic pain is poorly understood and, consequently, poorly managed. Initial investigations including ultrasound scans are often normal. Such patients are often referred to secondary care for diagnostic laparoscopies. Our aim, through this retrospective data analysis was to learn from our experience about the value of diagnostic laparoscopy in CPP.

Methods

Comprehensive data was collected on patients undergoing a diagnostic laparoscopy between October 2012 and February 2014. All laparoscopies were done under the same Consultant gynaecologist.

All the patients that complained of CPP or dyspareunia were included in the analyses. Patients investigated with ultrasound scans (USS) that positively identified a cause of pain were excluded.

Results

Out of 118 diagnostic laparoscopies done to investigate CPP and/or dyspareunia, 35 patients were identified that had no findings at USS. Of these, the presenting symptom was chronic generalised abdominal pain in 28 and dyspareunia in 7.

Laparoscopic findings were as follows: 34% were negative, 31% showed endometriosis, 14% showed significant adhesions, 6% had fibroids, 6% exhibited tubal pathology, and 9% showed other pathology unrelated to pelvic pain. All but one of the patients with endometriosis and/or adhesions underwent therapy following the diagnostic laparoscopy, at the same sitting.

The outcome was that over 90% of the patients were discharged from follow-up. Of the remaining two patients, one was referred on to a specialist care centre for the treatment of severe endometriosis and the other went on to have a hysterectomy for fibroids.

Conclusions

Diagnostic laparoscopy is the only test capable of reliably diagnosing peritoneal endometriosis and adhesions and has been regarded in the past as the ‘gold standard’ in the diagnosis of chronic pelvic pain. Conditions such as IBS and adenomyosis are not visible at laparoscopy but it should also be understood that some authorities consider that endometriosis is significantly underdiagnosed at laparoscopy.

The RCOG agrees with our findings that at least 1/3 of diagnostic laparoscopies are likely to be negative and that much of the pathology that may be identified will not necessarily be the cause of the CPP. One should not forget that many women feel disappointed at no diagnosis being made, this set of events may lead to disengagement with the medical process.
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ES23-0195
Posters

TOTAL LAPAROSCOPIC HYSTERECTOMY- EXPERIENCE IN MADEIRA ISLAND, PORTUGAL
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Objectives

Study the characteristics, surgical morbility and indications from patients who underwent Total Laparoscopic Hysterectomy in Dr. Nélio Mendonça Hospital, located in Madeira Island, a perypheral region of Portugal, between 2010 and 2013

Methods

The authors performed a retrospective analysis of the Total Laparoscopic Hysterectomies (TLH) performed in the OB/GYn department of our hopistal between January 2010 and December 2013. Clinical files and surgical reports were analysed and the follow ing data was collected: patients age, parity, Body Mass Index (BMI), prior pelvic surgery history, associated pathology, surgical indications and complications, duration of hospital stay, anatomopathologic findings.

Results

90 TLH were performed in the mentioned period. the percentage of laparoscopic approach against vaginal and abdominal approaches was 12%. The follow ing complications occured: vesical lesions (2.2%). The average duration of the hospital stay was 48 hours.

Conclusions

TLH is a safe procedure, associated to a shorter hospital stay and fewer complications than the abdominal approach. However it demands a longer learning curve and aquisition of specific surgical material which can have high monetary costs.
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ES23-0492
Posters

PRIMARY CARE REFERRALS FOR HEAVY MENSTRUAL BLEEDING

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Objectives

There is concern that patients are being indiscriminately referred from primary care with a diagnosis of Heavy Menstrual Bleeding without preliminary investigations or treatment.

The NICE guidance on Heavy Menstrual Bleeding clearly outlines an initial management plan, which should be initiated in primary care.

We wanted to ensure that history, clinical examination, full blood count done in the primary care. We wanted to know whether options of medical treatments are being discussed, offered and started in primary care .¡

Methods

Prospective study of Referrals received from the primary care on Heavy Menstrual Bleeding from a period January 2013 – May 2013.

54 referrals assessed and compared with the guidelines to check whether the patients had been enquired of the nature of bleeding, Affect on their quality of life. We also looked whether appropriate sexual history had been taken or an abdominal or vaginal examination been carried out. We also taken into account of investigations like Full Blood count, Ultrasound scan was performed and medical treatment options discussed.

Results

Women aged 13-58 (average 40 years). 46% were having cyclical bleeding. Quality of life question was asked only in 23% and Sexual history was taken only in 18% of patients. Abdominal examination was carried out only in 9% and vaginal examination in only 24%. Full Blood count was done only in 24% where as USS scan was performed in 67% . Treatment was not started in 35% of patients in primary care at the time of referral.

Conclusions

Only referral letters were analysed.

So it was Unclear what percentages of women are being managed in primary care without referral.

Quality of life question was asked only in 23% and Abdominal examination was carried out only in 9% and vaginal examination in only 24% of patients .

35% of women in this audit did not receive any treatment in primary care

National HMB audit found that 1 in 5 women in secondary care did not receive any treatment.

Many hospital trusts use referral Performa to guide GPs to follow the NICE guidelines.
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ES23-0122
Posters

EFFECTS OF ENDOMETRIAL POLYPS AND POLYPECTOMY ON INFERTILITY
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Objectives
Most endometrial polyps represent focal, hyperplastic processes of the endometrium. Polyps occur most frequently in peri-and postmenopausal women, but they can be found in fertile-age, too. Endometrial polyps can be diagnosed by ultrasound, hysterocontrastsonography, hysterosalpingography, endometrial biopsy, and uterine curettage, but the diagnostic hysteroscopy (HSC) is considered as gold-standard method, with the greatest sensitivity and specificity.
Methods

A retrospective study was conducted on 383 patients between 2006 and 2012, who were suspicious about having endometrial polyp based on the ultrasonography, or according to symptoms. 143 cases were excluded by reason of incomplete documentation or negative hysteroscopic finding. In 240 cases polyps were verified during diagnostic hysteroscopy and were removed either by resectoscopy, or by curettage. Localization of polyp in the endometrial cavity was categorized into five groups: utero-tubal junction, anterior uterine wall, posterior uterine wall, lateral uterine wall, and multiple. All samples underwent histological examination. The group of infertile patients was accentuated.
Results
The average age of patients was 46.16 (±SD) ± 13.67. The symptoms that indicated diagnostic hysteroscopy were abnormal uterine bleeding in 50.83% of cases, 13.75% infertility, 1.67% pelvic pain and positive finding during ultrasonographic examination were 51.67%. Polyps were excised in 70% by resectoscopic polypectomy, 30% by curettage. Less than 3% of polyps were malignant. The polyps, that were seen during hysteroscopy were confirmed by histological diagnose in 76.19% of resectoscopy cases and 68.05% of curettage cases. The difference between the two techniques in sampling precision was no significant (p=0.095). Among infertile women (n=33), with suspected endometrial polyp the average age (±SD) was 33.99±4.24. Endometrial polyp was verified by hysteroscopy in all cases. Polyp locations were as follows: utero-tubal junction 18.18%; anterior uterine wall 24.24%; posterior uterine wall 27.27%; lateral uterine wall 24.24%; and multiple 6.06%. In 72.7% of polyps resection happened by resectoscopy and in 27.3% by curettage. The effect of polypectomy for pregnancy rate was evaluated in one year period after the operation sorted by localization and histological findings, as well. Polyps were verified histological in 63.6% of cases. In histological verified polyp group the pregnancy rate after polypectomy was 52.38%, in the other group the rate was 18.18%. The difference was significant (p=0.0321).
Conclusions
In this study there was no difference in pregnancy rate according to the localization of the resected polyp. According to histological verification difference in causing infertility was significant. Removing of polyps diagnosed by hysteroscopy improves the likelihood of successful conception, if removed polyp was histological confirmed as polyp.
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ES23-0329
Posters

VAGINAL VAULT SUTURING TECHNIQUES IN TOTAL LAPAROSCOPIC HYSTERECTOMY (TLH) . VAGINAL VERSUS LAPAROSCOPIC ROUTE.

