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Mind the Gap – free tissue palatomaxillary reconstruction following sinonasal carcinoma

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Abstract Category: Case Report

Intern Network: West North-West
Introduction: Amyand's hernia is a rare condition of inguinal hernia in which the appendix is incarcerated within the hernia sac through the internal ring. Complications include acute appendicitis and perforated appendicitis, which are rare in incidence, accounting for about 0.1% of cases.[1] These complications prove a diagnostic challenge due to their vague clinical presentation and atypical laboratory and radiological findings. Until recently, open appendectomy was the mainstay of treatment. Laparoscopic surgery offers a less invasive approach to confirming a diagnosis and serving as a therapeutic tool in equivocal cases.
Case Presentation: We report a case of a previously healthy 20-year-old male presenting with atypical signs and symptoms, as well as blood investigation results, and radiological findings of a perforated appendix within an Amyand's hernia. The patient was successfully managed using a minimally invasive laparoscopic appendectomy approach.
Discussion: Until recently, open appendectomy was considered the mainstay in the management of complicated Amyand's hernia. Laparoscopic surgery provides a new avenue for dealing with diagnostic uncertainty with advantages including faster recovery time, reduced hospital stay, and better quality of life.
Conclusion: This case report highlights the concealing effects of an Amyand's hernia on a perforated appendix, the considerations required when an equivocal diagnosis present and the safe use of the minimally invasive laparoscopic surgery in the treatment of this rare condition.
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Audit of Follow-up of IBD Patients on Adalimumab Therapy in Midlands Regional Hospital Tullamore (MRHT)

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Background and Aims: IBD patients on Adalimumab require regular follow-up, to monitor for side effects and evaluate continuing need for treatment. The Injectable Drugs Guide advises clinical and laboratory monitoring twice per year for side effects, and more frequently in patients who have started therapy within 3 months. NICE guidelines recommend that need for treatment be re-evaluated annually, and only continued if there is clear clinical and/or endoscopic evidence of severe, active disease. Our primary aim was to audit how our follow-up of Adalimumab patients compared to guidelines. Our secondary aim was to evaluate the distribution of services currently allocated to these patients.
Methods: All IBD patients at MRHT taking Adalimumab between 01/07/2015 and 30/06/2016 were included in the audit. Using the hospital's electronic database, we performed a retrospective review of patient contacts with services between these dates. We compared patients who had recently started Adalimumab within 3 months with patients being maintained on therapy.
Results: 46 patients were audited. Of 114 total contacts with services, 74 were OPD visits, 14 day ward, 6 endoscopies, 12 admissions, 6 A&E presentations, 1 AMAU and 1 dietician visit. Overall there was an average duration of therapy of 24.4 months and an average 3.4 contacts per year. The recently started group had an average duration of 5.6 months and average 4.0 contacts per year. The maintenance group had an average duration of 40.9 months and average 2.9 contacts per year. 5 patients stopped Adalimumab – 4 due to lack of response and 1 due to patient preference.
Conclusion: We exceeded guidelines for monitoring Adalimumab patients for side effects. However, we can improve our re-evaluation of patients' need for treatment, in particular with increased use of endoscopy. The high service requirements of these patients suggests the need for a specialist biologic clinic and/or IBD nurse.

Interns as Medical Educators: Student experience from Intern-Delivered Teaching – A Follow-up Study

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Background: Acquiring and honing medical knowledge, history taking ability and clinical skills are core aspects of medical training in the clinical years. Interns, who themselves have recently graduated from medical school and entered clinical practice are well placed to assume a role in education of medical students. The aim of this study was to evaluate student feedback on an intern-delivered teaching programme at University Hospital Limerick (UHL) compared to results of a similar study in 2015.
Methods: Fifty interns volunteered to participate in the student teaching programme at UHL. Each intern aimed to deliver four one-hour tutorials per semester to a group of Year 3 or 4 students from the UL GEMs programme. A flexible schedule with a focus on practical skills and knowledge was created with oversight by two Lead Interns, Professor of Medicine and administrative support. Student feedback of the programme and its perceived benefits was collected using an anonymous questionnaire.
Results: Overall feedback on the performance of intern tutors was extremely positive. The response rate was 61%. The average number of tutorials received was 2. Tutorials on history taking and clinical examination were cited as the most valuable. Encouragingly, 76% of students indicated a desire to participate as intern tutors following graduation. In terms of weaknesses, 38% of students identified the logistical issue of agreeing a mutually suitable timeslot for themselves and their assigned intern as the main issue inhibiting delivery of teaching.
Discussion: The feedback from this study suggests that the intern-delivered teaching programme was beneficial and well received. However some barriers to tutorial delivery were identified by the questionnaire. An overall review of the programme will be carried out for both interns and students at the end of the academic year, and along with this feedback will help shape the future direction of the programme.

A Survey of the uptake of the pertussis (Tdap) vaccination and awareness among mothers of infants (0-24months) in Cork University Hospital (CUH), and among staff of an antenatal clinic in Cork University Maternity Hospital (CUMH)

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Paediatrics/Public Health/Obstetrics

Introduction: Following an outbreak of pertussis in 2012, including a number of infant deaths, the HSE recommended that all pregnant women

in Ireland be vaccinated with Tdap between 27 and 36 weeks gestation to protect mother and infant for the first 8 weeks of life.
Aim: Quantify the uptake of Tdap vaccine among pregnant women since its introduction. Assess the level of awareness of the vaccine and its function among the same group. Identify possible barriers to vaccination. Survey antenatal staff to gauge awareness levels and communication about the vaccine's availability.
Method: Mothers of inpatients in CUH paediatric department were surveyed by self-administered anonymous questionnaires. A cross-sectional quantitative and qualitative survey was carried out using retrospective analysis of mothers who had pregnancies since December 2012. Antenatal staff surveyed using another anonymous self-administered questionnaire.
Results: In the cohort of 81 women, 38% (n=31) were aware of the vaccine. 19.7% (n=16) received the vaccine during pregnancy. The primary reason cited for not receiving the vaccine was that it was "Not offered". 87.5% of vaccinated women received it from their GP. 100% of those who completed the antenatal staff questionnaire (N=30) agreed that the uptake of the vaccine would improve with a poster campaign. 20% of those staff were completely unaware of the Tdap vaccine in pregnancy. The data gathered has proven that awareness directly affects the uptake (p=0.008).
Conclusion: Further emphasis on increasing awareness could, according to these findings, directly increase uptake. Both healthcare professionals and patients alike lack awareness of the availability of this important vaccine.

Causes of Intussusception in Adults: A Review

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Objective: To identify the causes of intussusception in adults.
Introduction: Intussusception is the invagination of a proximal segment of the gastrointestinal tract (GIT) into the lumen of a distal part, leading to bowel obstruction and ischaemia. It is the most common cause of abdominal obstruction, and the second most common cause of acute abdominal emergencies in paediatric patients[1]. Intussusception is, however, rare in adults, and accounts for only 1-5% of intestinal obstructions[2].
Methods: PubMed and Google Scholar were searched using the following search terms: intussusception, adults.
Results: The most common identified cause of intussusception in adults was intestinal polyps. 63.4% of all causes were neoplastic, of which 40.6% were benign, 14.8% primary GIT malignancies, and 7.9% secondary metastatic malignancies. This was followed by congenital in 7.9%, including Meckel's diverticulum, Blue Rubber Bleb Nevus Syndrome and duplication of the alimentary tract. 5.9% were caused by endometriosis, 5.9% by inflammatory causes, including inflammatory bowel disease, and only 4.9% were iatrogenic. This is stark difference to the paediatric population where no aetiology is identified in up to 90% of cases.
Conclusion: Intussusception is a rare cause of bowel obstruction in adults. It is most frequently caused by neoplasia, with polyps identified most frequently (16.8% of cases). A lead-point was nearly always identified, which is in direct contrast to children, where it is often absent. When a diagnosis of intussusception in an adult has been made, a neoplastic cause must be out-ruled.

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A comparative analysis on the fastest modality and fastest method to load multiple images when reporting on an Integrated National PACS system

Banatwala M, Timoney J, Torreggiani WC.

Introduction: Nimis PACS is the National integrated computerised system in Ireland for reporting radiological images. As with any system, speed in downloading images is critical to functionality. This study aims to record and compare the actual time taken to load single studies in four modalities; Plain Film Radiographs (PFR), ultrasound (US), CT & MRI. It compares loading times opening single studies versus multiple studies cumulatively. In addition, it assesses if there is any temporal relation to time taken to load studies.
Aims & Method: Data was collected over 4 days; 2 mornings and 2 afternoons. Image loading times were recorded for 80 PFRs, 40 USS, 40 CTs & 21 MRIs. The time taken from clicking "open study" to the first image appearing on-screen was recorded.
Results: An average of 6.29, 4.05, 5.38 and 5.93 seconds were taken to load PFR, USS, CT and MRI images respectively. It took 6.88 seconds to open PFRs in the morning versus 5.96 seconds in the afternoon. The load times for opening 5 studies cumulatively for PFRs, US, CTs and MRIs were 9.87, 13.88, 3.85 and 2.53 seconds respectively.
Conclusion: PFR take the longest time to load, followed by MRI, CT and last US. Studies load 0.92 seconds faster in the afternoon than in the morning. Loading five studies at a time versus opening one study at a time took longer for both PFRs and US but shorter for MRI and CT. Overall, it is faster loading 5 scans cumulatively than loading 5 scans separately for the same patient.

Tailored Handover – one size does not fit all!

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Introduction:
"Handover of care is one of the most perilous procedures in medicine, and when carried out improperly can be a major contributory factor to subsequent error and harm to patients." [1] With the introduction of the EU Working Time Directive, the need for safe and efficient handover of patient care is more important than ever. Good handover improves a doctors' communication skills and helps with workload prioritization. Galway University Hospital (GUH) has introduced an electronic handover system for registrars. It is not suitable for intern lead handover which is a unique combination of task orientated jobs and patient management across multiple wards.
Aim:
To review the current intern handover process in GUH and to design a tailored intern lead system aligned with international best practice.
Methods:
A literature review of best international practice guidelines was conducted. Qualitative methods used to collect data included direct observation of intern handover and a focus group with the interns. A collaborative approach to the design of a pocket handover guide included input from interns, medical manpower, intern teaching staff and IT experts with experience in building electronic handover systems.
Results:
A pocket handover guide outlining what, where, when and how was designed. The ISBAR model, already used at induction in the WNW

intern network was used. An accurate bleep list, important phone numbers, checklist for handover duties for the doctor starting and finishing a shift, how to prepare for handover and top tips were included as content.
Conclusion:
Compliance with the handover system will be reviewed after the introduction of the guide. Data collection will include direct observation of handover and satisfaction questionnaire. This data will inform future development of an electronic handover system.

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Radiologically guided percutaneous biopsy procedures- An audit of the diagnostic yield of specimens obtained

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Purpose
Most percutaneous biopsy (PNB) procedures are now done under image guidance as this has been established to be a safe and effective method of investigating suspected pathological processes. The procedure can be deemed successful when the sample obtained is sufficient to make a definitive pathologic diagnosis or guide patient management.
The primary purpose of this audit is to retrospectively review specimens obtained by image guided percutaneous core biopsies and to determine if they are representative of the lesion and adequate for pathologic diagnosis. We aim to report the diagnostic yield of the procedures performed
Methods and materials
Image guided percutaneous biopsies performed between July 1, 2015 and June 30, 2016 were reviewed. A total of 31 biopsies were performed during this time. The radiology and histopathology reports were analysed in terms of biopsy site, image modality, and number of biopsy needle passes, complications and the resulting diagnosis. Patients' charts were reviewed in cases where complications occurred and when specimens were nondiagnostic.
Results
90% (n=28) of samples were diagnostic. 93% (n=26) of the diagnosis made were malignant lesions while 7% (n=2) were benign lesions. Ultrasound (US) was the image modality of choice in 58% (n=18) while Computed Tomography (CT) was used in 42% (n=13) of cases. 94% of US guided biopsies were diagnostic while 86% of CT guided biopsies were diagnostic. 18-gauge core biopsy needles were used during all biopsies. Total number of needle passes for 81% (n=25) of the biopsies was 3. Complications were documented in 13% of the procedures (n=4), these did not warrant intervention or follow up.
Discussion
The results of the audit show that image PNB have an overall high diagnostic yield in the hospital, at 90%. The Society of interventional Radiology standard of practise recommends a success rate ranging from 70-90%.

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The positive role of undergraduate prizes in the further development of the specialty of Emergency Medicine

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ABSTRACT
Inspiring medical students to become interested in Emergency Medicine and potentially pursuing it as a career is vital to the development of the specialty. Undergraduate prizes may influence perception of a specialty, attract a certain type of student to becoming interested in a specialty, and reward those who have already shown interest.
The Jim Doran prize in Emergency Medicine is awarded each year to a fourth-year medical student in University College Cork (UCC) by the Emergency Department. The prize is adjudicated by the CUH Emergency Department (ED) and funded by the ED educational fund. Participating students submit a proposal indicating their interest and are invited to speak on an allocated prehospital topic. The prize provides flights and a stipend towards expenses allowing the successful student to spend two months with London's Air Ambulance team based at the Royal London Hospital in Whitechapel, London on their summer elective.
Dr. Jim Doran was born in Cork in 1925 and graduated in medicine from UCC; he developed an abiding interest in, and a lifelong commitment to prehospital Emergency Medicine. His work is continued today by his son, Dr. Hugh Doran and East Cork Rapid Response.
While in London students spend time with the prehospital team and sometime within the emergency department of the Royal London Hospital and so get a full flavor of emergency medicine as a career.
In testimonials (to be presented in the poster) the students speak of the effect of the application process on their interest in Emergency Medicine and Pre-hospital care. They describe forming lifelong friends and mentors through the application process and subsequent elective. They highlight the educational value of reflective practice and how London HEMS promoted this through education and governance meetings they were able to attend.

References: Nil

A Study of Clinical Presentation to an Inner City Resuscitation Room

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Introduction: The resuscitation room is used to provide treatment for the most seriously ill or injured patients. Nationally and internationally there is a deficit of data surrounding presentations to resuscitation rooms.
Aim: The aim of this study was to perform a clinical research audit of patients presenting to the resuscitation room of Mercy University Hospital.
Methods: A retrospective chart review was conducted. Inclusion criteria were patients triaged as category 1 or 2, treated in the resuscitation room over a 1 year period. Patient demographics, presenting conditions, clinical management, vital signs and length of stay were collected and statistically analysed (n=78).
Results: Mean age on presentation was 54.74±2.48yrs. 61.5% were male and 38.5% were female. The five most common presenting conditions were overdoses (23.1%), cardiac arrest (9%), gastrointestinal haemorrhage (9%), cerebrovascular accidents (6.4%) and sepsis (6.4%). Clinical management correlated with NICE Guidelines in 63.6% of cases and with Cork Emergency Medicine Handbook Guidelines in 81.8% of cases. Upon departure, vital signs tended towards normalisation, with respiratory rate and heart rate normalisation being statistically significant (Paired T-test, $p<0.05$). The mean length of stay was 6.5±0.7hrs.
Conclusion: Drug overdoses, particular heroin overdoses, were determined to be the most common presentation to the resuscitation room in this study. Re-education of staff on local and international guidelines of common conditions may improve compliance. Re-education of staff regarding local and international guidelines of common conditions along with more detailed research is required in the future to enable improved patient care.

References: Nil

Audit of Sodium Valproate Use Among Women of Childbearing Potential

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Introduction: One of the most effective medications for epilepsy and bipolar disorder is sodium valproate. However, sodium valproate is teratogenic which cautions its use in women of childbearing potential. The advice is that first valproate should not be used in girls or women of childbearing potential unless other treatments are ineffective or not tolerated, and second that women of childbearing potential must use effective contraception during treatment.
Methods: This is audit is a cross-sectional study that aims to look at sodium valproate use among women of childbearing age, their indication for taking sodium valproate, whether they are taking oral contraception for same. The number of patients analysed were N=20
Results: There was considerable variation in the percentage of patients who were on contraception depending on the reason for taking sodium valproate. Patients who took sodium valproate for epilepsy were more than twice (N=10) as likely to be taking an oral contraceptive than those taking sodium valproate for a psychiatric disorder (N=5). In terms of documentation around discussion about the risks of sodium valproate. 20% of patients (N=4) with epilepsy had documented discussion or planned discussion about the risks of sodium valproate.
Conclusion: Many patients did not have documentation made on their patient records as to the risks of valproate use. Patients taking sodium valproate had a note written on their file for the risks to be discussed at the next appointment. A follow-up study should be undertaken to analyse any changes in management or documentation in a year follow-up.

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A Plastic Surgery Clinic; Analysis of Squamous Cell Carcinoma Lesions

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Introduction:
Over 10,000 new cases of skin cancer are diagnosed each year in Ireland, the National Cancer Registry has estimated that this number will double by 2040. We investigated the characteristics of patients and the histology of Squamous Cell Carcinoma (SCC) lesions removed at a plastic surgery clinic.
Method:
Patients (N=213) were selected from histology reports in County Roscommon Hospital and their records were analysed. Demographics, lesion site, and grade were recorded. Data analysis was carried out using SPSS.
Results:
There was a significant positive correlation between gender and anatomical site of lesions (r = 0.254, p = 0.000). There were significant negative correlations between the histological grade of a lesion and both patient gender and lesion site (r = -0.135, p =0.029 and r = -0.123, p = 0.047 respectively).
However, there was no significant correlation between patient age and grade of a lesion (r = 0.058, p = 0.353), or between age and lesion site (r = 0.074, p = 0.235), nor was there a significant relationship between nursing-home residence and lesion grade [r = -0.031, p = 0.615, F (3, 257) = 1.507, p=0.213].
Conclusions:
Male patients presented with SCC lesions at a more advanced stage, and were more likely to present with lesions of the head and neck compared to females. SCC lesions of the head and neck were more likely to be higher grade than lesions on the trunk or peripheries. Age and nursing-home residence did not significantly affect the grade or site of lesions.

Incidence and Mortality of Acute Kidney Injury in Ireland

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Intern South Network

Introduction: Acute kidney injury (AKI) is a common, serious complication hospital patients. Its prevalence is thought to be increasing due to the increasing age, comorbidities and increasing risk factors of patients. AKI is also a known independent risk factor for morbidity and mortality. However, our understanding of AKI epidemiology is limited and estimates of incidence and mortality in a national representative sample are lacking.
Aim: Describe the incidence, mortality rates, basic demographics and risk factors of patients with a primary diagnosis of AKI in Ireland over the past 5 years.
Methods: This is a descriptive, quantitative study. The Hospital Inpatient Enquiry (HIPE) database was accessed, and all patients with a discharge code of AKI as a primary diagnosis as per the International Classification of Disease 10 (ICD-10) codes from 2010-2014 were identified; n=7684. Death certificate data and census data were also obtained from the Central Statistics Office (CSO) for validity purposes. Analyses were carried out using SPSS.
Results: The incidence of AKI was 0.25% and the mortality rate was 11.7%. 81.1% of AKI patients were >60 years old. Chronic kidney disease (CKD), sepsis, cancer and diabetes were the most common comorbid illnesses in patients with incidence rates of 30.8%, 19.0%, 13.1% and 12.5% respectively. CKD patients who developed AKI were more likely to be admitted to the intensive care unit than non-CKD patients (p=0.020). 12% of patients needed renal replacement therapy, and these patients had higher mortality rates (14.5vs.11.4%; p=0.006). There was no statistically significant difference between mortality rates per 100,000 population between HIPE and CSO data.
Conclusion: AKI is an important cause of morbidity and mortality in Ireland and there are many common conditions which predispose patients to developing an AKI. Further studies including patients with secondary diagnoses of AKI are needed to assess its true burden.

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Who's Talking About Gynaecological Oncology on Twitter

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Introduction: Patients and physicians live in an information era dominated by the Internet and social media. Patients have unparalleled access to medical information from all sources. Much of present-day patient education occurs online through social media platforms like Twitter.
Aims: The aim of this study was to gain a better understanding of what online conversations about gynaecological cancers are taking place and what sources most commonly provide information to the general public.
Materials & Methods: Over an 80-day period, individual tweets containing hashtags relating to women's cancer were collected via the Twitter API. Data collection was limited to 14 terms relating to women's cancers, sourced from the CDC web site.
Results: Of the 200 most linked websites on Twitter, 14% were social media (e.g. www.youtube.com), 13% were general news (e.g. www.telegraph.co.uk), 12% were medical/science news (e.g. www.medicalnewstoday.com), 12% were charity/advocacy websites (e.g. www.jostrust.org.uk), 11% were commercial websites (e.g. www.amazon.co.uk) and 8% were academic journals (e.g. oncology.jamanetwork.com).
Conclusion: The dissemination of good quality information by Healthcare professionals to patients has always presented challenges. Social media presents further challenges, as any users may broadcast or promote content without regulation. Also, social media organizations need to generate revenue and depend on advertising and other commercial entities. Our results demonstrate that only 20% of Twitter conversations that specifically tag gynaecological cancers contain links to web sites associated with credible medical or scientific professional sources. Analysis and deeper understanding of social media content allows healthcare professionals to enter this global social conversation and to leverage it for the benefit of patients.

Attitudes of Irish Intern Doctors Towards' Learning, Using and Developing their Clinical Communication Skills (CCS)

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Introduction: Interpersonal communication skills are one of five core medical competencies an intern doctor must be competent in, as part of the National Intern Training Programme (NITP, 2016). The importance of communication skills in patient-care leads us to reflect on interns attitudes towards clinical communication skills (CCS) [1]. There are no studies that focus on interns' attitudes towards clinical communication skills.
Aims: In order to close this gap in educational research we carried out a study with the following objectives:
1. Develop a Communication Skills Assessment Scale (CSAS) applicable to Interns,
2. Explore Intern's attitudes towards learning, using and developing their clinical communication skills including the communication aspects of dealing with uncertainty,
3. Investigate the potential impact of demographic factors on attitudinal scores
Methods: We conducted a cross-sectional survey with Irish Interns (66% response rate). They completed an online survey which comprised demographic data, open ended-questions and an Intern version of the Communication Skills Assessment Scale.
Results: Interns have positive attitudes towards learning, using and developing their clinical communication skills. The majority have come across the clinical situation of communication when there was uncertainty in healthcare in terms of diagnosis, treatments and prognosis. They reported a lack of training in this regard.
Conclusion: Integration and enhancement of clinical communication skills during postgraduate training and inclusion of training in dealing with uncertainty. Training of clinical faculty and supervisors/tutors in order to promote continuous training in clinical communication skills.

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An Audit of Surgical Antimicrobial prophylaxis at University Hospital Limerick

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Introduction
Antibiotic prophylaxis is the use of antimicrobial agents to prevent infection. It is one dose given within 60 minutes before skin incision, discontinued no later than 24 hours after surgery. The agent used is dependent on the procedure and multidrug resistant (MDR) status of the patient. Antibiotic prophylaxis is indicated in all clean-contaminated surgical procedures. These are defined as non-traumatic breaches of respiratory, alimentary or genitourinary tracts.
Hospital antimicrobial guidelines vary from region to region to allow for variation in sensitivities and resistance. This audit was based on chapter 26 of the University Hospital Limerick (UHL) Antimicrobial Prescribing guidelines.
Aims
To determine whether at University Hospital Limerick (UHL) current antimicrobial guidelines on surgical prophylaxis were adhered to.
Methods
Data was collected on 172 patients operated on over a five-day period at UHL. Surgical patients were located using the theatre log book. Using a retrospective chart analysis, the following information was gathered: consultant, type of surgery, prophylaxis, duration, antibiotic given, dosing time, surgery start time, prolonged procedure, blood loss >1.5L and MDR status.
Inclusion criteria:
patients not currently on antibiotics
all surgical patients operated on (14/11/16 to 18/11/16)
Exclusion criteria:
currently on antibiotics
offsite procedures
patients with MDR status
Results
Of a total 172 patients who underwent surgery, 103 (60%) had prophylactic antibiotics and 69 (40%) did not. The majority of patients who received prophylaxis underwent general/gastrointestinal surgery. In 70% of cases the appropriate antibiotic was given. Compliance with antibiotic dosage was 100%. Duration of antibiotic prophylaxis was compliant in

x/103% of patients (one dose or <24hrs). Antibiotic administration time was recorded in 76% of cases.
Conclusion
Antibiotic prophylaxis guidelines are adhered to in the majority of clean contaminated surgeries. We hope to present this audit at surgical grand rounds. At UHL a new Kardex with an allocated section for surgical prophylaxis is in development. A re-audit would be appropriate following this intervention.

Prospective Cost Analysis of Low Molecular Weight Heparin Thromboprophylaxis Post-Planned Caesarean Section

Houlihan M, Higgins J, Ismail S, Murphy A

1 Introduction
Venous thromboembolism (VTE) is a leading cause of maternal mortality. Although the risk of VTE increases post-planned Caesarean section, there is no international consensus regarding thromboprophylaxis in this population. All women in Ireland receive Low Molecular Weight Heparin (LMWH) thromboprophylaxis in this setting.
2 Aim
To determine the cost incurred to our healthcare system by our safe practice of administering LMWH to all women post-planned Caesarean section.
3 Method
Risk assessments were performed on women undergoing planned Caesarean section according to the Royal College of Obstetricians and Gynaecologists guideline. We analysed the time and manpower costs of implementing this risk scoring against potential monetary saving, to determine the cost incurred by our own safe practice.
4 Results
We recruited 306 women undergoing planned Caesarean section. According to this risk score model, 248 women (81.1%) would have received LMWH, while 58 women (18.9%) would not. LMWH prophylaxis costs €19.04 per patient. The cost of time and manpower is 3.56 ± 1.51 minutes and €3.08 ± €1.31 per woman assessed. With 65,998 maternities and a Caesarean section rate of 14.8% nationally, there is a potential total saving of €5,189.79.
5 Conclusion
This study demonstrates a minimal potential of monetary benefit to a stricter model. A further cost-benefit analysis determining the cost of a missed VTE event is needed to determine whether a stricter model would be cost-effective for our healthcare system.

Intracranial Hypotension Secondary to Lumbar Puncture

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Introduction:
Lumbar puncture is a commonly performed procedure in Emergency Departments and in hospital. Yet there are many potential complications associated with this procedure, which are important when consenting a patient.
Case Presentation:
A 48-year-old woman presented to hospital with headache, photophobia and neck stiffness on a background of flu-like illness 2 weeks preceding presentation. Initial CT Brain was normal, routine lumbar puncture failed to demonstrate evidence of infection. She was treated as a viral meningitis with conservative management. Photophobia and neck stiffness resolved, however her headache persisted and she received a second CT Brain which showed two subdural collections along the right frontoparietal area (7mm) and left frontoparietal area (5mm.) MRI Brain, MRI Spine, and MR Cerebral Angiogram demonstrated abnormal pachymeningeal enhancement intracranially and over the cord as well as subdural collections over the cerebral hemispheres bilaterally which generated a differential diagnosis of intracranial hypotension potentially secondary to CSF leak. On day 14 of admission her headache remained refractory to treatment and she developed vomiting. CT Brain at this time demonstrated deterioration of the subdural collection with effacement of prepontine, premedullary cisterns and cerebellar tonsillar descent of 8mm below the foramen magnum. She was subsequently transferred to Beaumont Hospital for urgent neurosurgical review and shunt.
Discussion:
Intracerebral hypotension secondary to CSF leak is an important potential complication caused by lumbar puncture. Intracerebral hypotension requires a high degree of clinical suspicion as it has a similar presentation to typical post-lumbar puncture headaches.

Retrospective audit of the Peripherally Inserted Central Catheter (PICC) associated thrombosis in patients with haematological malignancies at Cork University Hospital.

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Abstract
INTRODUCTION:
Peripherally inserted central catheters (PICC) are used for administration of chemotherapy, antibiotics and blood products in patients with haematological malignancies. Although generally regarded safe, infections and thrombotic events have occurred with PICC use, necessitating study to guide future management.
AIM:
1) Determine the incidence of PICC associated thrombosis 2) To identify clinically significant risk factors contributing to these complications.
MATERIALS, METHODS:
Conducted in Cork University Hospital, between January 2010 and June 2015 all adult patients with PICC inserted under haematology were identified. A total of 90 patients with haematological malignancies who had PICC lines were included. Data was collected using proforma sheets including included patients demographs, malignancy types, PICC size, and duration of insertion. Haematological laboratory parameters were also recorded. The main outcome measures were PICC associated thrombosis and/or infection
RESULTS:
In total 90 patients received 131 PICCs. Of these total PICC episodes 28.2% developed complications (n=37) leading to removal. Thrombosis was found in 14.5% (n=19) and 13.7% developed infection (n=18). Of those with thrombosis (n=19), 7 patients had Multiple Myeloma and 6 had Acute Myeloid Leukaemia. Whereas those with PICC associated infection (n=18), 5 had Non-Hodgkin's lymphoma and 5 had Acute Lymphoid Leukaemia. Diagnosis was significantly associated with complication (p=0.019). PICC removal due to complications was associated with increasing PICC lumen size; 30% of 5-French PICCs necessitated removal whereas 79.2% of 6-French PICCs necessitated removal (p=0.01). Increased PICC lumen size was associated with clinically evident thrombophlebitis; 30% of 5-French PICCs displayed thrombophlebitis vs. 77%of 6-French PICCs displayed thrombophlebitis (p=0.017).
CONCLUSIONS:
The risk of complications of PICC line insertion is relatively high in patients with haematological malignancies. Haematological diagnosis was significantly associated with complication risk. Increased PICC lumen size was associated with higher removal rates as a result of complications and clinical signs of thrombophlebitis.

Ileal conduit varices: the point where hepatology and urology meet

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Formation of ileal conduit varices is a rare complication of intrinsic hepatic disease but can become life threatening rapidly should they haemorrhage. The management of this condition requires specialist knowledge in both urology and hepatology and all patients who fall into this category should ideally be transferred to a tertiary hospital as soon as possible.
A 57-year-old gentleman was admitted electively under our care for insertion of right nephrostomy and possible JJ stenting. Six months prior during routine investigations of the patient's chronic liver failure secondary to alcohol use, a computed topography showed an incidental finding of unilateral hydronephrosis. His background history includes urinary diversion and formation of ileal conduit due to bladder carcinoma, chronic thrombocytopenia and multiple admissions with hepatic encephalopathy.
During admission, he was complaining of ongoing intermittent haematuria and on examination there were a number of clots in his ileal stoma. The gastroenterology department was consulted and they confirmed formation of several ileal conduit varices. Day one post insertion of nephrostomy, he developed heavy variceal bleeding into his conduit and became unresponsive. Following swift blood transfusion and fluid resuscitation he was admitted into the intensive care unit. There he had two further episodes of variceal haemorrhage requiring fluid support and was transferred to a specialist unit in Dublin with a view to embolization.

Adherence to Medico-Legal Requirements in In-Patient Clinical Note Taking at Letterkenny University Hospital

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Objectives
To assess the compliance of both medical and surgical teams in clinical documentation at Letterkenny University Hospital (LUH) using the HSE Standards and Recommended Practices for Healthcare Records Management as a guideline.
Methods
A one-day analysis of the last clinical record documented by the team in charge across 9 wards at LUH. Predefined list of clinical documentation including date, time, patient identification, clinician name, signature and medical council registration number (MCRN) were investigated.
Results
236 patient charts were examined on 17/11/2016. From 236 charts, only 11 (4.66%) met 100% of the required medico-legal criteria of clinical documentation. Of all the clinical documentation inspected, time, clinician name and MCRN were the lowest (33%, 28% and 42% respectively) to be recorded in all the clinical notes examined. This was reflected in both surgical and medical notes. 85% of the medical notes had patient identification affixed at top of document page as compared to only 60% in surgical notes. Compliance in date and clinician signature recording were the highest (96% and 90% medical ; 100% and 94% surgical) and similar in both medical and surgical notes.
Conclusion
This audit demonstrates a need of improvement in both medical and surgical clinical documentation in order to reach the HSE guideline of medico-legal requirements in clinical note taking. This audit will be presented at the audit quality improvement forum at LUH to increase awareness of this issue. A re-audit will be performed in 1 month time to reassess and ensure compliance in clinical documentation.

An audit of specialty note-signing in the ED of a university teaching hospital in Dublin

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Introduction: Recording dates and times on clinical notes is essential for building a timeline of patient care, and assessing in what order specialties have encountered a patient. To achieve this, it is vital that specialists who see a patient in ED record the date and time that they see a patient.
Aim: This audit assesses the signing and timing of notes by specialists for patients seen in the ED of SVUH against the Joint Commissions International (JCI) relating to information management and documentation (MOI.11.1).
Methods: Prospective data was obtained over 1 week. During this time all patients who were referred for a specialist opinion by ED doctors were tracked daily through the SVUH Emergency Department IT system. Thereafter, clinical notes were obtained and assessed against the JCI standard. The standard was audited using the following parameters. "When the entry was made" was determined by whether the author had clearly stated 1) the date, and 2) the time that they wrote the note. Whether the authors had identified themselves was ascertained by recording if a signature was present.
Results: A total of 175 referrals were recorded during the period. A total of 145 (82.9%) notes were located and examined. The time of entry could be fully identified in 100/145 (69.0%) i.e. a date plus time. This was not complete in 45/145 (31.0%), which had only a date recorded only. There were no notes that had neither a date nor time recorded. A signature was present on 141/145 (97.2%) notes.
Conclusion: It can be seen that the JCI standard is not being fully complied with, especially with regard to recording the exact time that a specialist sees a patient. All patient encounters should be capable of being fully tracked to ensure that all parties can be aware of when, where, and who, has seen each patient.

Assessing the complex needs of elderly patients presenting for surgery in a University teaching hospital

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Background:
Elderly patients have increased vulnerability in the peri-operative setting, yet
make up an increasing proportion of those presenting for surgery.
Method:
We completed an observational study on all patients greater than 70 years old presenting for surgery to Beaumont Hospital over a 7-day period in October 2016. We collected data on demographics, co-morbidities, medications, type of surgery and peri-operative course. In addition, each patient had a multi-tool frailty and a cognition assessment.
Results:
Of 182 patients undergoing anaesthesia in the study period, 36 patients (19.78%) were 70 years or more at the time of surgery. The mean age was 77.42(range 71-90). 8/36 cases (22.2%) were classified as emergency procedures.
In 27/36 (75%)of the patients took > 3 medications with 12/36 taking > 5 medications. 8/36 (22.2%)were on anticoagulants (5 on novel agents, 3

on warfarin). 13/36 were taking antiplatelet agents. 11/36 patients were taking either an ACE inhibitor or ARB agent.
By Edmonton frailty scale, 12/36 were classified as frail, with 9/36 (25%) considered moderate-severely frail. 2/36 came from institutional care, 2/36 were inter-hospital transfers, 1/36 came from a hospice. 13/36(36%) patients had a measured Abbreviated Mental Test (AMT) < 8 /10 cutoff, suggestive of cognitive impairment. 7/36(19%) of our patients had pre-operative BMI <18.5. 8/36 patients had LOS >14 days.
Discussion:
Our results highlight the strong multidisciplinary focus required to care for the elderly surgical patient where polypharmacy, frailty, cognitive decline and dependence are prevalent.

Anaesthesia Care for Patients with Intellectual Disability Undergoing Dental Procedures

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Background:
Standard dental care for patients with intellectual disabilities is a well-established service provided at Connolly Hospital, Blanchardstown (CHB). Due to invasiveness of dental treatment, patient compliance, medical co-morbidities and challenges with pre-assessment, general anaesthesia (GA) is potentially a higher risk for these patients. We present a review of this service, including patient demographics, anaesthetic techniques, outcomes and complications
Methods:
Data was collected retrospectively on patients who had undergone dental treatment from June 2014 to July 2015. All patients were day cases at a regularly scheduled theatre time set aside for special needs dentistry. Data recorded included demographics, pre-medication details, pre-operative assessment, anaesthetic technique, peri and post-operative management and outcomes.
Results:
109 patients fulfilled the inclusion criteria, however data was only available from 99 patients. 47 patients were male (46.53%). The mean age was 38.8 years (range 16 - 73).
13 patients(13.13%) had trisomy 21, 21 (21.21%) had an acquired brain injury and 19 (19.19%) had autism. 88 patients (88.88%) were taking regular medications, with 60 (60.60%) on 3 or more. All patients were anaesthetized using Propofol 2-4mg/kg and Atracurium 0.6mg/kg. Oxygen, air and Sevoflurane were used for maintenance. Intubation was possible for all patients using standard equipment. Post–induction, 92 (92.92%) received Dexamethasone 8mg, 99 (100%) received Paracetamol 20mg/kg and 60 (60.61%) received an NSAID. All patients were successfully anaesthestised and there was no evidence of any peri or post-operative side effects related to the anaesthesia.
Discussion:
Despite compliance difficulties and the potential for complications to develop, we found no anaesthetic complications in this vulnerable patient cohort with a high incidence of complex medical comorbidities. We feel that this is due to using a consistent and safe anaesthetic technique, the same group of experienced theatre staff and no unnecessary deviations from practice.

Health challenges of international travel for obese patients

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Introduction: Obese patients are subject to medical co-morbidities and prejudice in their community and healthcare settings. International travel poses various health risks, including problems associated with air travel. The experiences of obese travellers have not been adequately described in the medical literature. Furthermore bariatric surgery is a popular form of medical tourism in many developing countries. We aimed to review the limited literature on this subject.
Methods: We searched for articles published through 2016 in the PubMed database and the grey literature, using a combination of the search terms 'obesity', 'international travel', and 'air travel'.
Results: The medical risks of obesity have been well documented and certain of these, including type 2 diabetes and osteoarthritis adversely impact the obese traveller. There were multiple articles addressing the health challenges of air travel in obese passengers, including hypoxaemia in obesity-hypoventilation syndrome, venous thrombosis, airport assistance, airplane seat width, aircraft toilet access, and medical evacuation. Airline policies regarding seat allocations for morbidly obese passengers varied between companies. A review article highlighted the increased risk of acute mountain sickness in obese trekkers. Excess body weight may impede stretcher rescue from wilderness environments. The association between excessive body weight and psychiatric disorders has not been discussed in the travel medicine literature. There have been studies about the problem of weight bias towards obese patients, but not in the context of overseas travel. Mobility solutions include the increasing use of electric convenience vehicles to facilitate travel in obese individuals.
Conclusions: Obese travellers face specific weight-related health risks during travel which are unlikely to be discussed in the pre-travel consultation. Anticipation of these issues may itself pose a barrier to travel. Particular attention should be given by travel health advisers to these risks. The actual travel-related health experiences and medical outcomes of obese travellers deserve further study.

Elective Lower Segment Caesarean Sections Prior to 39 Weeks and Indications-An Audit

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Introduction
Elective caesarean sections (ELCS) carry higher risks of respiratory morbidity than vaginal delivery. This is significantly reduced after 39 weeks. NICE guidelines recommend ELCS should not be routinely carried out prior to 39 weeks.
Aim
The aim of this audit is to examine the timing of ELCS (CS4) at University Maternity Hospital Limerick (UMHL). In addition, to record indications for these deliveries; comparing those delivered prior to 39 weeks gestation with those who completed 39 weeks.
Methods
1006 consecutive births between January and April 2016 were audited revealing 333 caesarean sections. Gestation, category, and indication were recorded through chart review.
Results
50% (168) were CS4. Of these, 40% (67) occurred prior to 39 weeks gestation ranging from 34+6 to 38+6, the majority (44) falling in the 38th week . 8 cases of ELCS prior to 37 weeks were found, 5 of which were admitted to NICU (total of 7 in <39 week cohort). Previous CS was the most frequent indication both pre and post 39 weeks. Other

indications followed similar patterns. In those delivered before 37 weeks none were due to previous CS.

Conclusion

At UMHL 60% of ELCS occur after 39 weeks revealing scope for improvement. Of those that do not achieve 39 weeks of gestation, most are delivered less than a week in advance for similar indications. This pattern may be due to capacity and scheduling limitations. In cases of very early ELCS (<37 weeks) the indications recorded vary greatly and it appears that underlying medical reasons for intervention are at play.

Audit of the quality of consent form completion in the Temple Street Children's University Hospital

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[1]Medical Intern (SVUH); [2]Clinical Audit Facilitator; [3]Nurse Practice Development Unit; [4]Risk & Legal Services

Aim:

To audit quality of consent with standards against the national consent policy (HSE, 2013)

Methodology:

This audit involved the retrospective review of the consent forms of 60 randomly selected patients who had a procedure or admission to Temple Street Children's University Hospital, in the period of 2013 to 2015. Patients were chosen randomly from the selection on-hold at the Healthcare Record's office. The tool consisted of 15 statements taken from the National Consent Policy (HSE, 2013). Each statement is a specific requirement for correct and legal consent to be established.

Results:

This audit result highlighted the quality of the consent documentation and process in TSCUH. There was record of obtained/refused consent with dates were present in the patient healthcare record was 98.3%. Consent documentation clearly identified service user by name (98.3%), Date of Birth (95%), Home address (88.5%), with healthcare identification number (95%). Consent documentation clearly identified the consent obtaining doctor's name (85.0%), Irish Medical Council's Number (IMC) (5.0%), Hospital bleep number (3.3%), clear signature (98.3%), and a job title (81.7%). Only 68.3% cases consent documentation clearly stated the procedure/treatment/care involved and the risks and benefits of that procedure/treatment/care, where appropriate.

Conclusion:

The results of this audit highlighted that there is a need for some targeted, accurate documentation awareness and low-cost interventions, which could significantly improve consent process and documentation compliance rate since none of the consent forms in this audit were seen to comply fully with the National Consent Policy (HSE, 2013) guidelines.

Recommendation:

Add dedicated section to Consent Form for Doctor's IMC.

Add dedicated section Consent Form for Doctor's Hospital Bleep Number.

Remove "Grade" and replace with "Job title".

Inform all incoming Doctors at hospital induction about the legal requirements for consent and requirement of compliance with the National Consent Policy (HSE, 2013)

Reference:

1. HSE (2013) National Consent Policy, National Consent Policy QPSD-D-026-1.1. V.1.1

2. Constantinou,S. & Dimitriadis, A.P.(2012) Audit of the quality of consent form completion and improvement of practice, Clinical Audit, September 2012.

Glycemic Control Targets are difficult to achieve in Irish adults with type 2 diabetes

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Aims:

Our aim was to investigate whether Irish adults with Type 2 diabetes satisfied the American Diabetes Association (ADA) criteria for BMI, Blood pressure, HbA1c, lipids and Albumin:Creatinine ratio.

Methods:

Retrospective cross-sectional study of patients attending a type 2 diabetes clinic at University College Hospital Galway, Ireland between September 23rd 2015 and September 23rd 2016. We extracted the raw data from the patients' last clinic visit from the Diamond ™ electronic diabetes database system; any missing information was reconciled using the hospital lab-enquiry system (PAS™). We used the ADA Clinical Practice Recommendations 2016 to define the thresholds for optimal control in Type 2 DM.