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Objectives
Comparison of the two techniques for vaginal vault closure in patients undergoing total hysterectomy , for benign diseases and endometrial cancer .

Methods

In the period between 1/2012 and 5/2013 twenty patients underwent TLH for benign diseases (myomas , pelvic organ prolapse , dysfunctional uterine bleeding) and endometrial cancer. In fifteen patients vault closure was done through laparoscopic route and in five patients it was done through the vaginal route. Operative time , postoperative vaginal bleeding , postoperative vaginal vault prolapse and easiness of vaginal vault access were compared between the two groups.

Results

The mean operative time was 140 minutes in the laparoscopic route group versus the vaginal route group (mean time : 150 minutes). Postoperative vaginal bleeding was presented in five women in the laparoscopic route group versus the vaginal route group in which none of the patients had such a complication. Vaginal support and easiness of vaginal vault access was similar in both groups.

Conclusions

Approximation of the vaginal cuff transavaginally is associated with shorter operative time and reduced post of cuff bleeding .
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ES23-0123
Posters

OBJECTIVITY IN ENDOSCOPY
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Objectives

Laparoscopy and hysteroscopy are well known and widely used endoscopic methods in gynecology. All endoscopic methods have the same physical background. Orientation and manipulation in three dimensions, watching it in two dimensions. According to the rules of optics, during endoscopy distance or size cannot be judged precisely. In case the tip of the optic is closer to the target, size seems to be smaller. If the tip is far from the target area, size seems bigger than in real.

Methods

During endoscopic operation visual measurement is depending on the distance between target and optic. To make it objective, we have to use an endoscopic ruler that has SI scale on it. Sizes of objectives can be compared to this scale and can be defined precisely. For hysteroscopy a scaled probe can be inserted through the working channel of the scope. Intrauterine objectives can be compared to the scale of the ruler. For laparoscopy, two or more instruments are used anyway. It is unnecessary to have one more ruler, just two measure objects. Instruments that are used (grasper, scissors) can have the scale engraved on their tips.

Results

During hysteroscopy endouterine ruler can help in deciding the method that we use for resection of uterine pathology. Smaller polyps can be resected by office hysteroscopy, bigger size can indicate resectoscopy via traditional hysteroscopy. Evaluating precisely the indentation of the uterine fundus can help in deciding the necessity of resection of septum. In cases of septum resection in two or more steps, decreasing size of septum can be recorded accurately.
During laparoscopy, scale-engraved instruments can assist in measuring intrapelvic organs, cysts, fibroids. By having exact sizes, necessity, way of operation can be decided or modified.

Conclusions

Using these scaled instruments, we can evaluate the size of objects during endoscopy. It can help us in decision-making during operations.
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ES23-0239
Posters

HYSTERECTOMY FOR EXTREMELY LARGE FIBROID UTERUS. WHAT ARE THER LIMITS?
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Objectives

Fibroids are the most common tumors of the uterus benign, typical symptoms are bleeding disorders, pain and pressure symptoms. They are the most common cause of performing a hysterectomy. [1] Sometimes these fibroids cause an extreme enlargement of the uterus. This leads to difficulties in selection of Hysterectomy route. Is laparoscopic hysterectomy even possible? Generally, an abdominal hysterectomy is related with the highest rate of postoperative complications and a longer hospital stay compared with the laparoscopic and vaginal procedures. [2, 3, 4, 5] The indication for abdominal hysterectomy for benign diseases is provided primarily by the size of the uterus and existing previous surgery. [6, 2] The feasibility of a laparoscopic procedure could be limited mainly due to poor visibility, the associated increase in intraoperative complications and a prolonged operation time. [7.3] We present here a case in which a supracervical laparoscopic hysterectomy could be performed without complications in a large fibroid uterus that weighed 2800 g.

Methods

Case presentation: The 45 year old patient, Nulligravida, presented with pressure symptoms and Hypermenorrhea. Four years earlier, an emergency midline laparotomy was carried out because of torsion of a sub-serous myoma.

In the initial examination reveals the following findings: Lean patient, the uterus is firm, irregular, extremely enlarged reaching just beneath the costal margin.

Ultrasonography: anteversion, anteflexion uteri at least 25 cm in size

Before the planned hysterectomy a diagnostic hysteroscopy with fractional curettage is performed. The cavity could not be fully seen due to poor distention by an extremely enlarged cavity .
Histopathology: Chronic cervicitis, uneven proliferative endometrium in the secretory phase.
Operative laparoscopy: sub umbilical introduction of a transparent 10 mm trocar under visual control with a 0 ° lens after insufflations with sufficient CO_2. Despite previous laparotomy there were no adhesions. The uterus reaches good 3 finger-widths above the umbilicus. Now a 30 ° lens through a trocar is placed under direct vision in the upper abdomen. Now introducing two additional working trocars under vision in middle abdomen.

The surgical instrument used offers combined bipolar and ultrasonic energy with simultaneous output capability.

Cutting the right round ligament and opening the peritoneum of the bladder. Dissection of the ureter in the retroperitoneal space in its course and Coagulation of the uterine artery at adequate distance of the ureter. On the left, the same principle applies. Now the body of the uterus could be excised with the bipolar Loop, Suturing of the peritoneum with a continuous suture, Vicryl 3/0. Morcellation of the Uterus with the 20 mm morcellator. A long part of the operation time (about 90 min) was spent on morcellation.

Results
Blood loss: 200 ml Operation time: 145 min Histology: 2800 g uterine tissue, Leiomyomas without malignancy, endometrial hyperplasia with evidence of hormonal dysregulation. On the fourth postoperative day, the patient was discharged after an uneventful hospital stay.

Conclusions

New and improved surgical equipments , such as a flexible high definition camera, 30 ° camera and combining the ultrasound with the Bipolar energy in one instrument, provided with good surgeon training makes the laparosopic procedure possible. The operation time increases, much of it is required for morcellation. A significantly longer operation time leads to increased perioperative morbidity. [7] However, the overall complication rate after laparoscopic supracervical hysterectomy is still the lowest. [8.3] Performing an abdominal hysterectomy only because of uterine size is to be questioned. Of crucial importance, of course, are experience and skills of the Surgeon. Conclusion: With appropriate operating equipment and surgical skills a laparoscopic approach is possible even with extremely large uteri. At least it is worth trying
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ES23-0166
Posters

SURGICAL MANAGEMENT OF FEMALE-TO-MALE TRANSGENDER MEN FOR GYNAECOLOGISTS: TOTAL LAPAROSCOPIC HYSTERECTOMY WITH BILATERAL SALPINGO-OOPHORECTOMY AND VAGINAL COLPECTOMY - OUTCOME AND PECULIARITIES
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Objectives

Gender reassignment surgery is a series of complex surgical procedures performed for the treatment of patients affected by gender dysphoria and has been proved as an important part of an effective multi-modal therapy for certain patients. In 2011 the World Professional Association for Transgender Health published updated guidelines and standards of care for patients affected by gender dysphoria, such as selection criteria for surgery (Version 7). Of the genital procedures in female-to-male (FtM) transsexuals hysterectomy with or without vaginectomy and consecutive penile and scrotal reconstruction are the core procedures in gender reassignment surgery. A particularity of hysterectomy in transgender men is the high percentage of virgins and nullipara as well as the foregoing androgenic hormonal treatment. Our study presents the gynaecological part in FtM gender reassignment surgery. We suggest a total laparoscopic hysterectomy with bilateral adnexectomy for safe and scar sparing treatment with short hospitalization.

Methods

From 12/2011 until 12/2013 we included 21 FtM transsexuals aged 32 ± 9 years performing a total laparoscopic hysterectomy with bilateral adnexectomy and vaginectomy in the Department of Gynaecology in Sana Hospital Berlin-Lichtenberg. We perform a multi-step procedure for genital reassignment. Most patients had a mastectomy first (18/21; 85,7 %). 90% of the patients were nulliparous (18/20, 1 not specified), 47% were virgins (10/21). All patients have been starting with hormone therapy (testosterone) for months. We basically monitored the operation time, the length of hospitalization, the rate of major complications, the amount of blood loss, the rate of conversions to laparotomy and the preoperative status of partnership.

Results

We had no single conversion to laparotomy. The mean operation time was 157 ± 19 min, mean blood loss was 255 ± 180 ml. The rate of complications was 23,8 % (5/21) including 1 lesion of the ureter, 1 lesion of the rectum and 3 bleedings with necessary revisions-surgery or blood transfusion, respectively. The mean length of hospitalization was 7,9 ± 2,7 days. In 33,3% the transgender men had a partnership with a women, 33,3 % had no partnership, the last third was not specified.

Conclusions

Total laparoscopic hysterectomy is a safe and viable option for female-to-male gender affirmation surgery. Gynaecologists should consider total laparoscopic hysterectomy as a minimal invasive option in treating female-to-male transgender men. The additional vaginal colpectomy prolongs the duration of surgery and seems to increase the rate of complications, especially lesions of neighbour organs and bleedings, but is often favoured if penile and scrotal reconstruction is planned.

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ES23-0014

Posters

CONGENITALLY ABSENT UNILATERAL ADNEXA WITH A LARGE PARATUBAL CYST

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Objectives

To present a case of congenital absence of an ipsilateral fallopian tube and ovary discovered incidentally during laparoscopic management of a large contralateral paratubal cyst.

Methods

Case report and literature search of similar cases.

Results

A 19 year old nulliparous patient presented with menorrhagia and abdominal swelling. The initial MRI scan was reported as a large left ovarian cyst and small right ovarian cyst. The patient underwent laparoscopy, which revealed unilateral absence of the ovary and fallopian tube and a contralateral large locular paratubal cyst occupying the whole pelvis without any other anatomical anomalies. The paratubal cyst was carefully excised without any injury to the only tube. Post-operative recovery was uneventful, however the patient was very upset and it was difficult to convince her that the ovary was absent before the surgery. A second review of the initial images with experienced radiologists agreed with the laparoscopy findings and confirmed no other structural anomaly.

Conclusions

Mullerian duct anomalies associated with gonadal anomalies are very rare, their aetiological explanations are uncertain and they pose difficult ethical dilemmas. There are three proposed theories for a unilateral absence of both fallopian tube and ovary. These are: congenital agenesis of both the fallopian tube and ovary, torsion of the tube and ovary, followed by ischaemia and reabsorption, antenatally, neonatally or later in life, and vascular anomaly leading to ischaemia and later reabsorption of the ipsilateral tube and ovary. It can sometimes be seen as inadvertent surgical removal due to some complication during current or previous surgery, consequently leading to medico-legal issues. Good record of images and videos during laparoscopy are useful in clearly explaining and demonstrating the clinician's findings. Rare association of renal tract abnormalities should be investigated.
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ES23-0263
Posters

OVARIAN TORSION IN CHILDREN AND ADOLESCENTS: DIFFERENTIAL DIAGNOSIS OF OVARIAN CYSTS
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Objectives

Introduction:
Ovarian cysts are frequent conditions in the paediatric age group. They are characterized by different clinical presentations and by the need to establish adequate type and timing of treatment in order to prevent complications such as ovarian necrosis resulting from torsion and secondary infertility. A differential diagnosis has to be established between benign follicular cysts and neoplastic lesions or organic cysts.

Methods

Case report:
A 12 years-old girl was admitted at the hospital with an acute abdomen presentation (pelvic pain, nausea and vomiting) associated with hyperthermia and leucocytosis, which could suggest an acute appendicitis. The measurement of ß-hCG was negative. Ultrasound examination demonstrated a 9 cm left ovarian cyst with a heterogeneous content, normal flow and fluid collection in Douglas. A laparoscopy was performed in emergency. The diagnosis of ovarian torsion on a haemorrhagic corpus luteum cyst was confirmed and, after untwisting left ovary, a partial cystectomy was performed.

Results

Discussion:
There are different group of ovarian cysts: functional cysts (follicular or corpus luteum cysts) and organic cysts. Ovarian tumours are uncommon in children. 2/3 is benign and germinal tumours are the most frequent. Mature teratomas are present in 90% of cases. Malignant tumours (malignant

germ cell tumours 85%) represent only 1% of all paediatrics malignancy. Other diagnosis must be eliminated: appendiceal abscess, hydrosalpinx, extra-uterine pregnancy or uterine malformation.

Conclusions

Conclusions:
The surgical treatment of children and adolescents presenting annexe torsion should be practiced as an emergency and it should be more conservative as possible in order to preserve the future reproductive potential. The essential objective aims to not ignore an ovarian torsion, an organic cyst or a malignancy, which all need chirurgical intervention, without operating a benign follicular cyst unnecessarily.

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ES23-0072
Posters

AN INDEPENDENT SUPERFICIAL EXTRAOVARIAN ENDOMETRIOTIC CYST IN THE VESICOUTERINE POUCH : A CASE REPORT

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Objectives
We report an independent superficial 6×8cm size extraovarian endometriotic cyst in the vesicouterine pouch. The tumor was adhered to only the omentum and peritoneum slightly. Bilateral ovaries were normal. No other endometriosis was detected in the abdominal cavity.Extraovarian endometriosis is reported in uterosacral ligaments, Douglas' pouch, uterus, rectovaginal septum, lung, rectum, bladder, ureter et al. In most cases they infiltrate deep and firm to the surrounding tissues. However in this case it was an independent superficial extraovarian endometriotic cyst.

Methods

A 50 year old, 2para, perimepausal woman.An ovarian cyst was detected in medical examination, and US and MRI showed a 6×8cm size left ovarian endometriotic cyst. We performed laparoscopic surgery. We confirmed that the cyst existed independently in the vesicouterine pouch. Adhesion was seen only slightly to the peritoneum and omentum. Bilateral ovaries were intact and other laparoscopic exploration was normal. Cystectomy and bilateral salpingo-oohorectomy was performed. Contents of the cyst was brown-colored blood with high viscosity.