Results:

During this period 2058 patients were identified as having attended the clinic with a diagnosis of Type 2 DM. Of this cohort of patients 38.9% were female and 61.1% were male. The mean age was 64.9 ± 12.1 years with an average age of diagnosis 63.2 ± 7 years. While 83% of patients satisfied total cholesterol targets (<5 mmol/l) only 41% satisfied HbA1c target (<53 mmol/mol). Furthermore 66% satisfied systolic BP targets (< 140 mmHg), while 95% satisfied diastolic BP targets (<90 mmHg).

Conclusion:

In our cohort of patients, glycemic targets in particular do not meet the recommended ADA guidelines and therefore require more focused therapeutic intervention.

Stroke in the Intensive Care Unit in Sligo University Hospital

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Introduction

Stroke is one of the leading causes of death and disability in Europe. Sligo University Hospital admits 200-250 patients annually with a diagnosis of acute stroke or TIA. As part of the National Stroke Programme, one of the KPI (Key Performance Indicators) is admission to an Acute Stroke Unit. On occasion, acute stroke patients are admitted to the ICU. We wished to explore this cohort's demographics, outcome measures and mortality.

Methodology

This was a retrospective review of electronic patient records from the ICU dataset. All patients, over 18 years, admitted with a primary diagnosis of acute stroke (both Ischaemic and Haemorrhagic), were included.

Results

Over a 22-month period (December 2014 to September 2016), there were 38 admissions to SUH ICU with an acute cerebral event, 18 with a primary diagnosis of acute stroke. Average age 68 (SD+/-11.5). Nine of these admissions were ischaemic (50%) and 9 haemorrhagic (50%). Of these 18 patients, 4 (22%) survived to be transferred to ward level care. Two patients were transferred to a tertiary centre (11%).

Average length of stay in ICU varied between groups. Patients with ischemic strokes were admitted to ICU for an average of 8.23 days (SD+/-7). Those who survived stayed for an average of 11 days (SD=/-9). Haemorrhagic Stroke patients were admitted for an average of 2.2 days (SD=/-1.4).

Conclusion

Acute stroke is a common disabling illness in older adults. Strokes can be ischaemic or haemorrhagic, but the most common form is acute ischaemia, accounting for over 80%. In our study, the most severe strokes, were

as likely to be haemorrhagic as ischaemic, and carried a mortality rate of 78%. As the next phase of our study we wish to explore, through qualitative research, the patient, carer and nursing experience of delivering care to a critically ill stroke patient in the ICU.

Reference

1. IRISH HEART FOUNDATION: COUNCIL FOR STROKE (MARCH 2010) *National Clinical Guidelines and Recommendations for the Care of People with Stroke and Transient Ischaemic Attack* , : .

Improving cervical screening uptake-an audit of a Galway GP practice

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Introduction:

All women in Ireland between 25-60 years are eligible for regular, free cervical screening with any GP registered with Cervical Check.(1) While this has its own recall system, it has shortcomings, particularly for patients who might have changed addresses or who are lost to follow up for other reasons.

Aim:

Our aim was to determine the number of eligible patients who were due/overdue their smear. Additionally, we hoped to increase uptake rates by implementing a fail-safe recall system to act as a 'second safety net'.

Methods:

Using the practice management system Socrates, we reported all female patients between 25-60 years [cohort of n=297]. A detailed chart review was conducted including; consultation notes, MedLab results, notes/correspondence from any previous GP and smear eligibility status using the patient's PPS number on www.cervicalcheck.ie. This enabled us to determine the date of the patient's last smear, was this due or overdue and if due, had she been reminded of this in recent consultations. Any patients seen once in an on-call context were deemed ineligible. All data was inputted into Microsoft Excel to facilitate mail merge for newly drafted reminder letters to be sent to patients. To complete our audit cycle, we re-audited 1 year later in order to determine if our new recall system had resulted in improved uptake rates.

Results:

Of the 297 women eligible to be part of the screening programme, 100 (34%) had no evidence of a smear within the previous 3 or 5 years. Only 21 of those women had evidence in their consultation notes of a reminder by their GP.

On re-auditing 1 year later, 56 (56%) of the women sent reminder letters had subsequently attended the practice for screening, with 3 women being referred onto colposcopy for treatment.

Conclusion:

The new recall system resulted in an increased screening uptake rate among patients.

Reference:

1. Service INCS. Cervical Check 2008 [Available from: http://www.cervicalcheck.ie/]

Investigation of orthopaedic admissions to CUH of patients over 90 years of age over a one-year period with a special interest in hip fracture patients

McGrath H[1], Harty J[2]

Network: UCC, south network, Cork University Hospital
Department: Surgery Research audit

Introduction: The geri-orthopaedic population has a high mortality in surgery due to multiple co-morbidities and risk factors, which can all adversely affect their outcomes.

Aims and Objectives: Assess patient risk factors in order to reduce mortality and identify causative factors.

Method: The study investigation focuses on patients admitted to the orthopaedic service of Cork University Hospital in 2014. Patients 90 years of age or older were included in the study. After retrieving the sample from a HIPE database, search, and evaluation of the data collection sheet of potential parameters commenced. Statistical analysis and inclusion/exclusion criteria were applied.

Results: 69 patients were included in the study (N=69). Following this, Six independent variables were investigated: age, gender, type of treatment, type of fracture, length of hospital stay, and complications post-operatively. The full model containing all predictors was not statistically significant in predicting death at follow-up, $\chi^2 = 15.622$ ($p = 0.209$, n = 69). There was an overall mortality rate of 21.7%. 15 patients in total. Those patients who did not survive, the experience of surgical complications was present in 86.7% of cases.

Conclusions: Overall, there are no clear associations between mortality and age, gender, previous history of hip fracture, the type of presenting injury, or the treatment received in this sample. The subgroup of patients who had died at follow-up is very small (n=15). New measures and criteria need to be assessed to practically predict mortality in Hip fracture patients over 90 years.

References:

1. HALPIN PJ, NELSON CL. A System of Classification of Femoral Neck Fractures with Special Reference to Choice of Treatment. Clinical orthopaedics and related research. 1980; 152: 44-8.

2.Tarrant S, Hardy B, Byth P, Brown T, Attia J, Balogh Z. Preventable mortality in geriatric hip fracture inpatients. Bone & Joint Journal. 2014; 96(9): 1178-84.

A Retrospective audit of patellar stabilization procedures in cases of recurrent patellar instability

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Introduction: Patellar instability, characterized by recurrent dislocation, is a disabling condition that limits the functional ability and physical aspirations of patients. There are multiple anatomical structures which stabilize the patella and surgical treatment is tailored to repair the underlying aetiology in each case.

Aim: To evaluate the clinical and radiological outcome of patellar stabilization procedures in patients with patellar instability.

Method: A total of 34 consecutive patients (36 knees) (mean age, 26.6; range, 17-43) with recurrent patellar instability who underwent patellar stabilization surgery from June 2009 to September 2014 were retrospectively included. Type of procedure was dependant on the concomitant aetiological factors and a combination of procedures was used when indicated: tibial tuberosity osteotomy (61.76%), MPFL reconstruction (67.64%), lateral release (5.88%) and trochleoplasty (2.94%). Mean follow-up was 3 years. Clinical results were evaluated using the IKDC and Lysholm scores as well as a subjective outcome regarding overall patient satisfaction. Patellar height, TT-TG distance and trochlear dysplasia were defined using plain radiographs and MRI.

Results: At follow up, 77% of patients were satisfied with the overall outcome of the procedure. The mean IKDC score was 66.7 ± 19.63, Lysholm score 74.9 ± 20.16. The mean patellar height decreased significantly ($P<.05$) to anatomic values. Pre-operatively, the mean TT-TG distance was 14.66mm (range, 5.97-20.18) and 81% showed evidence of trochlear dysplasia. Complications were found in 4 patients (11.1%).

Conclusion: Patellar stabilization surgery is an effective method of treating patellar instability, resulting in stability of the knee in 94.4%.

Thorough pre-operative evaluation is imperative to ensure these patients are receiving the appropriate treatment. Patients should be counselled regarding the likelihood of return to strenuous physical activity.

Acute Gastrointestinal Bleeding in the Presence of Antithrombotic Therapy

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Introduction: Long-term therapy with antithrombotic agents is becoming more prevalent, with an increasing number of antiplatelet and oral anticoagulant (OAC) medications available. With the use of these medications comes the burden of their associated bleeding risks, including the increased risk of gastrointestinal bleeding (GIB).
Aim: To assess the role of antithrombotic therapy in acute GIBs presenting to an acute surgical unit over a 12-month period.
Methods: A retrospective review of a prospectively maintained database of cases presenting to the emergency department with acute GIBs over a 12-month period was undertaken. A chart review of those admitted under the department of surgery was then carried out and data recorded with regards to patient demographics, clinical presentation and management.
Results: 92 patients presented to the emergency department with acute GIBs over the 12-month period. Of these cases, 44 (48%) presented while on antithrombotic therapy, with 30 (33%) presenting on antiplatelet agents, 21 (23%) on OACs, and 7 (8%) on concomitant antiplatelet and OAC therapy. Of those on anti-platelets, 80% were prescribed aspirin as a single agent, 7% clopidogrel, and 13% dual antiplatelet therapy. Rivaroxaban was the most common OAC prescribed (47.5%), followed by warfarin (28.5%), dabigatran (19%) and apixiban (5%). Upper and lower GIBs represented 45.7% and 43.4% of the total, respectively, with 10.9% remaining unclear in origin. Patients on antithrombotic therapy were older on average than those not on these medications (79 vs. 61, pvalue<0.001). The majority of patients identified were stable at presentation, with similar average systolic blood pressure (125 vs. 132, pvalue 0.23) and heart rate (87 vs. 92, pvalue 0.13) in those on antithrombotic therapy compared to those who were not.
Conclusions: These data demonstrate that there was a significant prevalence of antithrombotic agents in patients presenting to an acute surgical service with a GIB. Further to this, we have demonstrated the rates with which various agents were encountered. While patients on these medications were older on average, there was little significant difference in clinical presentation when compared to those on no antithrombotic therapy. However, general surgeons with the responsibility of managing GIBs need to be aware of these agents in their day-to-day practice.
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Hypertension that took her breath away…

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A 40 year old Afro-Caribbean female presented with BP of 230/150mmHg, headache and syncope. She has attended this hospital for eight years with severe resistant hypertension, with systolic blood pressure rarely below 190mmHg and diastolic rarely below 115mmHg despite trials of methyldopa, minoxidil and hydralazine. She has negative investigations for secondary hypertension apart from very severe obstructive sleep apnoea (OSA) and obesity (132kg). She has severe left ventricular hypertrophy with persistent tachycardia despite high dose beta blockade. Coronary angiogram and renal function are normal. There is a strong family history of cardiomyopathy, hypertension and cerebrovascular accidents. She has some retrognathia, severe chronic rhinitis and nasal obstruction and very crowded oropharynx.
Her OSA was not controlled on CPAP in the past despite being on the maximal possible pressure setting of 20cmH2O. She is on Bi-PAP since 2012 with some improvement but still resistant hypertension. She has family and health insurance in USA and has had several prolonged hospitalisations in New York for evaluation. Uvulopalatopharyngoplasty (UVPP) was proposed in 2013 but she was deemed unfit due to hypertension. She had a permanent tracheostomy in July 2013. Her hypertension immediately improved (and of course her OSA). She felt much better but she developed MRSA infection and tracheal stricture. She had nasal surgery and UVPP followed by closure of the tracheostomy in July 2014. Her OSA and hypertension relapsed immediately. Gastric banding was considered, but rejected due to high anaesthetic risk.
Her hypertension improved slightly on this admission with maximum dose labetelol and she was discharged. Her ENT surgeon in the USA is suggesting major facial surgery including jaw reconstruction. However before he will consider this her blood pressure has to be well controlled for up to one year. Unfortunately, her blood pressure is not going to be controlled unless her sleep apnoea can be controlled. Thus, it appears she is heading towards another tracheostomy. In the interim she is returning to the USA in February 2017 to have a gasterostomy tube inserted, as an attempted minimally invasive weight loss procedure.
This case illustrates the importance of obstructive sleep apnoea as a cause of resistant hypertension and it should always be excluded in the appropriate clinical setting, particularly in obese patients.

Metastatic spinal cord compression – A Case Report

Quigley S[1], Byrne F[2]

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Introduction Metastatic Spinal Cord Compression (MSCC) is a well-documented oncological emergency. MSCC as first presentation of cancer is documented to occur in up to 23% cancer patients.[1]
Case Presentation A 46year-old man was urgently transferred to GUH orthopaedic service with bilateral lower limb numbness and inability to walk. He reported a three-week history of progressively worsening hoarseness, lower back pain, right hip pain and bilateral lower limb weakness. The patient also reported a long-standing productive cough, denying haemoptysis. He reported a decrease in appetite, without weight loss.
The patient was an ex-smoker of 20 years, had no previous medical history and takes no regular medications.
On examination, he had 2/5 lower limb power, diminished anal tone, intact perianal sensation, intact sensation to level of L4, brisk reflexes and positive Babinski sign bilaterally.
MRI Spine revealed extradural spinal cord compression at level T8-T10.
Pelvic x-ray showed a pathological fracture of right femoral neck.
Further CT-imaging showed the suspect primary tumour, a 6.5x2.5cm right lower lobe necrotic lung mass with extensive metastases to the spine, lymph nodes, lungs, brain and left vocal cord involvement.

The patient required surgical management. He underwent T6-T11 stabilization and T8-9 decompression of the spinal cord. Three-days later he underwent a right hemiarthroplasty.
Post-operatively the patients symptoms improved. He regained power in lower limbs, scoring 4/5, and his anal tone returned to normal. Sensation was intact bilaterally and his plantar response returned to normal.
The patient underwent intensive post-operative physiotherapy and regained his ability to walk. He then went onto undergo chemoradiotherapy to further manage his newly diagnosed metastatic lung cancer.
Discussion Early diagnosis and surgical intervention plays a crucial role in the prevention of permanent neurological impairment in patients with metastatic spinal cord compression, with greater than 80% of patients maintaining or regaining their ambulatory capacity after surgical intervention.[2]
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Knowledge, Attitudes and Practices of Non-Consultant Hospital Doctors in the Immediate Post-Fall Period

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Introduction
'Doctor, can you please come and review this patient who fell?' is a common request to non-consultant hospital doctors (NCHDs). All patients who fall in hospital must have a medical review (NICE 2015) however a medication review and a bone health review is not commonly performed. The aim of this study is to explore the KAP of NCHDs in the management of a patient in the immediate post-fall period in a large tertiary teaching hospital.
Methods
A convenience sample of medical and surgical NCHDs were invited to complete an online or paper questionnaire over a four-month period comprising the following constructs: injury identification, preventing further falls and improving bone health. The questionnaire comprised polar, Likert scale and open-ended questions. Descriptive statistics were used.
Results
Our respondents (n=108: Intern: 81%;SHO: 9%;Reg/SpR 10%) reported being confident in their assessment of a fall (mean 8/10) but were not satisfied with their standard of training (mean 4/10). Most NCHDs (>90%) routinely determine mechanism of fall, blackout, pain, vitals and head trauma. Between 60-70% of NCHDs do not routinely determine hip trauma, joint tenderness or ROM, use of anti-coagulants, visual symptoms, amnesia or vomiting. Importantly, the medication record is reviewed (65%) and high falls risk medications are identified (65%) frequently. However, 57% rarely or never rationalise medications. The main reasons for this are lack of knowledge (63%), time constraints (65%), benefits outweighing the risks (80%) and reluctance to interfere with care of another medical team (86%). Only 9% always consider bone health review.
Implications
It is clear that intern NCHDs require more comprehensive training in post-fall assessment particularly hip assessment; neurological assessment; and medication rationalisation. Understanding falls prevention KAP of NCHDs is an important first-step in the development of education programmes and quality improvement initiatives to modify NCHD behaviours in the immediate post-fall period.

A rare case of Pyrexia of unknown origin - Case report

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Introduction: Pyrexia of unknown origin is defined as temperature greater than 38.3°C on several occasions of more than 3 weeks duration, hence failure to reach a diagnosis despite obligatory investigations. Haemophagocytic lymphohistiocytosis (HLH) is one of rare causes of pyrexia of unknown origin (PUO). It is a rapidly progressive, life-threatening syndrome of excessive immune activation. Prompt diagnosis and treatment for HLH is essential for the survival of affected patients. If left untreated, patients with HLH survive for only a few months, due to progressive multi-organ failure.
Case presentation: We present a 75-year-old female referred by a General Practitioner for on and off febrile illness with fatigue, lethargy, nausea, vomiting and weight loss. Her past medical history involves dermatomyositis (well controlled on Tacrolimus and Imuran), convulsive episodes, ischaemic heart disease, leucopenia secondary to immunosuppressive therapy, otitis externa, cystitis and urinary tract infection. Her physical examination was normal and initial investigations were inconclusive. Further investigations showed cytopenia, high Ferritin and LDH levels. Other abnormal investigations and findings were Hypofibrinogenemia, Hyponatremia due to SIADH and mild Hypotension. Patient was transferred to Galway Hospital for specialist opinion and bone marrow biopsy which was inconclusive. HLH was suspected as the most likely diagnosis. Therefore, bone marrow biopsies were repeated which confirmed HLH, therefore treatment was commenced immediately.
Discussion: Often, the greatest barrier to treatment and a successful outcome for individuals with HLH, is a delay in diagnosis. Reasons for delay in diagnosis include vague clinical presentation, rarity of the condition, limited numbers of studies and the lack of a specific diagnostic test. Therefore, it is important to consider HLH in any patient with PUO. Hence acutely ill patients or patients with suspected HLH should be referred immediately to a haematologist and a facility where they can receive HLH therapy without further delay.

Appendicitis: more costly than you thought!

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Introduction
Acute appendicitis is a commonly encountered surgical emergency. Currently, there is no diagnostic imaging protocol; it remains a clinical diagnosis. This uncertainty can lead to histo-pathologically normal appendices being removed- termed the negative appendisectomy rate (NAR). This audit aims to quantify the use of imaging in the diagnosis of appendicitis, to examine the values of inflammatory markers in appendicitis, to calculate the negative appendisectomy rate (NAR) and to calculate the average length of stay and the average cost of stay for appendisectomy in this period.
Methods
Data on all patients who underwent appendisectomies in University Hospital Waterford from January 2016 to September 2016 was collected. Retrospective analysis was carried out on C-reactive protein levels, white cell count, imaging findings and histopathology reports for each patient. Data was analysed using Microsoft Excel.

Results
190 appendisectomies were carried out in the timeframe. 97 (51%) were men, 145 had positive histology for appendicular pathologies and 42 had negative histopathology reports, producing a NAR of 22%. Average WBC and CRP for the positive appendicitis histology were 13 and 53, and 10.2 and 49 for negative appendicitis histology. 36 patients underwent CT imaging and 65 patients underwent ultrasound imaging to aid diagnosis. 2 patients had mucinous neoplasm, 2 had adenocarcinoma and 3 had enterobium vermicular reported. The average length of stay was 4 days (range 1-284) and the mode was 2 days. The average cost of stay was 6197.37 (range 1250-35500) Euro. The average cost of appendicitis overall is 8697.37.
Discussion
The negative appendisectomy rate seen in this audit is similar to current international standards and other Irish institutions.[1] The cost of appendicitis is significant within the Irish Health system. Accurate and timely diagnosis is essential to reduce the NAR and length of stay.
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Catecholamine Cardiomyopathy in a Young Male

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A 27-year-old male presented to the Mater Emergency Department with a 1/52 history of exertional dyspnoea, palpitations, productive cough, night sweats, and rigors on a background of ongoing cocaine use.
Initial investigations showed deranged liver enzymes with radiographic evidence of
cardiomyopathy and an ejection fraction of 15% on transthoracic ultrasound. Coronary angiogram showed normal coronary arteries. However, a right suprarenal mass was visualised on abdominal ultrasonography. Urinary catecholamines and adrenal imaging [MRI, CT, MIBG] confirmed the diagnosis of catecholamine-induced cardiomyopathy secondary to pheochromocytoma.
The patient was admitted for management with alpha- & beta-blockade prior to right
adrenalectomy. Full investigation for metastases (CT TAP, MIBG] and related conditions (TFTs, Calcitonin, Sestamibi scan) returned negative. At induction of anaesthesia, he suffered a cardiac arrest. Cardiopulmonary resuscitation was performed for 25 minutes with intensive care support in the form of Extracorporeal Membrane Oxygenation. The adrenalectomy was completed the following day with ECMO support. His post-operative course was complicated by a right cerebellar/brainstem ischaemic infarction and lower respiratory tract infection. He was discharged 3 weeks post-operation. At three-year follow-up, he is clinically stable on Ramipril 7.5mg OD and Bisoprolol 5mg OD with an ejection fraction of 50%. Genetic screening did not identify a mutation.

Drug Prescribing Audit in Paediatric Practice, November 2016

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Introduction
This audit was undertaken to review the standard of inpatient prescriptions written by medical doctors in the paediatric unit of University Hospital Limerick. Correct prescribing is essential to patient safety and wellbeing.
A prior audit was done in December 2015 and results were compared.
Aim
The aim of the audit is to examine current standards of safe prescribing, with the objective to raise awareness of safe prescribing.
Methods and sampling
A total of fifty kardexes were selected at random and examined on the Sunshine and Rainbow wards in November.
Results - General
Addressograph sticker: 100% (n = 50). Weight recorded: 100% (n = 50). Admission date recorded: 84% (n = 42), up from 80%. Allergy status recorded: 92% (n = 46), up from 78%. Patient name on every used page: 28% (n = 14) down from 54%. Patient chart number on every used page: 16% (n = 8) down from 54%.
Results – Drugs
Generic name used: 80% (n = 152), up from 78%. Dose clearly stated: 92% (n = 179), down from 100%. Frequency clearly stated: 88% (n = 171), down from 93%. Route clearly stated: 95% (n = 184), same at 95%. Start date: 97% (n = 189), up from 83%. Prescriber's name in block capitals: 19% (n = 37), up from 0%.
Conclusion
While many areas are improving, others have worsened, particularly patient identification on every used page.
Main areas to improve on are identifying all individual pages in a drug Kardex, use of generic names and clear, and legible prescription signatures.
Recommendations
Re-education of medical and nursing staff re proper prescribing protocol and re-audit in November 2017.

Pre and post-op haemoglobin assessment and estimated blood loss in caesarean section

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NICE guidelines recommend Full Blood Count (FBC) as a routine preoperative test for Caesarean Section (CS)[1,2]. We aimed to audit local practice of pre- and post-op Haemoglobin (Hb) testing and explore the Estimated Blood Loss (EBL) recorded during the same procedures.
100 elective (CS4) and 100 emergency caesarean sections (CS1, CS2, CS3) performed between January and April 2016 were studied. CS category and EBL were obtained by chart review. Pre-op and post-op Hb was obtained from the laboratory online system.
Pre-op Hb was available in almost 100% of cases. Post-op Hb was checked in 91% of emergency CS, rising to 96% for elective. The mean pre-op Hb for all categories of CS was 11.8 g/dL, while post-op Hb was 10.6 g/dL. Post-op Hb was taken on average 1 day post-op. There was a significant difference between pre-op and post-op levels of Hb across all categories with a mean drop of 1.5. A significant difference ($p<0.001$) was also observed between the drops in Hb recorded in emergency and elective categories. There was a significant difference ($p=0.007$) between mean blood loss estimates in Emergency and Elective CS. Estimates were highest for CS1 (mean 681), and lowest for CS4 (mean 523). In this sense, EBL reflected the general trend indicated by the hb levels recorded. In conclusion, NICE recommendations for pre-op FBC was met in all elective CS and in all but one emergency CS. Post-op testing was also achieved in most cases.
Post-op Hb levels were significantly lower after all CS. The drop in Hb levels seen in emergency settings was significantly higher than during elective surgery. EBL were higher in emergency CS compared to elective

CS. Routine post-op FBC should be performed after CS and in particular with emergency CS as it is associated with more maternal and post-natal complications[3].

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Toxicology Presentations to University Hospital Galway ED During Race Week 2016

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INTRODUCTION
The Galway Races is a horse-racing festival held in Galway, Ireland every year starting the last Monday of July. The festival is popular amongst locals and tourists with several events held in town.
OBJECTIVE
To determine whether toxicology related presentations to the UHG ED are more frequent during Race Week and how they compare to toxicology related presentations during a week with no special events.
METHODS
All intoxicated patients from 25/07/2016 – 31/07/2016 were identified retrospectively. Intoxication included alcohol, illicit, prescription and OTC drugs. The ED notes were then reviewed. Intoxicated patients from the control week from 01/08/2016 – 07/08/2016 were also identified retrospectively and the ED notes reviewed.
RESULTS
There were 76 toxicology related presentations to UHG ED during Race Week (6.4% of 1189 registered patients) and 25 toxicology related presentations during the control week (2.3% of 1102 registered). During Race Week, the majority of presentations were due to alcohol intoxication only (N=65, 86%), most patients were in their 20s or 30s (34% and 21% respectively) and 46 (61%) were male. 44 of the presentations occurred between midnight and 06:00. During the control week, alcohol intoxication accounted for the majority of presentations (N=15, 60%), the majority of patients were in their 20s or 40s (28% and 28% respectively) and 17 (68%) were male.
CONCLUSION/RECOMMENDATIONS
This audit confirms that Toxicology related presentations to UHG ED increase exponentially during the Race Week. There is a need for increased staffing and vigilant bed management to counter the increased number of patients.

Spontaneous Retropharyngeal Haematoma A Case Report

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Abstract
Retropharyngeal haematoma is an uncommon occurrence, which may cause rapid life-threatening airway obstruction[1,2]. This rare entity has a number of different causes including cervical-spine trauma[3], intra-thyroid bleeding[4], rheumatoid arthritis[5], surgery[6], parathyroid adenoma[7] and foreign body ingestion[8]. It may also occur spontaneously in patients with bleeding diathesis and those on anticoagulation therapy[9]. We report a case of spontaneous retropharyngeal haematoma in a 52-year-old female. She presented in May 2013 with progressive dysphagia following a meal, which included a fish finger. She strongly denied ingesting fish bone. None of the aforementioned causes were present. Her medication list was noted to contain daily aspirin (75mg) and she has a known history of hypertension. On clinical examination she was notably anxious but there were no signs of respiratory distress and her vital signs were stable. The right side of her neck was tender with no evident swelling, neck mass or crepitus. She was Capp's triad sign negative. CT imaging revealed an extensive retropharyngeal fluid collection (20cm x 6.5 cm), which tracked inferiorly to the right superior mediastinum, down to the level of the carina, displacing the oesophagus to the left for which drainage was radiologically advised.
Procedure: A longitudinal neck incision along the anterior border of the right sterno-mastoid muscle was used to reach a large retropharyngeal and mediastinal haematoma. The patient's symptoms were successfully relieved via drainage within 48 hours. She was asymptomatic at 2 and 4 weeks post-operatively.
Discussion: This case is unique for the lack of classic causes of retropharyngeal haematoma. The patient had no history of trauma or foreign body ingestion. Arguably, the only significant risk factors for this extensive bleed were hypertension and aspirin therapy. Absence of an obvious, congruent history can make diagnosis of this life-threatening condition difficult. Nevertheless, acute progressive dysphagia requires emergency investigation.

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Stickler Syndrome: A Case Report

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Introduction: MK, a 38 yo para 1+0, presented to Portiuncula Hospital for her booking visit at 12+5 weeks. Her previous baby was diagnosed with Stickler Syndrome. As Stickler Syndrome is associated with a 50% chance of recurrence, it was decided to arrange an anatomy scan at 22 weeks.

Clinical details: Following this, referral was made to the Rotunda for further scanning. USS in the Rotunda at 25+5 did not reveal an obvious foetal anatomical abnormality, although profile views showed a flattened foetal face.
On repeat scan in the Rotunda at 34+5, 3D evaluation showed an abnormal profile with a strong suspicion of micrognathia, making a diagnosis of Stickler syndrome likely. The decision was made to transfer care to the Rotunda, to allow for optimal neonatal management, specifically the potential complications of a difficult neonatal airway.
Discussion: Stickler Syndrome, also known as hereditary progressive arthro-opthalmopathy, is an autosomal dominant genetic disorder of connective tissue, affecting an estimated 1/7500 newborns (1). It results in orofacial deformities, ocular manifestations, hearing loss and joint problems. Affected individuals characteristically display a flattened facial appearance and often the Pierre-Robin sequence – cleft palate, glossoptosis and micrognathia. Stickler syndrome has 5 subtypes, with Type 1 (STL1) responsible for approx. 70% of reported cases (2). The most common mutated gene is the collagen gene COL2A1. The mutation in this case was carried on the paternal side.
Antenatal diagnosis primarily involves ultrasonography, and in certain familial cases, genetic testing. For those displaying the Pierre-Robin sequence, the mother may present with polyhydramnios, which should prompt investigation for a foetal swallowing difficulty. On detailed anatomy scans, profile views can reveal the flattened facial appearance and micrognathia.
Genetic testing can also be performed, by chorionic villus sampling or on amniotic fluid (3). It can be useful in certain familial cases, when the pathogenic variant is known (4).

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An 11 year review of the changing prevalence of Pre-eclampsia in the East of Ireland

R Horgan, C Monteith, L McSweeney, E Kent

Background:
Pre-eclampsia (PET) remains one of the leading direct causes of maternal death and is defined by RCPI as the presence of Hypertension (a systolic BP >140mmHg or a diastolic BP > 90mmHg) and proteinuria > 1+ on urinalysis. PET is internationally quoted to affect 2-3% of all pregnancies, rising to 5-7% in nulliparous women. With the increase in maternal age, body mass index and co-morbidities affecting individual risk we sought to assess if there was a local change in the incidence of PET.
Methods:
This is a retrospective review performed of two Dublin tertiary maternity units (Rotunda and Coombe) via interrogation of the annual reports between 2004-2014. Data from the National Maternity hospital was excluded as comparable data was unavailable.
Results:
During the study period a total of 181,329 women were delivered of whom 7755 (4.2 %) had a pregnancy complicated by PET. We noted a fall in the overall incidence during the study period of total pregnancies affected by PET from a peak of 5.8% in 2006 falling to 2.6% in 2013. When assessing the rates in nulliparous women alone the overall rate was 4.6% for the 11 year study period. There was a similar reduction from a peak of 5.3% in 2005 to a trough of 3.3% in 2014.
Discussion:
Despite anticipating a potential rise in PET rates due to increases in known risk factors such as advancing maternal age, BMI and complex co-morbidites. This study has demonstrated the converse with a reduction in our PET rates.

Cryopyrin Associated Periodic Fever Syndrome

Eisaka A[1], Anjum S[2], Stack J[3], Barry, M[4].

Introduction:
Cryopyrin Associated Periodic Fever Syndrome (CAPS) is a rare multi-system disease associated with a mutation in NLRP3 gene (1). This case demonstrates a patient attending James Connolly Memorial hospital with recurrent exacerbations of multisystem symptoms over a 15 year period, whom subsequently was diagnosed with CAPS.
Case Description:
Patient X, a 48 year old female, presented in 2012 with recurring symptoms over the preceding 13 years of fatigue, arthralgias of small and large joints of upper and lower limbs, with an associated skin rash on trunk and limbs, and xerostomia. On initial investigations she had raised inflammatory markers and a Neutrophilia, despite a negative autoimmune screen. An initial diagnosis of Connective Tissue Disease was made. She was initiated on immunosuppressant medications, initiating with Steroids and then adding Hydroxychloroquine, Methotrexate, and Etanercept from which all failed except Prednisolone. Subsequently, she developed blurred vision and a persistent global headache. On review in JCMH, examination revealed papilloedema with raised opening pressure of an otherwise normal LP. She was commenced on Acetazolamide with no improvement. She was given diagnosis of Benign Intracranial Hypertension and underwent VP shunting in Beaumont Hospital. During this admission a skin biopsy revealed urticaria and a temporal artery biopsy showed no evidence of giant cell inflammation. In 2014, she developed sensorineural hearing loss and was started on Rituximab. Despite a 6 month course, no improvement was noted. Further PET CT revealed increased bone marrow activity diffusely and mild increase in uptake in the femoral and popliteal arteries bilaterally. MRI of both hips showed multiple bilateral infarcts of distal femurs. At this point in 2015 auto-inflammatory/periodic syndromes were considered. Genetic tests were sent which came back positive for NLRP3 gene mutation consistent with CAPS.
Discussion:
This case report outlines the diagnostic and treatment challenges that present when facing a rare and complex case. It highlights how the advances in genetic testing and new biologic treatments can significantly improve patient outcomes.
IL-1 inhibitors now have become the treatment of choice for CAPS such as Canakinumab (Anti 1L-β) and Rilonacept (IL-1 trap) infusions every 2 months.

1. Diagnostic criteria for cryopyrin-associated periodic syndrome (CAPS) - Jasmin B Kuemmerle-Deschner[1]

A Retrospective Study on Length of Hospital Stay Among 100 Total Laparoscopic Hysterectomies in a Tertiary Gynaecology Oncology Referral Centre.

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Intern Network: DML

Abstract: The international best practice for length of stay post-total laparoscopic hysterectomy (TLH) in a tertiary gynaecology oncology referral centre is currently 1-2 nights.
We proposed analysing discharge patterns with reference to this international practice among 100 consecutive patients undergoing TLH in an Irish tertiary referral centre to identify if Irish standards correlate.
The study analysed 100 consecutive TLHs performed in the Mater Misericordiae University Hospital for length of stay, age, BMI, surgical indication, and whether histology was benign or malignant. Data from our internal patient database was then used to identify reasons for prolonged length of stay.
Of 100 cases analysed, 57 were malignant while 43 were benign. 44% of benign cases were risk reducing. Only 18% of patients stayed 1 night. The range of stay was 1 – 12 nights, mean stay 2.8 nights and median stay 2 nights. Of those who stayed more than 1 night the causes were as follows: 57% no cause cited; 17% pain; 7% infection; 7% anticoagulation; 4% patient preference; 3% major complications; 3% drug reactions; 2% nausea. Mean length of stay for TLHs indicated for malignancy was 3.2 nights versus 2.3 nights for benign cases. Mean length of stay for risk reducing surgery was 1.7 nights.
The mean length of stay post-TLH currently exceeds international best practice. Optimizing postoperative pain control seems to be of predominant importance in reducing duration of stay. Indeterminable causes – which we extrapolate are most likely due to patient preference rather than clinical indication - merit further investigation. We have begun distributing patient information leaflets which clearly delineate expected standard length of stay pre-operatively and plan to re-audit 6 months post-introduction.

Haemolytic Uraemic Syndrome: a 3 county 5 case series in 24 days

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Introduction: Haemolytic Uraemic Syndrome (HUS) is a microangiopathic haemolytic anaemia documented as a triad of thrombocytopenia, haemolytic anaemia and acute renal failure. Although recognised as one of the most common causes of acute renal failure in children, the incidence rate in Ireland is relatively low at just 2.41 cases per 100,000 children per year.[1]
Case presentation: We present a case series of 5 children who, over a 24 day period, presented to a regional paediatric unit and were all subsequently diagnosed with HUS. Geographically, these cases spanned a considerable distance over 3 counties. Patients aged between 11months and 8 years. Amongst the cohort were two siblings, whose only identifiable risk factor was a visit to a petting farm prior to admission, with the remaining cases having had no obvious exposure to recognised risk factors. All five patients had diarrhoea associated HUS (VTEC positive, varying strains), four presenting with bloody diarrhoea. Central, colicky abdominal pain was an additional presenting complaint in two patients, vomiting in three with associated decreased oral intake. Reduced urine output was reported in two. Worryingly, one child had had no urine output in 24 hours. All five patients ultimately required transfers to tertiary paediatric units. Four of these patients required peritoneal dialysis, two required ICU admissions, indicating the severity of the disease.
Conclusion: This case series details an unexpected and, to date, a largely unexplained surge in a serious childhood disease in a regional setting. It also highlights the diversity of presentation, clinical course and treatment options in HUS. At present, there is no local guideline for the management of HUS which may need to be reviewed.
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The Irish general population's perception of Anaesthesia

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Introduction:
The speciality of Anaesthesia commenced in 19th century with the use of ether. Despite more than 100 years of practice, the speciality remains relatively unknown amongst the general population. Numerous studies from across the world have reported a lack of knowledge of Anaesthesia and the role of the anaesthetist in the hospital (1, 2). Data from a tertiary referral centre in Ireland also show limited perception (3). We wish to evaluate whether this applies to a hospital setting in rural Ireland.
Aim: To understand the general population's perception of Anaesthesia and the role of the anaesthetist in a peripheral hospital in Ireland.
Method: Data was collected from 100 postoperative patients via an anonymous questionnaire. A written consent was obtained by the principle investigators prior to filling the questionnaire.
The cohort included all patients above 18 years of age who have had recent surgery, in Mayo University Hospital requiring general anaesthesia.
Results: The results of our survey showed a poor understanding among respondents to the role of the anaesthetist in their care. Only 54% knew the anaesthetist was a type of doctor, with 18% unaware that they played a role after the initial administration of the anaesthetic. A mere 15% knew that the anaesthetist played a role in the decision to give blood, despite the possibility of blood products being explained when consent was obtained for the procedure. 64% of patients expressed an interest in learning more about the role of the anaesthetist, with 96% of these saying an information leaflet at preoperative assessment would be beneficial.
Conclusions: Our results clearly demonstrated a lack of awareness among patients going for surgery to the role of the Anaesthetist. We also showed a majority (64%) would like to know more about the specialty. In the future we hope to create an information leaflet, hand it out at the preoperative clinics, and re-audit post operative patients.
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Shoulder and clavicular pain: An insidious presentation of methicillin sensitive staphylococcus aureus infection

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Staphylococcus aureus is a gram-positive cocci, usually seen in clusters. It is commonly implicated in soft tissue infections and osteomyelitis but rarely associated with polymyositis. We report the case of a 50-year old lady with a background history of hypertension and depression who initially presented to the emergency department with left shoulder pain. She was tender with reduced range of movement and she was discharged home with a diagnosis of a rotator cuff injury. She represented back to hospital after one week with an increase in intensity of the pain and a new swelling around the sternoclavicular joint. This swelling extended down to the left breast and up the neck towards the left temporomandibular joint. There was associated erythema around the sternoclavicular joint. She was commenced on high doses of benzylpenicillin and flucloxacillin.

An ultrasound scan revealed marked subcutaneous oedema and inflammatory changes overlying the left sternoclavicular joint and extending into the neck and chest with evidence of myositis. CT neck and thorax showed septic arthritis of the sternoclavicular joint and myositis. She deteriorated and flucloxacillin was changed to vancomycin. There was concern of necrotizing fasciitis, due to the extent of the infection, and she was seen by plastics, orthopaedic, cardiothoracic and ear, nose and throat surgeons. Clindamycin and tazocin were added. Blood cultures grew methicillin sensitive staphylococcus aureus and she was switched to flucloxacillin and clindamycin with clinical improvement. MRI neck showed an inflammatory phlegmon centred on the left sternoclavicular joint with associated myositis of the adjacent left pectoralis and sternocleidomastoid muscles. Inflammatory markers improved on antibiotics and she was discharged home on cefazolin through outpatient parenteral antibiotic therapy programme. This case illustrates the unpredictability and unusual presentation of staphylococcus aureus infections. It also highlights the importance of cooperation between different disciplines on improving patients' outcomes.

ISBAR: compliance with a standardized communication tool in a hospital setting – an audit

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Introduction:
ISBAR (Identify-Situation-Background-Assessment-Recommendation) is a framework that is often used to plan and structure communication. It is known that suboptimal communication may compromise patient safety[1], and the ISBAR technique allows us to focus our communication and is useful in preventing the omission of vital information[2].
Aims:
We hypothesize that the ISBAR framework is under-utilized and as a consequence, communication of vital information may be omitted. We aim to determine the rates of compliance with the use of the ISBAR communication and which subsections are most commonly left out.
Methods:
The interactions of 52 phone calls were noted by the call receiver (interns, SHOs and RMOs) and assessed to determine whether or not they fulfilled the criteria a) identification of the caller, call receiver and identifying the patient b) introducing the situation at hand, c) giving a background of the case, d) offering an assessment which may include a summary of the relevant information and e) offering or requesting a recommendation. These were noted immediately after the termination of the phone call and collated in a database using Microsoft excel.
Results:
Of the 52 calls, 27% (n=14) were deemed to have fulfilled all of the elements of ISBAR communication. The most commonly omitted subsection was supplying a background, with only 42% of calls (n=22) containing this information. Most calls identified the situation and requested a recommendation (87%, n=45 and 83%, n=43 respectively). 73% (n=38) included an assessment. Notably, only 52% of calls included an identification of the caller (n=27).
Conclusions:
We have found that the calls included in this study rarely contained all elements of the ISBAR communication framework. This may lead to errors in communication and ultimately compromise patient care. We plan to perform a re-audit after completing an information session on ISBAR in an effort to promote effective communication techniques.

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A 3 month evaluation of routine TSH level testing of patients admitted to an Irish private Hospital - An analysis of over 2300 individuals

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Abstract
Introduction: Thyroid disease is common in the community and thyroid function tests are the commonest endocrine assay performed in the laboratory. Hypothyroidism is the most common endocrine disease affecting 5% of the population. Published data in regard to the appropriateness of thyroid hormone replacement therapy (THRT) doses shows a disappointing number of patients achieving euthyroid status which is the biochemical goal of therapy. Preliminary data from the Beacon Hospital suggests that over 20% of all thyroid function tests performed in our laboratory are not within normal range and this warrants further exploration.
Methods and Materials: The Beacon Hospital admission database was queried to identify all patients currently on THRT during a 3 month period . We compared this with the laboratory data base to record who had routine TSH levels performed on admission. Of those admissions with abnormal TSH, their records were examined to identify a change in Levothyroxine dose or an endocrinology review.
Results: There were 2368 admissions during the 3 month period. 221 (9.33%) of those were on Levothyroxine for THRT. 78 (35.29%) of the patients on THRT had routine TSH levels tested on admission. 61 (78.20%) had a TSH level within normal range. 17 (21.79%) had abnormal TSH results. Of those with abnormal TFT'S, 5 of 17 (29.41%) had their dose of levothyroxine altered, and 4 of 17 (23.53%) had an endocrinology review. One had a normal TSH on repeat TFT's. One of the patient's charts was of unknown location, and one patient was RIP before a dose alteration or endocrinology consult could be done.
Conclusion: The majority of patients on THRT did not have routine TSH levels on admission. Routine TSH levels on admission led to beneficial therapeutic changes or expert review in only one tenth of the patients tested.

Interns On-Call at University Hospital Limerick; What You Need to Know!