Results
Histopathological examnation of the cyst was endometriosis. Bilateral ovaries were normal and no endometriotic tissues were detected . Most epithelial cells and interstitial cells of the uterine mucous in the cyst had fell off, and had disappeared. The cyst was presented by wall structure of glass-izing cholesterol, calcification, histiocyte, fibroblast, and myofibroblast from the inner side. Moreover, hemosiderin deposition and calcification was observed in the entire cyst wall. Ovarian tissue was not clarified.
Conclusions

It can be concluded that this case was atypical endometriosis from clinical and histopathological examnations.We considered three possibilities of the generation of the cyst.1.endometriotic cyst of a heterotopic ovary.2. occurred from epithelium by metaplasia or from transplantation of the peritoneum uterine mucous3. enlargement of endometriosis in the omentum.Although the second hypothesis is most likely, it cannot be concluded. Extraovarian endometriosis also has possibility of malignant transformation, so we think this procedure was worthwhile. Laparoscopic surgery was very effective since it was possible to observe minuscule pathological changes and the upper abdomen.
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ES23-0226
Posters

PELVIC RETROPERITONEAL SCHWANNOMA PRESENTING AS A LEIOMYOMA: CASE REPORT AND REVIEW OF LITERATURE
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Objectives

Present the case of a patient with a mass pelvic wich is suspected as myoma and turned out to be a schwannoma.
Sacral plexus schwannomas are rare retroperitoneal tumors that present infrequently as leiomyomas or gynecologic masses. Because of its nonspecific clinical and imaging findings, preoperative diagnosis may be difficult.

Methods

We report a case of a 53 year old female presented with abdominal and low back pain, also distention, constipa-tion and dyspareunia for 3 months. Transvaginal ultrasound suggested leiomyoma. Laparoscopic hysterectomy was planned. On laparoscopy, a retroperitoneal 9 cm mass was seen over de sacrum. The procedure was stopped for further studies. Magnetic resonance images detected a large presacral solid, tumor of 8 cm.
The patient was scheduled for laparoscopy with oncology group, the procedure was started by this approach, preserving sacral nerves. Finally the mass was excised completely by open approach.

Results

Postoperative period was uneventful. No complications were experienced intra or postoperatively The final pathologic diagnosis of the tumor was a cellular schwannoma, that was S-100- positive, and smooth muscle actin-negative.. A follow up consultation 6 months later showed a significant improvement of the lower abdominal pain.

Conclusions

Schwannomas rarely present as pelvic masses.

We report a woman with a pelvic mass initially diagnosed as a uterine fibroid but subsequently proven to be a retroperitoneal schwannoma.

This rare entity is usually asymptomatic or has nonspecific symptoms leading to misdiagnosis. Preoperative diagnosis of a schwannoma is not easy for a lack of distinguishing features on imaging studies. The prognosis of schwannoma is excellent, and the excision is usually curative.
***

ES23-0148
Posters

AN ANALYSIS OF THE OVERALL PATIENT SATISFACTION SURVEY POST LAPAROSCOPIC HYSTERECTOMY AT EPSOM HOSPITAL.

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Objectives
Our aim was to investigate patients' experience and views of having Laparoscopic Hysterectomy at Epsom Hospital. Hysterectomy may be required for many reasons . Some of these include benign conditions such as refractory menorrhagia, uterine fibroids, prolapsed uterus, or malignant disease of the female genital tract such at cancer of the endometrium, ovaries and cervix.
Our aim was to investigate patients' experience and views of having Laparoscopic Hysterectomy at Epsom Hospital. Hysterectomy may be required for many reasons . Some of these include benign conditions such as refractory menorrhagia, uterine fibroids, prolapsed uterus, or malignant disease of the female genital tract such at cancer of the endometrium, ovaries and cervix.

Methods
A standardised questionnaire was sent by post to 59 consecutive patients who had Laparoscopic Hysterectomy by the same Surgeon at Epsom General Hospital. These were collated on return and analysed using basic statistical graphs.

Results
There were a total of 27 respondents. All felt fully informed about the procedure. They all said they had adequate time to decide whether to go ahead with the surgery or not. 97% of the patients were happy with the verbal information they received about the surgery,however the remainder 3% would have preferred written information to refer back to.Unfortunately, 7% of the patients experiencedsome postoperative complications such as severe bleeding and pain around the scar. A further 7% of respondents did however alsobelieve that they were not fully aware of the risks and benefits of this procedure and believed that more information regardingpostoperative care, possible rehab and physiotherapy should be provided. 81% of patients returned back to normal activity at or earlier than expected and 96% of respondents said they were either satisfied of very satisfied of the surgery.

Conclusions
By analysing all of the responses, the patients felt that they received excellent care and felt they were well looked after. A leaflet however should be designed. It should include information on the details of laparoscopic surgery, postoperative advice, a more comprehensive list of potential risks to include such complications as constipation and information on the rehabilitation process.
Laparoscopic and vaginal hysterectomy (MIP – minimally invasive procedure hysterectomy)is said to reduce the severity of the pain, provide less postoperative complications and a quicker recovery time

compared with opensurgical hysterectomy. Our assumptions seem to be correct as only 7% of respondents faced postoperative complications and 33% of patients fully recovered before the expected time.?This audit has enabled our health care professionals to have a better understandingof the patient’s experience and therefore bettermanage and counsel future patients during this difficult time of their lives.
***

ES23-0118
Posters

TRANSVAGINAL NOTES ELECTIVE COINCIDENTAL APPENDECTOMY AT TIME OF VAGINAL HYSTERECTOMY

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Objectives
Background Elective coincidental appendectomy is defined as the removal of the appendix at the time of another surgical procedure unrelated to appreciable appendiceal pathology
Most studies suggest that there is little, if any, increased morbidity associated with elective coincidental appendectomy at the time of gynecologic surgery, whether performed during an open surgical procedure or during laparoscopy
In light of the low risk of morbidity based on current limited data, a patient's concern about developing future appendicitis may be considered
As advocated by The American congress of Obstetricians and Gynecologists(ACOG) Vaginal hysterectomy is the procedure of choice for surgical removal of uterus in benign coditions whenever feasible
Natural Orifices Transluminal Endoscopic Surgery(NOTES) has been considered as an innovative minimally invasive surgery
So when a woman who needs a hysterectomy for benign condition requests an appendectomy at time of hysterectomy in concern of developing future appendicitis Vaginal hysterectomy with transvaginal NOTES elective coincidental appendectomy may be the approach of choice in most cases
Objectives To study the feasibility and safty of Transvaginal NOTES elective coincidental appendectomy at time of vaginal hysterectomy

Methods

The medical records of women with non-prolapsed uterus requiring hysterectomy for benign uterine conditions and also request for elective coincidental appendectomy at time of hysterectomy who underwent vaginal hysterectomies and transvaginal NOTES elective coincidental appendectomy by myself in 3 private general hospitals in Bangkok Thailand from July 2011 to June 2013 were reviewed

Results

Of the 24 Transvaginal NOTES elective coincidental appendectomy at time of vaginal hysterectomy all were successfully performed The mean operative time was 32 minutes (range from 25 to 40 minutes) The mean estimated blood lost was minimal There was no intraoperative or postoperative complications The mean duration of hospitalization was 2 days (range from 1-3 days)

Conclusions

Transvaginal NOTES elective coincidental appendectomy at time of vaginal hysterectomy is feasible and safe
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ES23-0391
Posters

SENTINEL NODE BIOPSY IN CERVICAL CANCER. ARE WE READY FOR THE CHANGE?
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Objectives

The role of surgical staging in cervical cancer is a matter of debate till now. Despite of the evolutionary changes in the surgical and imaging techniques, the staging is still based on the clinical examination. Nevertheless the pelvic and in some cases also paraaortic lymphadenectomy are mandatory procedures in the management of this disease. There are many rationales to move towards the Sentinel Node Biopsy (SNB) in the management of cervical cancer.

Methods

We reviewed the literature of all actual studies dealing with the SNB in cervical cancer.

Results

The SNB helps detecting lymph node metastasis in atypical locations in the pelvis and has low false negative rates if identified on both sides of the pelvis.

Conclusions

The SNB can replace the systematic pelvic lymphadenectomy with all its co-morbidities leading to better planning of the therapy and avoiding the use of multiple modalities. In order to ensure a higher reliability of this procedure the intraoperative processing of the sentinel nodes has to be improved. This can be achieved through ultra staging, which will help in better detection of micrometastesis.
***

ES23-0497
Posters

ROBOTIC HYSTERECTOMY IN COMPLEX MORBID PATIENT, SURGICAL AND ANAESTHETIC CHALLENGE
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Objectives
Morbid obesity is growing trend in patients with endometrial cancer. Surgical treatment of pelvic clearance is treatment of choice. Traditional open laparotomy for this procedure is associated with signification operative and postoperative risks. These are minimised to certain extend with laparoscopic approach. However this is associated with significant operative difficulty. With

expertise's of Robotic surgery and advances in anaesthetics, pelvic surgical procedures is treatment of choice for these patients and should be offered than open or laparoscopic route.
Methods
Retrospective review of Robotic hysterectomy for endometrial pathology in patients with high BMI (Obesity and morbid Obesity). Study involves demographics, diagnosis, ASA grade, BMI, perioperative parameters. Intra-operative and postoperative complications. Follow up included length of stay, readmission rate, latest follow up, final diagnosis, stage and grade of treatment.
Results
Robotic hysterectomy is undertaken in our department for last 12 months. During this period all patients with high BMI (>25) were included in the study. The range included upto BMI 67. No patient had conversion to laparoscopic or open procedure. Intraoperative blood loss was minimum with no major intraoperative complications. Postoperative complications were few and majority of the patients reported very minimum postoperative pain. Majority of patient were medically fit for discharge next day of surgery.
Conclusions
Robotic surgery is major advance in gynaecology with advantage of 3 D vision in pelvis. Surgical procedure is very simplified with assistance of robot, hence should be one of the main indication of using robotics in gynaecology especially in growing population with obesity. Possibility of operating with low pressures of pnuemoperitonium and advances in anaesthetics helps to manage the these complex patients. Team working with surgical and anaesthetics is essential for good outcome.
***

ES23-0259
Posters

SPIES- STORZ PROFESSIONAL IMAGE ENHANCEMENT SYSTEM- A NEW GENERATION OF OPTICAL DIAGNOSTICS

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Objectives
it represents a new kind of optical vision during hysteroscopy
Methods
it's due by an innovative on-system of imaging with two missions: chromatic transition and enhacement of clarity and contrast

Results
With SPIES system is possibile to see better endometrial vessels and to study and treat atypical endometrium
Conclusions
SPIES is better of NBI to create 3D vision and to treat endometrial pathologies
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ES23-0081
Posters

A LAPAROSCOPIC SACROHYSTEROPEXY TO MANAGE UTERINE PROLAPSE IN A YOUNG WOMAN AFTER SURGICAL FAILURE BY A VAGINAL APPROACH

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Objectives

Pelvic organ prolapse caused by pelvic trauma, including pelvic fracture, is rare, and few reports exist. Direct injury to the pelvic floor and indirect damage to the muscles and connective tissue supporting the pelvic floor can result in uterine prolapse and pelvic floor dysfunction. Surgical and medical correction of these conditions is important to improve quality of life and preserve fertility in young women. Here, we describe the management of a young woman who presented with uterine prolapse after pelvic trauma.

Methods

A 22-year-old woman with uterine prolapse visited our clinic. She had a history of a pubic bone fracture due to a traffic accident at the age of 3 years and had undergone conservative treatment. Stage III uterine prolapse was observed on pelvic examination.
To treat the prolapse, we initially performed a sacrospinous ligament fixation, posterior colporrhapy, and levatoplasty. However, after 3 weeks, she revisited our clinic with recurrent prolapse symptoms. We decided to perform a laparoscopic sacrohysteropexy using absorbable mesh, to preserve fertility due to surgical failure. The procedure was performed under general anaesthesia with the patient in the low-lithotomy position. The abdominal cavity was insufflated with CO2 gas, followed by the insertion of a 10-mm trocar in the supraumbilical area. Two additional 5-mm trocars were inserted at both paramedial areas. The peritoneum over the sacral promontory was opened and carried down over the anterior surface of the sacrum. The rectosigmoid colon was reflected to the left to expose the presacral area. The aortic bifurcation was palpated, and the right ureter was retracted laterally. The peritoneum on the sacral promontory was bluntly dissected and undermined through the right uterosacral ligament. The right uterosacral ligament peritoneum was opened and dissected, to avoid ureteral injury. A subperitoneal tunnel into the cul-de-sac was created by blunt and sharp dissection. A rectangular polypropylene type-1 monofilament macroporous non-absorbable mesh (Ethicon Inc., Somerville, NJ, USA) was introduced through the 10-mm trocar into the supraumbilical area and placed under moderate tension from the sacral promontory to the right uterosacral ligament. The mesh was sutured to the periosteum of the sacral promontory with three non-absorbable 1-0 Prolene sutures and to the right uterosacral ligament with two 1-0 Prolene sutures. The apical vaginal wall and the peritoneum over the sacrum and right uterosacral ligament were closed with 2-0 Vicryl.

Results
The patient recovered without complications, and was discharged 2 days after surgery. At the 12-months follow-up, she was asymptomatic. The vaginal epithelium was intact, and no mesh-related complications had occurred.
Conclusions

We report a surgical technique for correcting uterine prolapse with uterine preservation via a laparoscopic approach after a surgical failure by a vaginal approach. A laparoscopic sacrohysteropexy is a safe and effective procedure or women who want to preserve the uterus.
***

ES23-0317

Posters

HYSTEROSCOPY COMBINED LAPAROSCOPIC DIAGNOSIS AND TREATMENT OF INFERTILITY ENDOMETRIOSIS MERGE CLINICAL ANALYSIS

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Objectives
to study hysteroscopy combined laparoscopic diagnosis and treatment of infertility endometriosis combination method and effect
Methods
retrospective analysis from July 2010 to July from hysteroscopy and laparoscopy combination therapy endometriosis infertility patients merged the clinical data of 146 patients
Results
primary infertility patients and secondary infertility patients postoperative remission rate, period, recurrence rate and pregnancy rate difference compared are of no statistical significance ($P > 0.05$). Ovarian type group and mixed group, peritoneal type, and deep infiltration type group of postoperative pregnancy rate difference compared with statistical significance ($P < 0.05$). Bilateral oviduct tubes and side oviduct unobstructed, double side oviduct obstructed conception rate difference compared with statistical significance ($P < 0.05$)
Conclusions
hysteroscopy combined laparoscopic diagnosis and treatment endometriosis merger infertility pregnancy outcome is good, can increase pregnancy rate
***

ES23-0378
Posters

UNEXPECTED PRESENTATION OF AN ECTOPIC PREGNANCY DUE TO ENDOMETRIOSIS.

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Objectives

With these photo's, we present an unusual presentation of an ectopic pregnancy.