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Background: The transition from medical student to internship can be challenging[1]. The National Intern Training Program have made efforts to address this difficult transition[2.] Improving knowledge of the types of tasks expected of interns on-call would help with education and training of both medical students and interns.
Aims: Identify the most common on-call requests to interns at University Hospital Limerick (UHL).
Methods: A retrospective review of the intern on-call job book for September 2016 at UHL was performed. Data was collected from three wards including, a surgical, medical and mixed ward. A proforma sheet was created to record the data collected which included requests for medications, patient reviews, phlebotomy, intravenous cannulisation (IVC), ECGs, administration tasks, X-ray reviews, patient admissions, ABGs, consent, telemetry, nasogastric tube and catheter insertions. Data was analysed using Microsoft Excel.

Results: A total of 1116 intern tasks were recorded over 30 days. The top four most common requests were; 1. Chart Medications 28% (n=314), 2. IVC 20% (n=224), 3. Patient Reviews 19.6% (n=219) and 4. Phlebotomy 16% (n=182).
Of the 314 requests to *Chart Medications*, 20% (n=62) were for intravenous fluids (IVF), 18% (n=56) insulin, 16% (n=51) analgesia, 7.3% (n=23) night sedation, 7% (n=22) laxatives, 6.7% antibiotics (n=21) and 5.7% (n=18) warfarin.
Of *Patient Reviews*, a breakdown of 241 conditions were identified; 14% pyrexia (n=33), 12% blood pressure related (n=29), 10% pain (n=24), 9.5% abnormal lab values (n=23) and 7.5% high early warning score (n=18).
Of note within *Phlebotomy* there were 42 vancomycin levels, 15 blood bank requests and 14 as part of serial data.
Conclusion: The findings of this research highlight the most common on-call requests for interns at UHL. This will provide a useful guide to enhance training of future interns. We would recommend that similar studies be repeated on a larger scale, including other hospital sites.
Conflicts of Interest: None
Disclosure: None

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Wolff-Parkinson-White Syndrome and Dilated Cardiomyopathy

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This case report illustrates the presentation of a 26 year old gentleman who had a two to three year history of palpitations that occurred regularly, lasted a prolonged period of time and which occurred with exercise. He had no medical history of note and no family history of sudden death or congenital cardiac abnormalities. ECG showed evidence of pre-excitation. Transthoracic ECHO estimated a left ventricular ejection fraction of 20% and the presence of a dyskinetic septum. Right ventricular ejection fraction was also assessed and was found to be decreased. Further cardiac MRI assessment reported atria of normal size and volume with normal valves, however both end diastolic volume and end systolic volumes were increased to 297mL and 208mL respectively. He was diagnosed with Wolff-Parkinson-White syndrome and dilated cardiomyopathy. This case presents a conundrum in establishing the precipitating cause of decreased cardiac function; did the dilated cardiomyopathy cause the WPW or vice versa? Learning points of this case include diagnosis and management of Wolff-Parkinson-White as well as diagnosis and management of dilated cardiomyopathy in a young male with no concurrent co-morbidities.

An audit of the quality of orthopaedic post-operative notes in a University teaching hospital

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Introduction
In 2008 The Royal College of Surgeons of England published a list of guidelines that outlined the relevant information that a good quality post-operative note should include. Tallaght Hospital relies on hand written post-operative notes for trauma and orthopaedic surgery with headings for the date, surgeon, assistant, theatre assistant and signature. The purpose of this study was to assess compliance with the recommended guidelines in a cohort of post-operative notes.
Methods
Over a three month period 50 post-operative notes were audited in terms of the RCSEng guidelines of date and time, elective/emergency, names of surgeon and assistant, name of theatre assistant, operative procedure, incision, operative diagnosis, operative findings, problems/complications, extra procedure and reason for same, tissue removed/added/altered, prosthesis and serial numbers, closure technique, anticipated blood loss, DVT prophylaxis, detailed post-operative care instructions, and signature. The overall legibility of the notes was assessed as was the grade of the doctor who wrote the notes.
Results
All notes recorded the procedure and date performed but none recorded the time it took place. The pre-operative diagnosis was not recorded in 66% of cases. While 86% of notes recorded the incision used, only 40% documented the operative findings. In 15% of notes the prosthesis implanted was not identified and only 10% of signatures were accompanied by the authors' MCRN. No notes audited recorded the anticipated blood loss but 92% documented the closure technique employed.
Conclusion
The adherence to the RCSEng note guidelines remains variable. This variability appears to be constant between grades of the doctors writing the notes. In an era of increasing accountability and litigation it is essential that all practitioners are advised of the RCSEng guidelines and that all efforts are made to ensure maximal compliance.

A case study of Duodenal Diverticula with Pancreatitis

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Introduction:
Duodenal diverticulum is the 2nd most common diverticula involving the Gastrointestinal tract. The true incidence is unknown and only 10% are symptomatic. Acute symptoms include melena, severe abdominal pain, jaundice and vomiting. Chronic complaints are related to stasis-induced steatorrhea and intractable abdominal pain.
Case presentation:
A 78 year-old-male was brought by ambulance from a nursing home to the Emergency Department with epigastric pain, lethargy for 4 days and one episode of vomiting. He had no nausea, change in bowel habits, weight loss or any stigmata of a gastrointestinal bleeding. He was an ex-smoker with a 75 pack year history and had a significant previous alcohol use. He had an unremarkable examination except for mild epigastric tenderness. His bloods showed significant increase in serum amylase, deranged liver enzymes tests as well as raised white cell count with a neutrophilia. The Glasgow score of 2 for acute pancreatitis was calculated, for age and raised WCC. His CT abdomen illustrated two large duodenal diverticula measuring up to 5 cm in diameter with peri-luminal inflammatory and infective changes concerning for duodenitis. The uncinate process of pancreas showed some peri-pancreatic fat stranding, suggesting pancreatitis. Severe diverticulosis of the sigmoid was also noted. He was resuscitated adequately and supportive management and antibiotics were started.
Discussion:
A diverticulum is a herniation of mucosal and submucosal bowel wall layers through a muscular defect. Two types of Diverticulum exist; True

and Intraluminal diverticulum. A true diverticulum is an acquired herniation of mucosal and submucosal bowel wall layers through a muscular defect. 70% of true diverticula are located medially in the 2nd part of duodenum and 26% in 3rd and 4th part of the duodenum. Its complications are rare but may be very severe such as mass effect on adjacent structures, inflammation in the ampullary region, jaundice, acute pancreatitis, intestinal obstruction, diverticulitis, perforation and GI haemorrhage.

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Adherence to Venous Thromboprophylaxis guidelines for medical patients in Sligo University Hospital

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Background: VTE is a common preventable cause of morbidity and mortality in hospitalised medical patients. These patients, often with one or more risk factors, have an overall 8 increased risk of developing VTE during or post hospital admission.Timely and appropriate VTE Thromboprophylaxis is an important quality indicator of Hospital performance. Health Care workers are well positioned to become active leaders and innovatory responsive in reducing human suffering. A VTE Thromboprophylaxis audit was conducted to determine the practice pattern in Sligo University Hospital.
Objectives: To determine administration of VTE prophylaxis in medically admitted patients and compare to Sligo University Hospital Guidelines.
Criteria/Standards: Guideline for VTE thromboprophylaxis from time of admission into Hospital from ED/AAU
Methodology :This retrospective audit was undertaken on patients who presented to the Hospital between the 4th October and 4th November 2016 (100 cases). Data was collected on the administration of VTE Thromboprophylaxis. The data was collected by two SHO's and 1 Intern using a Performa. Data was analyzed and a report was compiled by the Clinical Audit Support Team (CAST).
Results: 100 patients were recruited with a male to female ratio of 56:44. The mean age was 69.9 years. 55% of patients were audited on day 1 of their admission with that figure rising to 80% by day 5. The audit identified 96 (96%) patients with 1 or more risk factors for VTE. A total of 71 (73.9%) of the at-risk patients were indicated for VTE therapy, 66 (68.7%) for thromboprophylaxis, 5 (5.2%) for therapeutic treatment. Of the 71 indicated for treatment, 61 (85.9%) were receiving treatment as per guidelines
Conclusion: 85 (85%) patients were found to be correctly following Sligo University Hospital guidelines in terms of correct type, dosage and appropriate indication for thromboprophylaxis. While high, there is much opportunity for improvement.

Innocuous bicycle injury causing severed urethra

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Introduction: Anterior urethral injuries can result from blunt trauma to the perineum characterised by a straddle injury. These cases are best dealt with in a tertiary referral centre due to the complexity of the injury sustained, the technical challenges associated with a repair and the potential long-term outcomes.
Case Report: We report the case of a 44 year old male who was presented to another emergency department with perineal pain and difficulty voiding following a bicycle accident at 2am. He reported falling onto the saddle pole. He is HIV + with no other past medical history. At the time of presentation a single attempt was made at urethral catheterisation with unsatisfactory drainage of urine and a suprapubic catheter was inserted.
He was subsequently referred to the Mater Hospital (National urethral service) for definitive management of the presumed urethral injury.
While awaiting assessment, he presented to MMUH emergency department with bruising of perineum and some discharge from a perineal wound following blunt trauma sustained while in bed with his male partner. An MRI pelvis was performed which showed a superficial pelvic haematoma- he was managed conservatively with intravenous antibiotics. A retrograde and antegrade urethrogram showed complete disruption of the bulbar urethra with extravasation of contrast.f the patient and appropriate bladder drainage often requiring suprapubic catheter insertion.
Following a planned interval of three months, he underwent a single stage urethroplasty via a perineal incision with a high bulbo-penile end to end anastomosis. He was discharged home with urethral and suprapubic catheters. Subsequent peri-catheter urethrogram demonstrated no extravasation of contrast and he had a successful trial without catheter. He will be followed up in the clinic with uroflowmetry to assess for any evidence of urethral stricture.
Discussion: This case report demonstrates the complex nature of urethral injuries which often have long-term issues with urethral stricture disease. We would strongly advocate the management of such cases in a tertiary referral centre following initial stabilisation o

A retrospective review of hypernatraemia dehydration in breast fed neonates

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Introduction
Neonatal hypernatremic dehydration (NHD) can be a complication of inadequate breastfeeding in infants and may lead to adverse consequences such as cerebral edema, convulsions, venous sinus thrombosis, intracranial hemorrhage, renal failure and disseminated intravascular coagulation. We observed previously healthy breast fed neonates admitted with feeding problems and hypernatremic dehydration in the first week of life.
Aims
Our objective was to document and identify factors predisposing to hypernatraemia dehydration in breast fed neonates.
Methods
This was a retrospective study where babies with hypernatraemic dehydration were identified by an electronic search of the Hospital In-Patient Enquiry (HIPE) system between 2012 and 2015. Premature babies and babies with co-morbidities were excluded. Statistical analysis was completed using Microsoft Excel 2011. Data were reported as median and range.
Results
Ten neonates with NHD (median plasma sodium 150.5 mmol/L; range 147-155 mmol/L) were identified during the study period. Four neonates presented with mild hypernatremia (plasma sodium 146 - 149mmol/L) and six with moderate hypernatremia (plasma sodium levels 150-169 mmol/L).

Six babies were female and eight of ten were instrumental or caesarean section deliveries. Five babies were described as having prolonged labor or a difficult delivery. The median age at presentation was 78.5 hours (range 52-100 hours) and the median weight loss was 11.3% (range 9.2-16%). The presenting complaints were weight loss greater than 10% (n=7), jaundice (n=4), poor feeding (n= 2) and dehydration (n =2). Eight presented from the post-natal ward and two babies were admitted from home.
Investigations found that three neonates had elevated blood urea and two patients presented with hypoglycemia (median 3.4 mmol/L; range 1.8-3.8). Maternal characteristics include six first time mothers and all mothers received peri-operative anesthesia via epidural or spinal routes. Breast feeding assessments on the postnatal ward were all reported as going well prior to presentation. The median duration of hospitalization was 2.5 days (range: 1-6 days).
Conclusion
Breast feeding neonates presenting with hypernatraemic dehydration did so between day 3 and day 5. Factors that may contribute to NHD identified by this study include primiparity, instrumental and cesarean section delivery due to prolonged or difficult delivery. Breastfeeding assessments need to combine robust objective and subjective criteria including regular baby weight monitoring in a high risk group.

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An audit of blood transfusion practice among interns at the University Hospital Limerick

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Introduction: The safe delivery of blood and blood products is dependent on the identification of the correct patient and labelling procedures to ensure the right blood is delivered to the right patient. Currently the HSE incorporates the guidelines set out by the National Blood Users group[1]. It is vitally important to ensure knowledge and 100% adherence to guidelines involved in the pre-analysis phase of blood transfusion (i.e. sample collection, patient identification, sample labelling and appropriate ordering of blood products) to avoid the potentially catastrophic consequences of blood transfusion errors.
Aims: The aim of this audit was to monitor if the above guidelines in regards the intern's role in blood transfusion were adhered to and if not what can be done to rectify such practice to minimise poor transfusion practice, while increasing patient safety in regards safe prescribing of blood and blood products.
Method: An electronic questionnaire was administered to the current 2016 cohort of interns at the University Hospital Limerick. The questionnaire focused on the collection process of blood used for analysis in the hospital blood bank.
Results: The survey response rate among interns was 56.6% (30 out of 53). Surgical interns represented 53.33% of respondents, Medicine 43.33% and paediatrics 3.33% of respondents. Results indicate only 20.00% of them always verbally check and label beside the bedside, the patient identity, 30.00% sometimes 16.67% rarely and that 23.3% never do so. A total of 36% of interns have been contacted by the blood bank at some point regarding a sample labelling error. 67% do not know the procedure for checking of blood before administration. 68% do not know the indications for CMV negative and irradiated blood products. Only 50% are aware the HSE has published guidelines on blood transfusion procedures and 17% do not know the difference between a group and hold vs a crossmatch.
Discussion: Results indicate there is a clear divide between clinical best practice and clinical practice among interns at the University Hospital Limerick in the area of transfusion medicine, which needs urgent review to ensure safe delivery of blood products and ensure patient safety. Currently 100% of interns have completed an accredited haemovigilance programme before commencement of clinical practice. Most concerning is the improper pre-analytical labelling of samples which poses a serious risk to potential wrong blood administration if follow up checks are to fail. The ongoing aim is to know implement retraining among interns via intern teaching sessions to improve the safety of transfusion practice in the University Hospital Limerick with a future follow up audit to assess improvement in practice.

Facial nerve palsy in the West of Ireland: Exclude Lyme Borreliosis

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Introduction:
Lyme disease is the most common vector-borne infection in temperate climates, such as Ireland. It is spread through tick bites, and may be endemic to areas with suitable habitats. The West of Ireland, in particular Galway, is one such endemic area. In 89% of cases, erythema migrans is the presenting complaint of Lyme disease, however, unilateral facial nerve palsy is a significant first symptom in 3% of all cases of Lyme disease. In this case series, two children from Galway with unilateral facial nerve palsy were subsequently found to have lyme disease. Teaching points are discussed.
Cases:
Patient 1: a 7-year old boy who presented to ED with a 5 day history of left-sided facial nerve palsy. The patient was seen by the GP three days prior to admission, and was treated with steroids and acyclovir for presumed Bell's Palsy. On examination, a macular, erythematous, blanching rash was noticed on the neck, upper trunk and back, with no target lesions. A history of insect bite one month prior to admission was noted. Vital signs were normal and apart from lower motor neuron facial palsy, examination was normal. Serological testing for Lyme disease was performed.
Patient 2: a 7-year old boy who presented to ED with a 1 day history of left-sided facial droop. There was no history of insect bite or rash or other systemic symptoms. Aside from the left facial nerve palsy, neurological and systems examinations were normal. Although a provisional diagnosis of Bell's palsy was made, routine blood count and film, electrolytes and serology for Lyme disease tested.
In both cases, Ig and lineblot testing confirmed a diagnosis of Lyme disease. Both patients were re-assessed for signs of meningism or other neuropathies, and none were found. Following the IDSA guidelines, a 21-day course of oral amoxicillin was prescribed; doxycycline is the first-line antibiotic, but it is not recommended in patients under 8 years of age.
At one month follow-up, Patient 1 had unresolved left facial nerve palsy. Patient 2 had begun to show signs of resolution prior to beginning antibiotic treatment, and his facial nerve palsy had resolved by one month follow-up.
Discussion:
Unilateral facial nerve palsy is the third most common presentation, after erythema migrans and acute arthritis. Signs of meningitis or multiple cranial neuropathy require CSF investigation and intravenous antibiotics. Antibiotic therapy does not shorten duration of facial nerve palsy but prevents further complications of Lyme disease. A previous report by Allen and Jungbluth demonstrates how untreated lyme disease can progress to neuroborreliosis (15% of cases) with potentially devastating consequences including stroke. Therefore, in endemic areas, including Galway, unilateral facial nerve palsy should prompt lyme serology even in the absence of tick bite or erythema migrans. The overall outcome for lyme disease facial nerve palsy is positive but not all cases resolve.

A case of unusual presentation of Meningoencephalitis and septicaemia

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Objective: To report a case of Meningoencephalitis and septicaemia with an unusual presentation in a previously healthy immunocompentent patient.
Patient and Methods: A previously healthy 59 year old male was brought to Emergency department by Garda after being found wondering in the street with severe confusion, agitation and partially clothed. A collateral history was obtained and described a well man, who's only sign of illness has been a headache and some nausea the previous week. No medical history of note, and not currently taking any medication including any recreational drug. On examination, he was found to be extremely delirious with a temperature of 39.8°C. There was definite neck stiffness, and flexion of arms on neck flexion however no rash was present. The patient was clammy, and clinically septic and stuporous. His pupils were found to be equal and sluggishly reactive to light, and he had movement in all four limbs with increased tone and bilateral extensor planter response. Resuscitated in ED, and required sedation, intubation and ventilation. Clinically a diagnosis of Meningoencephalitis was made. Blood culture and septic screen were done and commenced on Ceftriaxone and Aciclovir intravenously. Following an urgent CT Brain, which was normal, he was transferred to ICU and a Lumbar Puncture was performed. Blood cultures returned positive for gram positive Bacilli, and it turned out to be Listeria, same grown in the CSF culture also. A final diagnosis of Meningoencephalitis and septicaemia secondary to Listeria Monocytogenes was made. The patient's antibiotic regime was optimised with high dose Amoxicillin with Gentamicin. The patient later made a full recovery.
Conclusion: This case report describes an unusual presentation of Listeria Monocytogenes infection in a previously healthy gentleman. Listeria Meningitis manifesting itself as confusion and agitation is very rare and not documented in current literature.

Trans-Perineal Radical Prostatectomy: A Case Report of an old approach used for Prostate Resection following Renal Transplantation

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Trans-perineal radical prostatectomy, popularised in the early 1900's is now a relatively obsolete treatment for prostatic malignancy, having been superseded by the retropubic approach in the 1960's. We report the complex case of a 52 year old gentleman with histologically confirmed organ-confined prostate adenocarcinoma (pT2c). This is on a significant background history of an increased risk of de novo malignancy due to failing bilateral renal transplantation whilst on immunosuppressive therapy and end stage renal disease as a result of biopsy-confirmed transplant recurrence of nephrotic syndrome.
Investigation of this patient's prostate specific antigen (PSA) returned at 7ng/dL (age-specific upper limit of normal is 3.5ng/dL) with a benign prostate gland on clinical examination. Subsequent transrectal ultrasound (TRUS) guided biopsy of the prostate revealed 2 cores of Gleason grade 3+3 prostate adenocarcinoma. Local staging with multi-parametric magnetic resonance imaging of the prostate confirmed organ confined disease.
Suitability for placement on the national renal transplantation waiting list requires documentation of no current active malignancy. Although suitable for active surveillance, this patient required active surgical management of the malignancy in order to facilitate eligibility to return to the national renal transplantation waiting list. This posed a challenging management decision as the bilateral renal transplantations were anastomosed to the internal iliac vessels bilaterally rendering it almost impossible to access the prostate from the standard retropubic approach.
Since the advancement of robotic and laparoscopic techniques in urological surgery, few specialists in the urological surgical community have experience in the trans-perineal approach to prostatectomy. In this complex case, we highlight the benefits of using an old surgical method to adapt to a newly evolving area of post-transplant prostatic malignancy.

The Effect of Lateral Decubitus Position on Diabetic Retinopathy

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Introduction: Recent research has suggested a link between sleeping position and ophthalmic conditions such as retinal vein occlusion and glaucoma. Our study aimed to determine whether or not this link held true for diabetic retinopathy.
Purpose: To investigate the relationship between preferred sleeping position and retinopathy severity in patients with diabetes.
Design: Retrospective, cross sectional study.
Methods: The study enrolled 135 patients who were attending the Diabetic Retinopathy Treatment clinic in Cork University Hospital. Each patient completed a questionnaire regarding their diabetes, preferred sleeping position, and relevant medical conditions. The retinopathy grade was recorded for each eye and data analysed using Stata statistical software package.
Results: Of the 135 participants in the study, 44 (32.6%) preferred sleeping on their right, 38 (28.2%) on their left, 48 (35.6%) varied between positions or did not know, and the remainder, five, (3.7%) slept on their back. Of the 37 (27.4%) patients with asymmetrical retinopathy grades, 13 (35.1%) preferred the lateral decubitus position on the same side as the more severely affected eye, while 12 (32.4%) preferred the lateral decubitus position on the opposite side ($p=0.641$). When comparing the 46 (34.1%) patients with asymmetrical maculopathy grades, 15 (32.6%) preferred the lateral decubitus position on the same side as the eye which had maculopathy, while 12 (26.1%) preferred the lateral decubitus position on the same side as the eye which had no maculopathy ($p=0.698$).
Conclusion: The results do not suggest a relationship between preferred sleep side and diabetic retinopathy severity. Thus patients with asymmetrical retinopathy do not need to be consulted regarding their preferred sleeping position, and there are likely random or as yet unidentified factors responsible for this asymmetry. Further research in this area with a larger number of participants may be warranted to better understand the pathophysiology of asymmetric disease.

Electrolyte monitoring practices in patients on loop diuretics in a General Practice

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Background
Diuretics are commonly used in General Practice. There are many side effects associated with diuretics including electrolyte imbalances. There

are currently no definitive local guidelines on the frequency of electrolyte monitoring, with regular, routine monitoring being recommended. The aim of this audit was to assess electrolyte-monitoring practices in patients on long-term loop diuretics in one General Practice.
Methods
Patients on repeat prescriptions for loop diuretics were identified from the practice's computer records, with exclusion of expired prescriptions and transferred/deceased patients. A total of eighty-four patients were identified, their medical records were then individually checked to identify if electrolyte levels had been monitored in the last twelve months. If levels assessed, any abnormalities in electrolyte levels were noted.
Results
The electrolyte-monitoring rate over the preceding twelve months in this general practice was 55.95%. Electrolyte abnormalities were detected in a number of patients (14.89%) in this audit.
Conclusions
Current electrolyte monitoring levels of loop diuretics was 55.95% in this General Practice. The identification of electrolyte abnormalities in some cases highlights the clinical relevance of monitoring electrolyte levels. Many factors may help to improve electrolyte-monitoring levels, including General Practitioner and patient awareness and involvement. Updated computer software with reminders of when monitoring is due should be incorporated into all general practices. Ultimately the development of definite local guidelines on the frequency of monitoring would set a standard and improve electrolyte-monitoring rates.

Audit: Use of Caprini Score as a standardisation method of VTE prophylaxis in elective surgery

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Introduction:
Venous thromboembolism (VTE) is a common and preventable cause of morbidity and mortality in elective surgical patients. In practice, prescription of VTE prophylaxis is often variable between doctors. NICE guidelines recommend risk-stratification of patients and appropriate prescription of mechanical and/or pharmacological prophylaxis thereafter. (1.) Mayo University Hospital introduced the Caprini Score system as a means of standardisation of VTE prophylaxis practice in 2015. (2.) This scoring system has been validated for use in multiple fields of surgery, although it is not in widespread use in Ireland. (3-5)
Objectives:
Our primary objective was to assess adherence to VTE prophylaxis in Mayo University Hospital, among elective surgical patients.
Method:
Data was collected on all general surgical patients undergoing elective operations during a 12 week period from 11th July 2016 to 30th September 2016, excluding paediatric patients. Data collected included: patient identifiers, operation performed, pre-assessment/ outpatient review prior to surgery, anticoagulation received pre-operatively and post operatively, and Caprini score if calculated.
Results:
In total there were 201 elective surgical admissions over the 12 week period. In total, 47 Caprini Scores were performed, (23% of elective surgical patients). On analysis, 16% of patients in July had a score, 19% in August and 32% of patients in September. Concentrating on those patients seen in the pre-assessment clinic, 27% had a score calculated. On further inspection, of those patients who were surgically reviewed at pre-assessment clinic, 28 out of a total 36 patients had a Caprini Score (77%).
Conclusions:
Overall, the introduction of the Caprini score has failed as an intervention. Scores were performed in less than a quarter of all patients. However they are being performed at a higher rate in patients surgically reviewed at pre-assessment clinic. Lack of awareness among NCHDs, time restraints, cumbersome nature of the scoring document and unavailability of the document on the wards have been suggested as possible barriers to compliance. Audit findings are to be presented at departmental case conference, ahead of a possible re-audit.
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Exercise not what the doctor ordered; a case of McArdle's Disease with Acute Kidney Injury

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Introduction: McArdle's disease, or Glycogen Storage Disorder Type V, is caused by a deficiency in myophosphorylase, an enzyme which breaks down glycogen in skeletal muscle, resulting in impaired muscle functioning and exercise tolerance (1). The estimated incidence of McArdle's disease is 1 per 100,000 population (2).
Case: A 33 year old man, with a previous diagnosis of McArdle's disease, presented with a twelve-hour history of painful thigh swelling. He described feeling unwell for the previous three days and noted dark discolouration of his urine following a period of increased physical activity. On examination his thighs were extremely tender and swollen. Urine dipstick was positive for blood and protein. Admission creatinine kinase was >400,000u/l, creatinine was 155umol/l and urea was 7.9mmol/l. Serum transaminases were raised, with AST 2572u/l, and ALT 517u/l. Also of note serum phosphate was 2.24mmol/l, LDH was 3895u/l and uric acid was 571umol/l. Intravenous sodium bicarbonate 1.26% was commenced. However, urine output decreased to 16mls/hour on the first day. Over the next three days creatinine increased to 784umol/l and urine output remained low, necessitating commencement of intermittent haemodialysis. The patient continued dialysis for five weeks after initial presentation, until kidney function recovered.
Discussion: McArdle's disease can lead to rhabdomyolysis as muscles cannot metabolise glycogen during exercise, causing cell injury and release of cell contents into the circulation including myoglobin, CK, LDH and phosphate (3). This case highlights the danger of acute kidney injury developing in severe rhabdomyolysis. This kidney injury is caused by a combination of hypovolemia causing renin-angiotensin-system activation with vasoconstriction, direct tubular injury from myoglobin oxidative

injury, myoglobin protein complex obstructive injury and cast formation from damaged tubular cells (4). Management is with fluid resuscitation, urine alkalization with sodium bicarbonate and in severe cases renal replacement therapy (3).

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Challenges of Vascular Access in Haemodialysis Patients: A Case Report.

Abstract Category: Case Report

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Introduction: A case report of a 72-year-old haemodialysis (HD) dependant gentleman with recurrent CVC sepsis and immature left Brachiocephalic Arteriovenous Fistula (AVF).
Case description: A 72-year-old gentleman, with a background of HD dependant end stage kidney disease (ESKD) was admitted feeling generally unwell.
He was disorientated, febrile, hypotensive and hypoglycaemic. The area surrounding his left femoral tunnelled central venous catheter (CVC) was erythematous with a purulent exudate.
Diagnosis: Septic shock due to an infected CVC. He was transferred to ICU for inotropic support, his CVC was removed.
A 3-month admission follows. During which he had 2 ICU admissions for septic shock secondary to infected CVC's with highly resistant organisms; sensitive only to ceftolozane/tazobactam(1). His options for vascular access were poor but infected lines had to be removed. He suffered severe oedema and hyperkalaemia.
8 CVC's, 4 temporary; and 4 tunnelled were placed on this admission. 7 of these were placed in 2 sites; right femoral vein or left femoral vein. Either HD was unsuccessful through the CVC, or the CVC quickly became infected. Difficult neck anatomy and an immature left AVF made internal jugular (IJ) CVCs unfavourable. But, with no other options for HD, a left IJ CVC was placed, potentially compromising his AVF. However, this line caused venous obstruction and severe left arm oedema. CVC's were not a long-term option. The potential maturation of his AVF must be considered. Fistuloplasty has been performed, showing some promise.
Case discussion: Ideal access for IHD is through an AVF(2).
However this can't always be achieved. As demonstrated by this case, reliance on CVC's for HD is a challenge. Vascular access in ESKD patients is of huge importance but often very poor and indwelling IV CVC pose a significant infection risk.(3) This can limit ESKD patients' success with HD.

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How effective are large group tutorials in undergraduate teaching?

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Background: Neurology has previously been described as a difficult specialty for medical students, with this phenomenon being described as 'neurophobia'. In University College Dublin final year students undergo an intensive week of large group neurology tutorials. This audit aimed to investigate whether these tutorials were effective in furthering the students' confidence at and knowledge of neurology. The topic was previously audited in 2015.
Methods: All final year medical students in University College Dublin (UCD) were invited to participate. Data was collected using an online questionnaire and distributed via college email addresses. One 'pre-teaching week' questionnaire and one 'post-teaching week' questionnaire were sent.
The questionnaire consisted of two parts, firstly, a section where students rated their confidence with various aspects of neurology on a scale of 1-10. Secondly, a section on multiple choice questions to assess technical knowledge
The aim was to assess the level of knowledge before and after the teaching week to observe any differences.
Findings: Total numbers of students emailed were 243. 124 (51% of) students responded to the 'pre-teaching week' questionnaire. 101 (42% of) students responded to the 'post-teaching week' questionnaire. 81% of students who responded to the first questionnaire went on to complete the second.
Results from the questionnaires highlighted a marked increase in students' confidence levels in all aspects of neurology following the tutorials. The performance in the multiple choice questions remained largely the same, with some questions showing small improvements.
The majority of students found the week of tutorials helpful in "understanding" the specialty – therefore combatting the 'neurophobia' previously experienced.
Conclusion: Large group tutorials are an effective way of delivering specialist teaching to undergraduate medical students. This teaching modality could be effective in other areas of the curriculum.
Additionally online questionnaires appear to be an effective way of surveying students over multiple clinical sites.

A curious case of lower gastrointestinal bleed in a 28-year-old gentleman

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Introduction: Acute bleeding per rectum is a common cause of hospital admissions. In a large south Californian maintenance organization, the yearly incidence of acute colonic bleeding was found to be 20 to 30 per 100, 000[1]. Cagir et al. reported that globally lower gastro-intestinal bleeding accounted for 1 -2% of hospital admission via emergency services and 15% of these would present as massive bleeding with 5% requiring

surgical intervention[2]. Schmulewitz, Fisher and Rockey, further document that only 5% of lower GI bleeding is of small bowel origin[3].
Case report: A 28-year-old gentleman presented to the emergency department with fresh bleeding per rectum. He consumes 10 units of alcohol a week and has a 2 pack years smoking history. His examination was unremarkable with a normal gastro-intestinal exam and an unrevealing digital rectal exam. Haemtological investigations showed a haemoglobin level of 9.7 g/dl. Oesophago-gastro-duedonoscopy revealed mild gastritis and colonoscopy showed the presence of grade II haemorrhoids. As no acute cause of gastro-intestinal bleeding was identified, a CT scan was subsequently ordered which revealed an incidental pelvic lesion in the retrovesical pouch. Further imaging studies with MRI showed a 6 x 7 x 9 cm complex solid cystic mass in the pelvis, located between the base of the bladder, indenting the base but without evidence of invasion. It was considered thus to be a malignant appearing pelvic mass of unknown aetiology. The mass did not appear to be fixed as it changed position within the two imaging studies and taking into account the presenting symptom and the age of the patient a working diagnosis of a gastro-intestinal stromal tumour (GIST) within a meckel's diverticulum was made. The mass was removed by an elective laparotomy after consensus at a multidisciplinary meeting. Histological analysis of the mass was however negative for a GIST and demonstrated the presence of a small bowel neoplasm of smooth muscle origin.
Discussion: Tumours of the small bowel are uncommon; the majorities that do occur however are malignant and symptomatic. Benign tumours, however, frequently cause no symptoms and may be discovered as an incidental finding at laparotomy or post-mortem[4].The leiomyoma is a tumour of smooth muscle, common in the uterus but rare elsewhere. It is reported to form between 18% and 43% of all benign small bowel tumours[5, 6]. Croom and Newsome[6] also described three different modes of presentation of small bowel leiomyomata: (i)haemorrhage, (ii) obstruction and (iii) as an unexplained abdominal mass. Gastro-intestinal haemorrhage, which may be torrential or slow is probably the commonest presenting feature of a small bowel tumour[4].

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A Case Report "A Case of Felty's"

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A 59 year old lady, NH, presented with a two month history of fatigue. She reported anorexia and 17kg weight loss over 3 months. She also reported epistaxis and easy bruising. On further questioning she admitted a long history of arthralgia, confined to her left ankle. Past medical history was significant only for splenic abscesses secondary to a perforated colonic diverticulum.
On physical examination she was underweight and had palpable hepatosplenomegaly. She was pancytopaenic (Hb 6.4, Plts 96, WCC 0.8, Neuts 0.3, Lymphs 0.4). CT TAP confirmed hepatosplenomegaly with her liver measuring 19cm and spleen 19cm. A focally ill-defined hepatic lesion was identified on MRI as well as heterogenous splenic enhancement with small infarcts which was concerning for a lymphoproliferative disorder. Bone marrow aspirate was non-diagnostic.
An autoimmune screen revealed positive Rheumatoid Factor (RF) which had on previous testing been negative and anti-CCP at a titre of >340. IgG, IgA, IgM were all elevated. On this basis a diagnosis of Felty's syndrome was made. Treatment with IV Methylprednisolone, alendronic acid, septrin and valganciclovir was commenced and NH reported to feel less fatigued within 2 weeks of treatment. She was discharged and is due to be seen back in clinic in one months' time.
This case represents an unusual presentation of Felty Sydrome and highlights that cases often do not present typically. Felty syndrome (FS) is a potentially serious condition that is associated with seropositive Rheumatoid Arthritis (RA). It affects 1-3% of the RA population. It is characterized by the triad of RA, splenomegaly, and graulocytopenia. (BMJ Best Practice). This case did not present with the typical triad. The lack of a diagnosis of RA along with the presence of hepatomegaly, pancytopenia, and the background of splenic abscesses made the diagnosis less obvious.

Creating a supportive buddy system for newly appointed interns - the 'nanny' intern programme

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Background: The entry of new interns onto clinical sites is a challenging transition associated with an increase in medical error. In the UK, one study found that death rates were 6 percent higher on changeover day. A Medical Council intern stakeholder study (2016) found that most interns felt very unprepared and unsupported during their first on call experiences and were concerned about the risks their inexperience could potentially pose to patient safety. Furthermore, the impact of the transition on interns' wellbeing is concerning, with up to one third of interns meeting the threshold of experiencing pathological levels of stress.
Aims: To develop a support network of experienced (outgoing) interns to mentor and ease the transition of the new (incoming) interns for the month of July – known as the "nanny" or "buddy" intern programme.
Methods: "Nanny" interns are recruited from a pool of intern volunteers at the end of their internship. They work for the month of July alongside the new interns, providing support and mentoring , skills training and working night shifts.
Results: The "nanny" intern programme is now in its 4th year. In 2016, 10 nanny interns were recruited and worked for the month of July covering night shifts and performing teaching duties during the day. All of the new incoming interns (n = 80) strongly agreed that the nanny intern programme was helpful and that it improved their comfort and confidence levels.
Conclusions: The popularity of the programme has grown in recent years as junior doctors recognise the importance of clinical leadership, mentoring and teaching. The nanny intern application process is now a competitive one. Medical Manpower in Galway University Hospital have been supportive of funding the programme, recognising its impact on intern wellbeing and on patient safety.
The success of the programme in GUH has led to its implementation on other intern training sites nationally.

Unexpected Morbidity Post Salvage Prostatectomy – A Case Report

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Introduction: This report details the case of a 70 year old man who underwent a complicated salvage radical prostatectomy for radioresistant prostate cancer. Complications from this technically challenging procedure would ultimately lead to significant morbidity and prolonged hospitalisation.
Case Description: This patient underwent a salvage radical prostatectomy with bladder neck reconstruction after a TRUS biopsy revealed widespread recurrence of prostate adenocarcinoma previously treated by external beam radiation therapy. One month later he was referred back to this tertiary centre complaining of markedly deteriorating mobility and bilateral groin pain since the operation. He was investigated for possible Cauda Equina syndrome before being discharged with pain specialist and physiotherapy referrals. He subsequently re-presented to ED almost two months later with frank haematuria, elevated inflammatory markers, and severe lower abdominal and bilateral groin pain. This was accompanied by weight loss of over 20 kilograms since his initial surgery and no improvement in his mobility in the intervening period. A CT abdomen/pelvis showed the presence of multifocal intramuscular abscesses in the adductor compartment of the thigh bilaterally and in the lower part of the rectus abdominus, as well as widening of the pubic symphysis with fluid and air and destruction of the local fibrocartilage. Additional imaging showed that these collections tracked from a residual defect in the anteroinferior bladder just anterior to the site of the prostatic urethra. What followed was a protracted and challenging hospital admission with multiple complex infective exacerbations before achieving adequate urinary diversion and symptomatic relief.
Discussion: This case emphasises the technical challenges and potential for complications associated with operating on previously irradiated tissue. Though rare, the unexpected sequelae of the surgery in this case should be considered by clinicians and surgeons, both before undertaking such salvage procedures and when faced with similar morbidity in the post-operative period.

Pneumatosis Cystoides Intestinalis: An Acute Abdomen and Misleading Radiology

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Introduction
Pneumatosis cystoides intestinalis (PCI) is a pathologic condition defined as infiltration of gas into the wall of the gastrointestinal tract. The pathophysiology of the condition is unclear yet rupture of the cysts can lead to the appearance of pneumoperitoneum.[1] Treatment in most cases is conservative.[2]
Case Description
A 65 year old female presented with a four day history of foul smelling vomitus, diarrhoea, and diffuse abdominal pain. On examination the patient was apyrexial, heart rate 84, respiratory rate 19, SpO2 96% on room air, GCS was 15/15. Abdomen was soft but tender throughout, with positive bowel sounds. Faecal occult blood test was negative. Of note she had a history of learning disability, schizophrenia and connective tissue disease, with no collateral history available. On admission inflammatory markers were raised, and lactate 0.9. No abnormal findings on electrocardiogram.
A chest x-ray and plain film abdomen were suspicious for a perforated viscous, with frank pneumoperitoneum and advised surgical review. CT abdomen confirmed previous radiological findings and appearance of sub-diaphragmatic free air in the abdomen. Collectively these findings resulted in the patient undergoing emergency laparotomy. Surgery uncovered extensive bullae of air exiting from the diaphragmatic hiatus in the upper abdomen in a distribution relating to the CT appearance. The patient was closed with no subsequent surgical intervention, and managed medically.
Discussion
An acute abdomen is a feature indicative of a potentially life-threatening intra-abdominal pathology, often requiring surgical intervention. In this case the abnormalities seen radiologically were at odds with the clinical findings. The radiographs and CT hinted towards a perforation, but the clinical presentation, to reach such a conclusion was less compelling. Radiology whilst an extremely useful tool must be considered amongst all investigations and assessments to avoid unnecessary procedures.
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Dissected from head to toe

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Introduction: Aortic dissection is defined as separation of the layers within the aortic wall as a result of an intimal tear. It most commonly originates in the ascending and descending aorta. It then propagates down due to high pressure blood flow through the aorta.
Summary of the case:
This is the case of a 77yo male, with a background history of Hypertension and Chronic obstructive pulmonary disease presented to a peripheral hospital with worsening dysuria for one month. He was referred to the urologists and on examination he was found to have a phymosis. This was surgically repaired by circumcision under local anaesthetic, and the procedure was successful. On day 1 post operation he was complaining of 'chest straining' and severe chest pain. On investigation, his ECG showed sinus rhythm with tachycardia. His troponin level was 14 and his D-dimer was 2000. A CT-Pulmonary Angiogram was performed which showed that he had a Type B aortic dissection.
He was then transferred to a Vascular tertiary referral centre where a CT peripheral angiogram was performed to assess the extent of the dissection. This revealed that the dissection extended into the abdominal aorta as far as the common femoral arteries bilaterally and there was a tortuous, juxtarenal AAA of 6.8cm in diameter. The true lumen was compressed by the false lumen at multiple sites.
The patient was admitted to ICU for strict blood pressure control while a plan for intervention was devised. It was decided that the dissection would be repaired in two stages in an aim to reduce the risk of morbidity and mortality. A TEVAR was performed initially, to repair the thoracic aortic dissection. This operation was successful and he was discharged on day 6 post-op with no complications. Eight weeks later the patient had a follow up CT angiogram. This showed that the left common femoral artery originated from the false lumen and the aneurysm had grown in size to 7cm. As the dissection had extended as far as the common femoral arteries (CFA) bilaterally it was decided that he was for aortobi-iliac grafting, this would require access from both CFAs. An EVAR was performed and a bifurcated stent graft was placed in the infra-renal aorta with stent extension as far as the common femoral arteries. The patient was transferred to ICU post op and had ICP monitoring and hourly

neurological observations overnight to check for any signs of spinal cord ischaemia. There were no signs of neurological deficits present and pa-tient was transferred to the ward on day 1 post op. He continued to improve and mobilised well, on day 5 post surgery the patient was discharged without any signs complications.
Discussion point: Aortic dissection extending to the infra diaphragmatic aorta has a high incidence of morbidity and mortality. By performing the procedure in two stages the am is to allow collaterals to build up in the interim, thereby decreasing the risk of spinal cord ischaemia. This case demonstrates a way in which to manage this challenge and could be replicated in the future.