Methods

Methods

The patient, a nulliparous, presented with an unplanned pregnancy. She was referred to our hospital by an amenorroea of 6 weeks for further management. She had no abdominal pain. Routine ultrasound showed no gestational sac in the uterus, 2 endometrioma's (48 and 36 mm) in the left ovary and a corpus luteum in the right ovary with an adnexal mass, suspected for an ectopic pregnancy. Serum beta-HCG level was 23373 U/l.

Results

Results

A laparoscopy was performed. By introduction we an enlarged ovary on the left sitewas observed with the 2 endometrioma's present and a normal uterus. No blood in the abdomen was seen. The right ovary was not visible. To obtain more visability, we performed a cystectomy of the endometriomata on the left site. On the right site, decidua became visible, and behind that a follopian tube with the p regnancy and a normal ovary.

By manipulating the ovary, a cavity in the peritoneum became visible. The peritoneum was not compromised. We postulate that the ovary was stuck in a large gun shot leasion causing little complaints and blood loss

Conclusions
Unusual presentation of an ectopic pregnancy due to endometriosis.
***

ES23-0194
Posters

MAV-UTERINE ARTERIOVENOUS MALFORMATION- NEW TREATMENT WITH SURGERY HYSTEROSCOPY
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Objectives
Surgery Hysteroscopy is a new conservative treatment for the MAV
Methods

MAV is a new US uterine identification that allowed a new view of conservative treatment.
Still now the only treatment consisted in attitude of expectation or embolization uterine artery or hysterectomy .

Results

The hysteroscopic surgery treatment of MAV ha allowed the complete removal of the pathology

Conclusions
This new way of treatment is conservative and preserves fertility.
***

ES23-0203
Posters

ELECTIVE LAPAROSCOPIC SALPINGECTOMY AS STERILIZATION STANDARD TECHNIQUE TO AVOID AN OVARIAN CANCER RISK FACTOR
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Objectives

We decided to compare the elective laparoscopic salpingectomy as standard sterilization technique in patients who request tubal sterilization with the objective to avoid an ovarian cancer risk factor.

We accept the relationship between the contact of the fimbriae of fallopian tube with ovarian as risk factor for ovarian cancer, especially in serous type.

It recognizes the advances in fertilization techniques, leaving aside the needless of anastomosis in fallopian tubes previously sterilized by conventional technique, with its complications.

Methods

We decided to offer elective bilateral salpingectomy instead conventional technique by coagulation and cut in patients who requested tubal sterilization in Gynecology and Obstetrics Department of our hospital since November 2013.

We compare the operative time, the presence of complications and quality of postoperative in all patients who underwent sterilization in both techniques.

Two randomized groups of patient. In one group we perform bilateral laparoscopic salpingectomy, and it compare with the control group in which sterilization is performed by coagulation and cutting.

All patients sign consent for the procedure performed.

We do umbilical or Palmer incision according to each patient's condition, as well as two accessory trocar used in both iliac fossae. Uterine manipulator, non-traumatic forceps, bipolar forceps, dissecting scissors and 0° optics are used in all cases. Carl Storz equipment is used for all procedures.

Results

To date we performed 10 procedures (N=10). In bilateral salpingectomy group (N=5), the operative time wasn't increased, complications were not produced and not need to convert to laparotomy. Either we find differences in the quality of the postoperative period, analgesic requirement or hospital stay respect control group. No patient has rejected laparoscopic salpingectomy as sterilization technique.

Conclusions

While the study is under way, anticipating 30 procedures to September 2014, we have found no difference in performing laparoscopic sterilization through elective bilateral salpingectomy respect control group. We recommend carrying out this technique in those patients who request tubal sterilization in order to avoid a risk factor for developing ovarian cancer. It is required to complete a study to support this recommendation with a good level of evidence.
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ES23-0525
Posters

LAPAROSCOPIC MANAGEMENT OF GRANULOSA CELL TUMOUR OF THE OVARY; GRANULOSA CELL TUMOUR REVISITED

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Objectives

Granulosa cell tumour is a rare form of ovarian malignancy. It is a sex cord gonadal tumour from the non-epithelial group of ovarian tumours. These tumours are malignant and the same staging system is used as for epithelial tumours. The peak age at which they occur is 50-55 years. however, they can present at any age.
Granulosa cell tumours are classified into two groups: functional and non-functional. Functional tumours produce oestrogen and can cause menorrhagia, irregular menstruation, postmenopausal bleeding and precocious puberty depending on the patient age.
Inhibin, a protein complex with dimeric structure has been used in diagnosis, monitoring and response to treatment in these cases.
We are presenting a case of granulosa cell tumour which was managed laparoscopically. This presentation is aiming to update trainees and general gynaecologists with clinical presentation and management of this rare ovarian malignancy.

Methods

A 49 year old lady presented with new onset of menorrhagia after a short period of amenorrhea. A pelvic ultrasound revealed a 60x50x50 mm cystic left ovarian mass and a thickened endometrium of 15 mm. Tumour markers including CA-125 and CA-199 were reported to be normal. Pelvic MRI revealed a 64x68x82 mm left ovarian mass with predominantly homogenous intermediate signal with focal areas of high T2 signal which were low on T1, consistent with fluid indicating possible haemorrhagic cyst or endometrioma. Patient was counseled and underwent hysteroscopy, insertion of Mirena IUS and laparoscopic left salpingoophorectomy. Histlogy revealed granulosa cell tumour of the left ovary.

Results

This case was discussed in gynaeoncology Multidisciplinary meeting and patient was counseled for a laparoscopic staging procedure. A total laparoscopic hysterectomy, right salpingoophorectomy, omentectomy, periotoneal washings and biopsies were performed six weeks after initial surgery. Patient had a good recovery and was discharged home after 48 hours.
A follow up staging CT of chest, abdomen and pelvis was requested 2 months post-operatively. Patient will be monitored with Inhibin levels and regular follow-up by our gynaeoncologist .

Conclusions

Granulosa cell tumours of the ovary are rare forms of ovarian malignancies responsible for 5% of all ovarian cancers. However, usual tumour markers used for epithelial cancers are not helpful in these women. Moreover, imaging can be misleading as tumour features are not pathognomonic. High index of suspicion, attention to other presenting clinical features such as menohrragia, thickened endometrium, low FSH and specific patient age group ie in early 50's are other helpful clinical hints. Every attempt should be made to remove any complex cyst intact esp in the older age group. Further consideration should be given in counseling these women for bilateral versus unilateral salpingo-oophorectomy.

***

ES23-0093
Posters

A NOVEL DEVICE FOR LAPAROENDOSCOPIC SINGLE-PORT SURGERY: OUR FIRST EXPERIENCE FOR ADNEXAL PATHOLOGIES

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Objectives
To present our initial experience using a new device for single access laparoscopic surgery for the treatment of benign adnexal pathologies.
Methods

10 Women with benign adnexal pathologies underwent salpingectomy (n=4) or ovarian/para-ovarian cyst enucleation (n=6) using laparoendoscopic single port approach with a new multiport reusable trocar inserted transumbilically trought a small wound retractor. Intraoperative data such as trocar introducing time, operative time, estimated blood loss (EBL), operative time, conversion to standard laparoscopy, peri- and post-operative complications, hospital stay and VAS score (as assessment of pain and cosmesis) were recordered.

Results

Port placement was successful in all patients and the mean time for introduction of the trocar was 4.4 minutes (range 3.4–5.3 min). No intra or post operative complication occurred. Mean operating time was 50.0 ± 9.2 min and mean blood loss was 28.5 ± 8.8 ml. Mean hospital stay after surgery was 1.6 ± 0.5 days, and convalescence was complete at one week. Scores for postoperative incisional pain and cosmesis were good.

Conclusions
Adnexal single port surgery using the new device is feasible, safe, effective and has good results for cosmetic appearance and postoperative pain. The drape let no contamination of the port site, make the operative field isolated, really important above all in case of adnexal pathologies of incertain ethiology. In addition, the facility of inserting and the conformation itself of our new port access, make the procedure feasible also in obese patients.
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ES23-0150
Posters

AN EVALUATION OF UTERINE HEALING FOLLOWING CRYOABLATION

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Objectives

Evaluation of uterine healing at six months post-treatment with the Channel Medsystems Device for Endometrial Cryoablation

Methods

Subjects were treated with the Channel Medsystems Device for Endometrial Cryoablation and followed for six months, at which time uterine healing was assessed. Investigators used either hysteroscopy or saline-infused sonography (SIS) to evaluate the cavity, and adhesions were scored using a modified American Fertility Society score.

Extent of Cavity Involved
Assessment
Zero < 1/3
1/3 – 2/3
> 2/3
Score
0
1
2
4
Type of Adhesions
Assessment
None
Filmy
Filmy & Dense
Dense
Score
0
1

2
4

If hysteroscopy was used, the Investigator was also asked to rate the ease of cavity access as easy, moderate, or difficult.

Results
As this study is ongoing, emerging results will be presented at the conference.
Conclusions

The results from this study give an initial indication of uterine healing and ease of endometrial cavity access post-ablation.
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ES23-0416
Posters

TOTAL LAPAROSCOPIC HYSTERECTOMY FOR BENIGN GYNECOLOGICAL INDICATIONS
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Objectives

Abdominal hysterectomy is one of the most common surgical procedures performed in gynecology. Most of the hysterectomies are performed for benign indications. In cases where vaginal approach is not possible, abdominal hysterectomy is performed traditionally. However laparoscopic hysterectomy has become an important option to consider since minimal access surgery has gained popularity. Here we present our experience of laparoscopic hysterectomy in comparison with abdominal hysterectomy.

Methods

We analyzed patients who underwent total hysterectomy for the benign gynecologic indications retrospectively through our medical records and hospital's database. 609 women attending the Ankara University Medical Faculty Department of Obstetrics and Gynecology for hysterectomy with benign indications from January 2012 through January 2014 were recruited retrospectively for the study. We examined the patient characteristics, indications for hysterectomy in both groups. We compared drop in hemoglobin and hematocrit levels, mean operation time and requirement for erythrocyte suspension transfusion between laparotomy and laparoscopy.

Results

We analyzed 609 patients who underwent laparotomic (n=542) and laparoscopic (n=67) hysterectomy retrospectively. Laparoscopic route ratio was 11% in overall. Most common indication for hysterectomy was menorrhagia with uterine leiomyoma in laparoscopic or laparotomic route. There was no significant difference in preoperative and postoperative hemoglobin and hematocrit levels between patients who underwent laparoscopic hysterectomy and laparotomic hysterectomy. Mean operating time was significantly higher in the laparoscopy group. In both groups any complications were not observed.

Table 1: Patients characteristics and perioperative outcomes of the groups. (TLH; Total laparoscopic hysterectomy, AH: Abdominal hysterectomy, NS; Non significant)

Patient Characteristics and Perioperative outcomes	TLH	AH	P
Mean age (years)	47,9±8.4	44,5±5.4	0.01
Mean parity	2,7	2,3	NS
Number of postmenopausal women	31 (46,2%)	118(21,7%)	

<0.001
Indications for hysterectomy
Menorrhagia with uterine leiomyoma
25 (37.3%)
348 (64.2%)
<0.001
Endometrial hyperplasia
16 (23.8%)
78 (14.3%)
0.04
Menorrhagia
10 (14.9%)
39 (7.1%)
0.02
Adnexal mass
5 (7.4%)
20 (3.6%)
NS
Prolapse
5 (7.4%)
9 (1.6%)
0.002
Adenomyosis
3 (4.4%)
22 (4.0%)
NS
Postmenopausal bleeding
3 (4.4%)
11 (2.0%)
NS
Tuba-ovarian abscess

- 14 (2.5%)
- Women with previous laparoscopy
  1 (1.4%)
  9 (1.6%)
  NS

Women with previous laparotomy
2 (2.9%)
46 (8.4%)
NS
Mean operating time (minutes)
122.0±35
98.1±30
0.03

Mean preoperative hemoglobin (g/dl)
12.4±1.6
12,1±1.8
NS
Mean preoperative hematocrit (%)

37.2±5.3
36,7 ±5.5
NS
Mean postoperative hemoglobin (g/dl)
11.0±1.2
11,1±1.4
NS
Mean postoperative hematocrit (%)
33.2±3.6
33,6±4.2
NS
Number of patients requiring ES transfusion
5 (7,4%)
34(6.2%)
NS

Conclusions

Laparoscopic hysterectomy is a feasible method that can be preferred for the treatment of benign uterine pathologies.
Laparoscopy may offer advantages of shorter recovery period, less postoperative pain and reduced blood loss. In conclusion detailed evaluation of the patient and assessment of the advantages and disadvantages of the procedures is necessary before choosing the most feasible method.
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ES23-0360
Posters

LAPAROSCOPIC APPROACH FOR EARLY STAGE UTERINE ENDOMETRIAL CANCER IN OUR INSTITUTION: COMPARISON WITH OPEN SURGICAL APPROACH
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Objectives

The aim of this study was to present our laparoscopic approach for early stage endometrial cancer and analyze the safety and effectiveness our surgical method.

Methods
Consecutive eight women who underwent laparoscopic semi radical hysterectomy, bilateral salpingo-oophorectomy and pelvic lymphadenectomy for endometrial cancer between January and December 2013 were compared with consecutive twelve women who under went abdominal open staging in our institution.
Results
Women who underwent laparoscopy had lower BMI (p=0.008), longer operative time (p<0.001), lower blood loss (p=0.01), similar number of pelvic lymph nodes removed, shorter length of stay (p<0.001), and lower inflammatory change (p<0.001) in comparison with women who underwent open surgical operation . No differences were in complication rate recorded.
Conclusions

Our results indicated that laparoscopic approach was equivalent with open surgical approach in safety and effectiveness for early endometrial cancer.
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ES23-0346
Posters

SURPRISES AT LAPAROSCOPY AND HYSTEROSCOPY—I AM A GYNAECOLOGIST GET ME OUT OF HERE!

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Objectives

We present series of surprising findings we encountered during diagnostic laparoscopies and hysteroscopies at our hospital. When a finding is incidental, how to proceed or not with management can generate clinical dilemmas. Problems encountered by the surgeon include deciding on the most appropriate action and consent for additional procedures.

Methods

Our hospital is a district general hospital. We present a series of incidental findings we encountered during diagnostic laparoscopies and hysteroscopies at our hospital.

Results

We present following cases:

1) A young woman who had diagnostic laparoscopy for pelvic pain was found to have malignant looking lesions on both ovaries with peritoneal deposits. That provided us with a management challenge. The histology of the biopsy of this lesion turned out to be benign fibroma.

Ovarian fibroma is the most common benign solid tumor of the ovary. It is often misdiagnosed because of the solid nature, presence of ascites, and increased serum CA 125. Laparoscopic surgery can be an effective and safe surgical approach for managing ovarian fibromas.