An Audit of Renal Function Monitoring in Patients with HIV

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Background:
The diagnosed prevalence rate of HIV in Ireland is estimated at 1.09/1000 and Galway University Hospital (GUH) is one of six specialist adult HIV treatment centres in Ireland. Highly Active Anti Retroviral Therapy (HAART) is the mainstay of treatment and in 2016 UNAIDS recom-mends that 90% of all patients are treated. Tenofovir (TDF), a nucleotide reverse transcriptase inhibitor and Atazanavir (ATZ), a protease inhibitor are both common components of HAART; both can cause nephrotoxicity. The European AIDS Clinical Society (EACS) issue guidelines regarding care of patients living with HIV and recommend patients with eGFR<59ml/min have medications reviewed and renal ultrasound imag-ing (USS).
Aims:
The aims of this audit were: to assess whether GUH reaches the 90% treatment target rate and where eGFR was measured at 30-59ml/mi to review: use of nephrotoxic medications; use of renal ultraound imaging and assessment of proteinuria in the clinic.
Methods:
Medical records of all patients attending the HIV clinic in GUH for the past 12 months were reviewed, and relevant clinical data were extracted from the notes and electronic database. Data were coded and pseudonymised in Microsoft Excel. The results were primarily descriptive.
Results:
272 patients were registered as attending GUH for HIV care in October 2016. 260/272 (96.9%) were on HAART; clinical data were available for 252/260 patients. 193/260 were on TDF and 59/260 were on ATZ. 42/260 of patients on treatment had a renal USS at some point. 21/260 patients had an eGFR <60; 3/21 were on TDF and 3/21 were on ATZ. 10/21 (47.6%) had a renal USS and 12/21 (57.1%) had urinary protein/creatinine ratio measured.
Conclusions:
GUH meets the UNAIDS 90% treatment target. A high proportion of patients are on TDF or ATZ containing regimens, but the rates of renal impairment seen are low. In those with a low eGFR approximately half had appropriate renal investigations. As a result of this audit a protocol has been instituted for the assessment of patients with low eGFR while on HAART; this will be re-audited in 12 months time.

Paracetamol Overdose Resulting In Cardiotoxicity

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Introduction: Paracetamol is a common medication for intentional over-dose worldwide, present in 27% of non-fatal drug overdoses in Ireland in 2009[1].
Although hepatotoxicity following paracetamol overdose is well studied data regarding cardiotoxicity is minimal. This link has been the subject of several case reports[2 3]. This case provides an interesting example through the use of serial data.
Description: A 42 year old female presented to the ED with an intentional paracetamol overdose of 35x500mg tablets, giving paracetamol concen-tration by body weight (47kg) of 372mg/kg. Above 150mg/kg is a toxic dose[4]. N-acetylcysteine infusion was started - 5.5 hours after original ingestion.
Clinical examination was normal, vital signs were normal. ECG was NSR 91bpm, no ischaemic changes. Liver and renal function tests were normal throughout hospitalisation.
ECG #1 was normal at admission. Troponin T #1 was raised at 126 ng/mL (normal range 0-14ng/dL)
ECG #2 was normal, Troponin T #2 was 145ng/mL, 16 hours later.
ECG #3 showed T–Wave inversion (TWI) in V2, Troponin T #3 was 84ng/mL, 24 hours after admission.
ECG #4 showed TWI in V2/3/5/6. Troponin T #4 was 42ng/mL, 36 hours after admission.
She reported no cardiac symptoms and remained haemodynamically stable. Dual Anti Platelet Therapy was commenced. Her only cardiac risk factor was a 20 pack year history of smoking, she quit 3 years ago.
An echocardiogram was ordered, showing apical akinaesia.
Coronary angiogram showed mild left ventricular hypokinaesia - ejection fraction decreased at 45-50% - bisoprolol added. Cardiology opinion maintained the cardiac dysfunction was likely a direct result of the paracetamol over-dose. Troponin remained stable.
Discussion: This case demonstrated through the use of serial data and cardiology investigation a possible direct link between paracetamol tox-icity and cardiac insult. Cardiac damage should be considered in the work up of patients presenting with paracetamol overdose.

Combined-Approach Resection of Nasopharyngeal Schwannoma

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We present the case of a 51-year-old female patient who attended our service with an 18-month history of nasal congestion, postnasal dis-charge, midfacial pressure symptoms and occasional small-volume epi-staxis. Following initial review and examination, MRI scan was complet-ed which highlighted a 3.2cm x 2.4cm x 3.5cm well-defined lesion in the right perivertebral space at the level of C1. Endoscopic postnasal space biopsy was performed, which confirmed nasopharyngeal schwannoma. Following multidisciplinary discussion and consultation with the patient, a combined-approach, endoscopic transnasal and transoral resection was performed. Pre-operative radiology, as well as intraoperative imaging are

utilised to demonstrate the operative approach to this challenging, uncommon pathology.
Schwannomas are benign, slow-growing tumours arising from nerve sheath cells. Provided complete resection is obtained, schwannomas can present a low risk of recurrence post-operatively. Though commonly found in the head and neck region, just 4% of schwannomas occur in the nasal cavity.
We highlight the unique case of a large schwannoma occurring in the postnasal space, which presented a considerable operative challenge with many learning points.

Anticoagulation in the setting of an acute-on-chronic ischaemic limb; A Case Report

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Introduction:
Atrial fibrillation (AF) is the commonest cardiac arrhythmia with a prevalence of ≤9% in the elderly population. This case concerns the thromboembolic sequelae associated with AF and the clinical importance of adequate anticoagulation to reduce the incidence of the morbidity and mortality of thromboembolism.
Case Description:
A 71 year old lady presented with acute onset of a cold, painful right leg with progressive paraesthesia. Clinical examination revealed a cold, discoloured limb with absent femoral and distal pulses. Background medical history included valvular atrial fibrillation (managed with warfarin and bisoprolol), non-insulin dependent diabetes mellitus, hereditary haemochromatosis, IHD: anterior STEMI 2012 managed with PCI, dilated cardiomyopathy, IgA paraproteinaemia and Barrett's oesophagus. She had been discharged from hospital 5 days prior following conservative management of acute cholecystitis. Pertinent laboratory investigations revealed a sub-therapeutic INR of 1.2 (target 2.5-3.5), cholestatic liver function tests and raised inflammatory markers.
Clinical diagnosis of acute-on-chronic limb ischaemia was confirmed on CT angiogram of the lower limb, showing complete occlusion of the right common iliac, external iliac and internal iliac arteries, superficial femoral artery, popliteal, anterior tibial, posterior tibial and peroneal arteries. She underwent right femoral and popliteal selective embolectomy (along with 4 compartment fasciotomy) with perioperative unfractionated heparin infusion.
Post-operative complications included episodes of fast AF and difficulty maintaining therapeutic anticoagulation.
Discussion:
This case highlights the importance of appropriate anticoagulation in the perioperative period, particularly in the setting of valvular AF. It emphasises the utilisation of different methods of anticoagulation and their appliance to clinical practice. With regard to current literature, I reviewed the comparison of anticoagulation agents in AF.

A two-month audit examining patient transfers from a model 4 to model 2 hospital

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Background:
Transfer of patients between hospitals is dictated by differing expertise capacity among facilities and patient preference. Since the implementation of the Acute Medical Programme (AMP) in 2011 there has been a clear delineation of hospital services established on the facilities, resources and local factors. In line with the AMP, model 2 hospitals provide in-patient diagnostics and rehabilitation for low-risk medical patients. A bi-directional patient flow between hospitals according to patient needs exists.
Methodology:
We conducted an observational study evaluating consecutive patient transfers from a model 4 hospital to a model 2 hospital for eight weeks during the months of August and September 2016. Information was collected from patient records: age, presenting complaint, investigations and treatments required on site, estimated length of stay and use of multidisciplinary team.
Results:
72 patients were admitted to the model 2 hospital. The median age of the patients was 77years (64.5-86 years). The most common presenting complaint was infection, accounting for 42% of all admissions. Over 80% of patients received basic diagnostic tests including X-ray and blood analysis. 30% of patients presenting with neurological complaints required a CT brain scan in model 2 hospital. On arrival 1/3 of patients required CT or MR imaging. 77% of patients admitted availed of allied health professional input; 89% of allied health care provided involved more than one specialty.
Conclusion:
Many of the patients transferred to the model 2 hospital were complex elderly patients (median age of 77years) with many co-morbidities and significant social issues. This is reflected in the high usage of higher-level diagnostic tests and AHP care use. With our ageing population the demands on a model 2 hospital will continue to grow. This study will help inform refinement of policy and resources for the future.

A Rare Case of Granulomatous Angiitis of the CNS presenting as Rhomboencephalitis

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A 58 year-old right-handed female presented to ED with a bifrontal throbbing headache preceded by visual disturbance and associated with nausea, vomiting, photophobia and confusion. With a background of migraine with aura, she was discharged home following normal bloods and CT brain. She represented nine days later with persistent headache, vomiting, worsening confusion, word-finding difficulties and rambling speech. Medical team on call commenced acyclovir for possible encephalitis. Neurology consult was obtained who found her to be encephalopathic with mild right facial droop, generalised hyperreflexia with Hoffman's reflex and crossed adductors bilaterally. Gait was ataxic. Constructional apraxia was evident on clock-drawing.
Lumbar puncture revealed a mononuclear lymphocytosis, with increased CSF protein and ACE. Bloods were significant for an SIADH and ESR 29. MRI Brain showed hyperintensities in the brainstem, frontal white matter and both thalami. She was treated empirically with IV methylprednisolone, showing improvement. Serial MRIs revealed progression with small acute infarcts and pontine haemorrhage. Transoesophageal echo detected a patent foramen ovale with right-to-left shunt and aneurysmal septum. She was commenced on dual anti-platelets and discharged on tapering steroids.
She represented after weaning steroids with headache associated with vomiting, facial droop, dysarthria and confusion, requiring retreatment with IV methylprednisolone. MRI brain showed increase in bilateral white matter lesions and perivascular enhancement with several small acute infarcts. Following normal cerebral angiogram, a brain biopsy

was obtained, which showed non-necrotising granulomatous angiitis consistent with primary angiitis of CNS. Cyclophosphamide was initiated as per CYCLOPS protocol. She has since improved.
Granulomatous angiitis of the CNS is a rare vasculitis of unknown aetiology[1]. Clinical presentation includes stroke, seizures, encephalopathy and headache. A diagnostic challenge that requires a high degree of suspicion, it is rapidly fatal without treatment and often only diagnosed at autopsy[2]. Laboratory studies, neuroradiology and angiography are inadequate for diagnosis, requiring tissue confirmation[1].

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An Audit of University Maternity Hospital Limerick's Perinatal Mental Health Referral Pathways

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Background: Psychiatric illness is a leading cause of morbidity/mortality in the perinatal period. The National Institute for Health and Clinical Excellence (NICE) and the Royal College of Obstetricians and Gynaecologists (RCOG) both recommend locally defined referral pathways from maternity services to mental health services, alongside training in perinatal mental health for maternity staff.
Objectives: To assess knowledge of current referral pathways from University Maternity Hospital Limerick (UMHL) to local mental health services and to assess levels of training in accordance with RCOG & NICE guidelines.
Design/Methods: An anonymous 6-part questionnaire with Yes/No answer options was circulated to all obstetric doctors, antenatal and postnatal midwives in UMHL. Theatre and labour ward midwives were excluded as they generally do not refer to psychiatric services. In total, 19 Doctors and 36 Midwives participated.
Results: 21% of doctors vs 55.6% of midwives were aware of referral pathways to mental health services (χ^2=6.019, p=0.014). Only 38% of postnatal midwives were aware of these pathways in comparison to 78.6% of antenatal midwives (χ^2=5.546, p=0.019). 47% of doctors and 55.6% of midwives know how to access mental health services. Only 47.6% of postnatal midwives know how to access these services in comparison to 71% of antenatal midwives. 26% of doctors and 8% of midwives reported ever receiving training in perinatal mental health issues.
Conclusions: There is a clear lack of knowledge among doctors and postnatal midwives, in particular, of referral pathways from UMHL to local mental health services. There is insufficient knowledge on how to access mental health services, in addition to lack of education in perinatal mental health issues among UMHL staff. Clarification will be sought from local mental health services regarding specific referral pathways. Based on this we will run perinatal mental health training for doctors and midwives followed by a re-audit in 6 months-time.

An Audit on the Use of IV Iron Infusions in St. John's Hospital in 2016

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Introduction:
Anaemia has been shown to be a public health problem with significant adverse health consequences [1]. Intravenous iron offers a rapid means of iron repletion and is superior to oral iron in many circumstances [2]. Ferinject (ferric carboxymaltose) is generally preferred in St. John's Hospital (SJH) over other preparations for its shorter transfusion time, higher elemental iron equivalency (1g), and lack of need for a test dose [3].
Aims:
(1) To investigate if patients were appropriately worked up for Iron Deficiency Anaemia (IDA).
(2) To calculate if correct dose of Ferinject was given.
(3) To see if follow up was organised, if required.
Materials and method:
This is a retrospective study on all administrations of Ferinject over a two month period (Jul-Aug 2016) in SJH.
We gathered the following data: Hb, MCV, MCH, haematinics, ferritin, weight, blood film report, as well as information on oral iron prescriptions and recent RCC transfusions.
Results:
32 patients received Ferinject in this period.
25 (78.1%) of these had confirmed IDA based on: low Hb, low serum iron, low ferritin, high TIBC, low transferrin saturations, and blood film showing microcytic and hypochromic cells with absence of target cells [4].
31 (96.9%) of patients received the correct dose of Ferinject initially, however only 7 of the 20 patients (35%) requiring further Ferinject were properly followed up according to SPC [5] recommendations. 4 (13.3%) patients had been prescribed oral iron before receiving Ferinject.
Conclusion:
From the data we can conclude that physicians are good at recognising and treating IDA, although it remains important to fully investigate a patient to outrule other causes of anaemia (B12, folate, thalassaemia, etc…). The number of patients receiving adequate initial doses was excellent, showing that a relatively expensive drug was not overprescribed. However, a role for education and awareness in follow-up exists based on the data.
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A Case Report on the Presentation and Differential Diagnosis of a Cold Abscess

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MP is a 38 year old gentleman who presented to University Hospital Waterford Emergency Department with a two week history of left flank pain, fevers, chills and vomiting with associated weight loss of two stone over a six week period. The patient also had a cough productive of green sputum present for three weeks. In terms of relevant negatives, there was no recent foreign travel, no sick contacts, no intravenous drug use and no antibiotic treatment prior to admission.
There was no medical history of note. He was on no regular medications and has no known drug allergies. There was nothing of relevance in his family history.

MP's social history was significant for a 25 pack year smoking history. He consumes 8 units of alcohol per week. Currently he works as a machine driver and denies any occupational asbestos exposure. He lives with his partner and has no children.
On examination MP appeared cachectic. There was globally reduced air entry of the lungs on auscultation that was worst at the left base. He had a boggy, tender mass over the left renal angle on palpation of the abdomen. MP's bloods showed a raised ALP, Gamma GT, CRP, white cells and platelets. He was hyponatraemic and also had a low Hb. A lactate was 1.2. A CT-TAP showed a necrotic lesion in the left lung base. There was a suspicious nodule in the liver. A left flank collection was seen relatively superficially.
This case had a wide differential diagnosis including TB, HIV or primary lung malignancy. Clinically the collection was a cold abscess.
Management initially included out-ruling the above causes. Ultrasound guided drainage of the abscess under Interventional Radiology was performed. As per Microbiology advice MP received 4 weeks of high dose IV benzylpenicillin followed by 6 months of oral Amoxicillin.

"Steth-O-Cope" – an iterative and collaborative approach to the development of an application designed to support interns

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Background: Research has consistently found that high percentages of interns feel under-prepared to begin working in a hospital and lack the skills necessary to perform their job, particularly in acute care situations. Protocols and check lists can be useful tools to facilitate decision making and communication.
Aim: To identify the "ward calls" that interns find challenging and to develop an application to support preparation and decision making when assessing unwell patients.
Methods: A questionnaire circulated to WNW interns(response rate 45%) and a focus group identified 14 common topics involving the assessment and management of unwell patients, that interns are called to review.
A team of interns, NCHDs and educationalists formulated a series of stages and actions for the intern to work through upon receiving a ward call: *Prepare, Assess, Fact Find, Manage.* A collaborative approach with review cycles and collation of feedback was used before final sign off on content by senior expert clinicians. Additional evidence based practice protocols and guidelines were sourced to support each topic.
Results: The Steth-O-Cope application, built with 14 initial ward calls covering topics such as high temperature, abdominal pain, fast heart rate, shortness of breath, was tested on intern users($n = 10$) and revisions made to reflect feedback. The beta version was developed with additional functionality added such as a task creation section and the ability to set reminders while the gold version will be developed for Android and launched on the Google Play Store in January 2017.
Conclusions: The adoption of an evidence based, iterative and collaborative approach to the development of the support application Steth-O-Cope is one of the strengths of this application. The pilot research informing the content was critical in ensuring the application addressed intern training needs. User rate and feedback will be collated using Google Analytics in 2017.

A Case of Drug Induced Liver Injury

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Case discussion: 59-year-old lady presented to the ED with acute right upper quadrant abdominal pain on a background of deranged LFTs and cholelithiasis. The pain was 10/10 in severity and associated with vomiting & 'dark' urine. She denied any change in bowel habit, chills or fevers. She was a non-drinker. On examination she was jaundiced, there were no other abnormal findings. Her medications included; nitrofurantoin, solifenacin, paracetamol & NSAIDS; dexketoprofen, naproxen and celecoxib.
On admission, her LFTs revealed cholestasis (GGT 339, ALT 952, ALP 229, Bili 105) with evidence of synthetic dysfunction (Albumin 32, INR 1.6) which had worsened from her baseline. An ultrasound and MRCP suggested the possibility of a Mirizzi Syndrome. An ERCP was within normal limits. At this point, an intrinsic liver disease was felt to be the most likely aetiology. A non-invasive liver screen was non-contributory. She then proceeded to a transjugular liver biopsy (due to coagulopathy) which revealed mixed patterns suggestive of a drug-induced liver injury. While awaiting biopsy result, she decompensated with ascites. Repeat ultrasound & CT findings were consistent with cirrhosis and portal hypertension.
A medication compliance history revealed that she had been taking nitrofurantoin since 2011 for UTI prophylaxis. Nitrofurantoin is associated with chronic liver injury in 1/1500[1]. This combined with an idiosyncratic adverse reaction to NSAIDs (link with liver injury in 1-10/100000 prescriptions[2]) which she had taken in the weeks prior to her admission is thought to have caused an acute-on chronic liver injury.
Her ascites was managed medically with diuretics and the offending drugs were discontinued with some resolution of underlying liver biochemistry. She was subsequently discharged for close outpatient monitoring.
Discussion: This case highlights the importance of regularly reviewing a patient's medication history. It is important to investigate the underlying cause of conditions such as UTIs to minimise prolonged and potentially indefinite treatment which can cause adverse effects.

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X-ray Interpretation – The Intern On-call

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Abstract
Background: Interns on-call (IOCs) are frequently asked to interpret x-rays without an accompanying radiologist's report. Aims: The aim of this study is to assess the level of basic x-ray interpretation training in medical schools and interns' degree of confidence interpreting such x-rays whilst on-call and without radiology reports. Methods: A questionnaire was distributed to interns in the Mid-West Intern Network (n=50). The questionnaire explored methods of teaching used and satisfaction levels with teaching of basic radiology in medical schools. Additionally, the level of confidence interpreting basic, commonly-encountered x-rays (especially chest and abdominal films) on-call and interns' receptiveness to further formal radiology teaching as part of the intern training programme were considered. Results: The response was 76%. All Irish medical schools and one British school were represented in the study. 38% of respondents reported some formal training in radiological interpretation at medical school. 27% reported no formal training, whilst 59% encountered radiological interpretation as merely part of problem-based learning or clinical skills sessions. 97% of interns have been asked to interpret an x-ray whilst

on-call and without a radiologist's report. 13% are confident interpreting these x-rays. Identifying correct nasogastric tube (95%) placement and identifying lobar pneumonia (71%) on chest x-rays are the most confidently interpreted x-rays by IOCs. 26% are confident interpreting abdominal x-rays. 100% of IOCs questioned believe they would benefit from further x-ray interpretation tutorials. Abdominal x-ray interpretation is the x-ray type most-requested for further training (55%). Conclusion: The level of and methods of radiological interpretation teaching in medical schools appears to vary considerably. 97% of IOCs have been asked to interpret x-rays whilst on-call and without a radiologist's report, but only 13% are confident in doing so. 100% of interns feel they would benefit from further formal teaching.
Key words: Medical school • Intern training • Radiology • X-ray Interpretation

Mesenteric Ischaemia – An Atypical Presentation

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Introduction: A case of Mesenteric Ischaemia, admission was due to left scapular pain.
Case Description:
Mr MR is a 64 year old gentleman, referred to AMNCH by his GP with a 2 day history of moderate left scapular pain radiating down left arm, and mild periumbilical pain, on a background of a 45 pack year smoking history, 80 units of alcohol weekly, hypertension and hypercholesterolaemia. There were no cardiac symptoms, and no bowel symptoms.
Physical exam was unremarkable.
Initially he underwent investigation of his shoulder pain - MRI C-spine showed cervical spondylosis, and disc protrusion at C6/C7, giving a working diagnosis of radicular pain.
The abdominal pain worsened, became constant, and was exacerbated by eating. His lactate was 2.2. A surgical review suspected chronic pancreatitis/mesenteric ischaemia, prompting a CT Angiogram, showing obstructing thrombus in the SMA and stenosis of the coeliac trunk. A diagnosis of mesenteric ischaemia was made.
The vascular team started an unfractionated heparin infusion.
Day 11 post admission, the patient had an ileomesenteric bypass to the superior mesenteric artery from the left common iliac artery, using the left long saphenous vein.
Post-operatively he remained on the heparin infusion, and Clopidogrel 75mg was started. An episode of bilious vomiting was the indication for a CT 3 days post-op. The findings were suspicious for mesenteric ischaemia. The patient was clinically stable, however, and conservative management was advised
His heparin infusion and Clopidogrel were discontinued, and Warfarin was commenced.
On day 8 post-op, MR tolerated a light diet, progressed well, and was discharged 26 days post admission.
Discussion
This case illustrates the value of a complete history and the vital role that Radiology plays in the diagnosis and intervention in a case of mesenteric ischaemia, as timely intervention is crucial.
A turbulent tackle : A novel surgical approach to a rugby related jejunal perforation
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Introduction:
Viscus perforation in the context of blunt-force abdominal trauma is in itself a rarity. Within a sporting context, it is especially rare. Herein, we report a novel laparoscopic surgical approach to the management of a traumatic jejunal perforation sustained through a shoulder blow on the playing field in a previously fit and healthy 28-year old.
Description
A 28-year old gentleman with no significant medical history presented to Emergency Department with severe left sided abdominal pain and vomiting following abdominal trauma during a rugby match. Clinical examination revealed localised left-sided peritonism. The patient was afebrile and haemodynamically stable throughout. CT imaging demonstrated tiny foci of free air adjacent to a focal segmental thickening of the jejunum distal to the ligament of Treitz. Laparoscopy was performed which revealed evidence of an early adhesional mass forming in the left upper quadrant. An extensive washout was undertaken and a wide-bore free drainage system was placed along the left paracolic gutter. An immediate symptomatic response was noted in the post-operative period with near complete resolution of pain and full mobility the next day.
Conclusion/ Treatment
Rugby union is increasing in physicality both in the professional and amateur arena leading to a wide spectrum of potential injury. Our case highlights laparoscopy as a safe and effective treatment modality for hollow viscus perforation. To our knowledge, the washout and drainage technique has yet to be described in the context of a sporting injury as shown in our report.

An Unusual Case of Mumps

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Introduction: The mumps virus causes an acute, self-limiting viral syndrome. Prior to the introduction of the MMR vaccine in Ireland (1988), mumps primarily affected the paediatric population. However, almost all of the elderly population would have been exposed to the virus and thus would be expected to have immunity.
Case presentation: An 84-year-old female nursing home resident presented to her GP with a one day history of unilateral facial swelling, with associated nausea & vomiting. Apart from attending hospital for an outpatient x-ray 9 days prior to presentation, she had no known exposure to sick contacts. Vaccination history: flu and pneumococcal vaccines administered as per national guidelines. Examination revealed an enlarged and tender parotid gland. There was a high clinical suspicion of mumps, however the patient was treated with oral co-amoxiclav to cover for possible bacterial infection and paracetamol PRN. IgM serology sent in the convalescent stage of the illness confirmed the diagnosis of mumps. The patient's symptoms improved significantly within the first week. Droplet precautions were used by the nursing home staff & the patient did not have any contact with other residents. No other residents were infected.
Informal contact tracing performed by the GP did not reveal any source of the infection amongst nursing home staff, their families or visitors to the nursing home.
Discussion: This case highlights an unusual presentation of mumps. Mumps is highly infectious and spreads rapidly among susceptible people living in close quarters. Control of transmission is challenging since the virus is present in saliva days before clinical parotitis occurs and viral shedding can occur in asymptomatic individuals. In instances such as this case, droplet precautions are recommended. (1)
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NCHD Prescribing in the Mater Hospital

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Aim: To reduce prescribing errors by examining what drugs NCHDs prescribe, how efficiently and under what circumstances.
Methods: a working group comprised of 1 consultant, 7 NCHDs and 3 pharmacists discussed possible factors contributing to prescribing error in MMUH and potential solutions were generated.
Data were collected on the types of drugs prescribed by NCHDs during a single working day, whether they were prompted to prescribe these and the time taken to prescribe. Four data sets were taken during normal working hours, two during on call shifts.
Results: Data on 36 prescriptions were collected of which 11 were discharge scripts and 25 hospital drug charts. 11 prescription were issued while on call (of which, four were rework prescriptions). 75% of the prescriptions were prompted by another person: this varied significantly between intern and SHO prescribers, with 94% of intern prescriptions being prompted compared to 60% of SHOs. Nursing staff were the commonest prompters, alerting NCHDs in 48% of prompted prescriptions; including all prescriptions by on-call interns. Another doctor was consulted in 27% of prescriptions; in 5.4% of cases a hospital protocol or book was consulted.
The commonest drugs prescribed were analgesics (16%), anticoagulants (13%), insulin (8.5%) and antibiotics (5.5%).
Factors identified as contributing to error included difficulty accessing relevant information, pressure to prescribe quickly and interruptions while rewriting Kardexes. Possible improvements ranged from Kardex alterations (eg. a page for anticoagulation) to enabling remote access to prescribing info throughout the hospital.
Conclusions: We have highlighted a number of issues with regards to NCHD prescribing. Solutions identified to reduce medication errors and improve prescribing efficiency include increasing remote access to information, addressing the time spent on call doing re-work prescriptions and lending further support to interns. All parties agreed electronic prescribing should be the ultimate goal.

A Case of Acute Ischaemic Stroke in an 87 Year-Old: Capturing Key Learning Points

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Introduction: This is the case of an 87 year-old female with a left middle cerebral artery infarct admitted to UHL. While ischaemic stroke is a common condition, this case captures several important practical medical as well as ethical issues. It highlights key learning points regarding the prevention and management of ischaemic stroke and end-of-life care.
Case description: A previously well, 87 year-old female living independently in sheltered accommodation, with a history of asymptomatic atrial fibrillation treated with aspirin, was brought into the Emergency Department after being found on the floor of her unit, possibly having been there for 24 hours. On admission, the patient had a GCS of 11, right hemiplegia, her gaze was deviated to the left and she had marked expressive and receptive dysphasia, and dysphagia. The picture was further complicated by respiratory distress due to pulmonary embolism, rapid atrial fibrillation and aspiration pneumonia. While the exact time of her collapse was unknown, it was beyond the time limit for IV thrombolysis and IA thrombectomy. Over the course of three weeks in UHL, the patient slowly stabilised, with improving consciousness and cardiorespiratory function, a partial recovery in swallow, but with persistent right hemiparesis and severe speech and language difficulties. After discussion with next of kin, she was discharged to a nursing home with a “Not For Resuscitation” status.
Discussion /conclusion: This case highlights key learning points relating to the prevention and management of ischaemic stroke; more specifically, the management of a major predisposing factor such as asymptomatic atrial fibrillation and the overall approach to acute stroke therapy and its timing. The treatment of stroke complications such as pulmonary embolism (and its associated risks), infection, swallowing and speech are discussed. Finally, ethical issues and decisions regarding resuscitation status and end-of life care are highlighted.

Where Eagles Dare: An Interesting Case of Eagle Syndrome

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Eagle syndrome, which is due to calcified stylohyoid ligaments or an elongated styloid process, may manifest as chronic throat pain or classically, with pain on swallowing or flexing the neck laterally. These symptoms are thought to be due to either arterial or cranial nerve impingement. The use of modern imaging modalities that allow for 3D reconstruction have aided the diagnosis enormously. We present a patient who sustained blunt trauma to the neck during a sports related injury. He presented to ED with dysphagia and throat pain worsening over a number of days. He was admitted to the ICU for close observation given his high risk airway. Plain film X-rays delineated air in the retropharynx, further confirmed by CT. His CT demonstrated bilateral calcified stylohyoid ligaments resulting in a ring of bone at the superior aspect of his larynx. He had a fracture at the stylohyoid junction, likely resulting in posterior laceration of the pharyngeal wall. He was treated conservatively and made a full recovery. This likely would not have occurred without his anatomical curiosity. Treatment options, the current stance in the literature as well as 3D reconstructions of our case are discussed.

Panton-Valentine Leukocidin Staphylococcus Aureus: a Rare Disease

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Panton-Valentine Leukocidin (PVL) is a virulence factor produced by <2% of Staphylococcus Aureus. It causes skin and soft tissue infections, and severe invasive infections in otherwise healthy patients in the community, namely: necrotizing haemorrhagic pneumonia, necrotizing fasciitis and osteomyelitis.
A 23-year old male presented to the Emergency Department with a 3 day history of a large abscess on his left hand. In the preceding 4 months, he developed acute abscesses on his shoulder and groin, which were responsive to oral Flucloxacillin. The current abscess was the largest to date. There was no history of IV drug use, diabetes or recent travel.
On examination, there was a 6cm circumferential abscess on the dorsum of the left hand producing green pus, with associated cellulitis. He was systemically well.
White cell count and CRP were mildly elevated. Screening tests for immunocompromise, including HIV, were negative. X-Ray of the left hand showed no osteomyelitis. Wound swabs grew Staphylococcus Aureus.

An uncomplicated incision and drainage was performed. He was treated with oral Flucloxacillin and discharged.
At follow-up in Infectious Disease clinic, microscopy and gram stain taken at the time of incision were positive for PVL, which was Penicillin and Clindamycin resistant, and Flucloxacillin/Methicillin sensitive. Although the hand abscess had healed, he had developed a 1cm abscess on his shoulder. He reported his girlfriend had developed a similar abscess. Subsequently, a targeted history revealed the patient's risk factors included: close contact and sharing contaminated items such as towels and razors.
It was decided to proceed with decolonization. Chlorhexidine bodywash and Mupirocin topically to each nostril was prescribed. Other advice that was given included: covering infected skin with a dressing, which should be changed regularly, regularly wash hands and wash towels daily in hot water.
At follow up post decolonisation, the abscess had fully healed and he had no recurrences.
This case describes a rare case of a PVL infection in an immunocompetent patient, and illustrates the importance of an early diagnosis.

Are we failing both the patient and the newly qualified doctor?- Interns experience of consenting in Ireland

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Appropriate informed consent is a cornerstone of good Medical Practice as defined by The Medical Council[1].We performed a survey of Interns in Ireland. Objective: to ascertain Interns' experience seeking consent and adherence to Medical Council guidelines.
An anonymous survey was distributed to all interns.192 responded. 89.1% consented for surgery regularly.91.8% were expected to consent and 66.7% felt under pressure in doing so.63% agree that they should be consenting given adequate training, but only 1.2% received training on consent as interns, with 64.9% receiving training in university.
Medical Council guidelines state"As the treating doctor,you will have a full understanding of the procedure or treatment,how it is carried out and the risks attached to it".Our results demonstrated that 82.5% are unaware of any policy regarding consent in their hospital and 62.4% are unaware of national guidelines.The Council's Guide to Professional Conduct further states"You should not delegate any part of the consent process to an intern unless the procedure is a minor one with which the intern is very familiar and the intern's medical supervisor has clearly explained the relevant information about the procedure to them".In our study 16.4% reported senior colleagues explaining the procedure to them.None were regularly observed when consenting and 92% had never witnessed the procedure.
This study has demonstrated that current practices regarding Interns seeking consent are suboptimal.We hope this will prompt Colleges to address the deficiencies identified and enact appropriate change to ensure adherence to Medical Council's Standards of Practice and enhance patient safety and quality of care.
[1]Irish Medical Council Guide to Professional Conduct and Ethics for Registered Medical Practitioners 8th Edition 2016.
Conflict of interest: none Disclosures: none

Under Pressure: Parastomal Hernia In Pregnancy

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Abdominal wall hernias are a common surgical problem. The increasing intra-abdominal pressure attributable to the gravid uterus means they frequently occur in pregnant women. There are however, unique challenges facing surgeon with regard to the diagnosis and treatment of parastomal hernias in pregnancy.
We present a unique case of parastomal hernia leading to recurrent bowel obstruction.
A 36-year old G1P0 female with a history of Ulcerative Colitis presented at 28 weeks gestation with abdominal pain, nausea, vomiting and reduced stoma output. This was her second presentation with signs of bowel obstruction, the first having resolved spontaneously 10 weeks previously. Clinical examination revealed a small parastomal hernia, with a small bowel obstruction diagnosed on MRI.
Conservative management was effective and she was discharged with advice to self-reduce the hernia. Two days later, she re-presented with raised inflammatory markers. Repeat MRI displayed an inter-loop abscess in the RIF.
The patient was optimized for early delivery and underwent a Midline C-Section, with delivery of a healthy male fetus. This was immediately followed by small bowel resection, refashioning of loop ileostomy, RIF drainage and repair of parastomal hernia.
Recovery was complicated with intra-abdominal collections. The patient was discharged 12 days postpartum, and her baby boy spent 6 weeks in the neonatal ICU.
This case illustrates the challenging manner that pregnant patients pose to the general surgeon.
Obstruction in pregnancy has been associated with high morbidity and mortality. Parastomal hernias are a rare cause of obstruction evidenced by a lack of case reports in existing literature.
Presentation can mistakenly be attributed to that of a normal pregnancy, delaying diagnosIs and treatment. MRI is the safest imaging modality with lowest radiation exposure. Management should be guided by gestation of fetus, and relative risk to the mother. In the 3rd trimester, hernia repair with concurrent C-section is the optimal treatment of those with a symptomatic abdominal wall hernia.

Bridging the Gap: The Management of a Complex Upper Limb Defect

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We present a patient with a composite defect of the left upper limb following a road traffic accident. Reconstruction of a major nerve injury and complex soft tissue defect are discussed.
An 18 year old, right hand dominant, leaving certificate student was a front seat passenger in a single vehicle collision. He sustained an isolated left upper limb injury with an open humerus fracture and large soft tissue defect on the posterior aspect of the elbow and ulnar side of his forearm. Open reduction and internal fixation of the humerus and debridement of the wounds was initially performed. A left ulnar nerve defect of 9.5cm was identified. The soft tissue loss measured 15cm by 9 cm and there was open communication with the elbow joint. Forty eight hours later the patient underwent definitive reconstruction. This involved sural nerve grafts and a free anterolateral thigh flap. The patient was discharged from hospital 10 days later with a plan for intensive physical and occupational therapy.
Discussion
Modern major trauma care requires a timely, coordinated, multidisciplinary team approach. Complex composite defects pose significant reconstructive challenges. The case we describe required both Orthopaedic and Plastic/Reconstructive specialities, nerve grafts and free tissue transfer to

ensure an optimal patient outcome. Various options for reconstruction of such severe injuries are discussed.

Audit into the Appropriateness of Brain CT Scan requesting for Minor Head Injuries in the Emergency Department

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Abstract
ntroduction: Intracranial Haematoma is a recognised complication of trauma related minor head injuries. Computed tomography (CT) remains the imaging modality of choice in patients presenting to the emergency department (ED) with a head injury to exclude intracranial bleeding. The aim of this audit was to review appropriate use of brain CT imaging in the ED and assess compliance with the National Institute for Health and Care Excellence (NICE) and Canadian CT Head Rule head rule (CCHR) head injury clinical guidelines.
Methods
All CT brain scan requests made by ED doctors over a one month period (August 2016) were identified. Charts were reviewed for a total of 41 patients who underwent brain CT scanning. The CCHR and NICE clinical guideline 176 were used as the standard of care. Data from the 41 patients was collected to perform a retrospective audit to assess which patients qualified for a brain CT by fulfilling one or more criteria from either guideline or from both.
Results
36 patients who underwent brain CT imaging were identified. The average age of the patient sample was 55 years with 20 male patients (55.5%). At least one of the NICE guideline criteria and one of Canadian Ct head Rule criteria was fulfilled in 94.4% of patients who underwent brain CT imaging. 2 patients did not meet criteria for either guideline. 1.32 of the NICE criteria and 1.29 of the CCHR criteria were fulfilled on average.
Discussion
ED consultants appropriately refer patients for brain CT scans following minor head injuries and adhere to NICE and Canadian head injury guidelines.
Conclusion
Utilisation of guidelines in the ED can help doctors effectively identify patients who would benefit from brain CT imaging in a trauma setting while allowing doctors to safely discharge patients who do not fulfil imaging criteria.

Respiratory Syncytial Virus - A severe case of Community Acquired Pneumonia

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A 76-year-old man was admitted under Medicine for the Elderly with dyspnoea, low oxygen saturation levels, and loss of consciousness. His past history included an STEMI in 2006, Atrial Fibrillation and previous episodes of pneumonia. He was worked up for community-acquired pneumonia, and a possible PE. His CT brain was normal.
On day three of his admission, he became acutely unwell in the early hours of the morning, with a troponin rise, right sided chest pain, fast A. Fib, respiratory distress and non specific T wave changes. A diagnosis of NSTEMI was made. Repeat CXR showed progression of his pneumonia to ARDS. Echocardiogram showed an ejection fraction of 20-25%, with a BNP of over 20,000. His antibiotic regimen was escalated and he was transferred to the ICU.
While there he began requiring increasing levels of Noradrenaline to maintain his blood pressure. He was started on Dobutamine, which was stopped due to an episode of unstable A fib. His A.Fib resolved after two DC cardioversions, and was further treated with Amiodarone infusion. One week after his admission he was diagnosed with severe RSV infection. Unfortunately, he failed to make any significant recovery in ICU, with increasing Oxygen and Noradrenaline demands. He passed away on day 8 of his admission.
This case illustrates the severity of RSV pneumonia in the elderly population, as well as our current inability to actively treat RSV infections in at risk populations. While palivizumab has been employed in at risk paediatric groups for passive resistance, there is as yet no vaccination available for at risk elderly people[1], who are frequently unable to mount an appropriate immune response. A recent study in The Netherlands proved that RSV vaccination would be cost effective, particularly if applied to high risk groups[2].

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Peritoneal tuberculosis – The Great Pretender

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Introduction
Peritoneal tuberculosis is an uncommon extrapulmonary site of mycobacterium tuberculosis infection. It typically occurs following reactivation of latent peritoneal foci previously spread from a primary lung lesion[1]. Onset is insidious, and symptoms may be ongoing for months prior to presentation, making diagnosis challenging. A high index of suspicion is required, particularly in patients from high risk areas.
Case Presentation
We present the case of a 32 year-old lady from Afghanistan who presented with a two week history of abdominal pain and pyrexia. Physical examination was significant for left iliac fossa tenderness. Mantoux and Quanteferon tests were positive for tuberculosis. She was found to have a raised CA-125 (120U/mL). Chest x-ray demonstrated an old calcified granuloma in the right lung, while pelvic ultrasound revealed fluid in the Pouch of Douglas. Subsequent computed tomography revealed ascites with peritoneal nodularity and a 4cm rim calcified structure in the right adnexa. Differential diagnosis was between that of peritoneal tuberculosis and ovarian carcinoma. Laparoscopy was performed, and extensive pelvic adhesions were seen, most consistent with ovarian carcinomatosis. Although Zeihl-Neelson stain was negative, biopsy results revealed florid, well defined granulomas and no evidence of malignancy. The patient was commenced on empiric treatment for tuberculosis on the basis of biopsy results.
Conclusion
Peritoneal tuberculosis presents clinicians with several diagnostic and treatment challenges. Clinical presentation may resemble that of intraabdominal malignancy, and alterations in tumour markers may further confound diagnosis[2]. Disappointingly low yield of Ziehl-Neelson staining, and delay in tissue culture reports provide further difficulty with timely diagnosis[3]. Peritoneal biopsy is useful as results are often prior to mycobacterial cultures being available.

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NMDA Encephalitis, A Case Study

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Abstract
A fifty two year old female patient was transferred from a psychiatric hospital, with a two day history of acute confusion and unsteady gait. Her background was significant for chronic depression. Neurological examination revealed disorientation and ataxia.
Routine blood investigations including FBC, CRP, U/E and LFTs were normal. CT brain and MRI brain studies were unremarkable. A lumbar puncture was performed which showed lymphocytosis (WCC 1st bottle 103, 3rd bottle 45) and a raised protein level (87). No organisms were seen. Treatment was started with IV acyclovir which was discontinued after three days because of acute kidney injury.
The patient developed worsening encephalopathy with confusion, anxiety and upper limb cerebellar signs on examination. Aciclovir was restarted and renal function was monitored closely. Evaluation for other causes of encephalitis was performed. Serum Anti - Hu, Yo, Ri, VGKC, ANA, ENA, ANCA, PR3, myeloperoxidase, and GBM antibodies all returned negative. HSV PCR also returned negative.
Two weeks into admission the patient had two grand mal seizures and was commenced on phenytoin and levetiracetam. MRI Brain was repeated and showed high signal in the medial temporal lobes bilaterally with extension into the right thalamus indicating progressive encephalitis. EEG studies showed periodic lateralised epileptiform discharges.
Lumbar puncture was repeated and CSF samples were sent to Oxford University laboratory for further evaluation. Serum and CSF NMDA receptor antibodies returned positive which confirmed the diagnosis of NMDA encephalitis. Treatment was commenced with high dose intravenous steroids, IVIg and later plasma exchange.
The patient has shown a significant clinical improvement after five sessions of plasma exchange to date manifest by being orientated in time and place and walking with assistance. Investigations continue to out rule possible underlying malignancy such as ovarian teratoma.
NMDA receptor antibody needs to be considered as a cause of encephalitis where other aetiological causes have been investigated. NDMA only accounts for 4% of cases of encephalitis[1] but effective treatment yields successful outcomes in the majority of cases.

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Stroke at 16 years old – An unusual presentation and aetiology

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Introduction
Protein C deficiency has an estimated prevalence of 0.2-0.5 percent(1). The incidence is increased tenfold in patients with venous thromboembolism(2). These individuals are more likely to develop thromboembolic events earlier in life compared to the general population(3). The risk of arterial thrombosis and stroke is less certain, however considering the devastating effect stroke may have, thorough investigation is still warranted(4).
Case Discussion
We present the case of a previously healthy 16 year old male, who presented with acute onset expressive dysphasia and right sided weakness. CT angiogram of brain demonstrated a left middle cerebral artery thrombus, with subsequent magnetic resonance imaging confirming a left basal ganglia infarct. His motor symptoms had resolved entirely at this point. Further history revealed he had undertaken a strenuous rugby training session the previous day. Extensive laboratory and radiological investigations followed including a Transcranial Doppler with Bubble Study. This demonstrated a small patent foramen ovale with a degree of shunting. Furthermore, haematological testing revealed mild Protein C deficiency, with a reading of 59 U/dL. The patient has made an excellent recovery, with only slight deficits in higher level speech.
Conclusion
One of the proposed mechanisms in this case is that a Valsalva Manoeuvre during rugby training allowed the small patent foramen ovale to open, allowing a paradoxical embolus to occur. Protein C deficiency alone has not been shown to increase risk of arterial thrombus but it may be a factor in the presence of a PFO particularly in this case where no other aetiology has been found.

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An Audit of epilepsy care in a Tertiary Irish Paediatric Neurology Unit

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Background: Epilepsy is the commonest treatable life threatening neurological disorder in childhood. Management is complex and requires a team approach. We generated a series of standards and evaluated our care over a two year.

Methods: We identified patients through a retrospective analysis of medical records sourced from an EEG database [N = 3847] and selected children with EEGs performed in 2014 and 2015 [N= 1958]. Search criteria for specific epilepsy syndromes were implemented with removal of duplicate entries [N = 193]. Our data collection instrument comprised of 7 statements on which to gauge quality of care. These were a combination of recommendations from the 'NICE Quality Standards for Epilepsy 2013' and local departmental standards. Cases were assigned

either a 'pass' (P) or 'fail' (F) based on passing a standard of ≥ 80% conformity.

	Pass	Fail	
1. Children presenting with suspected seizure - seen with 4 weeks	42%	58%	**
2. Children have EEG within 4 weeks of request	38%	62%	**
3. Children (a) seen by an epilepsy specialist nurse	43%	57%.	**
(b) had contact with epilepsy nurse specialist	88%	12%	*
4. Written and agreed comprehensive care plan in nurse records	57%	43%.	**
5. Structured review with epilepsy specialist at least annually	85%	15%	*
6. 1st line therapy for the epilepsy syndrome used appropriately	100%	0	*

Quantative assessment of Radiology reporting: how often is the question relating to the indication for the procedure directly answered in the report conclusion?

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Background & Aim: Radiology is a core part of the diagnostic process, providing clinicians with an expert opinion. When in the request a clinical question is posed, a specific answer should always be given in the report. There is research to show that many doctors may not read the report in full and skip straight to the conclusion. As a result, we wish to audit the rate at which this question is directly answered in the conclusion of the radiology report in SVUH.
Standard to which practice was measured: Wallis A, McCoubrie P. *The radiology report–are we getting the message across?* Clin Radiol. 2011 Nov;66(11):1015–22.
Methodology:
Start date: 30/11/2015
Finish Date: 01/12/2015
Chosen Population: A sample of 91 CT reports
How sample was selected: We examined 91 reports that appeared on PACS in chronological order starting from 00:00 on 30/11/2015
Retrospective Audit
Sample Size: 91
Tool used: Excel
Results: 88/91 reports answered the clinical question directly in the conclusion. 3/91 reports did not answer the clinical question directly in the conclusion. In all of these cases, the clinical question was answered in the body of the report and an alternative diagnosis was offered in the conclusion.
Conclusion: The CT reports reviewed in this audit provide a direct answer to the clinical question in the conclusion in over 96% of cases. In all of the cases, the clinical question was answered in the body or the conclusion. This demonstrates excellent quality reporting in regard to answering the clinical question in this sample taken in SVUH.

A multi-perspective analysis of a peer teaching programme delivered by interns

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Purpose of study: Peer teaching (PT) has become increasingly popular. PT may offer benefits for students, tutors, and institutions. Although resistance to PT has been identified among faculty, research has typically focused on students' experiences and perceptions, rather than those of the peer tutors or senior doctors/medical faculty. The current study comprised a comprehensive, multi-perspective evaluation of a near PT programme delivered by interns to final year medical students in the Republic of Ireland.
Study design: This study employed a mixed methods design, using both interviews and questionnaires to assess students' (n=130), interns' (n=49), and medical faculty or senior doctors' (n=29) perceptions of the programme.
Results: All three groups were emphatic about the programme's benefits, although senior doctors and faculty reported significantly more positive attitudes than the other groups. Mean ratings of the programme's value, out of 10, were 8.2 among students, 8.2 among interns, and 9.1 among senior doctors and faculty. Challenges identified were largely organisational in nature. Perceived benefits for students included the informality of the teaching sessions, increased opportunities in the clinical environment, and improvements in exam preparedness. Perceived benefits for the interns included improvements in knowledge and teaching ability and experience as a role model.
Conclusions: PT programmes have been posited as an 'easy fix' to growing numbers of students. However, it is apparent that PT has substantial value outside of this. Future research that conducts economic evaluations of such programmes, and that collects objective data on teaching quality and student learning would be of much interest

An audit on the assessment of bladder and bowel continence on inpatients in the acute medical assessment unit

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Introduction: Bladder and bowel incontinence are common symptoms in the older adults admitted to a hospital and are frequently overlooked. Incontinence has major implications on a patient's life. It is associated with incontinence associated dermatitis, recurrent urinary tract infections, pressure ulcers, catheterisation, faecal impaction, falls, frequent hospitalisations, social isolation, reliance on pads, carer stress, depression and anxiety and admission to a long term care facility.
Methods: We aimed to examine whether incontinence was assessed by admitting doctors and nurses. A cross sectional analysis of medical admission notes and nursing patient assessment sheets was undertaken of inpatients to the acute medical unit on two separate days in November and December 2016.
Results: Forty patients were included in this audit with an average age of 72.25 (SD=16.3264) years, of whom 17 were females. Twelve (30%) had some form of incontinence with 91.67% having urinary incontinence, 41.67% having bowel incontinence and 33.33% having both bladder and bowel incontinence. Of those, 12/40 with some form of incontinence, 91.67% were aged > 65 years. In 50% of cases, incontinence was not documented on the admission note by doctors. Duration, frequency, management and cause of incontinence were documented in 8.3% of patients. Fifty percent of those with incontinence had documented cognitive impairment. In contrast the nursing pro-forma patient assessment sheet had 95% documentation rate of bladder and bowel continence in both the continent and incontinent patients.
Conclusion: Doctors fared worse in comparison to nurses on assessment of incontinence. It is clear that there is a need for education to highlight awareness on the assessment of incontinence.

Clinical audit: A review of breast cancer screening in young, asymptomatic high risk women

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Aims:
We assessed all referrals to screening mammography in a tertiary hospital carried out outside the BreastCheck programme over a two year period.
Methods:
We identified 617 mammograms from asymptomatic women who had been referred on grounds of increased risk (typically gene carriers/strong family histories), and assessed the BIRADS score for each, and the results of follow-up investigations. Patients were classified as moderate/high risk by the requesting clinician. Referrals for women under 30 or over 50, those with symptoms, or requests missing risk information were excluded.
Results:
325 women were aged 30-40 (62% 'high risk'), while 292 were 40-50 (63% 'high risk'). 40.1% were being screened for the first time.
93% of mammograms were classified as BIRADS 1 or 2 (normal/benign), while 1% were BIRADS 4 (suspicious). Women with BIRADs scores of 1-2 were equally likely to have repeat mammography ($p>0.5$) or an MRI ($p>0.9$) as those with ultrasound or biopsy ($p<0.35$) or to have a malignancy ($p=1$) as those in the 40-50 group. 'High risk' women were more likely to have a repeat mammogram ($p<0.0001$), ultrasound or biopsy than 'medium risk' women ($p<0.007$), but were not at a higher risk of malignancy ($p=1$). The overall cancer yield was 1% (n=6), while follow-up investigations (repeat mammography: 67%, ultrasound: 31%, MRI: 23%, biopsy: 6%) were common despite reassuring mammograms.
Conclusion: This study highlights that high risk women are subject to increased levels of investigation despite overall cancer pickup rates that are lower than in comparable studies.

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BIRADS 3-4, but less likely to have ultrasound or biopsy ($p<0.0001$ each). In women who had a biopsy, there was no difference in malignancy rates between BIRADS 1-2 and 3-4 ($P=1$), though those with BIRADS 4 scans were more likely to have a malignancy ($p<0.03$).
Women in the 30-40 group were equally likely to undergo repeat mammography ($p<0.8$),

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Statins – are patients attending our Acute Medical Unit on appropriate treatment?

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Introduction:
Patients at high risk of Cardiovascular disease (CVD) should have their risk factors actively managed. LDL cholesterol levels are correlated with this risk and can be reduced using statin therapy. High risk patients include those with CVD, including TIA, Stroke or Coronary artery disease (CAD), and Diabetes Mellitus (DM)[1].
Aims/ Objectives:
To determine whether patients presenting to the Acute Medical Unit (AMU) are appropriately treated with statin therapy.
Design/Methods:
Electronic Discharge Summaries of 183 patients attending the AMU over 2 weeks were examined to establish how many patients had CVD and DM, and how many were on statin therapy.
Results:
41 patients were on statin therapy. Of these, 8 did not have one of the above conditions (they had a documented history of 'hypercholesterolaemia').
24 patients had CAD. 22 were on a statin. 2 were not. Of these two, one had satisfactory LDL (1.3), the other did not (LDL 2.6).
2 patients had a new diagnosis of stroke. Both were commenced on statin therapy. One patient had a history of stroke and was already on statin therapy.
21 patients had a known diagnosis of T2DM. Of these, 13 were on a statin. 7 were not; of these, 5 had satisfactory LDLs (including one patient with both CVD and DM), one had high LDL (4.9) and one had no recent lipids recorded. It was unknown whether one of the patients was on statin therapy or not.
Two patients had a new diagnosis of T2DM, and both were on a statin
Conclusions:
Of the patients with CVD or DM presenting to the AMU, the majority was prescribed statin therapy and, of those who weren't, the majority of their LDL cholesterol was satisfactory. In the remainder, efforts should be made to identify these patients and commence statin therapy where tolerated.

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'Like a Backwards Crucifixion': Bilateral Brachial Plexus Injury

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Introduction:
An 82 year old gentleman was admitted to Galway University Hospital with bilateral arm weakness and loss of sensation following a complex

nighttime fall at home which resulted in his arms becoming separately caught in both his bedside locker and a rail attached to his bed. His home-help carer found him the following afternoon, describing his position between the bed and the locker as 'like a backwards crucifixion'.
Description/case presentation:
On returning from the bathroom at 2am, the patient, a single farmer, lost his balance and fell forward, with his left hand becoming lodged in a partially opened drawer of his bedside locker, and his right arm getting caught between the mattress and bed rail. For twelve hours, he remained in this position with his arms abducted and extended, his chest pointed towards the ceiling and his knees flexed and suspended two inches from the floor. He reports feeling a stretch under his axillae, and then his arms 'went dead'. The panic alarm on wrist was inaccessible as he could not free either arm.
He was BIBA to GUH A&E, with 0/5 power and 0/5 sensation in his Upper Limbs bilaterally, rhabdomyolysis and a secondary AKI. Despite extensive radiological work up, there was no indication of nerve root avulsion on either CT C-Spine, or MRI Brachial Plexus. Extensive oedema was evident on both. Nerve conduction studies identified a severe peripheral nerve injury and prognosis is likely very poor.
Discussion/conclusion:
Permanent total bilateral upper limb weakness represents a devastating injury in a previously independent farmer, and significant challenges to all involved in his care: neuropathic pain control, mobilisation assistance, rehabilitation, and not least diagnosis.

Complete Endovascular Re-Canalisation of the Aortic Bifurcation - A Case Report and Review of the Literature

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Introduction
Complete aorto-iliac occlusion is an extremely rare phenomenon, manifesting as ischaemia affecting the intestinal tract, renal system, spinal cord or lower limbs. Occurring secondary to atherosclerosis, it is often a chronic phenomenon which presents late, with blood supply to the lower limbs maintained by the formation of collateral vessels.
Case Description
Here we describe a case of a 45 year old man with a significant smoking history, who presented to the vascular clinic with a history of short distance claudication and impalpable lower limb pulses on clinical examination. Ankle Brachial Pressure Indices confirmed the presence of bilateral critical limb ischaemia, and subsequent CT angiogram revealed extensive atherosclerotic disease in the aorta causing total vessel occlusion. This case was managed by the placement of a bifurcated aorto-iliac endovascular stent. This resulted in an excellent functional outcome, leading to the complete resolution of the patient's claudication symptoms.
Conclusion
This case explores the successful management of an unusual phenomenon in a young patient by means of an endovascular approach. The aetiology, presentation, appropriate investigation and management options of total aortic occlusion will be discussed by way of a systematic review of the available literature.

Mature or immature?

A curious case of an ovarian mass in a 45 year old woman with multiple liver lesions.

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Teratomas are germ cell tumours often composed of several cell types derived from the three germ layers. They range from cystic lesions that are benign and well-differentiated (mature) to those that are malignant and solid in nature (immature).
The authors present the case of a 45 year old lady presenting with left iliac fossa discomfort. She was otherwise healthy with no significant medical history. She reported no weight loss and no change in appetite, menstrual cycle or bowel habit. Ultrasound scan revealed a left ovarian 10.4 x 8.7 x 7.7 cm dermoid cyst with a typical appearance. Further investigation with CT and MRI revealed multiple liver lesions which appeared subscapular and all contained some fat. Appearances were suggestive of previous rupture of a dermoid with peritoneal spread and deposits on the liver surface. Metastatic disease from a malignant dermoid was deemed a possibility, although this would be more likely to produce intraparenchymal liver lesions. It was thus impossible to out rule metastasis disease based on imaging alone.
Liver biopsy revealed lymphangioma. However, this also did not definitively out rule that the other liver lesions were not indeed metastatic. The case was discussed at a multi-disciplinary gynaeoncology meeting and the patient was subsequently scheduled for laparoscopic bilateral salpingo-oophorectomy combined with a liver resection under the hepatobiliary team. Post operative histology of the ovarian mass revealed a mature cystic teratoma with lesions on liver interpreted as being similar in origin. No immature tissue was noted. The patient had an uneventful post-operative course and was discharged home on day 6.
This case represents an interesting combined surgical approach and exemplifies multi-disciplinary team work as radiological, histological and surgical intervention were all required to come to an accurate diagnosis.

Investigation into the adherence of NCHD's with recommended hospital/national guidelines for blood culture sampling

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Background
Blood culture sampling is considered the gold standard for diagnosing blood stream infections and is considered an integral part of important diagnostic algorithms[1]. Positive results can guide the rationalisation of appropriate antimicrobial use and help reduce the emergence of multi drug resistant bacteria.
Aim
The objective of this study was to gain insight into whether blood culture samples taken by NCHD's in UHL are appropriately measured, in adherence with hospital/national guidelines and if educational intervention was necessary.
Method
A single survey was designed and answers collected using an online survey software. The population of interest were 50 NCHD's based in the University of Hospital Limerick. A 10 question survey was devised based on the current national guidelines from the Irish society of clinical microbiologist. The results were then analysed using standard statistical techniques to determine the knowledge level on the topic.
Results
A total of 36 NCHD's took the survey, providing a 72% response rate. The inclusion criteria was fulfilled for all participants with 100% practiced in taking blood cultures. 86% of the population were not aware of where to locate the hospital guidelines for appropriate blood culturing. Two thirds of the population did not fully understand when and how many cultures were required if a patient is already on antimicrobial

therapy but had suspected bacteraemia. 60% admitted that they have never taken samples from more than one site on a patient.
Discussion
The data collected suggests a lack of understanding around when and how often to sample a potentially sick patient. Educational intervention could resolve this, improving appropriate antimicrobial prescribing, as most culturing is completed by NCHD's. A repeat survey will be compared post intervention to determine if it was successful, ensuring no further knowledge deficits exist.

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A case of multiple renal calculi requiring a multimodal treatment approach

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The European Urological Association has established guidelines for the management of urolithiasis. However, consideration of individual patient characteristics remains paramount in deciding the most appropriate treatment modality.
A 51-year-old male presented to the Emergency Department with a one-day history of sudden onset right-sided renal angle pain radiating to the groin with associated urinary frequency, nausea and emesis. A non-contrast CT KUB showed an obstructing 4mm right vesico-ureteric junction (VUJ) calculus, an obstructing 1.5cm right pelvi-ureteric (PUJ) calculus and a non-obstructing 1.2cm calculus in the lower pole of the right kidney.
Given the acute obstruction and the large stone burden, a two-phase multimodal approach was used. For treatment of his acutely obstructing stone, he underwent a right rigid ureteroscopy, fragmentation of the 4mm calculus and JJ stent insertion.
Management of his remaining stone burden was discussed at a multidisciplinary radiology meeting. Treatment options were flexible ureterorenoscopy with laser fragmentation or percutaneous nephrolithotomy (PCNL). Due to the location of the lower pole calculus and the tight infundibulopelvic angle, PCNL was recommended. Percutaneous access was established through the right lower pole infundibulum, with an angle of tracking that enabled access to both the lower pole and PUJ calculi. He underwent successful PCNL with complete stone clearance, and was discharged three days post-operatively.
Urolithiasis is a common urological presentation and this case illustrates that the management of renal calculi can be complex. Although there are international guidelines on the management of renal and ureteric calculi, complex cases require careful consideration of individual patient characteristics, stone burden and location. Multidisciplinary team input is critical in deciding the most appropriate treatment modality.

Contraception counselling in women of child-bearing years prescribed psychotropic medication

Coen S[1], Noonan A1

ABSTRACT
INTRODUCTION: There are risks and benefits to taking psychotropics during pregnancy. A previous audit found that 17% of women of child-bearing years were counselled regarding contraception in the previous year. Following this, a form, which prompted reviewing psychiatrists to discuss contraception with patients, was placed in each file of women of child-bearing age, with the standard being that contraception should be discussed with all women of child-bearing years prescribed psychotropics. Additionally, as a health promotion measure, we aimed to discover the number of women aged 25 and over with whom cervical smears were discussed.
MATERIALS AND METHODS: Our outpatient database was used to identify all women from 18-50 years old. We examined their records to identify those on psychotropic medication, if they received contraception counselling and if 25 years old or over, whether cervical smears were discussed.
RESULTS: We identified a cohort of 78 women from 18-50 years old. 68 of 78 (87.18%) were being prescribed psychotropic drugs. Of the 68, 35 (44.87%)women were prescribed antidepressants , 26 (33.33%) a combination of psychotropics, 2 (2.56%) atypical antipsychotics, 1 (1.38%)a benzodiazepine/hypnotic, 2 (2.56%) mood stabilisers and 1(1.38%) a GABA analogue.There was documentation of contraception counselling for 25 of 68 (36.76%) women on prescribed psychotropics. Only 8 of 68 (11.76%) had contraception counselling within the last year. Of the women aged 25 and over, cervical smears were discussed with 22 of the 69(31.88%).
CONCLUSION: For 88.24% of our cohort, there was no documentation of contraception counselling in the past year. Cervical smears were discussed with almost one third of our patients aged 25 and over. As an intervention, we intend to redesign the form, and add an outpatient job description for NCHDs, which includes contraception counselling.

Pneumopericardium with Tamponade post Thoracic Surgery

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Introduction:
Pneumopericardium is a rare phenomenon that refers to a collection of air or gas within the pericardial cavity. It is most frequently associated with barotrauma in preterm infants who spend prolonged periods of time on mechanical ventilation, as well as individuals who sustain penetrating thoracic injuries.
Case Description:
PD is a 51 year old male with squamous cell lung cancer who underwent a left upper lobe sleeve lobectomy with mediastinal lymph node dissection. The patient's medical background was significant only for a solitary left kidney from birth, however he had a 20 pack year history and continued to smoke up until his diagnosis. His post-operative course was complicated by respiratory sepsis, for which he received antibiotics and non-invasive ventilation. On post-operative day 19, he collapsed on the ward. On examination, he was dyspnoeic with muffled heart sounds, a tachycardia of 142 beats per minute, blood pressure of 99/62mmHg, a fever of 39^0C and SpO_2 of 85% on room air. An ECG revealed fast atrial fibrillation and his chest Xray was significant for a large pneumopericardium with worsening pneumonia. Subsequent echocardiogram and CT thorax confirmed the diagnosis and the patient was quickly transferred to the catheterization laboratory where emergency pericardiocentesis was performed, followed by drain insertion. Symptomatic and haemodynamic improvement was noted immediately. Subsequent investigation did not yield an exact aetiology.
Discussion:
There are very few published cases of pneumopericardium in patients following lobectomy or pneumonectomy. In those described, artificial ventilation at the time of the event was common, and points of air entry were identified in the pericardium. Although often asymptomatic, once there is evidence of haemodynamic compromise in these patients, mortality is as high as 56%. This case highlights the need for vigilance in the post-operative period, as well as the importance of timely intervention in such patients.

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PFC vs Attune – functional outcomes

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Background: Total Knee Arthroplasty is now the most commonly performed elective orthopaedic procedure. However, it continues to perform significantly less well in patient satisfaction scores than Total Hip Arthroplasty, despite improvements in surgical techniques and implant design in recent decades. Patient satisfaction levels are persistently around 80-85%, and persistence of pain and poor function are reported by the majority of unsatisfied patients, and may occur despite successful surgery. The Attune (Depuy Synthes – Warsaw, Indiana, USA) Total Knee Arthroplasty system claims to improve outcomes by minimising pain and improving function
Aims and Objectives: To assess whether the Attune knee offers improved outcomes for patients undergoing Total Knee Arthroplasty.
Methods: This was a retrospective cohort based chart review of 170 patients which compared consecutive patients undergoing TKA with the PFC implant (n=80) against consecutive patients having the Attune knee implanted (n=90), with all perioperative factors being otherwise equal. Preoperative and 6-month postoperative WOMAC and SF12 scores were the primary outcome measure. Range of movement at 6 months was a secondary outcome measure
Results: As expected, both knees reported a statistically significant increase in PROMs pre vs post-operatively (p value 0.005 for SF12, 0.000 for WOMAC). The Attune knee resulted in a greater improvement of both subjective and objective PROMs but the difference between the two groups was not statistically significant. (p = 0.811, 0.087 respectively). There was a significantly larger improvement in Range of Movement in the Attune group compared to the PFC group. (p = 0.016)
Conclusions: The Attune knee gives better outcomes in terms of absolute ROM but patient reported outcomes are similar to that of the PFC knee.

Homeless Patients' Experiences in Hospital

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Introduction:
Homeless people represent 10% of medical inpatients in St James's Hospital (SJH) in Dublin. Homeless people often report negative experiences in hospitals. 40% of homeless ED attenders leave before being assessed by the ED staff, compared to only 15% of housed individuals. We sought to describe the characteristics of homeless patients and their experiences of community and hospital staff and services.
Methods:
Ethical approval was obtained and informed consent was sought verbally from all patients. Patients included in the study were interviewed about their time spent in hospital, life experiences leading up to admission and access to health services. Patients were asked what they would change and what they would like to see happen in hospital. A questionnaire with both open and closed questions was used. Permission was given for the interviews to be recorded.
Results:
10 patients were interviewed. 6 were male, 4 were female. 8/10 were currently injecting drugs. All patients reported difficulties with waiting for methadone or chlordiazepoxide while in ED. 8/10 patients reported difficulties obtaining clean clothes while an inpatient. 5/10 reported feeling that they were treated differently to other patients. Patient suggestions included provision of free televisions and improved management of drug/alcohol withdrawals..
Conclusions:
Homeless patients make up a significant proportion of presentations to the emergency department in St James Hospital and indeed of the overall inpatient population. These patients frequently have adverse experiences of care. With this study we highlight the voices of the patients, let them have their say on how they find being in hospital and what they would like to see changed in the future.

The Accuracy of the Advanced Paediatric Life Support (APLS) Paediatric Weight Estimation Formula: Time to Change?

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Introduction:
A child's weight is central to many decision processes in Paediatrics. Weight estimation formulae remain integral to pre-hospital, emergency and critical care settings, where weighing a child may not be possible. The use of the traditional Advanced Paediatric Life Support (APLS) formula [(Age+4)x2] is continued practice; however there is increasing evidence that it significantly underestimates weight. This has potential dangers in the resuscitation setting, and may increase morbidity and mortality. Current APLS guidelines provide 3 different formulae based on age; however this adds complexity in acute situations with potential for errors. The Luscombe and Owens (LO) formula [(Agex3)+7] has been validated and applies to children aged 1-15 years.
Methodology:
Data from children (n=126) attending the operating theatre was recorded, including: age, gender and actual weight. From this information, a child's weight was estimated using both the APLS and LO formulae. The accuracy of these formulae at different ages was analysed and compared.
Results:
Considerable underestimations of weight (range -5.73% to -34.78%) were noted using the APLS formula across all ages, mean=-13.51%. The LO formula was more accurate at most ages, mean=+5.19%, with any overestimates generally being small. Mean % difference from actual weight of APLS vs. LO formula was: -8.34% vs. +2.93%, -14.13% vs. +11.80%, and -28.60% vs. -2.94% at 1-5 years, 6-12 years, and 13-15 years respectively.
Conclusion:
Although sample size was small, this study conforms to current literature in that the LO formula is more accurate than the APLS formula and is applicable to children aged 1-15 years. Overestimates of weight using the LO formula are generally small and not considered harmful; underestimations of the APLS formula are of increased magnitude and may lead to inadequate resuscitation, unnecessary interventions, and may have an adverse effect on outcomes. Increased awareness of this is vital and a change of current practice should be considered.

MRI negative for brain stem stroke in a confirmed case of vertebral artery dissection

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Arterial dissections may happen at any age, though it is a valid differential for stroke in the young. This case highlights that: 1) a left vertebral artery dissection may present with symptoms mimicking a left MCA ischaemic infarct; 2) that MRI can be normal in acute stroke; and 3) that lifting heavy weights may have been causative in this case, especially in a person who has no features of increased risk for arterial dissection.
A 44 year old male council worker presented to the E.D. after complaining of right sided weakness. He had been lifting loads of 40 kg for prolonged periods. The weakness worsened over the next few hours though there was no facial asymmetry. He had felt light headed, with no headache, dizziness, chest pain, dyspnoea, or palpitations. He had paraesthesia over the dorsum of the right foot. This was the first time this had happened. His medical history included renal cell carcinoma, and ulcerative colitis. He was not on any medications. On initial assessment in the ED he had right hemiparesis, with increased tone and 4/5 power on the right upper and lower limbs. His Romberg sign was negative. Of note, he also had right arm pronator drift. The rest of his examination was unremarkable.
An urgent CT Brain was normal. Initial diagnosis was left MCA territory ischemic event; so he was commenced on aspirin and statin, and admitted to the acute stroke unit. Further evaluation showed diplopia on left lateral gaze, and right hemiparesis. There was no facial asymmetry. Features were consistent with brain stem stroke. Subsequent MRA brain showed a high signal intramural ring consistent with left vertebral artery dissection. Even though clinically our final diagnosis was brain stem stroke, the MRI did not show any diffusion weighted restriction defect to support it. Nor did it show any abnormality or ischaemic event in the left MCA territory, which was the initial diagnosis in the emergency department.

Can cost-consciousness be taught to NCHDs?

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Introduction: The rising cost of healthcare is an important public policy issue. Doctors have a responsibility to deliver quality care to patients whilst balancing resource use. However, few clinicians are formally educated or aware of the financial implications of their decisions.
Aims: (i) Assess the knowledge of costs of common investigations amongst NCHDs.
2. (ii) Determine the attitudes towards cost-conscious clinical practice. Evaluate an educational intervention delivered to NCHDs with focus on cost-conscious care.
Methods: An electronic survey was sent to 260 NCHDs in a teaching hospital. Participants (i) estimated costs of commonly ordered laboratory and radiological investigations; (ii) selected diagnostic tests for commonly encountered clinical vignettes, (iii) rated their agreement with statements about resource efficiency in healthcare. A random sample of respondents subsequently attended a clinician-led, accountancy-partnered education session, provided feedback, and completed a post-intervention survey.
Results: 110 NCHDs completed the survey (response rate 42%). Cost-estimates of commonly ordered investigations showed considerable variation with 86.2% of 4,227 being incorrect. For common clinical vignettes, 77% of NCHDs requested unnecessary tests, the cost estimates for such orders being €2,794 per 100 patient-episodes. Most respondents identified resource-consciousness as part of their role but few considered costs in their daily practice. All NCHDs participating in the educational session (n =16) found the intervention to be beneficial, informative and relevant to clinical practice. All reported a significant increase in their knowledge of test costs after the educational intervention ($p<0.001$). All would welcome structured teaching on resource-efficiency at postgraduate level.
Conclusion: NCHDs lack knowledge of costs of commonly ordered laboratory and radiological investigations. NCHDs would select tests of low yield in commonly encountered clinical scenarios, with resultant significant cost and resource implications. NCHDs recognize the need for resource-efficiency and would broadly welcome educational interventions. A structured, clinician-led educational program has potential to improve resource efficiency.

The Hidden Stone

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Introduction: We report a 40 year old male presenting with recurrent pancreatitis following cholecystectomy despite normal magnetic resonance cholangiopancreatography (MRCP) in the absence of other risk factors.
Case description: He had been discharged from another hospital two weeks previously with his second episode of acute pancreatitis in 6 months. He underwent a cholecystectomy on his first admission. During his last admission he had a CT, which confirmed his diagnosis and a normal MRCP. His routine bloods, medical, drugs, alcohol and travel history did not reveal any obvious cause of pancreatitis and was otherwise well.
He was admitted for endoscopic ultrasound (EUS), which revealed a filling defect in the common bile duct (CBD). Subsequent Endoscopic retrograde cholangiopancreatography (ERCP) showed a dilated CBD, which tapered sharply indicating an obstruction. A sphincterotomy was performed without adequate drainage and a stent was inserted in the pancreatic duct and CBD. He was discharged with a view for follow-up ERCP in four weeks. He re-presented to the ED two days later with another episode of pain and hyperamylasemia but no other adverse indices and was later discharged with adequate analgesia.
During the follow-up ERCP the stents were removed a balloon trawl extracted a small stone from the CBD. He has had no episodes of pancreatitis since discharge.
Discussion: Gallstones remains the modal aetiologic factor for pancreatitis. MRCP, although widely relied upon, has as little as a 70% sensitivity for choledocholithiasis. Endoscopic ultrasound may have greater sensitivity, particularly for sludge or non-polymerised sludge aggregates. ERCP remains the Gold standard of both diagnosis and therapy, but sphincterotomy and balloon trawl is necessary for maximal sensitivity. As EUS is a safer procedure, it should be the next investigation for recurrent acute pancreatitis if MRCP is negative.

A case of electrolyte abnormality leading to diagnosis of Gitelman's syndrome

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Abstract Category: Case report (medical)
Intern Network: West, north-west (NUIG)
Introduction: Gitelman's syndrome was first described in 1966 as a subtype of Bartter's syndrome. It is thought to be associated with mutations in the SLC12A3 gene, impairing the function of the sodium chloride co transporter of the distal convoluted tubules in the kidneys. This leads to excessive loses of electrolytes, most notably, potassium and calcium, but serum magnesium can also commonly be affected. Here, we examine the

case of a lady with new onset hypocalcaemia and metabolic alkalosis, who's undiagnosed Gitelman's syndrome was exacerbated with the commencement of a thiazide diuretic.
Description/case presentation:
A 59-year-old Irish lady presented to medical services with symptoms of generalized weakness, constipation, nausea and poor oral intake for four days. Initially she was managed by her GP for diverticulitis, with no improvement following a four-day course of antibiotics. Serum measurements of renal function revealed a severe hypokalemia and blood gas showed that she had a poorly compensated metabolic alkalosis. She was commenced on potassium replacement, and her diuretics were optimized to minimize potassium losses. While initially slow to respond to IV therapy, her potassium, calcium and phosphorus returned to normal ranges with resolution of her presenting symptoms.
Discussion/conclusion:
It is important in patients presenting with hypokalaemia to include Gitelman's as a differential and to ensure that they do not have associated hypochloremic metabolic alkalosis, and hypocalciuria, which could indicate this syndrome as a cause. This case also highlights the importance of evaluating renal profile serum tests before the commencement of diuretic therapy.

Miller Fisher Syndrome; an unusual presentation and difficult diagnosis

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Abstract Category: Case report (medical)
Intern Network: West, North-West, (NUIG)

Introduction: Miller Fisher syndrome is a variant of the better-known Guillan barré syndrome. It accounts for 5% of all cases of GBS and in 96% of these cases, they are positive to anti-GQ1b antibodies. An abnormality in sensory conduction leads to a triad of symptoms; opthalmoplegia, sensory ataxia and areflexia. It is more commonly found in men than women by 2:1 ratio, and mean age of onset is 43.6 years. Preceding infection is common, most commonly of the upper respiratory tract or gastrointestinal system. The majorities of cases are self-limiting in course, but may be difficult to diagnose due to a myriad of additional neurological symptoms that may concomitantly present alongside the classic three.
Description/case presentation:
This case involves a 47 year old Irish female with no significant past medical history, who presented to ED with a 2 day history of progressive unsteadiness of gait, frontal headache, slurred speech and sensory disturbance of upper limbs on a background of recent URTI 1/52 prior to onset. Neurological symptoms progressed over an eight day period, at which point the patient had areflexia, opthalmoplegia in all directions, photophobia, unilateral left sided ptosis and diplopia, unilateral lower limb parasthesia and absent gag reflex. Following neurological review she was clinically diagnosed with Miller fisher syndrome commenced on IVIG and transferred to CCU for higher care setting management.
Discussion/conclusion:
Despite the presence of the classical symptoms of miller fisher syndrome this case was difficult to diagnose due to the additional neurological symptoms with which the patients clinical path followed. Even more interestingly, despite clinical diagnosis and good response to therapy, she tested negative for anti-GQ1b antibodies, which are positive in 96% of patients.

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Assessing the impact on management of MRI brain in elderly in-patients

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Network: Mid-West

Aim:
To evaluate the use of MRI brain in elderly (>80 years) in-patients and assess its impact on management.
Method:
We retrospectively audited 35 patients, above the age of 80, who have had a CT brain and a MRI brain in the same admission. A simple data collection tool was constructed to record the clinical indication and key findings of the scans and their impact on management. Waiting time between CT brain and MRI brain was also recorded.
Results:
There were 4 major indications of MRI brain:
21 cases of evaluating for stroke where symptoms had persisted despite a negative CT brain. 12 of these cases had a positive MRI brain. This, however, resulted in no major change in management, as plans continued to revolve around stroke rehab and regaining functionality where possible.
5 cases of evaluating calcifications seen on CT brain. 2 of these were positive for tumours with no major changes in management.
4 cases of MRI brain requested along with MR Angiography and Venography. There was no intervention due to the MRI brain directly.
2 cases of evaluating cranial nerve palsies, both negative.
Majority of the CT brain were performed on the same day as order, while the average waiting time for a MRI brain was 4.2 days.
Conclusion:
1. The majority of requests are for evaluation of stroke symptoms in the presence of an inconclusive CT. MRI helped confirm clinical diagnosis of acute stroke in 12 cases and did not change management in any of the 21 cases.
2. There is a need for increasing radiology resources to reduce waiting times and minimise delay in discharges.
3. Conversely, there is a need to establish better imaging pathway protocols for elderly patients with suspected stroke.

"My Stress Right Now"- Factors that Influence Staff Perception of Stress in the Emergency Department

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Introduction: Stress is a well acknowledged problem amongst healthcare staff and is associated with a number of negative outcomes that impact both the healthcare provider and the patient. Staff working in the Emergency Department (ED) are particularly vulnerable to stress, and this is of no surprise given the unpredictable and challenging nature of the ED.

Aim: To investigate 'real time' stress levels experienced by staff in the ED and also to explore reasons identified that influence stress levels.
Methods: A quantitative cross-sectional study design was used. Staff working in the ED in Cork University Hospital were invited to complete a short questionnaire on an iPad during their work shift. Perceived stress levels were measured using a visual scale analogue (VAS) 'stressometer' Participants were invited to complete the questionnaire more than once over two weeks.
Results: A total of 508 questionnaires were completed. The mean stress level was 37.4 out of 100. 41% of the completed questionnaires indicated mild stress, 25% indicated moderate stress and 23% indicated severe stress. Median stress levels were statistically significantly different between professions, $\chi^2(10) = 25,403$, p=0.003. There was no statistically significant difference between locations within the ED and median stress level, $\chi^2(9) = 15.188$, p=0.086. The top 3 causes of stress were identified as; environment (n=175, 34.4%), staffing (n=168, 33%) and workload (n=162, 31.8 %).
Conclusion: In the ED most staff experience stress, with a high proportion experiencing moderate and severe stress. Many factors are related to causing stress, the main being environment, staffing and workload.

References
1. Dr Ruth Daunt (AMAU Intern Cork University Hospital, Medical South Interns)
2. Dr Eugene Cassidy (Consultant Psychiatrist Cork University Hospital)
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Audit of patient cancellations on day of elective surgery in main operating theatres in Letterkenny University Hospital from January 1st to June 30th 2016: A follow on audit

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Introduction
Patient cancellations are an obstacle faced in perioperative care which can lead to suboptimal use of operating theatre capacity and resources and can cause patient dissatisfaction(1)(2). The HSE model of care for elective surgery recommends a cancellation rate <5%.(3)
Methods
A retrospective review of 698 elective surgical cases scheduled from January 1st to June 30th 2016 was performed. Reasons for cancellation were evaluated and divided into non-clinical and clinical headings. The medical records of patients cancelled for clinical reasons were reviewed to assess if the cancellations were avoidable.
Results
Of the 698 elective cases scheduled, 119(17%) were cancelled on the day of surgery. The most common cause was unavailability of a postoperative bed contributing to 82(68.9%) cancellations and was the most common non-clinical cause. 21(17.7%) cases were cancelled due to clinical reasons, of which 4 were excluded due to poor documentation. 13(10.9%) cancellations were found to be unavoidable. 4(3.4%) cancellations were avoidable, 2 due to insufficient cessation of medication pre-operatively,1 due to surgery no longer required and 1 due to surgeon's absence on day of surgery.
Conclusions
The results of this audit are in concordance with the audit performed last year which showed a 15% cancellation rate in elective lists from January 1st to December 31st 2016, 70% due to lack of a postoperative bed. LUH is still not in keeping with HSE model of care for elective surgery. A re-audit from July 1st to December 31st 2016 should be undertaken. Potential areas for improvement include communication between theatre and hospital bed management and clear instructions to be given to patients regarding pre-operative management.

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Analysis of Alcohol Related Deaths in the Cork and Kerry region during the year 2012

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Excess alcohol consumption is one of the greatest public health problems in Ireland at present and attacks all strata of society and age groups impinging on all aspects of society including both behavioral and medical problems. In order to increase public awareness of all aspects of the dangers of excess alcohol consumption, a study of alcohol related deaths in the Cork and Kerry region was undertaken for the year 2012. The aim was to establish a baseline of the many wide and varied ways that alcohol can directly cause or contribute significantly to the death of both young and old alike.
A total of 810 post mortem reports from the year 2012 were surveyed. 187 (23.09%) were implicated alcohol related deaths of which 140 had blood alcohol levels at the time of post mortem. 87.17% of alcohol related deaths were male and 12.83% were female and overall had an average age of 49.37 years. On inspection of the post mortem reports, 5 main categories were identified in which alcohol related death could be incorporated. These included organ damage, misadventure, accidental death, suicide and criminal causation. On analysis of the results, the highest proportion of deaths related to alcohol, were due to organ damage, which accounted for 41.18% of deaths. This encompasses Cardiac (19%), liver (10.16%), pancreas (1.6%), gastro-intestinal tract (5.88%), lung (3.74) and brain (0.53%). Suicides also accounted for 25.67% of alcohol related deaths, which is also a significant proportion of these deaths.
The results highlight a definite and substantial role of alcohol consumption in sudden deaths in various aspects. Awareness of the extensive effect alcohol can have on the human body, which can be both chronic or acute in nature is in need of address.

Retrospective study on achievability of R0 margin resection after polypectomy

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Introduction: Colonic polyps are removed endoscopically by various methods. The size and the type of the polyp generally decides the way in which a polyp will be removed. Diminutive polyps <1cm in size are usually removed by cold snare, pedunculated polyps are removed by hot snare whereas sessile and superficially elevated polyps are removed by endo mucosal resection technique (EMR). Irrespective of the method in which polyps are removed the goal of a polypectomy is to achieve a R0 margin meaning that the margin does not contain polypoid material.
Objective: We aimed to determine the achievability of R0 clear margin after various methods of polypectomy. We also wanted to look at if any method was superior to others in obtaining a R0 resection margin.

Methodology: Retrospective and ongoing prospective study on a single endoscopist records over a 6 month period. Endoscopy notes and histology reports were assessed and the data compiled into an Excel sheet. Interim data on size, morphology, location, histology, polypectomy technique and resection margins were collected.
Results: We analysed 537 colonoscopies in which 613 polyps were removed. 218 had histological comment on margin clearance (35%). Definitive clear margins were achieved for n=144 (66%) polyps. Cold Snare achieved 45/71 (63.88%), Cold Forceps 15/20 (75%), EMR achieved 65/94 clear margin reports (69.14%), and snare cautery achieved clear margins in 15/25 (60%). When polyp size was analysed it showed that 23/74 polyps (31.08%) which were <0.5cm had a positive margin, 30/83 (36%) of polyps sized 0.5-1cm had a positive margin while 11/29 (37.93%) polyps sized between 1-3cm had a positive margin.
Conclusion: Only a third of the histology reports had mention of margin of resection. 2/3rd of these polypectomy specimens had R0 margin. Although cold snare of diminutive polyps had highest R0 margin clearance, no particular technique was superior to others in this retrospective analysis.