2) A 50 year old woman who was undergoing total laparoscopic hysterectomy was found to have incidental finding of pus in the abdomen. Surgeons could not find a source of pus. The dilemma was wheather to continue the proposed procedure or abandon it. She had antibiotics and we continued with our procedure. She had uneventful post operative recovery.

3) A 43 year old patient undergoing hysteroscopy for irregular bleeding. She was found to have a strange looking intrauterine coil, on history taking it was found to be inserted in China. The identification of these coils can be tricky unless suspected.

Discussion: A ring shaped inert coil is still widely used in China and are inserted postpartum. They have a higher failure rate and are difficult to remove.

4) Five secondary infertility patients who underwent diagnostic hysteroscopy were found to have foetal bones in the uterine cavity. They gave a history of a previous missed miscarriage or a surgical termination of pregnancy.

6) In two patients with menorrhagia bony metaplasia of endometrial cavity was found on hysteroscopy. They gave a history of a previous missed miscarriage or a surgical termination of pregnancy.

Endometrial osseous metaplasia is an uncommon disease with the presence of mature bone in the endometrium. The pathogenesis of this entity is still unclear.

7) Surprisingly a broken tip of Karmann cannula was found in a case undergoing hysteroscopy for primary infertility, she had concealed a history of surgical termination of pregnancy.

Conclusions
The cases highlight that when faced with incidental findings the management of such cases can be challenging and can cause significant management dilemmas for treatment.

When treating these patients consideration must be given to patient wishes and potential response to additional procedures. Clearly, what is best for the patient should always guide the treatment.
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ES23-0400
Posters

LAPAROSCOPIC AND MINIMALLY INVASIVE SURGERY COURSE
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Objectives

The aim of the course is to create a training path for Residents unifying several specialistic surgeries of the Azienda Ospedaliera Universitaria Integrata (AOUI) of Verona. The course, certified by the European Academy of Gynaecological Surgery (EAGS), gives residents the essential theoretical and practical skills to approach surgery and the possibility to improve their abilities when minimally invasive surgery is taken place.

Methods

The full programme is based on two levels: basic and advanced. The basic is dedicated to participants with minor experience who approach for the first time minimal invasive surgery and need to start from the basic laparoscopic psychomotor skill like camera handling, hand-eye coordination and bi-manual instrument handling. The advanced would focus on specific techniques applied in pelvic and abdominal endoscopic surgeries, it permits to train and test on fine psychomotor skills like stiches and knotting procedures. Theoretical lessons are performed by specialists in gynecologic, abdominal, vascular and urological surgery, while the practice would be observed and supervised by surgeons in a proper training center with the support of advanced pelvic trainers devices and virtual simulators. The number of participants is set for 20 , divided in groups of 2 during the practice, to permit an accurate and tutored experience.

Results

Residents can have a major number of hyperspecialist hours available compared to the classic standard educational path and be provided a minimum of practical skill lab training before going into the operating room. This enhances surgical training and increases patient's safety. The advanced course permits the acquirement of advanced techniques and the improvement of the basic skills in physicians who have already approached minimally invasive surgery.

Conclusions

In the actual apprentice model the resident has to learn simultaneously the laparoscopic psychomotor skills and the surgical skills from its tutor on a one-to-one teaching concept. This training model, with an important skill lab learning phase, prepares the resident in a more efficient way, for the subsequent one-to-one in operating room teaching phase. The course will be certified from the European Academy of Gynaecological Surgery (EAGS) and this certification assures that a surgeon has acquired and retained a certain level of knowledge, skills and performance
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ES23-0394
Posters

LYMPHADENECTOMY IN CERVICAL CANCER – HOW AND HOW MANY?
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Objectives

The problem of lymphadenectomy (LNE) in gynecologic cancers remains one of the key issues in our field. While for breast cancer, the issue has been mostly resolved, an intense discussion continues for endometrial and cervical cancer. What is the diagnostic significance, what is the therapeutic effect and what are the consequences for management of everyday cancer cases.

Methods

We reviewed the literature of all actual studies concerning the LNE in cervical cancer. We also reviewed the diagnostic and therapeutic role of laparoscopy within this field.

Results
The pelvic LNE has the strongest sensitivity detecting the disease, which consequently strongly influences the prognosis of the patients. It also plays a pivotal role in the planning of adjuvant therapy. Standardization of the Procedure makes it safe and feasible.

Conclusions

When possible the pelvic LNE should be performed laparoscopic due to the lesser morbidity in the hands of trained surgeons.
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ES23-0526

Posters

OBSTETRIC OUTCOME AFTER HYSTEROSCOPIC SEPTUM RESECTION IN PATIENTS WITH UTERINE SEPTA OF VARIOUS SIZES

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Objectives

Resection of larger uterine septa does improve obstetric performance but whether smaller septa need resection and their impact on obstetric outcome is not clear. We wanted to evaluate the role of septal resection of septa of various sizes in obstetric performance.

Methods

This is a retrospective cohort study. This study was conducted at a tertiary care teaching hospital of Northern India. Data, comprising of general information, obstetric & menstrual history and imaging findings, was collected from the medical record department from the year 2007 to 2012 (n=107). All the hysteroscopic septal resection surgeries were performed by one of the authors using monopolar electrode. Hysteroscopic and laparoscopic findings were recorded. The patients were categorized on the basis of extent of uterine septum into four groups: a) Subsepta (<1/3rd), b) Septum >1/3 to ½, c) Septum>1/2 to whole uterine cervix, d) Septum traversing whole of uterine cavity and cervix. Out of these 107 patients, 74 could be contacted telephonically. The patients were called with all the relevant records. The obstetric performance after hysteroscopic septum resection was noted in each group.

Results

Primary infertility was seen in 63.64%, 55.26%, 52.94% & 84.61% in <1/3rd, >1/3 to ½, >1/2 and complete septa respectively. Secondary infertility was seen in 13.64%, 31.57%, 29.41% & 15.38% in <1/3rd, >1/3 to ½, >1/2 and complete septa respectively. Abortions were seen more commonly in subsepta (18%). Vaginal septum was associated with 38.46% cases of complete septa.

Considering hysteroscopy as gold standard, transvaginal Sonography, transabdominal Sonography, hysteron-salpingography and MRI had 78%, 69%, 82% and 98% sensitivity respectively. The PPV was 68%, 72%, 83% and 100% respectively. Tubal block was present in 30%, 36%, 40% and 23% cases in the subgroups respectively.

Mean duration of follow-up was 63 (+ 23), 54(+ 18), 59(+ 13), 67(+ 12) months in <1/3rd, >1/3 to ½, >1/2 and complete septa respectively. Significant improvement in infertility was seen in all septal subgroup i.e. 1/3 to ½, >1/2 and complete septa (p=0.046, 0.032 & 0.05 respectively) patients except in subsepta (<1/3rd uterine cavity) after septum resection. Abortions were significantly reduced (p=0.048) in third subgroup (i.e. septum > ½ to upto internal os) after hysteroscopic septum resection. No significant improvement was seen in other subgroups. Take home baby rate was 33% in subsepta and around 50% in the remaining subgroups of septa.

Conclusions

Septal resection improves obstetric performance in patients with uterine septa of various sizes. Whether septal resection improves obstetric performance in patients with subsepta or very small septa, is controversial. Larger studies addressing this issue, need to be planned.
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