Ectopic Pregnancy Surgical Time Index

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Introduction:
Major advances in the diagnosis and management of ectopic pregnancies (EP) by transvaginal scanning and hCG monitoring have resulted in a striking reduction in mortality for this previously lethal condition. Most women with EP are now managed as outpatients in an early pregnancy unit (EPU). An efficient EPU allows planned surgery for EP.
Aim:
To determine compliance with RCOG Good Practice Guideline stating that surgical management of ectopic pregnancies should occur within normal working hours and to describe a scoring index for best practice.[1]
Method:
Theatre registers from June 2011 to November 2016 were reviewed to identify cases of surgical intervention for EP. We noted whether procedures were completed in normal working hours (between 8am-8pm, Monday to Friday) or whether they were performed out of hours (starting or finishing after 8pm or before 8am Monday to Friday, and all day Saturday or Sunday).
Results:
The study group comprised 93 patients who underwent surgical management of EP, 86 (91.5%) laparoscopically and 7 (8.5%) by laparotomy. There were 89 tubal ectopics, one cornual and three ovarian. Procedure length, including anaesthesia, ranged from 35 minutes to 138 minutes.
85 (91%) surgeries were performed within normal working hours and 7 (9%) were performed out of hours. The calculated index is therefore 91.
69 (73.4%) cases were performed within normal working hours on Monday, Wednesday and Friday, the days that the EPU operates at this hospital.
Conclusion:
The majority of EP's that undergo surgical treatment in MRHM are managed within normal working hours, in compliance with the RCOG Good Practice Guideline. Only 24.6% underwent surgery on days where the EPU wasn't running. In the majority of cases the EPU facilitates efficient surgical management of ectopic pregnancies when theatre staffing levels are at the optimal level. The EP surgical time index in MRHM is 91.
[1]RCOG Good Practice Guideline No.9; Gynaecology:Emergency Services Standards of Practice and Service Organisation. June 2009

Drilling into a cause of neck pain

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Background: Neck-Tongue syndrome is an uncommon condition consisting of pain in the neck accompanied by altered sensation in the ipsilateral half of the tongue. We report a case presenting with left sided symptoms following an episode of drilling above neck level.
Case description: A 71 year old right handed man developed symptoms of intermittent pain and paraesthesia in his left neck associated with numbness of the left tongue. These symptoms occurred while stretching the left side of his neck during strenuous drilling into a wooden beam above neck level.
His examination revealed wasting of the left tongue with deviation to the left on protrusion. The rest of his neurological examination was normal. Bloods, including a vasculitic screen, were normal. A CT Brain was performed which out-ruled any vascular event.
MRI C Spine with gadolinium demonstrated multilevel facet joint osteoarthritis with multiple posterolateral disk-osteophyte complexes from C2-C3 to C5-C6. Of note there was a finding of a dislocated osteophyte at the left odontoid peg.
The cranial nerve palsy largely resolved during his nine day admission and he was discharged with residual mild left sided preauricular pain. Detailed out-patient EMG revealed significant partial motor axonal loss in the left hypoglossal nerve, consistent with Neck-Tongue syndrome.
The patient continues to have altered sensation and mild weakness in the left tongue two months following the initial event, however the neuropathic pain has since resolved.
Conclusion: We hypothesise the likely cause for this presentation is the dislocated osteophyte from the left odontoid peg secondary to longstanding degenerative cervical disc disease, which has caused a traumatic hypoglossal nerve palsy.

Prospective Study of Hysteroscopic Tubal Occlusion for Hydrosalpinges Prior to IVF

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Introduction:
A hydrosalpinx is a collection of fluid within the fallopian tube and can occur when the distal fallopian tube is blocked. Occlusion or removal of a hydrosalpingotic tube prevents backflow of toxic fluid into the uterine cavity and improves pregnancy outcome.
Objectives:
To evaluate pregnancy and delivery rates in women with hydrosalpinges who underwent in vitro fertilisation (IVF) following hysteroscopic occlusion of the fallopian tube(s) with the AltaSeal device.
Methods:
Prospective, single centre, observational study approved by the Health Products Regulatory Authority. Twenty women (mean age 37 years) who had unilateral or bilateral hydrosalpinges were offered hysteroscopic AltaSeal tubal occlusion in a day case hospital setting. Manufactured from surgical steel and placed through the 5 french channel of a diagnostic hysteroscope the AltaSeal provides immediate tubal occlusion. Following confirmed device placement each woman had a hysterosalpingogram at 12 weeks. IVF was then performed at one of five fertility centres in Ireland. Follow up was by telephone for side effects and fertility outcomes up to five years.

Results:
Nineteen women had successful insertion of AltaSeal for unilateral (6) or bilateral (13) hydrosalpinges and in one case the procedure was not completed. One woman withdrew from the IVF programme. Of the 18 women undergoing a total of 31 IVF cycles after AltaSeal insertion, 8 (45% of women and 26% of IVF cycle attempts) conceived and 7 delivered live births (39% of women and 26% of IVF cycle attempts).
Conclusions:
Hysteroscopic AltaSeal placement offers a reliable treatment for women with hydrosalpinges prior to IVF.

Why the headache?

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Introduction:
A lumbar puncture (LP) is commonly performed in the work-up for meningitis and subarachnoid haemorrhage (SAH). However, post lumbar puncture headache (PLPH) is an important and potentially debilitating complication.
The aim of this audit is to examine the practice around LPs in our emergency department (ED), the incidence of PLPH, it's associated factors and patient outcomes.
Methods:
LPs performed in the ED of Saint Vincent's University Hospital (SVUH) between January and September 2015 were included. Data extracted included demographics, indication for LP, grade of doctor performing the LP, number of attempts needed, needle size, time of LP, and incidence and treatment of PLPH. Data was collected using the SphinxÒ software system.
Results:
161 patients (male = 80, 49.7%) were identified. Suspected meningitis was the indication in 73 (45.3%) and SAH in 69 (42.9%).
A member of the ED team performed the LP in 103 cases (64%), but the specialty performing was not documented in 28%.
The procedure was most commonly performed by SHOs (26.1%) and registrars (24.8%), but was not documented in 34.2% of the cases. Informed consent was documented in 43 (26.9%) and an explanation of potential complications was documented in 41 (25.5%).
The number of attempts needed and the needle size were not documented in 133 (83.6%), and 153 cases (95.0%) respectively.
PLPH symptoms were experienced in 19 cases in total (11.8%), 4 on the same admission. 17 patients re-presented with PLPH symptoms. 9 of these 17 patients were admitted to hospital. 4 patients required an epidural blood patch.
Conclusions:
The incidence of PLPH in our population is significant but is in keeping with what is previously published in the literature. Documentation regarding the details of the LP was poor. A new LP pack and proforma has been developed for future use in the SVUH ED.

To Audit the Completion of St James's Hospital Emergency Department Discharge Summaries by Emergency Medicine Doctors

Emergency Department, St James's Hospital
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Background & Aim: Emergency Department (ED) discharge summaries ensure effective communication between the ED and General Practitioner. They help to minimise patient harm when transitioning between the acute hospital setting and the community. There is an electronic ED discharge summary template available on our institution's electronic patient record (EPR). Doctors are encouraged to complete a discharge summary on all patients discharged from the ED. This audit aimed to identify whether this document was being completed as recommended.
Methodology: Data was collected retrospectively from ED admission records. The ED patient records for all patients presenting on 29/11/16 were reviewed. Of these patients, only those who were seen and discharged directly from ED were included in the audit. Each patient's EPR was reviewed to determine whether or not an ED Discharge Summary had been completed.
Results: 131 patients presented to our ED on the day in question. 58 patients were referred for opinion or admission to an inpatient service. 20 patients left prior to completion of their assessment. 53 patients were discharged directly from the ED. Of these, 26 patients (49.1%) had a discharge summary completed on EPR.
Conclusion: Completion of the ED discharge summary document was 49.1% in the time period studied.
This audit has highlighted the need for improved documentation in order to facilitate effective communication between the hospital and primary care setting, and thus optimise patient care.
Recommendation: Teaching sessions will be provided to ED staff to heighten awareness and re-emphasise the importance of completing a discharge summary for patients seen and discharged directly from the ED. A re-audit should be carried out following this. Further exploration into why 51% of patients had no discharge summary completed may be warranted.

Acute onset dyspnoea with a negative CTPA in a patient with renal cell cancer

Yates A, Walker C, Westrup J

Intern Network: Beacon Hospital, UCD Intern Network
Abstract Category: Case Report

Background
Pulmonary tumour embolism is a rare complication of malignancy. It often presents with unexplained progressive dyspnea and features suggestive of venous thromboembolism or pulmonary hypertension.
Case Report
A 55 year old female, presented with a 3 day history of dyspnea on exertion. She was diagnosed with high grade papillary renal carcinoma, stage T3NxM0, 3 years prior to this admission. She had recurrent disease on computed tomography (CT) scan and declined active therapy.
On admission, her resting peripheral capillary oxygen saturation (SpO2) was 93% on room air. Chest radiography, routine bloods, ECG and cardiac enzymes were normal. D-dimer was raised. Computed tomography pulmonary angiography (CTPA) found no filling defect, no pulmonary masses, infiltrates, or consolidation, and pleural spaces were clear.
Her dyspnea progressively worsened. On the third day, a portal vein thrombosis was discovered on CT abdomen-pelvis, and therapeutic low molecular weight heparin (LMWH) was commenced. The following day, SpO2 was 78% on room air and arterial blood gas analysis revealed pH 7.488 and PaO2 6.77kPa. Coronary angiogram showed normal coronary arteries and echocardiogram found no structural heart defect, with left and right heart pressures within normal range. A ventilation/perfusion scan revealed multiple sub-segmental perfusion defects in both lungs with normal ventilation.
The patient's condition continued to deteriorate and she passed away 9 days after admission.
Discussion
Considering the constellation of progressive dyspnea, investigation findings, and renal cell cancer, the differential diagnoses were evolving venous thromboembolism, and tumour emboli.

Pulmonary tumour embolism is a rare, end-stage, manifestation of malignancy that has a poor prognosis[1]. It is most commonly associated with renal cell carcinoma and hepatocellular carcinoma[1]. The clinical manifestations are nonspecific with many patients presenting with subacute, progressive dyspnea. Definitive diagnosis can be made by lung biopsy, however most patient are too unwell to undergo this procedure. The diagnosis is often delayed, and not made until autopsy.

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Now you hear me: Patient perspective on information received during consent process

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Abstract Category - Audit
Intern Network – WNW
Aims/Objectives –
To assess patient satisfaction with the consent process and the change in same following changes instigated after a previous audit carried out in September 2015.
To assess if the national guidelines and policies for obtaining a valid consent were being followed.
Design/Methods – A prospective audit on 33 patients who underwent a surgical procedure under GA in Sligo University Hospital in November 2016. An anonymous patient questionnaire identical to the one distributed in the previous audit was given to patients on the day of or day before discharge.
Results –
61 % of patients in cycle 2 were offered additional sources of information eg, leaflets, drawings compared to 50% in cycle 1. The associated risks and complications were better explained in cycle 2 (97% vs. 84%). 53% received information about alternative treatment options in cycle 1 versus 48% in cycle 2. Overall the amount of information provided to the patients in each aspect was better appreciated by patients in cycle 2.
Conclusions/Action Plan -
Our findings showed that most patients were satisfied with the amount and quality of information provided during the consent process. However, certain areas need improvements and another auditing. In our opinion some low cost targeted interventions and a multidisciplinary approach can lead to significant improvement and better patient satisfaction.

The Effect of Needle Size on the Diagnostic Adequacy of Liver Biopsy Samples

Yates A, O'Donohoe R, Mc Grath E, Nolan N, Gibney R

Intern Network: St. Vincent's University Hospital. UCD Intern Network

Introduction
Currently both 18-gauge (18G) and 16-gauge (16G) needles are used to obtain core liver parenchyma biopsies under ultrasound guidance. While a 16G needle provides a larger sample, an 18G needle may be associated with a lower risk of complications, including haemorrhage[1]. The pathological diagnosis of diffuse parenchymal liver disease is dependant on an adequate core biopsy sample[2]. The number of portal tracts determines the adequacy of the biopsy sample[2].
Aims
This audit was conducted to compare the diagnostic adequacy of 16G and 18G parenchymal liver biopsy samples.
Methods
Patients who had ultrasound-guided biopsies sampling liver parenchyma from 14th December 2014 to 14th December 2015 in St Vincent's University Hospital were retrospectively reviewed.122 cases were identified. Pathology reports were reviewed and samples reported as having fewer than 6 portal tracts were identified. Samples where the number of portal tracts was not reported were re-examined to ensure sample adequacy.
Results
121 cases were included in the audit, including 40 cases following liver transplant. 57/121 (45.0%) cases used a 16G core biopsy needle and 64/121 (55.0%) used an 18G core biopsy needle.
The total number of inadequate samples was 17/121 (13.9%), including 8 from liver grafts. Of these samples 9/57 (16.4%) were obtained using a 16G biopsy needle and 8/64 (11.9%) used an 18G biopsy needle.
Conclusions
There was a 14% overall rate of "inadequate" liver biopsy specimens. Post liver transplant specimens were disproportionately represented in the "inadequate" group (47% of total inadequate); the number of portal tracts required for diagnosis is particularly important in this group of patients.
Core biopsies of parenchymal liver tissue using a 16G needle had a similarly higher rate of inadequate samples compared to biopsies using n 18G needle.

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An Audit of Portiuncula Hospital's AMAU adherence in 2015 to the 2013 NICE guidelines for the Diagnosis of Venous Thromboembolism in Adults

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Introduction:
DVTs are Venous Thromboembolic events, when promptly diagnosed within 24 hours, patients can recover from. The 2012 NICE clinical guidelines on diagnosing a venous thromboembolic event promote the use of parameters to diagnose a DVT in best practice: Well's Score, D Dimer and Doppler ultrasound. This criteria recommends the initial diagnostic investigations begin with a Well's Score. In clinical practice, there has been a move towards bypassing this score, and beginning investigations immediately with D-Dimer levels or a Doppler when there is suspicion of a DVT.
Aims:
Audit the amount of patients presenting with a DVT picture in 2015 to the Portiuncula Hospital AMAU who were accurately investigated as per 2012 NICE guidelines: "Venous thromboembolic diseases: the management of venous thromboembolic disease and the role of thrombophilia testing."
Materials and Methods:
This is a retrospective study on all cases of clinical suspicion of the presence of a DVT from January 2015 to December 2015 inclusively in Portiuncula Hospital's AMAU. Data was be collected for the mode of admission, gender, Well's Score recorded and reported, D-Dimer recorded and range, and the outcomes of Doppler ultrasounds performed. The NICE guidelines clinical audit tool will be used on this cohort.
Results:
Preliminary data suggests the majority of patients (73.5%) did not have a Well's Score documented upon request of ultrasound. However, 92% of

Doppler Ultrasound positive patients had a D-Dimer level requested. Therefore, D-Dimer was the most commonly used parameter for the initial investigation of a DVT.
Conclusion:
DVT diagnosis includes many parameters each sensitive or specific to rapidly diagnose the presence of a DVT. Experienced clinicians routinely process Well's Scores rapidly while assessing patients without recording them. Therefore, D-Dimer, while not specific to a DVT event, is a common test often requested before the recording of a Well's score.

References:

1) Venous thromboembolic diseases: diagnosis, management and thrombophilia testing (2012 updated 2015) NICE guideline CG144
https://www.nice.org.uk/Guidance/CG14

May-Thurner syndrome resulting in a rare case of left iliac vein rupture and DVT

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Introduction: May-Thurner syndrome is the chronic compression of the left common iliac vein by an overlying right common iliac artery against the 5th lumbar vertebra. The syndrome is prevalent in almost 25% of the population and higher in females in their 2nd to 4th decades. Damage to endothelium and disruption of blood flow are risk factors for DVT. Rupture of the iliac vein is rare and potentially life-threatening. Only about 40 cases of spontaneous/non-traumatic rupture have been reported in international literature to date.
Presenting complaint: An 81 year old lady presented to the emergency department with a one day history of severe left groin pain and left leg oedema. She described moderate pain becoming suddenly severe while on the toilet (with increased intra-abdominal pressure). Examination revealed extensive bruising across her lower back and left flank. There was no history of trauma. Background history included pulmonary embolism 40 years previously.
Investigations: US Doppler and CT revealed an extensive left lower-limb DVT extending to the external iliac vein. MRI pelvis revealed chronic compression of the left common iliac vein by right common iliac artery, an extensive thrombus in the left common iliac vein and a haematoma communicating with the left external iliac vein.
Diagnosis: The radiological findings and clinical exam are consistent with May-Thurner syndrome, DVT and iliac vein rupture.
Management: This patient was treated conservatively with therapeutic innohep and analgesia. Iliac stenting was considered but not undertaken as she remained haemodynamically stable. She started warfarin and was discharged after two weeks.
Discussion: May-Thurner syndrome is an often overlooked cause of 'unprovoked' DVTs, despite its common prevalence. Use of dynamic imaging techniques, such as CT or MRV, can increase identification and avoid recurrence of thrombosis in susceptible individuals. The presence of left flank bruising should raise suspicion of (rare) spontaneous vein rupture.

Sweeter Than Your Average Rash

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INTRODUCTION: This case explores the presentation of subcutaneous Sweet's syndrome and the multidisciplinary involvement to diagnose the same.

CASE DESCRIPTION:
Patient x is a 31 year old Pakistani lady of 29 weeks gestation who presented to Connolly Hospital A&E with a 2 day history of bilateral heel pain and swelling, painful feet and hands, rashes on the extremities and fever.
Upon examination the main clinical findings were a tender left breast mass, arthralgia of the feet and hands, painful erythema nodosum-like lesions in the distribution of shins, feet and dorsum of hands with localised oedema surrounding the lesions , conjunctival inflammation and pyrexia of >39C.
The only abnormalities on blood investigations were CRP 133, WCC 17.2, Neut 13.7, Hb 10.6 and MCV 76, while chest Xray and urinalysis were normal.
During the patient's admission, referrals were made to several disciplines due to the variety of clinical findings and the lack of a definite diagnosis. The surgeons were first consulted with ?cellulitis and the patient was started on flucloxacillin. The patient was referred to Rheumatology, who deemed the most likely diagnosis to be disseminated staphylococcal infection secondary to a breast abscess. IV flucloxacillin was thus continued with an urgent referral to the breast surgeons. On failed drainage multiple biopsies were taken with the suspicion of malignancy. Dermatology were consulted and a skin biopsy was performed, while Ophthalmology diagnosed the conjunctival inflammation as nodular episceleritis with likely underlying systemic vasculitis/autoimmune disorder.
The patient remained pyrexic throughout the hospital stay despite negative blood and urine cultures and the viral screen returning as negative. Microbiology were consulted and Flucloxacillin was changed to Co-Amoxiclav to provide broader coverage.
On day 8 of hospital admission the septic screen was reviewed and it was deemed less likely to be an infective process and thus antibiotics were stopped. Steroids were commenced and over 24 hours, the patient saw a dramatic improvement of symptoms, inflammatory markers decreased and no further episodes of pyrexia occurred.
Only on integration of the results of the skin biopsy showing subcutaneous neutrophillic lobular panniculitis combined with characteristic clinical features was a definitive diagnosis of subcutaneous Sweet's syndrome made.
DISCUSSION: This case highlights the importance of multidisciplinary management in complex conditions with widespread systemic features. Additional learning points are the re-evaluation of the septic screen during the course of stay and the value of treating the patient rather than the inflammatory markers.

A Case Of Central Venous Sinus Thrombosis In Pregnancy

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Introduction: Cerebral venous stroke is a dysfunction of the brain caused by thrombosis in cerebral veins or thrombosis in the sinus of the dura mater. It is a rare but potentially fatal cerebrovascular condition. Pregnant women are at greater risk because of their hypercoagulable state.
Case Report: TM is a 24 year-old lady Gravida 4 Para 2+1. She presented with a 2 week history of headaches at 37 + 4 weeks gestation. The pain radiated into the left side of her ear and was associated with nausea and vomiting, dizziness and light sensitivity. She was initially diagnosed with otitis media and started on oral antibiotics.
She re-presented two days later with worsening symptoms and was admitted for treatment with intravenous antibiotics and analgesia. Due to the fact that she was not improving, an MRI of the Brain was requested. This showed a cerebral transverse sinus vein thrombosis.

She was transferred to a tertiary centre and had haematology input. She was commenced on unfractionated heparin and this was stopped the next morning to facilitate induction of labour. She had a vaginal delivery of a male infant weighing 3.22 kilos. Around the time of labour she was treated with prophylactic low molecular weight heparin. She was recommenced on therapeutic anticoagulation on day two postnatal and will require one year's anticoagulation in total.
Discussion: Cerebral transverse venous sinus vein thrombosis is a rare event but identifying and treating it in pregnant women is essential.

CADASIL. Case report of a 64-year-old male with recurrent TIAs and strong family history of stroke disease

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Introduction: Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy (CADASIL) is a hereditary cerebral arteriopathy caused by mutations in the Notch-3 gene. Worldwide prevalence from 0.8 to 5 in 100,000.
Case Report: A 64-year-old right-handed man presented with a two-day history of mild headache, right limb weakness, slurred speech and unsteady gait on a background of recurrent transient ischemic attacks and previous stroke, hypercholesterolemia and long-term smoking. He has strong family history of stroke and myocardial infarction. MRI imaging findings showed extensive white matter changes throughout both cerebral hemispheres and brainstem, multiple lacunar infarcts and moderately large infarct in the pons to the right midline. The ischaemic changes were found to be quite confluent in the anterior and frontal lobes, suggestive of CADASIL. Genetic testing for Notch-3 receptor mutation on chromosome 19 confirmed the diagnosis of CADASIL in this man.
Conclusion: This case reveals challenges of early diagnosis and raises ethical issues surrounding genetic testing for family members.
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Appropriate stone profile work up of first time presenters with ureteric colic to the ED and Urology service

Introduction:
All first time presenters with renal stones should have a basic stone profile performed. This includes a calcium, phosphate and uric acid level [1]. Uric acid nephrolithiasis accounts for 8-10% of renal stones. Identifying hyperuricaemia allows important preventative measures to be instigated. These include dietary measures to reduce uric acid excretion and as well as normalising urine pH. Uric acid stones are also unique in that they can be dissolved with medical therapy [2].
Aims:
· Audit complete stone profile workup in first time presenters
· Introduce an intervention to increase rates of complete work up
· Complete audit cycle
Methods
· The hospital radiology IMPAX system was used to retrieve patient identifiers from all non-contrast Computed Tomographic scans performed during a 6 week period demonstrating renal/ureteric calculi
· Recurrent stone formers were excluded following review of previous electronic discharge summaries.
· The hospital laboratory system was used to review metabolic screens
· Audit intervention: raising awareness amongst NCHDs within the urology department by
1) Providing visual reminders 2)Presenting the results of our initial findings at our departmental monthly research meeting.
Results
A total of 86 CT KUBs were performed on first time stone formers during a 6 week period.
Only one quarter (25.6%) of patients had a complete stone profile performed. All patients had calcium and phosphate levels measured., the latter being included within the standard metabolic SMAC-20 panel.
Post audit intervention measurement of uric acid levels was greater than 80% amongst admitted patients.
Conclusion:
Complete stone profiles were not being routinely performed on first time presenters with renal stones in UCHG. Uric acid nephrolithiasis carries a high risk of recurrence [3], but it is a preventable from of renal calculi formation. Our basic intervention resulted in far greater levels of uric acid level screening and will hopefully allow patients to more effectively pursue preventative measures.
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Author: V.Griffith , A.Madden, F.Darcy

Paediatric Negative Appendectomy. What do we know and what is our practice?

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The diagnosis of acute appendicitis is challenging, particularly in the paediatric population. Atypical presentation in this age group, non-specific symptoms and a wide range of differential diagnoses add to this challenge.[1] The literature is relatively deficient in describing paediatric negative appendectomy (NA) rates and implications.
Our aims were to systematically review current literature for paediatric NA.
Secondary objectives are to;
Stratify NA rates with regard to age and gender.
Audit the normal/negative paediatric appendectomy rate at UHL.
Correlate histological diagnosis and NA rates.
A systematic review was conducted using the PRISMA guidelines. PubMed, Cochrane, Embase and EBSCO databases were searched for relevant studies using appropriate MESH terms. Inclusion criteria included paediatric studies (16 years) that described NA rates, within the last five years. A simultaneous retrospective audit was undertaken to examine the histological records of paediatric appendectomies at UHL since September 2014.
An initial search sourced n=723 articles which resulted in 19 papers being included in the study. The overall mean rate for NA was 7.8%; with more incidence in males than females (NA 9.08% vs 7.58%). Younger age was associated with NA: 15.35% in <5 years old compared to 3.03% in 5-10 years.
A total of 429 paediatric appendectomies at UHL resulted in a 17.7% NA rate. The histology of NA showed pathologies other than appendicitis including: lymphoid hyperplasia, faecolith and/or oxyuriasis without inflammation.
NA was relatively common in UHL compared to the international figures. Considering signs like pruritus ani and eosinophilia could aid clinical diagnosis.

Reference

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Bereavement Counselling for Healthcare Workers in The Aftermath of Child Death

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Background: Employers have a duty of care under common and statute law to ensure care for the health and safety of their workers. There are moral and legal duties to consider the psychological needs of personnel following exposure to traumatic events related to the workplace.
Aims: There is a paucity of research regarding the effectiveness of bereavement counselling for Paediatric staff after critical incidents. The aim of this study was to survey healthcare workers who have been involved in recent Paediatric ward death at UHL in order to assess the requirement for and utilisation of bereavement services.
Methods: This study was a qualitative and quantitative evaluation using a structured survey of all the staff based on the Paediatric wards. Questions collected data regarding views and individuals' personal experience of bereavement counselling. We collected data over two weeks that pertained to 7 child deaths that had occurred over a six month period in 2015/2016. SPSS v23 was used for data analysis.
Results: There were 56 respondents. 43% of the sample population was <45 years old, 85.2% female, 89.1% Irish, 32.7% nurses and 20% were NCHDs. 21.8% reported not feeling supported following child death. 37% agreed that it impacts their ability to cope.11.3% wanted Bereavement Counselling within 2 days, 45.3% within 1 week and 43.4 % within one month. 19.6% of patients had attended bereavement counselling. 72.7% were satisfied with their experience. 40.5% were unaware of the service. Males reported to preferentially be facilitated by a hospital staff member and females an external facilitator (p=0.05).
Conclusion: Bereavement counselling services are highlighted as having an important role not only for parents but also for healthcare workers in the setting of child death. This study adds to the evidence base supporting this service in a local setting and identifies several improvements that could be made to enhance its utilisation.

When you hear hoof beats…occasionally think of zebras: A case of peritoneal TB presenting as pyrexia of unknown origin

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Introduction: Pyrexia of unknown origin (PUO) is a conundrum we are commonly faced with in clinical practice. This case illustrates the importance of a thorough work-up, emphasising the need to await all lab results prior to commencement of targeted treatment when diagnosis is uncertain.
Case Report: We describe the case of a 69 year old woman presenting to the hospital with generalised right-sided abdominal discomfort and associated malaise, weight loss and fever. Of note, the patient had recently completed a course of GP-prescribed antibiotics for suspected UTI. Relatively unremarkable past medical history; hypercholesterolemia (Atorvastatin) and 'jaundice as a baby' (No further details known). Lifelong non-smoker. Mild alcohol consumption (4 units/week). Paternal family history of bowel cancer.
Thorough work-up ensued with no abnormalities detected. Recurrent UTI suspected and treated. However, fever persisted and further investigations were performed. Tumour markers were sent with CA-125 returning as significantly elevated (791). Subsequent CT-TAP revealed peritoneal nodularity and mild ascites. Of note, calcified pulmonary nodules consistent with prior granulomatous disease were reported.
Due to the high suspicion for metastatic peritoneal deposits, a diagnostic laparoscopy was performed with tissue samples taken. However, prior to distribution of histopathology results, the patient self-discharged and self-referred to medical oncology. Histopathology reports subsequently returned describing granulomatous lesions suggestive of an infective process. Quantiferon was also positive. A diagnosis of peritoneal TB was made and the appropriate treatment regimen commenced. On news of this, the patient vaguely recalled that her 'jaundice as a baby' was TB-related.
Conclusion: PUO is common in clinical practice. Although we are taught from an early stage that 'what's common is common,' we must always out-rule rarer causes of fever when the source is unknown. This case not only illustrates the importance of awaiting all lab results before commencing targeted treatment but also the importance of thorough history-taking on presentation.

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Modern Healthy Diet: Eat well, exercise and…undergo plastic surgery?

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Introduction: Madelung's disease is a rare disease characterised by benign, symmetrical lipomatous tumours predominantly affecting the head and neck region. It has been found to be associated with excessive alcohol use. Although the condition is considered benign in nature, this case report aims to explore the potential catastrophic consequences it can incur on both an individual's mental and physical health if left untreated.
Case Report: We describe the case of a 49 year old man initially presenting with multiple, painless masses of his head and neck. These were found to be benign lipomatous tumours and a subsequent diagnosis of Madelung's disease was made. Due to the benign nature of the condition, no intervention was deemed necessary and the patient was discharged having undergone no treatment.
Over the following years, the psychological effect of these growing masses resulted in social exclusion and excessive alcohol use which had a detrimental effect on the patient's health. He developed alcoholic liver disease, requiring liver transplant and subsequent re-transplant for acute cellular rejection. Furthermore, the synergistic effect of immunosuppressive drug toxicity and hypertension led to the development of renal failure and eventual renal transplant.
It was at this point, now aged 63, the patient re-presented to his doctor and a referral to the plastic surgery service was made. Following extensive work-up, he underwent initial de-bulking procedures. Despite the requirement for further procedures down the line, the beneficial psychological effect was immediately evident. The patient feels great, claiming he can now leave the house without 'scaring children.'
Conclusion: Madelung's disease, although considered a benign condition, can result in social exclusion and has an association with excessive alcohol use. For this reason, early intervention should be considered as a preventative measure to protect against the potential detrimental effects on the patient's mental and, subsequently, physical health.

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Computed Tomography Pulmonary Angiogram (CTPA) use - an audit within a Level Three Hospital

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Background
CTPA is the most commonly used imaging method to detect emboli within the pulmonary vasculature. There are widely used international guidelines and scoring methods, such as the Wells Score, which allows risk stratification and appropriate use of CTPA for patients with suspected pulmonary emboli. In Ireland, two of the main guidelines followed are the NICE guidelines and iRefer, a series published by The Royal College of Radiologists.
Aim and Objectives
This audit was undertaken to investigate the extent to which clinical and radiological practise adheres to international guidelines and standards in relation to the diagnosis and identification of pulmonary embolism.
Methods
All patients who received a CTPA between August 1st and October 31st 2016 were included in the study. Analysis reviewed all pertinent data including patient demographics, biochemistry results, requests and outcomes of radiological scans.
Results
Seventy five patients who underwent CTPA were included in the study. The incidence of pulmonary embolism detected was 9% (n=7). The results revealed that a Wells Score was provided in 13% (n=10) of requests to the Radiology Department.
Any patient who had a low probability of a pulmonary embolism should have received a d-dimer test. This occurred in 87% (n=5/6) of cases. However, d-dimer results were included in only 50% (n=3/6) of the corresponding radiological requests.
Incidental findings were identified in 23% (n=17) of cases with nodules accounting for 37% (n=10/17) of these.
Discussion and conclusions
Significant improvements in the use of probability and risk scoring measures are needed. International standards are not being met in the application of either a Wells Score or patient d-dimer results. Increasing the utilisation of these measures would enhance resource prioritisation and decrease the burden of unnecessary scans on patients and hospitals. Future action plans centre on educating clinicians and a subsequent re-audit to assess for improvement.

"Worth the weight": An Audit of Nutritional screening practices in accordance to HIQA standards

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Introduction:
Malnutrition is a state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients lead to adverse effects on clinical outcomes. In Ireland, an estimated 145,000 patients are malnourished or at risk of becoming malnourished. This leads to vulnerability to infection, delayed wound healing and increased length of stay. Healthcare costs associated with this are approximately over €1.4 billion, therefore it is essential that accurate assessment of nutrition be carried out to provide high quality patient care. According to the Health Information and Quality Authority (HIQA), every patient should be screened for risk of malnutrition within 24 hours of admission.
Methods:
A prospective audit examined 40 patients admitted to Regional Hospital Mullingar (RHM); recording time and place of weight documentation within the first 24 hours, verifying completion of the Malnutrition Screening Tool (MST) and reviewing Body Mass Index (BMI) calculations and comparing them to HIQA Nutritional and Hydration standards.
Results:
40 patient charts were audited. Weights were documented in 30 (75%) patients, all were weighed at ward level. 29 (73%) patients were weighed in the first 24 hours. Out of those 30 patients, weight was documented in the drug kardex in10 (33%) patients; in EWS parameters in 5 (17%) patients and in both kardex and EWS parameters in 15 (50%) patients. 10 out of 40 patients (25%) were not weighed.
21(53%) out of 40 patients had an MST completed and 27 (68%) out of 40 patients had their BMI calculated.
Conclusions:
This audit demonstrated poor compliance with HIQA standards. Time constraints, staff shortages and lack of appropriate weighing equipment were likely factors in this. Recommendations from this audit include; all patients to be weighed, screened and BMI calculated on admission, documentation of weights to be streamlined and appropriate weighing scales to be provided.

Recognising Diogenes Syndrome: A Case Report

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Introduction: Diogenes syndrome, also known as senile breakdown or senile squalor syndrome, is a rare behavioural disorder characterised by extreme self -neglect, domestic squalor and unnecessary hoarding[1]. Often observed in the condition is social withdrawal, refusal of external help and unawareness or concern over their living conditions[2]. The estimated annual incidence of Diogenes syndrome is 0.05% in people over 60 years. It is frequently associated with other mental illnesses such as schizophrenia and frontotemporal dementia[2].
Case: An 82 year old gentleman was found at home, soiled, with no electricity, running water or heating. His home was filled with debris and refuse. His hygiene and self care was extremely neglected and on presentation to the emergency department he was confused,disorientated and hypothermic with a temperature of 33.9° C. Chest X- ray revealed a right lower lobe pneumonia and he had an acute on chronic kidney injury, Urea 17 and Creatinine 210. His mobility was markedly off baseline and he was refusing all oral intake. Collateral history from family members revealed that this behaviour had been ongoing for the last 10 years, despite several hospital admissions for recurrent infections. CD repeatedly refused any efforts from family members to improve his social situation and despite family intervention, several months after returning home CD would revert to living in extremely poor conditions. He was reviewed by Old Age psychiatry and the diagnosis of diogenes syndrome was suspected.
Discussion: Morbidity and mortality is largely increased in patients with Diogenes syndrome, with some case reports noting a 46% death rate within 5 years[2]. This highlights the importance of suspecting and recognising this condition which is notably poorly described throughout the literature. The management of Diogenes syndrome is centred around multi- disciplinary team involvement with input from Old Age Psychiatry and appropriate community supports on discharge.
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An Ominous Case of Delirium

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A relatively independent 87 year old female was brought in by ambulance with a presenting complaint of acute onset confusion. Her home help and family reported she did not recognise them over the preceding few days. She was treated for UTI by her GP. Her past medical history included nodular melanoma of the upper arm (Breslow thickness 5.5 mm) which was excised in October 2015 – subsequent PET-CT was clear and she was discharged from oncology services.
Initial investigations included MSU which was negative for white cells or bacteria and chest x-ray showed a bilateral patchy opacification. She was prescribed clarithromycin for atypical pneumonia. However her inflammatory markers were not raised and she had no respiratory symptoms so antibiotics were stopped after two days. BNP was normal and there were no signs of fluid overload.
Her cognitive function had not improved in this time, and she remained disoriented to person, place and time, exhibiting signs of hypoactive delirium. She had no history of recent falls but CT brain was ordered to outrule intracranial pathology. Radiology reported the presence of multifocal metastases in all lobes of her brain, including the cerebellum. Staging CT-TAP showed further metastases in her lung and spleen. She was deemed unfit for chemotherapy given the extent of her cerebral metastases and passed away three weeks later.
Discussion: This case highlights the importance of reviewing a diagnosis when current investigations do not fit the clinical picture. It highlights the usefulness of head CT in delirious elderly patients without an obvious infective or metabolic cause. Finally, it emphasises the lethality of nodular melanoma despite this case being classed as stage IIB with a reported 5 year survival of 70%[1].
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An Audit of Adherence to Local Vancomycin Prescription Guidelines in Letterkenny University Hospital

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Objectives: To assess adherence to local antimicrobial guidelines for vancomycin prescription in Letterkenny University Hospital.
Methods: Data was collected for all patients commenced on IV vancomycin over a period of one month on acute medical and surgical wards. Patients eligible for inclusion were identified by nursing staff on the wards. Data on indication, calculation and documentation of eGFR, timing of trough levels and dose adjustments were examined.
Results: 10 patients were identified and included in the analysis. None of the patients had creatinine clearance documented. 3 patients (33%) were commenced on the appropriate starting dose, 1 patient was excluded from this category due to insufficient data. 100% of patients had first trough levels appropriately monitored. 5 of 8 (62.5%) patients had doses adjusted appropriately following trough levels. 80% of patients had trough levels monitored at least twice weekly as per guidelines.
Conclusion: Appropriate dosing and monitoring of vancomycin is important, due to its narrow therapeutic range and potential for toxicity. Detailed local antimicrobial guidelines, including dose adjustments based on weight and renal function, are in place to facilitate this and to safeguard patients against inappropriately supratherapeutic or subtherapeutic levels of vancomycin. Despite the relatively small number of patients audited on this occasion, it is clear that significant improvements need to be made in adherence to local antimicrobial guidelines, particularly in documenting creatinine clearance and calculating the correct initial dosing of vancomycin. Findings of this audit will be presented locally at the next audit quality improvement forum to increase awareness and knowledge of local guidelines, with a view to re-auditing vancomycin prescribing in the hospital.

The challenges, implications and considerations of pre-surgical alpha and beta blockade in the management of the pheochromocytoma

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Introduction:
The surgical management of phaeochromocytomas is challenging due to the intra-operative release of catecholamines upon tumor manipulation. A well-structured medical protocol is vital to decrease morbidity and improve outcomes in these patients. The phenomenon of "overblockade" whereby the patients suffer significant postural hypotension post operatively is a complication of this medical management.
Aim:
To establish the effective alpha and beta blocker dosage required to avoid hemodynamic fluctuations in the peri-operative phase and to investigate the efficacy of hydration therapy in restoring normal blood volumes to prevent postural hypotension from "over-blockade".
Method:
15 patients who had undergone surgical resection of phaeochromocytoma over a 5 year period were identified. A retrospective review of each patient's medical file was carried out. Patient drug charts and clinic notes provided doses of blocking agents and quantity of fluid replacement (in liters per day). Intraoperative blood pressure and heart rate values were recorded from the anaesthetic operation notes. The EWS vital sign observation chart provided post op blood pressure to evaluate the presence of postural hypotension after tumor removal.
Results:
Aggressive pre-op alpha blockade in conjunction with fluid replacement was found to be an effective method to avoid life threatening fluctuations in surgery and resulted in minimal post operative hypotension in patients. The majority of patients' blood pressure had returned to sustainable levels by post op follow up at 3 months.
Conclusion:
High dose oral non-competitive alpha antagonist therapy presents safe pre-operative management for phaeochromocytoma and does not present a risk of so-called overblockade in this context, once appropriate fluid resuscitation is undertaken.

Contraception Use in Women of Childbearing Age with Epilepsy in a Dublin City Centre Primary Care Practice

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Introduction:
According to the Prevalence of Epilepsy in Ireland Report there are currently 37000 people living with Epilepsy in Ireland and approximately 25% of these are women[1]. Epilepsy is an important reproductive consideration for female patients from menarche through to menopause. It is recommended that all women of childbearing age undergo regular contraceptive counselling due to the risk of foetal malformations with certain anti-epileptic drugs. The suitability of contraceptive choice may also be impacted by the pharmacodynamics of particular anti-epileptic drugs. Epilepsy is the most common neurological problem affecting pregnancy, therefore patient education and liaison with epilepsy specialists is vital in ensuring maternal and foetal health.
Methods:
A practice based search was carried out to identify the number of female patients between the ages of 10-52, diagnosed with epilepsy to whom anti-epileptic medications are currently prescribed. Medications included sodium valproate, levetiracetam, lamotrigine, topiramate, trieptal, zebinix and lacosamide.
Results:
14 patients were identified from 7000 patients and a chart review completed, which revealed that 10 patients (71.4%) were currently using contraception. Patients who were not actively using contraception were invited to attend for an epilepsy review in an attempt to identify their contraceptive needs.
Conclusion:
Women of childbearing age are an important patient cohort for primary care physicians. Due to the multifactorial considerations involved in the management of these patients, regular contraception and pre-conceptual counselling should be offered to all women currently prescribed anti-epileptic medications. Counselling should commence at diagnosis and continuously offered at regular intervals throughout adulthood. The ultimate goal in management of these patients is optimisation of epilepsy control and to ensure foetal and maternal health.
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Sometimes it is a zebra, a case report

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Introduction:
Wilms tumour is the most common renal malignancy in childhood[1].The most common presentation is with an abdominal mass[2], but other presentations include abdominal pain and it is recognised that Wilms tumour can occasionally present as an acute abdomen[3].
Case:
This is the case of a 5 year old boy who presented with acute right iliac fossa pain. On examination his abdomen was soft, tender in the right iliac fossa with rebound and guarding. He was apyrexic with stable vitals. He had a background of surgically corrected coarctation of the aorta, and hypertension controlled with atenolol. Laparoscopic appendicectomy was planned for suspected acute appendicitis. However, on abdominal examination under anaesthesic a ballotable mass in the right upper quadrant was palpated and surgery was suspended. Subsequent imaging with ultrasound and computed tomography revealed a right intrarenal mass, consistent with a Wilms tumour, which had likely ruptured. Biopsy confirmed a Wilms tumour. He received neo-adjuvant chemotherapy, with a future plan for restaging, surgery, and possible radiotherapy.
Discussion:
This case highlights how the acute abdomen, and in particular right iliac fossa pain can result from more unusual causes than those that initially spring to mind. It also reminds us of the importance of the abdominal examination in the acute abdomen, and that even in children tumours should be considered.
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Posterior Reversible Encephalopathy Syndrome (PRES) emerging as a post-procedural complication in both medicine and surgery – two case reports.

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JC is a 68 year old gentleman referred for elective OGD, on the background of dysphagia and oesophageal candidiasis. Standard sedation was used and a benign peptic stricture was noted, managed with balloon dilatation without apparent immediate complication. At completion, JC became confused and obtunded. Despite reversal of sedation, JC remained unrousable. Two hours later, with all investigations for suspected complications including perforation, negative, JC developed sudden onset left-sided hemiparesis. A FAST call was initiated and following a normal CT brain and angiogram, JC was thrombolysed in the ICU. Seven to eight hours later, JC developed tonic-clonic seizures that required phenytoin infusion and subsequently intubation and ventilation.
Patient Two (EK) is a 16 year old girl admitted with perianal sepsis on background of severe medically refractory Crohns disease. Having failed to respond to optimum medical therapy, panproctocolectomy was performed. Day three post procedure, EK developed a generalised tonic-clonic seizure which lasted for approximately one minute and resolved spontaneously. Post-ictally, EK was drowsy however physical examination was otherwise unremarkable. EK was discharged home eight days later on oral anticonvulsants until review in neurology out-patients three months later.
With no significant findings on CT brain, both patients underwent MRI which demonstrated PRES.
Discussion: PRES (Posterior Reversible Encephalopathy Syndrome) is a clinical radiographic syndrome consisting of acute neurological features, particularly seizures, with characteristic findings on MR brain. Up to 90% of cases recover fully. These two cases serve to highlight the ever-growing list of risk factors and precipitating events for the condition. From our literature review, PRES has not yet been associated with endoscopic balloon dilation. These cases also highlight that with early recognition and accurate diagnosis, the prognosis can be reassuring and inappropriate treatments avoided.
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An audit of blood laboratory investigations performed at a pre-assessment clinic.

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Introduction
All patients undergoing elective surgery should attend a pre-admission clinic that is focused on preparing the patient for their surgery. Safe and effective surgical and anaesthesia practice requires an optimized patient[3]. Patients may require routine laboratory blood investigations blood tests as part of their assessment. However, these tests are costly and every effort should be made to protect healthcare resources, including identification of inappropriate blood testing.
Aim
To undertake an audit to assess whether blood investigations are repeated inappropriately on admission, following pre-assessment clinic.
Method
All patients who presented to the pre-assessment clinic over a 5 week time period were included. We checked who had routine bloods performed at the pre-assessment clinic (as were deemed appropriate testing as per local guidelines). Blood tests included Full Blood Count, Urea & Electrolytes and Coagulation Screen. At admission for surgery these patients were then investigated to see if their blood tests had been performed again.
Results
A total of 185 patients were assessed at the pre-assessment clinic in Galway University Hospital over a five-week period between the 18th October and 24th November 2016. Of this group, 62 patients were admitted electively before 1st December 2016. 57 patients had bloods performed at the pre-assessment clinic. 22 out of 57 patients (38%) had repeated bloods on admission.
Discussion
The majority of the repeated blood samples consisted of all three investigations. Having reviewed audit results, an appropriate intervention will need to be established and re-audit to assess the impact of intervention.

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STERCORAL PERFORATION: A DEADLY COMPLICATION OF AN INNOCUOUS PROBLEM

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Introduction
Berry first described a case of stercoral perforation of the colon to the Pathological Society of London in 1894(1) A rare surgical complication of faecaloma formation with fewer than 150 cases were reported through 2011[2]. Stercoral colitis is an inflammatory colitis following faecal impaction, in which ischemic pressure necrosis of the colonic and rectal walls can occur due to increased intraluminal pressure [3]. This in turn may lead to the formation of a stercoral ulcer and, ultimately, colonic perforation.
Case Description
A 68 year old man presented to the Emergency Department with acute epigastric pain, generalised guarding and rigidity with a background history of chronic constipation. Plain film of the abdomen demonstrated faecal loading and dilated loops of small and large bowel, with no evidence of colonic perforation on the chest radiograph. Pneumoperitoneum was demonstrated on CT abdomen/pelvis and following patient resuscitation, an emergency laparotomy was performed. A large perforation was found in the sigmoid colon with multiple faecalomas scattered throughout the large intestine. An emergency Hartmann's procedure was carried out and the patient experienced no major complications post operatively.
Discussion
Stercoral perforation is an infrequent but grave complication of chronic constipation predominantly seen in elderly patients, with a mortality rate of up to 35% [3]. The sigmoid and rectosigmoid colon are the most susceptible areas to stercoral colonic perforations due to the reduced diameter of the colon and perilous blood supply, with 74% of stercoral perforations occurring in this region [4], as in this case. Although infrequent, it is important to be cognisant of this condition particularly in elderly patients presenting with an acute abdomen on a background of chronic constipation.

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Compliance with the introduction of routine antental anti-D prophylaxis at University Hospital Galway

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Our study aimed to discover rates of compliance with routine antenatal anti-D prophylaxis (RAADP) at 28 weeks gestation following its introduction to routine practice at University Hospital Galway.
Background: Prior to the development of anti-D immunoglobulin the incidence of Rh D alloimmunization was 16% in rhesus negative women. With the introduction of post-partum administration of anti-D, this rate fell to 1-2%. A further reduction in the sensitization rate to 0.1-0.3% was achieved with routine antenatal prophylaxis during the third trimester.
Methods: Our study was designed to review patients who were Rhesus negative at booking and review whether they received RAADP. We reviewed each patient who booked at an antenatal clinic in February & March 2016, RAADP was introduced as a routine antenatal intervention in January 2016. We reviewed the laboratory references to see who received RAADP and reviewed the charts of those who did not.
Results: A total of 601 women booked antenatally in February and March. 12.8% of these were Rhesus negative. Of the total number of rhesus negative women, 14.28% experienced early pregnancy miscarriage or failed to carry the pregnancy to completion. Of the remaining 66 women, 10 (15%) did not receive prophylactic anti-D in accordance with the guideline. 5/10 refused despite strong clinical reasoning, 1/10 was to receive a bilateral salpingectomy and did not need RAADP. 1/10 husband rhesus negative. Reasoning was unclear in the case of three patients.
Conclusion: In the two months following introduction of RAADP, compliance rates of 85% were achieved.

Hepatocellular Carcinoma after Successful Treatment of Hepatitis C

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PW first presented to the Mater Hospital in acute alcohol withdrawal in 2004. An ex-IVDU, he had been Hepatitis C positive since the age of 12. An abdominal ultrasound at that time revealed cirrhosis, splenomegaly and portal hypertension. Over the next few years PW represented to ED several times with psychiatric presentations but was lost to liver follow-up.
In December 2013 PW presented with ascites, his first episode of liver decompensation. Having failed Interferon previously, it was decided to treat his Hepatitis C with Harvoni (ledipasvir/ sofosbuvir). He had at the time been abstinent from alcohol for 2 years. On treatment, his viral load fell from >2,000,000 units to undetectable by mid-2014 and he was cured of his hepatitis C.
Unfortunately, PW returned to ED in December 2015 with ascites and encephalopathy. Despite his diuretics being increased to spironolactone 300mg and 120mg furosemide, he became dependant on large volume paracentesis, requiring drainage every 8-10 days. His encephalopathy was a contraindication to a TIPSS procedure.
PW was worked up for transplantation for diuretic-intractable ascites and was called to SVUH in October 2016. Unfortunately a CT done 6 days prior showed a portal vein thrombosis, which was treated with therapeutic heparin. A further MRI in SVUH showed the thrombus had extended into the IVC and was associated with a 7.6cm intrahepatic mass, consistent with a rapidly growing hepatocellular carcinoma. PW returned to the Mater for palliation and passed away 36 hours later.
New direct-acting antiviral agents such as Harvoni can obtain a sustained virological response after 12 weeks of treatment in 96% of patients with Hepatitis C cirrhosis. Unfortunately, cure does not entirely eliminate the risk of decompensation in patients with advanced disease and while the risk of hepatocellular carcinoma is reduced from around 4% to 1% per year, it is not abolished.

Dentophobia and multifocal infectious processes - a case of fusobacterium nucleatum

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Fusobacterium nucleatum is an anaerobic spore-forming gram negative bacillus and is the most commonly found of the genus fusobacterium. It is present in larger amounts in adults with a tenfold increase in their numbers in periodontal diseased sites (i.e. poor dentition). It has been implicated in a variety of human diseases including periodontitis, colonic cancer, empyema, bacteraemia with distal seeding and preterm births.
We report a case of a 51 year old man with background of alcohol excess and poor dentition secondary to dentophobia who presented to emergency department with a one-week history of right thigh pain and swelling, fever, night sweats and unintentional weight loss. On admission, d-dimers, white cell count and C - reactive protein were elevated. Deep vein thrombosis was excluded. There was a collection consistent with an intramuscular haematoma on ultrasound of right thigh. His chest x-ray showed a focal area of consolidation and effusion in the left lower zone. CT thorax showed a loculated empyema. This empyema was managed using ultrasound guided drainage with chest drain left in situ. Culture of the pleural fluid grew fusobacterium nucleatum. His thigh swelling failed to resolve after several weeks. MRI thigh revealed that the collection previously seen on ultrasound was more consistent with an abscess with underlying osteomyelitis. He had ultrasound guided drainage of this collection. Pus was drained and there was no growth. He had a peripherally inserted central catheter placed for management with outpatient antibiotic therapy. His antimicrobial changed from Tazocin to clindamycin and benzylpenicillin in consultation with infectious diseases team.
Our patient had empyema most likely through oropharyngeal route and osteomyelitis and thigh abscess through haematogenous seeding to a distant site. Patients with distal infections should have their dentition assessed and oral cavity normal flora should be considered as possible pathogenic agents.

The Curious Case of the Hiccups

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Introduction:
Hiccups, or singulutus, is an uncommon presenting complaint to an Emergency Department. Numerous causes of hiccups have been described, yet the exact mechanism provoking hiccups remains unknown. This case report details an unusual and pathologic case of hiccups.
Case:
A 45 year old male presented to the Emergency Department following 6 days of persistent hiccups. He had been prescribed chlorpromazine, with no improvement in his clinical condition. He was otherwise asymptomatic. His past medical and surgical history was significant for a brain aneurysm, which was operated on, and he had a ventriculoperitoneal shunt in situ.
CT Thorax showed a left lower lobe necrotic mass, which was inseparable from the local pericardium. A lung tumor was suspected. Representative Lymph nodes in his mediastinum were biopsied and showed no evidence of malignancy.
He was subsequently treated for an inflammatory mass and made a full recovery.
Discussion:
Hiccups are generally benign, self-limiting and serve no known physiological function. However, this case demonstrates that prolonged hiccups can be a symptom of a more serious underlying pathology and they necessitate a thorough medical evaluation.

Management of Acute Pain in Adults attending an Emergency Department. A closed loop audit

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INTRODUCTION:
Pain is one of the most common reasons people attend an Emergency Department. It is often underestimated and under-treated by healthcare professionals. The Royal College of Emergency Medicine (RCEM) have published guidelines on how to approach a patient presenting with acute pain. All patients reporting pain should have their pain graded on a scale of 1-10 and receive appropriate analgesia based on their individualized score. This should be completed within a timeframe of 20 minutes.
AIM:
Primary
To determine if adults reporting pain on presentation to the ED received analgesia within the time frame recommended by the RCEM best practice guidelines.
Secondary
1. To determine if a patients pain score is recorded.

2. To determine if patients received the recommended analgesia based on their pain scores.
METHODS:
1. All adult patients who presented with acute pain to the department over 3 randomly selected days in September.
2. All patients reported pain on initially assessment.
3. Data collected from clinical notes.
The results of the initial audit were presented to staff in the ED. After an awareness campaign within the ED, the audit was repeated in late November.
RESULTS:
In the initial audit 55 patients reported pain. 12 patients (22%) received analgesia within 20 minutes of initial assessment.
20 patients (36%) had a pain score recorded.
4 patients (20%) received the recommended analgesia based on their recorded pain score.
In the re-audit, 64 patients reported pain. 30 patients (47%) received analgesia within 20minutes of initial assessment.
40 (64%) had a pain score recorded.
21 patients (53%) received the recommended analgesia based on their recorded pain score.
Conclusion:
Our audit and subsequent awareness campaign led to more patients receiving analgesia within the recommended time frame. There were improvements in documention of pain scores, and in selection of analgesic agent.

Audit of the SVUH Hip Fracture Protocol

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Introduction:
This audit examines the Intern driven initiative to identify, investigate, and institute treatment in order to prevent future fragility fractures in hip fracture patients.
Aims:
1. Assess the adherence to this protocol
2. Correct any protocol errors/omissions
Methods
Inclusion criteria: low energy hip fracture admitted to SVUH. The sample size was n=62 (16 males and 46 females).
Interventions audited:
Laboratory investigations: calcium, phosphate, alkaline phosphate, 25-hydroxyvitamin D (VitD), parathyroid hormone (PTH).
Discharge prescription:
Calcium/vitamin D supplements
Anti-osteoporosis medication (denosumab or bisphosphonate).
Data collection: data was collected on discharge.
Tools used: Irish hip fracture database (IHFD), hospital in-patient enquiry (HIPE) and ward based excel spreadsheet.
Results
59 (95.2%) had calcium, phosphate and alkaline phosphate levels, 50 (80.6%) VitD and 49 (79.0%) PTH levels taken. Of 50 tested, 37 (74.0%) had VitD<75mmol/l (UpToDate recommend a target of 75-125mmol/l to optimise bone health). 59 (95.2%) were discharged on calcium/vitamin D supplements. 51 (82.3%) were discharged on anti-osteoporosis medication.
Conclusions
Calcium/VitD on discharge: 95.2%. One patient was discharged on Vitamin D but not on calcium as the patient had active prostate cancer.
Anti-osteoporosis medications on discharge: 82.3%. Eleven patients were not discharged on anti-osteoporosis medications.
Laboratory investigations: 21% did not have all the specific blood tests, most commonly missed were VitD and PTH. Although they did not have the specific blood test performed they were still discharged on Calcium/Vitamin D supplements for the most part.
Subsequent contact was made to patient GPs advising commencement of Calcium/Vitamin D and a bone protection agent for those missed.
Recommendations
All suitable patients should have
standard admission blood investigations: U&E, Bone profile, VitD and PTH
calcium/Vitamin D and an anti-osteoporosis medication charted as discharge medication in their inpatient Kardex. This avoids omissions by doctors unfamiliar with the Hip fracture Protocol (eg: rotator/on-call staff)
The audit should be completed every quarter.

TRALI; The Cinderella complication

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Introduction: Transfusion Related Acute Lung Injury (TRALI) is an adverse effect of blood product transfusion with high morbidity and mortality. It is defined as a new onset acute lung injury or acute respiratory distress syndrome occurring within six hours after blood product administration. The incidence is ~1:5,000 transfusions.
Description: A 54 year old woman presented to the Emergency Department with a 2 day history of haematemesis and meleana on a background of chronic alcohol abuse and alcoholic steatosis. She had known portal hypertension but no oesophageal varices. Her haemoglobin was 4mg/dl, prothrombin time 23 seconds and platelets were 65.
She was initially administered one unit of red cell concentrate (RCC), over 2 hours. Hours later, advised by haematology, she received vitamin K and fresh frozen plasma (FFP). She had a total 7 units of RCCs and 2 units of FFP.
Twelve hours following her first transfusion she developed respiratory distress, with an O2 saturation of 85% on 100% oxygen. She had a positive fluid balance of 1.5 litres. It was considered overload due to the large transfusion and was given IV furosemide 40mg. Non-invasive ventilation was commenced but she deteriorated further, requiring intubation and ventilation. The possibility of a TRALI was questioned and blood was sent for HLA matching.
Discussion: It is hypothesised that TRALI is caused by the action of donor antibodies against recipient leucocytes and occurs in a two-hit mechanism. Neutrophils are sequestered and primed in the lung. They are activated by a factor in the blood product, damaging the pulmonary endothelium. Anti-leucocyte antibodies are thought to be responsible and neutrophils are primed due to underlying clinical conditions. Chronic alcohol abuse is one risk factor in this case.
Conclusion: TRALI is a recognised but underdiagnosed complication. In a critically ill patient with activation of the massive transfusion protocol, respiratory distress may point to diagnosis of transfusion associated circulatory overload (TACO). However, it is important that TRALI is considered as an alternate diagnosis.

Inpatient Colonoscopy: Futile or Worthwhile?

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Introduction:
Inpatient colonoscopy is less effective than outpatient colonoscopy, with reduced rates of rates of caecal intubation and poorer bowel preparation. Guidelines recommend outpatient colonoscopy where possible.
Aim:
To compare inpatient versus outpatient colonoscopies from 2010-2011 with 2014-2015 with respect to volume and outcomes.
Methods:
We performed a retrospective audit of the EndoRADD database of colonoscopies from 2010/2011 compared to 2014/2015 with regards to the following outcomes: numbers of procedures, patient classification, quality markers including bowel preparation, caecal intubation, polyp detection and tumour detection. Bowel preparation in our unit changed from Picolax in 2010/2011 to Kleanprep in 2014/2015.
Results:
Overall 4839 colonoscopies were performed in 2010/2011 compared to 5730 in 2014/2015.
Significantly more inpatient procedures were performed in 2010/2011 (821(17.0%)) compared to 2014/2015 (311(5.4%)). (P Value < 0.001)
Poor bowel preparation rates increased significantly in inpatients 2010/2011, from 15.6% (128(2010/2011) to 30.9% (96(2014/2015). (P Value< 0.001)
Poor bowel preparation rates significantly decreased in outpatients in 2010/2011 from 17.0% (679(2010/2011)) to 8.7% (473(2014/2015)). (P Value < 0.001)
Caecal intubation rates remained poor in both inpatient groups 81.3% (668(2010/2011) versus 74.6% (232 (2014/2015)). Caecal intubation rates significantly improved between outpatients in 2010/2011 83.2% (3344) versus 93.9% 2014/2015 (5089). (P Value < 0.001).
There was no significant difference in polyp detection rates between inpatients from 23.1% (190 (2010/2011)) to 20.6% (64(2014/2015)).
Polyp detection rates increased in outpatients significantly from 22.6 % (910(2010/2011)) to 33.4% (1810(2014/2015)). (P Value < 0.001).
Inpatient tumor detection rates were 5.6% (2010/2011) and 7.4% (2014/2015). Outpatient tumour detection rates were 2.2% (2010/2011) and 2.0% (2014/2015).
Conclusions:
In line with guidelines inpatient colonoscopy in our unit is decreasing. Inpatient colonoscopy still has high rates of poor preparation, failed caecal intubation and low polyp detection compared to outpatient colonoscopy. Inpatient colonoscopy should be reserved for a minority of select patients.

An Audit of Epidural Activity in a Peripheral Irish Obstetric Unit

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INTRODUCTION AND BACKGROUND
Wexford General Hospital is a peripheral Irish hospital with approximately 1,800 births per year. We reviewed the epidural rate, the rate at which multiple attempts at achieving effective epidural analgesia was required, and the epidural complication rate over a one-year period.
METHODS
A retrospective audit of labour analgesia database records was conducted, from 01 November 2015 to 31 October 2016. An 'event' was identified as a complication of epidural anaesthetic, or the need for multiple attempts at same. The rate of events was compared between usual working hours (08:00 – 18:00) and on-call hours (18:01 – 07:59).
RESULTS
There were a total of 1,821 births in the aforementioned timeframe. 677 of these patients sought epidural analgesia, giving an epidural rate of 37.18%. 41 events were identified (incidence of 6.06%). Multiple attempts at achieving epidural analgesia were required on 28 occasions (4.14%). A lumbar puncture was unintentionally performed on 7 occasions (1.03%). Other issues reported included the need to re-site the catheter (3 occasions), ineffective analgesia (1 occasion) or the need for frequent top-ups (2 occasions), and hypotension (1 occasion, extent and outcome not documented). The rate of events during usual working hours was 6.43%, and 5.88% for on-call hours. The time of epidural was not specified in 18.17% of cases.
CONCLUSIONS
A retrospective audit over a one-year period at a peripheral Irish hospital found the overall incidence of events to be 6.06%. There was no significant difference in the rate of event during usual working hours and on-call hours. There is scope for better note-keeping of epidural activity.

Efficacy of Chloral Hydrate for procedural sedation in a paediatric population

Background
Paediatric patients frequently require sedation for imaging procedures. Sedation in this population has a dual function; its purpose is to achieve immobility for a better quality test and to alleviate stress on the child. Sedation with a pharmaceutical agent is not without risk, one of these being the failure of sedation. The risk of sedation failure is not only inconvenient for the child and their family, it also has health economic implications, necessitating further imaging appointments, admissions and in some cases progression imaging under general anaesthesia. Most importantly, however, sedation failure can lead to delayed diagnoses.
In 2010, NICE published CG112 outlining guidelines for Sedation in children and young people. These guidelines, however, focused heavily on sedation in an emergency setting and for painful procedures and gave little guidance on elective sedation for imaging and mildly painful procedures. There are currently no uniform clinical practice guidelines available in Ireland for paediatric procedural sedation although individual hospitals have developed individual guidelines.
Aims and Objectives
The aim of this study was to evaluate the efficacy of Chloral Hydrate for procedural sedation among a paediatric population at Cork University Hospital (CUH) and compare the failure rates with a previous study undertaken in the department in 2014.
Methods
A retrospective chart audit was undertaken. Ethical approval was sought and granted from the Hospital Quality and Patient Safety Committee.
Current hospital policy in CUH limits the number of charts requested for a retrospective audit to 100. The charts of 100 patients who underwent MRI, CT, MCUG, Bone Scan or Mag III Scan, from 1st January 2016 were audited. There was no age or weight criteria applied. Any patient admitted for the above procedures who declined sedation was excluded from the study.
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Case report: Granulomatous nephritis and sarcoidosis with granulomatous lymphadenitis: rare complications of TNF-α inhibitor therapy for rheumatoid arthritis

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Tumour necrosis factor alpha (TNF- α) inhibitors are used to treat various autoimmune disorders. This case reports a 58-year-old male with

rheumatoid arthritis who develops pulmonary sarcoidosis and granulomatous interstitial nephritis secondary to treatment with TNF-α inhibitor Adalimumab. He presented with a markedly elevated creatinine level, dyspnoea, dry cough, weight loss and fatigue becoming progressively worse over the previous month.
Blood results showed a markedly elevated urea and creatinine level with inflammatory markers within their normal reference ranges. Initial investigations included a full septic, vasculitic and connective tissue screen. His vital signs began to deteriorate, with oxygen desaturation requiring supplementation and recurrent spiking of temperatures. Physical examination found decreased air entry bilaterally but was otherwise unremarkable. Radiological findings showed fine nodular and interstitial patterns present in both perihilar areas with a ground-glass pattern leading to a broad differential diagnosis of pulmonary diseases including sarcoidosis, tuberculosis, atypical infection and malignancy. Subsequently he was isolated until tuberculosis had been excluded. A new working diagnosis of pneumocystis pneumonia (PCP) was investigated as increased oxygen supplementation was required and a series of broad-spectrum antibiotics commenced. He became notably more delirious and agitated as his acute kidney injury (AKI) continued to deteriorate necessitating haemodialysis. Whilst serum calcium and angiotensin-converting enzyme levels were raised, tests had been inconclusive requiring further invasive investigations. An endobronchial ultrasound with biopsy showed non-caseating granulomata in keeping with a diagnosis of sarcoidosis and granulomatous lymphadenitis whilst a renal biopsy showed granulomatous nephritis. Steroid therapy was commenced and he was discharged to continue haemodialysis twice weekly as an outpatient until his AKI resolved.
This case illustrates a series of rare complications of TNF-α inhibitors that can cause a rapid, serious decline in health whereby patients receiving therapy for autoimmune conditions should be educated for early warning signs of a developing condition.

Analgesia Prescribing Trends in the Management of Major Spinal Surgery in University Hospital Galway.

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Introduction:
In the post-operative management of Major Spine Surgery, adequate analgesia is vital in reducing patient distress and aiding return to normal function and mobility.
A local pain protocol for Major Spine Surgery analgesia was introduced in the Orthopaedic Department in UCHG in conjunction with the anaesthesia department.
The protocol outlines the recommended peri-operative analgesia and the recommended medications to reduce opioid induced side effects.
Aims:
To audit the analgesia prescribing trends in the management of major spine surgery.
To educate and introduce change based on the results.
Methods:
Over 2 weeks, analgesia prescribing trends in all patients admitted electively for major spine surgery were audited. Patients' charts were audited day 3 post-op.
Results:
The protocol recommends that Pregabalin 50mg BD is given to patients day 1 pre-op. In this audit, 54% of patients received this. On the day of surgery, patients should receive Pregabalin 100mg STAT; 69% of patients received this. Patients should receive a fentanyl PCA on the day of the surgery; 54% of patients received this and the remaining 46% received alternative opioid analgesia. Patients should receive Tapentadol SR from day 1 post-op; 54% of patients received this and the remaining 46% received alternative opioid analgesia. Patients should also receive Tapentadol IR as prn medication from day 1 post-op; 54% of patients received this and the remaining 46% received alternative opioid analgesia.
Conclusion:
We achieved our aim of auditing the analgesia prescribing trends in the treatment of major spine surgery. In a number of areas of the protocol, alternative opioid analgesia was used to the recommended; this is partly due to the availability of Tapentadol on certain wards and the familiarity of other forms of opioids. The aim on completion of this audit is to educate the department and implement a greater compliance with the protocol.

Case report: The complications of the complications of uncontrolled insulin-dependent diabetes mellitus.

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The complications of uncontrolled diabetes mellitus are well reported however these complications can further progress to cause unexpected acute life threatening events. A 73-year-old male presented with a progressively worsening left hallux ulcer, fever and rigors. His background history included insulin dependent diabetes mellitus, hypertension and gout.
The left hallux displayed necrosis with bony protrusion and a 3cm x 3cm slough with erythema present. The left lower limb was cellulitis from the necrotic hallux to the knee. Admission bloods showed a significantly raised creatinine level with a vastly elevated C-reactive protein (CRP). Initial treatment involved managing the acute kidney injury whilst consulting with orthopaedic surgery, vascular surgery and rheumatology physicians departments regarding a possible diagnosis of osteomyelitis. His renal function improved with aggressive treatment however during admission he developed swollen, extremely tender joints in his upper limbs with significant lower and upper limb oedema. The left hallux was amputated and a considerable amount of purulent discharge drained from the left foot following surgical lancing at three points. Culturing of the amputated hallux grew Streptococcus Dysgalactiae. Despite intervention, he continued to remain febrile and vital signs began to deteriorate despite concurrent prescriptions of benzylpenicillin, flucloxacillin, metronidazole and piperacillin/tazobactam as per the advice of the department of infectious diseases. It was felt he had developed septic arthritis in multiple joints along with displaying signs of transient ischaemic attacks verified following an MRI brain. An echocardiogram showed cardiac vegetations sourced to the initial infection of the hallux, with infective endocarditis disseminating septic emboli to the brain and joints requiring aggressive treatment and a further prolonged admission by the infective diseases department.
This case demonstrates how the complications of a chronic disease can progress and the necessity of a diverse multidisciplinary approach for successful management in what was a complex and misleading admission.

Audit of Clinical Compliance with National Clinical Guidelines in Sepsis Management in the Emergency Department

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Abstract Category: Audit
Introduction: According to the National Clinical Effectiveness Committee (NCEC) 2014, the existing HIPE data is likely to be an

underestimate of the true burden of sepsis in Ireland.[1] The purpose of this audit was to assess the clinical compliance with the National Clinical Guidelines in Sepsis Management in the Emergency Department.
Methods: A manual retrospective review of adult admission charts which fulfilled the sepsis criteria on dates between 01/06/2015-30/06/2015. The data was analysed and focused on the compliance factors. Times from when patients were seen to when factors of the protocols were applied were calculated. Interquartile ranges were calculated in Microsoft® Exel® 2011.
Results: There is no IT system in place for patient's charts; everything is documented manually in the paper 'blue charts'. 50% of blood cultures had no plan documented, no time documented and no result documented. 78% of cases had a plan for bloods to be taken but no time as to when they were taken and no result in the chart. 71% of the cases had no plan for lactate analysis documented, no time documented and no printout result present in the chart. 50% of the cases that theoretically required oxygen therapy had no documented plan or administration. 85% of the cases had fluid administered and a time documented. Antimicrobial therapy and time administered were documented in 74% of cases. Out of the cases that had a time documented, the majority of the 'Take 3-Give 3' protocols were within the hour (55-80%).
Conclusions: Management of sepsis in the department appears to adhere to the guidelines. Documentation appears to be the main issue in this audit. Educating physicians on the need for documentation and highlighting the Sepsis 6 management plan to all staff may be suggestions for consideration.

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Endoscopist and Patient Assessment of Comfort During Colonoscopy using the Modified Gloucester Scale: A Cross-Sectional Study

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Introduction: The Global Rating Scale (GRS) was created as a quality improvement and assessment tool for gastrointestinal endoscopy service in the UK in 2004. Patient experience is one of the major aspects of assessing endoscopy service quality.[1] This cross-sectional study at the Midland Regional Hospital aims to compare endoscopist and patient assessment of comfort during colonoscopy using the Modified Gloucester Scale. Such knowledge allows the endoscopy unit to monitor this one aspect of colonoscopy quality.
Materials and Methods: The 54 patient filled Modified Gloucester Scores were manually collected from the 26/2/14®26/4/14 and cross-matched with the score given by the endoscopist during the procedure. This was then inputted into a spreadsheet in Microsoft® Exel® for Mac 2011. The data was analysed using SPSS. The Wilcoxon matched pair signal rank statistical test was used to look for comfort score differences between the groups.
Results: Fifty-four patient forms were analysed using SPSS. For more than half of the sample (29 of the 54), there was no difference in the two scores so the median difference is zero. There was no significant difference between the two sets of scores (p=0.23).
Conclusion: The results suggest that there was no difference between the two sets of scores. This implies that there was no discrepancy between the scores recorded by both endoscopist and patient on the level of comfort during the procedure.

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Multiple Visceral Aneurysms in Ehlers-Danlos Syndrome Type IV: Case Report

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Introduction:
Ehlers-Danlos syndrome (EDS) is a rare, variably inherited disorder affecting connective tissue. There are now more than 10 phenotypes of this heterogeneous condition described. The vascular system is affected specifically in EDS type IV, which was first described in 1967. Patients are susceptible to both aneurysm formation and spontaneous rupture of nonaneurysmal vessels resulting from extreme vessel fragility. A mortality rate of 50% has been described for patients with EDS type IV with vascular complications.
Case:
We describe a rare case of a previously fit 28-year-old male who presented to the emergency department with a three-day history of acute onset sharp, progressively worsening upper abdominal pain. His family history was significant in that his father died at age 40 from an intracranial haemorrhage. Clinical examination was positive for tenderness and guarding in the epigastrium. He was hemodynamically unstable upon arrival and responded well to fluid resuscitation. CT scan revealed haemoperitoneum secondarily to a 2.2cm splenic artery aneurysm. In addition, there was an unusually ectatic right common iliac artery measuring 1.8cm noted. These were both treated successfully by transcatheter coil embolization through a percutaneous femoral artery approach. The patient made an uneventful recovery and was discharged home well on post-op day 10. In the following 12 months, the patient represented on two separate occasions with additional ruptured visceral aneurysms necessitating further embolization of the same. The patient was referred to a clinical geneticist who made the diagnosis of EDS type IV.
Discussion:
The management of these patients can be extremely hazardous, with a high mortality rate reported for operative and noninvasive intervention. A multitude of treatment modalities exist for the management of visceral aneurysms in EDS. A high level of clinical suspicion is warranted in order to make a timely diagnosis of EDS type IV.

An Unusual and Disabling Side Effect of Long-Term Steroids in an Elderly Irish Man with Parkinson's Disease

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Abstract Category: Case report
Introduction: A more unusual and not as well documented side effect of long-term steroids is spontaneous Achilles tendon rupture. It is seen particularly in the elderly cohort of patients who take long-term steroids for systemic diseases.[1]
Description: A 71-year-old gentleman presented to the ED with a four-day history of pain and swelling of the left foot. The patient described a feeling of a 'stone' in his shoe. There was no recent trauma, pedal pulses were present and he was unable to weight bear on that leg. The ankle was acutely swollen, exquisitely tender, erythematous and warm to touch. The painful area extended from mid gastrocnemius to base of the toes. He was unable to move the joint.

The patient had a background history of Parkinson's disease, COPD, Bronchiectasis, orthostatic hypotension and fractures from previous falls. His relevant medications were deltacortril and fludrocortisone. He lived alone and had no family.
His bloods revealed a mildly raised white cell count 11.3, raised CRP 11.4, raised D-dimer 244 and reduced uric acid 197.
An ankle x-ray showed soft tissue swelling. No fracture was identified. An x-ray of the calcaneus revealed soft tissue swelling posterior to the calcaneus, which may represent insertional Achilles tendonitis.
An ultrasound Doppler of the veins in the left lower limb revealed no DVT. The patient was admitted under medics with a suspected arthropathy.
Three days after admission, an MRI scan revealed a full thickness tear of the mid Achilles tendon with a tendon gap of 6.3 cm. The inferior margin of the tear was 5cm from the calcaneal attachment.
Discussion: According to the Kuwada classification[2], it was a type IV tear. It was treated non-surgically with a below-knee cast. His Parkinson's disease made it very difficult to mobilise the patient with a frame. He was transferred to a district hospital for appropriate rehabilitation respite.

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Case Report: Pringles, Pizza and Pancytopenia

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A 27 year old male with Asperger syndrome presented to the emergency department with a four week history of cough and lethargy. He reported one episode of minor epistaxis 5 days prior to presentation. He denied any further bleeding, easy bruising or other symptoms. Examination was significant only for pallor and sinus tachycardia (120bpm).
Investigations revealed: haemoglobin 4.8g/dl, platelets $53x10^9$/L, white cell count $2.2x10^9$/L, neutrophils 1.1 $x10^9$/L and lymphocytes $1.1x10^{9/L}$. Reticulocytes were significantly reduced: $9.1x10^9$/L (0.56%). Prothrombin time was elevated: 20.7sec as was bilirubin: 34umol/L. Blood film: hyper segmented neutrophils, macrocytic red cells and tear drop poikilocytes (no blast cells). Further tests included a viral screen (HIV, Parvovirus, EBV, CMV and hepatitis) which was unremarkable. Coombs test, tTG and IgA were negative.
Haematinic studies showed elevated iron (46umol/l) and transferrin saturation (>90%). Vitamin B12 and ferritin were within normal ranges but a markedly low folate (<1.5 ng/ml) was noted. A nutritional history exposed he had been subsisting solely on Coco pops, pizza and Pringles.
Intravenous folinic acid was given and oral folic acid provided as maintenance therapy. He was transfused with 2U of red blood cells and 1g of fibrinogen. He was also given vitamin K for a presumptive deficiency causing his coagulopathy. Dietetic input deemed him a moderate refeeding risk and he had replacement of thiamine, potassium, magnesium and phosphate with careful electrolyte monitoring. His stay was complicated by a temperature spike on day 2. He was covered initially for neutropenic sepsis and then treated for an identified respiratory source.
The reticulocyte count post folate replacement demonstrated an excellent bone marrow response ($249.2x10^9$/L, 11.81%). Close nutritional support is ongoing.
This case documents an unusually benign cause of a profound haematological abnormality. It highlights the importance of screening for nutritional deficiencies and demonstrates the significance of taking a dietary history.

Pyrexia of Unknown Origin: 'Still' a Mystery?

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Introduction:
Juvenile Idiopathic Arthritis (JIA) is the most common rheumatological disease in childhood.(1) Adult Still's Disease describes a condition similar to JIA seen in adults with characteristic features including, daily spiking temperatures, arthralgia and evanescent rash.(2) The exact aetiology is unknown, likely a mixture of environmental and genetic factors.
Case Description: 64 year old man who presented with a 10 day history of fever and rigors, drenching night sweats both day and night, generalized myalgia, arthralgia and fatigue. No evidence of joint swelling or rash at presentation. Patient denied the presence of headaches, nausea or vomiting. Clinically, no palpable lymphadenopathy or organomegaly.
Patient experienced daily temperature spikes but repeated blood cultures remained negative. C-reactive protein (CRP) peaked at 305mg/L; platelets at 827 x 10^9/L; serum ferritin 2754ng/ml. Urine dipstick was negative. Rheumatoid factor <11.4IU/ml; ANA and ANCA negative. Anti EBV, Hep B, C, HIV not detected. Anti CMV, anti IgG, anti Borr. Burgdorferi IgG, Q fever or leptospirosis not detected. Quantiferon testing was negative, blood film normal. ESR measured 111mm/hr.
Echocardiogram showed no vegetations. CT thorax abdomen pelvis along with PET scan were normal. Patient was initially commenced on broad spectrum antibiotics which were subsequently discontinued, as he continued to be pyrexic and no focus of infection was identified on investigations.
He was empirically started on prednisolone 40mg once daily and did not spike a fever after this. Night sweats resolved and CRP settled to 11.3 on discharge.
Discussion: Adult Still's disease shows no bias between sexes; it peaks in occurrence between the ages of 15-25 and 36-45.(3)
Data on the diagnosis and treatment of Adult Onset Still's Disease is scanty. (4)Diagnosis is mainly based on the exclusion of infective, malignant and immunological processes.(5) Laboratory tests are largely non-specific and show a heightened inflammatory process.

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Should all pregnant women be screened for Parvovirus B19 infection?

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Parvovirus B19 is known for its potentially harmful effects to a fetus during pregnancy.[1] Exposure of the fetus to parvovirus B19 prior to 20 weeks gestation is associated with a 10% rise in overall risk of spontaneous abortion, and is a common cause of fetal anaemia and nonimmune hydrops fetalis. Routine antenatal screening is not recommended.[2]
Aim
To explore the implication of antenatal screening for Parvovirus B19 in the management of potential risk to expectant mothers and their babies.
Methods
Single site prospective cohort study of 142 women booking for care at 12 – 14 weeks gestation between July and November 2016. All women were tested for Parvovirus B19 IgG and IgM.
Results
Out of the 142 patients examined 105 (73.9%) tested positive for IgG and negative for IgM, 1 (0.7%) tested positive for both IgG and IgM, and 36 (25.3%) tested negative for both IgG and IgM.
Discussion
Our study demonstrated that the tested population showed a significantly higher rate of immunity than the ~50% quoted in literature. Indeed our susceptible cohort (25%) is much lower than those quoted in England (38%), Finland (48%), Italy (39.9%) and Poland (36.8%).[3] Current advice such as avoiding young children who might introduce a risk of Parvovirus infection and frequent hand-washing[1] is unnecessary for 75% of women who are shown to be immune to Parvovirus B19. A more focussed approach including early diagnosis of infection is possible for those women who are non-immune.

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The overarching principles of EULAR gout guidelines

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The overarching principles of the 2016 EULAR gout guidelines have a significant focus on lifestyle and preventive medicine with patient education as well as systematic screening for associated comorbidities playing an important role in the overall management of gout. This audit was a retrospective study of outpatient department consultations conducted by doctors at the Rheumatology service in Manorhamilton, Co Leitrim. Its main aim was to investigate the extent of documentation of the various aspects of the three overarching principles.
A pre-existing database of more than 100 symptomatic patients with high uric acid levels was obtained and used in order to select the audit sample. This database was collected based on patient attendences to OLHM between January 2011 and August 2016. The patients were sorted in decreasing order of level of uric acid. The 25 patients with the highest uric acid levels were selected for the study. The first 30 consultations, often with more than 1 consultation per patient, encountered in the medical charts with a working diagnosis of gout were selected.
The results show that overarching principle A which focuses on patient education (includes 1 item) was documented on 0/30 occasions; overarching principle B which focuses on lifestyle advice (includes 7 items) was documented on 0/30 to 5/30 occasions, depending on the item in question; and overarching principle C which focuses on screening of associated comorbidities (includes 6 items) was documented on 1/30 to 26/30 occasions, depending on the item in question.
This shows that the documentation of individual items of the overarching principles was largely poor. A number of interventions have been suggested in order to improve documentation in a manner which facilitates the adherence to most recent guidelines. Following these interventions, a re-audit is planned which will complete the audit cycle.

Prevalence of Delirium in ICU patients and Delirium Prevalence after Introduction of a Non-Pharmacological Intervention

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Introduction: Delirium is a serious neuropsychiatric syndrome. It is frequently experienced by ICU patients and causes increased morbidity and mortality. Consequently, the prevalence of delirium within an ICU and its prevention are of great importance to patient care.
Aim: Establish baseline delirium prevalence rate by testing ICU patients. Investigate the effect of a non-pharmacological intervention, clocks, on the delirium rate. Identify the ICU delirium subtypes.
Method: Prospective cohort study in a university affiliated tertiary care hospital. Consecutive patients admitted to 10-bed ICU screened for delirium. Screening carried out using RASS and CAM-ICU. Patients excluded for head injury and no consent. Study carried out in 2 phases, March–April 2015 and October 2015. Clocks placed opposite patient's beds for phase 2.
Results:
Study Phase 1: There were a total of 51 patients. 7 excluded no consent or head injury. 44 testable patients, 24 met delirium CAM-ICU criteria giving delirium prevalence of 54.5%. Delirium subtypes were hypoactive at 54.2%, mixed at 26.2% and hyperactive at 16.7%.
Study Phase 2: There were a total of 21 patients. 2 excluded for head injury. 19 patients, 10 met delirium CAM-ICU criteria giving a prevalence of 52.6%. Delirium subtypes were hypoactive at 50%, hyperactive at 40% and mixed at 10%. Comparing prevalence rates 54.5% and 52.6%, Fisher's Exact test, $p = 0.862$. Therefore not statistically significant and clocks did not affect the delirium rate.
Conclusion: Discovered baseline delirium prevalence rate was 54.5%. Hypoactive delirium was most common subtype. The clocks were ineffective in delirium prevention.

AN INTERESTING CASE OF POST-OPERATIVE TACHYCARDIA IN AN ENDOMETRIOSIS PATIENT

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Thyroid storm is a thyrotoxic crisis, in which there is an acute release of thyroxine (T4) and tri-iodothyronine (T3). Incidence amongst hospitalised patients is 0.20 per 100,000. Clinical manifestations include tachycardia, pyrexia and gastrointestinal symptoms. Mortality rates are reported to be 20% - 30%.
We present the case of a 23 year old lady admitted electively for laparoscopic adhesiolysis and excision of endometriosis, on a background of stage four endometriosis. Her past medical history was significant for anxiety. She was noted intraoperatively to be tachycardic despite minimal blood loss. She was managed with fluid resuscitation. Immediately post-operatively, she became increasingly tachycardic at 155/bpm, hypertensive at 160/90mmHg, pyrexic to 38.1°C, as well as nausea and vomiting.

An urgent full blood count and septic screen were sent, as well as thyroid function tests. Her blood results revealed Hb 11.6g/dl, an elevated fT4 of 68.0 pmol/L (12–22) and a low TSH of < 0.05mU/L (0.3-4.2). Diagnosis of thyroid storm on a background of undiagnosed hyperthyroidism was made. Metoprolol and carbimazole were commenced and the patient was observed in the Post Anaesthetic Care Unit. An isotope thyroid scan demonstrated findings consistent with Graves' disease. With treatment, the patient's condition stabilized and she was discharged day 3 post op.
A 2016 study found a higher prevalence of Graves' disease in endometriosis patients. It is postulated that this may be related to autoimmune factors and interestingly Anti Nuclear Antibody positivity has been found to be elevated in both groups. This association should be considered in endometriosis patients.

Investigation of changes in quality of life following transcatheter aortic valve implantation in a single centre

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Introduction: Severe aortic stenosis results in reduced life expectancy and impacts on wellbeing. Transcatheter aortic valve implantation (TAVI) provides a treatment option in patients unsuitable for surgical valve replacement due to prohibitive operative risk. In addition to morbidity and mortality outcomes, changes in quality of life represent a key metric in assessment of overall success.
Aim: To evaluate changes in quality of life following TAVI in a single centre.
Methods: The Kansas City Cardiomyopathy Questionnaire was utilised to assess patient quality of life at baseline and post procedure. The instrument quantifies physical function, symptoms, social function and quality of life in heart failure patients. Telephone interviews were conducted. A Wilcoxon test was performed on paired differences between scores at baseline and post procedure. Statistical analyses was carried out using SPSS for Mac version 20.0 and Prism 6.
Results: 91 patients underwent TAVI between November 2008 and December 2013. At the time of study, 28 were deceased, 11 were unsuitable and 52 were included. Of those included, 33 were male (63%), the mean age was 84 +/- 6.7 years. Mean follow up was 35 months (range 3-64 months). The following results were pre and post procedure respectively. Overall summary score 61.4 ±25.6 and 78.9±24.6 (p<0.0001), clinical summary score 67.8 ±23.4 and 79.0±23.3 (p<0.0001). Physical limitation score 64 ±3.3 and 65.2±29.2 (p=0.9), symptom frequency 65.4±24.8 and 78±7.4 (p=0.0001), symptom burden 75.5±24.7, and 86.0±21.3, (p=0.004). Total symptom score 70.5±23.1 and 82.4±21.2, (p=0.0003), self-efficacy score 45.0±26.7 and 66.9±28.4, (p=<0.0001), quality of life score 48.7±27.1 and 82.9±25.0, (p<0.0001), social limitation score 62.4±32.6 and 75.4±33.6, (p=0.03). 37 (66%) experienced improvements in clinical summary score, and 42 (80.2%) in overall summary score.
Conclusion: A treatment effect was demonstrated with 80.2% experiencing improvement from baseline. Highlighting the clinical benefit attainable from TAVI in an elderly population who would otherwise be unsuitable for intervention.

Audit on compliance with Rivaroxiban guidelines

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Rivaroxaban is a Novel Oral Anticoagulant used in prevention of stroke and emboli in adults with non-valvular atrial fibrillation and treatment of DVT and PE. Clinical monitoring is recommended for the duration of therapy, especially in renally impaired patients, due to the risk of haemorrhage. The aim of this audit was to investigate compliance with Rivaroxaban safety recommendations. This includes a follow-up appointment in the outpatient clinic of the prescribing practitioner to monitor the risk of haemorrhage and a blood test by the patients' primary care physician to check renal function. Patients were contacted directly via their provided contact phone number and asked a series of questions to assess their experience with Rivaroxaban. The population for this audit were patients who were prescribed the drug in the outpatient setting. Twenty four patients taking Rivaroxaban were recruited for the study, however nine of these were excluded. 87% of patients included in the study were still taking Rivaroxaban at the time of the study. 100% of those report full compliance, 62% had their renal function checked by their primary care physician after starting the medication and 38% had a return consultation in the outpatient clinic. 13% of the participants were no longer taking the drug due to the side effects, half due to bleeding and half due to a rash. Only one of the participants experienced bleeding while on Rivaroxaban and was subsequently switched to Warfarin. In order to improve the percentage of patients who are seen in clinic after commencing Rivaroxiban I recommend a mandatory followup appointment in the outpatient department or anticoagulation clinic. This would give the prescribing physician the opportunity to review the patient and any side effects or compliance issues they may have.

A Case of Breast Cancer in a Patient with Antipsychotic-induced Hyperprolactinaemia

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Case report: Ms X, a 42 year-old nulliparous woman with a 23 year history of treatment-resistant schizoaffective disorder, was admitted involuntarily to the psychiatric unit with psychosis secondary to medication non-compliance. In the past she had failed to reach full recovery on an array of antipsychotic drugs. Raised serum prolactin levels were noted on a number of occasions over the years. On admission Ms X had an inverted left nipple, present for a few months. Radiological investigations revealed a locally invasive non-metastatic ductal carcinoma with positive axillary nodes, and left mastectomy with axillary clearance was recommended. Initially Ms X was reluctant to agree to surgical intervention, as she exhibited delusions that healthy eating and natural supplements alone would cure her. However once her mental state had improved, and it was felt she had capacity to understand fully the nature of the diagnosis and proposed treatment she consented to same. The surgery itself was uncomplicated and she recovered well afterwards. At the time of writing she was awaiting further treatment with radiation therapy and chemotherapy.
Discussion: The link between antipsychotics (both typical and atypical) and hyperprolactinaemia has long been established[1]. Prolactin is secreted by lactotrophs in the anterior pituitary gland, and antipsychotics block D2 receptors on lactotrophs, thus blocking inhibition of prolactin secretion[1]. Hyperprolactinaemia is thought to be associated with various pathological conditions, including breast cancer, and the relationship between the two has been explored[2]. To date studies have been equivocal, and the role of prolactin in breast tumorigenesis remains unclear[3], with other risk factors such as nulliparity, lifestyle factors and obesity thought to have more relevance[4]. This is an interesting case in light of ongoing research in the area. Ms X's management also raised important ethical questions regarding the management of a patient with reduced capacity who refuses lifesaving treatment.

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Prevalence of potentially inappropriate prescribing in an Age Related Healthcare Service in Ireland

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Background: Potentially inappropriate prescribing (PIP) in the elderly is associated with morbidity, mortality and adverse events[1].
Objectives: The aim of this study was to investigate the prevalence of potentially inappropriate medication use on discharge from a specialist age related healthcare hospital service in Ireland.
Methods: A retrospective cohort study of patients aged greater than 65 years discharged from a geriatric unit in a tertiary hospital in Ireland between 2014-2016. Patient records were analysed for medical history, pre admission medications and discharging prescriptions. Beers and STOPP criteria were applied to ascertain the number of PIMs (Potentially inappropriate medications).
Results: One hundred patients aged 65 or older were included in the study, 54 females and 46 males. Overall, using STOPP criteria, 67% were prescribed a PIM on their discharging script. Applying Beers to discharge prescriptions, 64% of patients were discharged with a PIM. Seventy-nine patients had their pre-hospital medications pre reconciled by a clinical pharmacist. Of those definitively commenced in hospital, the most common PIM were PPIs (15%) according to STOPP. Using the Beers criteria, of those commenced in hospital, the most common were psychotropic PIMs BDZ and non BDZ (2.5%) and antipsychotics (2.5%).
Conclusion: Despite being part of an elderly specialist service, older patients are still prescribed inappropriate medications, whether it commenced in hospital or in a repeated script. Applying Beers or STOPP criteria routinely may give scope to improve care.

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Spontaneous Silent Feto-Maternal Haemorrhage – A Case Report

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Introduction: We report a case of massive silent feto-maternal haemorrhage (FMH).
Clinical Details: The patient presented at 35+4 with a two day history of reduced fetal movements. Her antenatal course had been largely uneventful. At booking she was found to be rhesus negative and she had one hospital presentation at 20+2 following a minor abdominal trauma. She was well, Kleiheuer was negative, she received prophylactic anti-D and was discharged. On presentation at 35+4 her CTG had a pathological pattern with markedly reduced variability and late decelerations. An emergency caesarean section was performed. At delivery the infant had a haemoglobin of 3.5 and massive silent FMH was diagnosed.
Discussion: Massive FMH is a rare phenomenon, presenting in 1/5000 deliveries. [3] Fetomaternal haemorrhage refers to the passage of fetal blood into the maternal circulation either before or during delivery. [1][3] Although the placenta is considered a barrier separating maternal from fetal circulation, bidirectional passage of a small number cells across the placenta is a physiological process and occurs commonly at delivery without clinical consequence for mother or baby. [1] Clinical manifestations are dependent on the volume of blood loss; potential outcomes include non-reassuring fetal heart patterns, neonatal haemodynamic instability, fetal or neonatal anaemia, hydrops fetalis, intrauterine or neonatal death.
A high index of suspicion is required in those presenting with reduced fetal movements. Urgent fetal assessment with ultrasound, CTG and laboratory tests to detect FMH should be considered, as this rare condition can have devastating outcomes.

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DYSPHAGIA LUSORIA: A RARE CAUSE OF INTERMITTENT DYSPHAGIA

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A 77-year-old female presented with a 4 year history of non-progressive dysphagia to solid foods accompanied by episodes of food bolus obstruction that became more frequent over the previous year. There was associated weight loss of 2 stone over the last 6 months and regurgitation of food. Past medical history significant for colorectal cancer managed with subtotal colectomy and end ileostomy formation. Physical examination was unremarkable. A barium swallow was performed and demonstrated an extraluminal compression on the posterior left lateral aspect of the proximal oesophagus. An OGD was done to exclude malignancy with biopsies demonstrating normal oesophageal squamous mucosa. Manometry and pH studies were not tolerated by the patient. This was followed up with a CT thoracic angiogram which showed an aberrant right subclavian artery passing behind the oesophagus causing compression and complete obliteration of the oesophageal lumen. This finding is consistent with dysphagia lusoria, a term used to describe vascular compression of the oesophagus. The patient was managed conservatively with diet and lifestyle modifications, and was commenced on proton pump inhibitor therapy. Aberrant right sided subclavian artery is a relatively common variant of aortic arch branching, occurring in 0.5% - 2% of individuals [1]. It is usually asymptomatic but in cases where it does cause symptoms, surgical repair may be indicated [2]

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Acute vision loss – looking for a cause

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A 60-year-old lady presented to MMUH with a 1 week history of left partial, painless vision loss. This was acute in onset, commencing as a "smudge" in her left central visual field and eventually progressing to a "dark fog". No associated jaw claudication, scalp tenderness or neurological deficit however the patient reported a 6 week history of intermittent left fronto-parietal headaches. Right eye was unaffected. Past medical history is significant for diet-controlled hypercholesterolemia. On examination, only abnormalities detected were a left central scotoma and relative afferent pupillary defect (RAPD), with reduced visual acuity 6/9.
Initial empiric treatment included prednisolone 60mg OD, aspirin 75mg OD, atorvastatin 40mg OD. Stroke work-up was negative and a range of bloods, including CRP and fibrinogen, were normal. ESR was mildly raised at 22. Temporal artery US, performed following failed left temporal artery biopsy, showed no evidence of vasculitis.
As this case did not fulfill the criteria for giant cell arteritis (1), non-arteritic anterior ischaemic optic neuropathy (NAION) was diagnosed by exclusion. The patient had mild improvement of visual acuity and was discharged on a tapering dose of prednisolone with discontinuation of aspirin. She was due for follow-up in ophthalmology and stroke clinics.
Discussion
Acute vision loss can be a frightening experience for a patient. It is important to have a low threshold for urgent empirical treatment with corticosteroids if there is any suspicion of arteritic ischaemic optic neuropathy in order to prevent bilateral vision loss, which can occur in days to weeks in 50% of patients(1). However, not all acute vision loss is arteritic in nature. NAION is damage to the optic nerve secondary to vascular insufficiency and is the most common acute optic neuropathy in those over 50 years of age(2). Treatment includes control of vascular risk factors to prevent sequential vision loss.

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An uncommon case of brain stem stroke in a young person.

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This case highlights that: 1) vertebral artery dissection may present with symptoms mimicking MCA ischemic infarct; 2) that MRI can be normal in acute stroke; and 3) that lifting heavy weights may have been causative in this case; especially in someone who has no features of increased risk for arterial dissection.
A 44-year-old male presented to the ED after complaining of a right-sided weakness. He had been lifting loads of 40kg for prolonged periods. The weakness worsened over the next few hours though there was no facial asymmetry. He had felt light headed, with no headache, dizziness, chest pain, dyspnoea, or palpitations. He had paraesthesia over the dorsum of the right foot. This was the first time this had happened. His medical history included renal cell carcinoma, and ulcerative colitis. He was on no medications. On initial assessment in the ED, he had right hemiparesis, with increased tone and 4/5 power on the right upper and lower limbs. His romberg sign was negative. Of note, he also had right arm pronator drift. The rest of his examination was unremarkable.
An urgent CT brain was normal. The initial diagnosis was left MCA territory ischemic event; so he was commenced on aspirin and statin, and admitted to the acute stroke unit. Further evaluation showed diplopia on left lateral gaze, and right hemiparesis. There was no facial asymmetry. Features were consistent with brain stem stroke. Subsequent MRA brain showed a high signal intramural ring consistent with a left vertebral artery dissection. Even though clinically our final diagnosis was brain stem stroke, the MRI did not show any diffusion weighted restriction defect to support it. Nor did it show any abnormality or ischemic event in the left MCA territory, which was the initial clinical diagnosis in the emergency department.

An analysis of the relationship between Body Mass Index and post-operative complications in elective Total Knee Replacements

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Aim:
It was observed that patients who underwent elective knee replacement with increased Body Mass Index (BMI) seemed to be at higher risk of complications in comparison to those with a lower BMI. Our aim was to correlate the rate of postoperative complications and BMI in a cohort of orthopaedic patients following total knee replacement.
Methods:
A retrospective analysis was performed of all elective Total Knee Replacements undertaken between January 2016 and October 2016 in Midlands Regional Hospital, Tullamore. There were 86 patients in total. 7 were excluded, as BMI had not been recorded, giving a total of 79 patients. Patients were divided into categories based on their BMI. 16% were considered healthy BMI, 20% were overweight and 62% were classified as obese. Complication rates were determined through examining patient notes from the beginning of the postoperative period until their 6-week outpatients appointment.
Results:
The rate of complications was 0% in patients with a BMI less than 18.5, 23% in individuals with a BMI from 18.5-24.9, 31% in patients with a BMI of 25-29.9, 36% in patients with a BMI of 30-34.9 and 0% in those with a BMI of greater than 40. The most frequently observed complications were superficial infection, decreased range of movement and joint instability. Infection was more common in those of higher BMI. 8% of patients considered healthy weight had an infection while 13% of obese individuals had a postoperative infection.
Conclusions:
Patients with a BMI of 25-34.9 were at higher risk of postoperative complication in comparison to those with a healthy BMI (18.5-24.9). This is most evident in relation to postoperative infection. Of note, patients with a BMI of greater than 35 were at lower risk of postoperative complication. This, however, may reflect selection bias and the low numbers in this category. Further evaluation of this cohort is warranted.

Metastatic Staphylococcus aureus bacteraemia

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Introduction:

Staphylococcus aureus bacteraemia is a dangerous infected associated with significant morbidity and 11-43% mortality.[1] This case demonstrates the complex metastatic nature of staphylococcal infection, the need for prolonged antibiotics and high clinical suspicion to avoid overlooking complications as these may present non specifically in the context of critical illness.

Case Report:

The patient is a 69 year old female with a 30 year history rheumatoid arthritis well controlled on methotrexate. She presented initially with persistent pain following right wrist fracture with profound neutropenia. Four blood culture sets were positive for MSSA bacteraemia and a large infected haematoma was found at fracture site which required wash out and external fixation. Initially antibiotic therapy was with intravenous flucloxacillin and clindamycin, however, this was changed to ciprofloxacin, linezolid and rifampicin due to rising inflammatory markers and ongoing pyrexia.

CT TAP day 16 showed bilateral psoas abscesses causing right hydronephrosis. MRI spine day 29 subsequently revealed extensive osteomyelitis in cervical, thoracic and lumbar spine, with lumbar spinal discitis, oedema and high grade spinal canal stenosis. Bone scan showed further dissemination with osteomyelitis in the right foot and septic arthritis in the left shoulder. Repeated echocardiogram showed no evidence of infective endocarditis. Recovery was slow and complicated by; quadriplegia secondary to spinal canal stenosis and critical illness myopathy, hypercalcaemia as a result to immobilisation and osteomyelitis, opioid toxicity, NSAID induced pancolitis and severe malnutrition.

A prolonged 4 month course IV antibiotics was necessary given the severity of infection and persistent elevation in CRP. Flucloxacillin alone was used after 1 month combination treatment. This was changed to oral cephalexin in September due to flucloxacillin induced liver injury, which is currently ongoing pending radiological resolution and normalisation in CRP. The patient has made a remarkable recovery, with substantial improvement in motor power allowing her to live independently at home.

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Unusual cause of joint pain in a healthy male

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A 26 year old male presented with 3 day history of increasing left groin pain and difficulty mobilising. He had no significant medical history, no history of trauma and was apyrexic with no systemic symptoms. On examination he had severe hip pain on passive flexion and rotation. His infection markers were raised. His working diagnosis was septic arthritis of the hip joint and IV antibiotics were commenced.

Initial MRI pelvis showed a moderate left hip effusion. Ultrasound-guided aspiration yielded a haemorrhagic viscous fluid. At open washout of the joint the capsule and cartilage appeared normal, but there was dark synovium behind his femoral head which was excised and sent for histology. Post washout, pain improved significantly, inflammatory markers normalised and mobilising was pain-free. His joint aspirate showed pus cells but no organisms grew.

A MRI of his left hip was then performed demonstrating a focal mass-like synovial thickening posterior to the left femoral head neck junction consistent with focal pigmented villonodular synovitis (PVNS). The patient was discussed at an MDT. Giant cell tumour of tendon sheath was considered but thought unlikely as the tissue was within the hip joint. Antibiotics were stopped, with a plan to repeat an MRI in 6 weeks time. A wide range of differentials should be considered for joint pain other than septic arthritis, especially in young patients with no risk factors. It highlighted that rare conditions may present with common symptoms and that appropriate investigation is essential.

PVNS is a rare, benign, but potentially locally aggressive and recurrent condition characterized by synovial proliferation and hemosiderin deposition inside the joints, tendon sheaths, and bursae. It's prevalence is approximately 1.8 cases of intra-articular disease per 1 million population.

An Unusual Presentation of Recurrence of Non-Small Cell Lung Cancer

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Case

A 62-year-old lady presented with three-month history lower back pain associated with worsening bilateral leg weakness, which had been worsening over past two months. She had a background history of early stage non-small cell lung cancer (Pt1a N0 adenocarcinoma) in 2012 for which she had left lower lobectomy with no adjuvant therapy.

On exam power was 3/5 in the right leg and 4/5 in the left leg associated with reduced coordination. On admission MRI Brain/ Spine showed multifocal T2 intensity in the thoracic spine with hyperintensities in the right frontal, left frontal and right parietal areas. At this stage, while concerning for malignancy, the differential also included infectious and inflammatory etiology such granulomatous disease/sarcoid.

Following this patient had lumbar puncture which showed high protein and monoclonal bands. Histology of her CSF showed atypical cells but was not conclusive for malignancy. The patient also had a PET scan at his time showing uptake in bihilar and precarinal lymph nodes. EBUS was performed which revealed non caseating granulomas. As this point diagnosis was still inconclusive. The investigations at this point were consistent with both neurosarcoid and malignancy. The patient then underwent a brain biopsy of left occipital enhancing lesion which confirmed metastatic adenocarcinoma consistent with non-small lung cancer. The patient is currently being treated with whole brain radiotherapy and intrathecal chemotherapy.

Discussion

Non small lung cancer is one of most common malignancies and commonly metastasizes to the brain. However this case was extremely unusual in that this patient's original malignancy was early stage making her very unlikely to present with a recurrence. The usual five year and ten year survival with early stage primary cancer is 77% and 70% respectively (Martini et al., 1995). Also interestingly, this patient had solely brain/ leptomeningeal metastases without spread anywhere else. There is one other reported case like of isolated brain metastasis as a late recurrence of non-small cell lung cancer and that was a T2 tumour as compared to T1 in this case. (Ju and Han, 2016).

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Rupture of a Femoral Artery Pseudoaneurysm A Case Report

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Introduction: Pseudoaneuryms are a known complication of intravenous drug use.
The femoral artery is most commonly involved due to the close proximity of the
femoral vein (1).
A 36-year-old male presented to the Emergency Department with a two-day history of pain and swelling in the right thigh and inguinal area. His background history was significant for intravenous drug use and Hepatitis C. On examination he was febrile and tachycardic. As part of the initial investigations, a Doppler Ultrasound was performed. It showed a right above knee occlusive deep venous thrombosis. He was initially treated with therapeutic anticoagulation and intravenous antibiotics.
As there was a noticeable groin swelling, it was thought the patient had an abscess. Ultrasound groin demonstrated minimal vascular flow, which was consistent with an abscess. He underwent a CT Venogram for further evaluation of his DVT. This showed a pseudoaneurysm of the profunda femoris artery, which was not previously visualised. Before these results were communicated, the patient sneezed on the ward and began haemorrhaging from the pseudoaneurysm. He lost approximately 500mls of blood. He was brought to theatre for emergency surgery. The femoral triangle was inoperable and the bleeding was definitively managed with ligation of the external iliac artery. The femoral artery was oversewn. He received intravenous antibiotics for two weeks post surgery.
Discussion: Although femoral artery pseudoaneurysms are an infrequent clinical
condition, they should be borne in mind in an at risk population. Treatment options
include excision, ligation and debridement of the pseudoaneurysm with either
routine, selective or no re-vascularization (1). Review of the literature shows that
ligation and excision of the pseudoaneurysm without re-vascularization is safe and effective in this patient population.

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Simultaneous Near Infrared Spectrometry (NIRS) and Electroencephalogram (EEG) in Preterm Infants

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Introduction: Preterm birth is a key determinant of neonatal brain injury. Neuromonitoring of cerebral oxygenation and neurological activity may detect antecedents to preterm brain injury.
Aims: To determine in infants < 32 weeks;
1. normative values of regional cerebral oxygenation (rScO2) using NIRS,
2. the relationship between rScO2 and adverse outcome,
3. to examine the relationship between rScO2 and quantitative EEG.
Methods: This was a prospective observational cohort study of infants <32 weeks. Part 1: Infants were monitored using NIRS with a neonatal probe in the first 48 hours of life. A composite measure of death and any abnormal cranial ultrasound finding was used to define adverse outcome.
Part 2: In the same cohort, EEG was simultaneously recorded along with NIRS in 8 infants. EEG burst and Inter-burst Intervals were correlated with NIRS.
Results: Part 1:127 preterm infants, median gestation 29 (26.92-30.71) weeks and median weight 1.14 (0.87-1.46) kg were evaluated. 85 infants had a good outcome while 42 infants had an adverse outcome (GM-IVH, PVL or death). There was a non-significant increase in rScO2 values for those with good outcome 79% (76-87%) versus 77% (72-79%), p >0.05.
Part 2: Pearsons correlation between rScO2 interquartile range and number of bursts per minute r = -0.60 (CI: - 0.91 to –0.12) was significant.
Conclusion: This is the first study to establish normative values of cerebral oxygenation in preterm infants using a neonatal probe. Preterm infants with low rScO2 had poorer outcomes. Furthermore, a reciprocal relationship between neurological activity and hemodynamic changes was determined.

Read Between the Lines: A Case Report of an Interstitial Hernia

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Introduction: An interstitial hernia is one where the hernia sac is located between the layers of the abdominal wall. Incidence of interstitial hernias has been reported to be between 0.08 and 1.6% (1).
A 49-year-old woman presented to the Emergency Department with a sudden onset of right lower back pain. The pain radiated to the right iliac fossa and groin. There were no associated symptoms. On examination, the patient was afebrile and haemodynamically stable. Her abdomen was soft with associated rebound tenderness in the right iliac fossa. There was no evidence of herniae and her cough impulse was negative. Bowel sounds were present. At this point the provisional diagnosis was renal calculi. Haematological investigations were within normal limits. CT KUB was performed, which showed fluid filled mildly dilated small bowel measuring up to 2.9 cm in a right inguinal hernia. The patient was taken to theatre for emergency repair of the right-sided hernia. An open inguinal incision was performed. At this point, it was seen that the hernia sac was located between the layers of the external oblique and internal oblique muscles. Small bowel was located in the sac. The small bowel was dusky but there was no evidence of ischaemia. The small bowel was reduced back into the peritoneum and the defect was closed. The patient had an uncomplicated post-operative course.
Discussion: Interstitial hernias can be difficult to diagnose clinically. They are easily misdiagnosed as the clinical symptoms can vary. There is little in the literature regarding the optimal management. However, most authors recommend an oblique inguinal approach because it provides good exposure and facilitates dissection of the sac.

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Posterior cerebellar ataxia as a result of pembrolizumab in the treatment of desmoplastic melanoma

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Immunotherapy is fast becoming the front-runner in the systemic treatment of desmoplastic melanoma. Anti-CTLA-4 monoclonal antibodies

such as ipilimumab and newer anti-PD1 agents like pembrolizumab have shown promising results in melanoma therapy, but these immunotherapeutic options are not without risks. Neurotoxicity has been reported in approximately 1% of cases.

An 80 year old male presented with progressive ataxia, lethargy, a decline in cognitive function and new onset dystonia which had been present for the previous 10 days. The patient was taking pembrolizumab for the treatment of locally recurrent desmoplastic melanoma. A CT brain was performed which showed no intracranial metastatic deposits. The patient was believed to have posterior cerebellar ataxia as a consequence of the autoimmune effects of pembrolizumab. The pembrolizumab was held and the patient was begun on 75mg of prednisolone daily, following which he had a marked improvement in mobility, coordination and cognitive function.

The patient was originally diagnosed with desmoplastic melanoma BRAF wild type on the left occipital scalp which was excised in December 2013 followed by adjuvant radiotherapy. The patient had multiple local recurrences and excisions with repeat radiation until February 2016 in which he was started on CTLA-4 monoclonal antibody ipilimumab. His cutaneous metastasis continued to grow irrespective of the treatment. The possibility of a delayed response to the immunotherapy was communicated to the patient and the lesion gradually decreased in size from 3.5cm at its largest to 1.4cm over the following weeks.

Pemrolizumab was introduced in June 2016 and the patient had a remarkable response within his well-known scalp lesion. CT TAP showed no metastatic disease and the patient had a complete clinical remission in the scalp. He then developed autoimmune neuropathy in October 2016 and the pembrolizumab was held.

This case illustrates the efficacy of immunotherapy in the treatment of desmoplastic melanoma but it also highlights the risk of immune related adverse events.

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TB or not TB; That is the Question - A Case Report

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A 70-year-old gentleman presented to the ED following an unwitnessed fall at home in the setting of a partially treated urinary tract infection (UTI). A background of extensive smoking and oral cancer was noted in the history but the staging and treatment was unclear. Although the patient was alert and fully orientated, he was a poor historian. On inspection, a low BMI was noted and a scar following the right anterior cervical chain was visible. A diffuse expiratory wheeze was heard on auscultation with no focal consolidation or crepitations. He was saturating well at 96% on room air and reported no recent respiratory symptoms. Laboratory tests revealed a leucocytosis, neutrophilia and a raised CRP which were presumed to be linked to his ongoing UTI. A chest x-ray revealed multiple small nodular opacities throughout both lung fields.

The initial differential was between miliary TB or metastatic lung disease. He was isolated with airborne precautions pending further imaging. Information transfer between his original hospitals took several days to organise. This ultimately revealed that this patient previously had oral squamous cell carcinoma (T2N0M0) treated with excision, radiotherapy and chemotherapy. In addition, he had undergone three previous lung biopsies between 2013-2015 which demonstrated fibro-inflammatory change and were not for further investigation. Over the course of the two days that this patient waited in isolation for his Quantiferon result and CT scan, his clinical condition deteriorated to the extent that metastatic disease or a second primary became the main differential. The decision was made to involve palliative care and to make him comfortable.

This case highlights the importance of reliable and timely information flow between hospitals, the impact it can have on improved quality of patient care and also illustrates the difficulty in attaining accurate early diagnosis of non-specific lung lesions found on chest x-ray.

Duodenal gunshot injury

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Abstract

A 42 year old man with a history of intravenous opiate abuse was brought by ambulance to the Emergency Department with peritonitis following a shooting. On arrival, the patient was alert and self-ventilating with BP 103/74, pulse 96, respiratory rate 18 and Sp02 98%. He had a midline bullet entry wound in the epigastrium 2cm below the xiphisternum, with a corresponding exit wound in the right lumbar region. He also had two superficial bullet wounds in the right shoulder and right forearm. His abdomen was distended, with features of peritonitis present. Following fluid resuscitation, antibiotic administration and crossmatching of blood, computed tomography revealed significant pneumoperitoneum with intraperitoneal free fluid and a complex duodenal injury. There was also a grade 5 right renal injury with loss of perfusion of the interpolar region and lower pole, with large right perinephric haematoma, and fracture of the right transverse process of the L3 vertebra and a right psoas haematoma. At laparotomy, the bullet was found to have obliquely traversed the stomach and duodenum, with anterior wounds to the antrum, pylorus and second part of duodenum, with a posterolateral duodenal wound created en route through the retroperitoneum. The duodenum was fully kocherised and each injury was primarily repaired with interrupted 3/0 PDS sutures. Integrity was confirmed by insufflation of the stomach and duodenum via the nasogastric tube. The perinephric haematoma had not enlarged during this time so it was decided to manage this conservatively. He was maintained on parenteral nutrition until day 5 when a contrast study showed the stomach and duodenum were intact. He required percutaneous drainage of a sympathetic right pleural effusion and developed a postoperative pneumonia which responded to intravenous antibiotics. He was discharged home, well, four weeks post surgery.

Aggressive presentation of metastatic testicular cancer

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Testes cancer usually presents as a firm swelling in the scrotum. It is the most common solid tumour in men aged 20-45 years old. Metastases from testes cancer usually follow a predictable pathway- with first site of metastasis to the retroperitoneal lymph nodes.

We present the case of a 40 year old French gentleman presented to the emergency department with a one year history of large painless scrotal swelling. He had an associated non-productive cough and right chest wall tenderness. He was a non-smoker and had no significant past medical history. He was single and had no children.

On examination he had a firm smooth hard swelling of the right testes ~12cm in size. The left testes were atrophic. There were no palpable lymphadenopathy, but there was right, upper chest wall tenderness. An MSU was clear. Routine bloods were unremarkable. A scrotal ultrasound demonstrated an 11.6cm heterogenous mass consistent with a neoplasm.

Testicular tumour markers were significantly elevated βHCG 13397, AFP 16146 and LDH 543. A chest X ray revealed a cannonball opacity in the right upper zone concerning for a pulmonary metastasis. Staging CT TAP confirmed a 7.5cm pleural mass with destruction of the adjacent 3 rd rib, along with a 3cm pulmonary nodule in the right mid zone and a small nodule at the left costophrenic recess.
The patient underwent a radical orchidectomy via a scrotal approach as the mass was too large to remove via an inguinal incision. The tumour histology was a mixed germ cell tumour comprising of 50% teratoma, 25% yolk sac and 25% seminoma. The tumour was confined to the tunica and staged as pT2. Tumour markers began to decrease by day 5 (βHCG 8847, AFP 13997 and LDH 439).
Following MDT discussion, he was commenced on adjuvant chemotherapy (after appropriate work up- audiometry and pulmonary function assessment) and has commenced his first cycle (4 in total) of BEP- Bleomycin, Etoposide, Cisplatin. He was offered sperm banking prior to commencing chemotherapy.

Diabetic Ketoacidosis- First presentation of Pancreatic Adenocarcinoma

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Diabetic Ketoacidosis (DKA) is a medical emergency characterised by hyperglycaemia, hyperketonaemia and an associated metabolic acidosis. Although an uncommon presentation in older patients with no previous history of diabetes, DKA can represent numerous underlying aetiologies including pancreatitis and pancreatic malignancy.
A 71 year old lady presented to Beaumont Emergency Department with a two week history of malaise and lethargy, six weeks post-cholecystectomy (indicated for cholelithiasis). She described anorexia and 7lb unintentional weight loss over the previous month. One day prior to admission she developed vomiting and generalized abdominal pain, but denied osmotic symptoms. Regarding family history, her daughter developed Type 1 diabetes mellitus in her teens. She had no history of excess alcohol consumption. On examination, she was hypovolemic and tachycardic. Her abdomen was soft, with generalized tenderness but no guarding or rigidity. Of note, she had no features of obstructive jaundice. Initial investigations were consistent with severe diabetic ketoacidosis (DKA). She was commenced on an intravenous insulin regime as per Beaumont Hospital DKA management protocol. Blood and urinary amylase were significantly elevated, and a modified Glasgow Score of 2 was calculated indicating mild acute pancreatitis. The patient improved rapidly with correction of her acidosis, and was transitioned to subcutaneous insulin. Further investigation revealed a glycated haemoglobin of 10.1% . Islet cell antibodies, insulin antibodies and glutamic acid decarboxylase antibodies were negative.
Computerised Tomography (CT) of the pancreas was arranged, and demonstrated a 3.3cm mass in the uncinate process of the pancreas. Fine needle aspiration confirmed pancreatic adenocarcinoma. The tumour was deemed unresectable following surgical assessment, and she recently commenced chemotherapy.
In conclusion, this case demonstrates the importance of having a high index of suspicion for pancreatic pathology in older patients who present with features of new onset insulin deficiency and we would advocate pancreatic imaging when investigating similar cases.

Gastric Carcinoma recurring as an isolated breast secondary after three years from curative treatment. Case report and literature review.

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Extra-mammary tumour metastases to the breast are extremely rare accounting for less than 2% of all breast lesions. Breast secondaries were reported with lymphoma, melanoma, ovarian carcinoma, renal cell carcinoma, colonic adenocarcinoma and gastric carcinoma. Stomach cancer metastases to the breast are very rare, with an incidence believed to be around 2.1% of all breast secondaries. The presentation is usually quite similar to breast primary; therefore clinicians need to keep an open mind when discussing histology as additional immune-histopathological tests are usually necessary to fully diagnose the cancer. Our case was a 55 years old female who was treated for gastric signet ring carcinoma in 2013. She was referred to our breast clinic three years post curative surgical and chemotherapeutic management of her stomach cancer with a right breast lump with oedema and thickening of the overlying skin. She was thought to have inflammatory breast carcinoma; however, further histological tests demonstrated signet ring cells consistent with metastatic gastric carcinoma. Radiological staging tests confirmed single isolated breast secondary with no other metastatic lesions. To best of our knowledge, this is the only case of isolated breast secondary from gastric tumour. In this report, we reviewed the literature; discussed patient presentation and management, including breast metastectectomy.

An Audit of Oral Hygiene in an Acute Stroke Unit; paving a path for improved dental care

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Introduction
The British Society of Gerodontology have published guidelines for the Oral Healthcare of Stroke Survivors. (1) It highlights the risk that poor oral health poses for stroke survivors and emphasises the importance of including oral care measures in post stroke care protocols. The National Stroke guidelines do not reference dentistry specifically which is confounded by a paucity of evidence for staff led interventions in this area. (2) The combination of stroke-related and pre-existing risk factors for poor oral hygiene can negatively impact nutritional status and also increase the risk of aspiration pneumonia which can have repercussions for rehabilitation and functional outcomes.(3, 4)
Aim
The aim of this audit was to identify risk factors, both stroke-related and pre-existing, for poor oral health in all post-stroke patients admitted to the Acute Stroke and the Rehabilitation Units across UCHG, with a view to developing an Oral Care pathway for this patient cohort.
Results
25 patients in total were identified, 12 (48%) in the acute stroke unit and 13 (52%) in the inpatient rehabilitation facility.
13(52%) had either dysphasia, dysphagia or both, secondary to their stroke. 23(92%) were prescribed medications with oral side-effects. 6(24%) were taking fortified diet supplements. 14(56%) had a significant smoking history. 13(52%) had dentures, with 2(8%) having new problems with their dentures since the stroke. 4(16%) had been to a dentist in the last year.
Conclusion
Our audit identified that this cohort of patients is at increased risk of oral health problems due to both prescribed medications and physical complications following their stroke. The majority of patients did not have a recent or upcoming dental assessment. This information emphasises the need for an oral healthcare protocol as part of the stroke management pathway which will be developed following a planned education session to be delivered to our multidisciplinary colleagues.

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Diagnosis, prenatal treatment and follow up of twin reversed arterial perfusion sequence occurring in a monochorionic diamniotic twin pregnancy: A case report

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Abstract Category: Case report
Intern Network: West/Northwest
Introduction: Here a case of twin reversed arterial perfusion sequence occurring in a monochorionic diamniotic twin pregnancy with successful radioablation treatment is reported. TRAP (Twin Reversed Arterial Perfusion) sequence is a rare syndrome seen in monochorionic twin pregnancies. It occurs in just 1% of monochorionic twin pregnancies. (1) This TRAP sequence case was diagnosed at 12 weeks of gestation.
Description/case presentation: At 12 weeks a 23 year old para 1 woman presented for a 12 week ultrasound scan where a monochorionic twin pregnancy was suspected, with demise of fetus. The ulstrasound demonstrated a live fetus which measured equal to dates. The other fetus measured 8+5 weeks, but had an atypical appearance. Follow-up ultrasound showed a monochorionic twin pregnancy with one live fetus equalling dates and one fetus that had the appearance of an acardiac twin. There was no identifiable vascular connection. At 15 weeks and 4 days ultrasound indicated the acardiac twin measurements had increased. No cardiac activity was observed. Lower limbs were apparent but other structures could not be visualised. The patient and her partner were counselled regarding surgical and conservative management options. At 16+6 weeks gestation, radio frequency ablation was performed in the UK. The procedure was uncomplicated and the patient was discharged on that day. More detail on outcome required. No chromosomal abnormalities on genetic testing of second fetus were suggested. Weekly follow up in national maternity hospital followed.
Discussion/conclusion: TRAP is considered to primarily result from an abnormal placental arterial to arterial anastomosis.(2) Characteristically the outcome is an a cardiac twin and a pump twin. The pump twin is in general smaller and viable, and the acardiac twin is unstructured and non-viable.

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Audit on Right Iliac Fossa Pain/Appendicitis Pathway at Letterkenny University Hospital

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Abstract Category: Audit
Intern Network: West Northwest
Objectives: To assess Letterkenny University Hospital (LUH) surgical department compliance with the guidelines set by the Associations of Surgeons of Great Britain and Ireland (ASGBI) 2014 Commissioning Guide for Right Iliac Fossa Pain/Appendicitis Pathway.
Methods: A retrospective study carried out on 50 randomly selected patients (10 patients from 5 different consultant surgical intake) presenting with a chief complaint of RIF pain between May and July 2016. Patient demographics, presenting complaint, early warning score (EWS) and investigations on admission, provisional diagnosis, time seen by senior doctor, in-patient management, and operative findings were analysed.
Results: A total of 50 subjects were evaluated, 42% were male vs. 58% female. 83% of female patients were of childbearing age. Localized RIF pain was present in 96% of patients, of whom 90% had a provisional diagnosis of appendicitis. EWS ranges were 84% (0-1), 12% (2-3), 4% (4-6), and 0% (>7%) on admission. Haematological investigations requested on admission included FBC (98%), CRP (98%), Amylase (62%), LFT (74%), U&E (94%), and Lactate (80%). 100% of female patients of reproductive age had β-hCG test on admission. 96% of patients had a urinalysis on admission. 36% of patients had an ultrasound abdomen vs. 38% had a CT abdomen requested on admission. Time seen by senior doctor was 20% (0-119mins), 50% (120-240mins), 12% (241-480mins), 14% (12-24hrs) and 4% (>24hrs). 28% of patients were conservatively managed vs. 72% had laparoscopic appendectomy vs. 4% open appendectomy. 89% of appendectomy were positive for appendicitis.
Conclusion: This audit demonstrates a good compliance to the standards set by the ASGBI 2014 Commissioning Guide. This audit will be presented at the Quality improvement forum at LUH to increase awareness of performance with regards to care of patients with RIF pain. The audit cycle will be completed in 1 month to assess for improvement in patient care.

Computer based semi-automated audit of all HbA1c levels in a Type 1 paediatric diabetes service

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Background: Standards of care, multidisciplinary team ratios and HbAic (measure of glucose control) targets in childhood type one diabetes mellitus (T1DM) are well established. Use of electronic data management systems is limited in Republic of Ireland and manual audit is laborious and may be inaccurate. Development of an electronic audit tool would facilitate clinical audit to identify deficits and target quality improvement initiatives for children and adolescents with T1DM
Aim: to systematically audit all HbA1c results reported in children (< 16 years) with T1DM in a single centre to identify all affected patients, assess compliance with best practise guidelines in terms of monitoring frequency (aim > 3/year) and to identify patients with poor control who may benefit from intensive intervention.
Methods: All HbA1cs results from 2015 were exported electronically from the clinical laboratory system. Non type 1 patients (Type 2 DM, Cystic fibrosis related diabetes, metabolic patients) and results within 3 months of diagnosis were excluded. The mean annualised individual HbA1c and the total centre mean and median HbA1c were calculated.
Results: A total of 316 patients with T1DM identified. The median age was 12 years and median HbA1c was 66 mmol/mol. Forty-eight % of patients met the target of >three HbA1cs determinations, 42% had three

and 10% had two. Target HbAic was only achieved in 9% of patients (< 54 mmol/mol) with a further 35% achieving levels between 54-64. Ten % had very suboptimal control of >80mmol/mol.
Conclusions: This system of semi-automated data collection enabled creation of a clinically meaningful dataset that facilitated audit of key performance indicators. Patients failing to meet targets were identified, and new baselines established for comparison with future performance. Capture of electronic data facilitating audit has a key role in optimising care and should be prioritised for national rollout.

A rare case of Arrhythmogenic Right Ventricular Cardiomyopathy

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Introduction:
Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) is a progressive, autosomal inherited condition with an estimated prevalence of 1:2500-5000, a male predominance and, traditionally, a predilection for people from the Mediterranean basin of Italian and Greek descent (1). This disease was first identified by a team of cardiologists in France in the 1970's(2). It is attributable for almost 20% of sudden cardiac death (SCD) (3) and is the leading cause of SCD in the Venetto region of Italy(4).
Description/case presentation:
A 39-year-old gentleman presented to hospital in April 2016 with palpitations, chest tightness and shortness of breath which began at his work in a local butchers shop. This was the fourth such episode in 4 months with the duration of symptoms ranging from 30 minutes to 15 hours.
On admission, a ventricular tachycardia of 188 bpm was identified and chemically cardioverted successfully. ECG highlighted a broad complex tachycardia with left-bundle-branch morphology while echocardiography identified a reduced ejection fraction of 40%, delayed diastolic relaxation and impaired right and left ventricular systolic function. Cardiac MRI revealed extensive, non-ischaemic fibrosis involving both the left and right ventricles confirming ARVC(5). Subsequently, genetic screening was conducted. His 18 year old daughter, who was entirely asymptomatic, has since been diagnosed with ARVC and consented to the insertion of an Implantable Cardiac Defibrillator.
Discussion/conclusion:
Notably, four clinical phases exist (4):
1. Silent phase
2. Appearance of arrhythmias;
3. Appearance of structural abnormalities
4. Onset of heart failure
The high prevalence of ventricular arrhythmias is out of proportion to the extent of ventricular dysfunction and dilation. This is a key finding that may suggest a positive diagnosis.
The identification of ARVC in this gentleman's daughter may prove crucial as ARVC-associated SCD is more common in adolescents and young adults and can be precipitated by exertion(6).

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A case of giant small bowel diverticulum in a young man

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Case Report
Introduction:
A diverticulum is an outpouching in the gastrointestinal tract wall, usually the colon. Typically 5-10mm in size. 'True' diverticula involve all wall layers. Acquired small bowel diverticula are rare entities, especially ileal (15%). Mean age of presentation is 64. Most are asymptomatic and found incidentally. While aetiology remains unclear, many possible causes are reported in literature.
Case:
A 24-year-old man presented with dull, right lower quadrant, non-radiating pain increasing in intensity over the past month with associated nausea. No diarrhoea, constipation or weight loss. He reported a longstanding history of intermittent mild abdominal pain and excessive flatus since infancy. Previously, abdominal massage could alleviate symptoms. No abnormality detected on prior investigation.
Past history included duodenoduodenostomy for atresia, aged 2 months. An abdominal x-ray showed a large gas-filled small bowel outpouching of unclear aetiology. A CT confirmed a 10x7cm saccular pouch in the mid-distal ileum, filled with faecal matter and contrast. Barium follow-through showed contrast passing freely with no evidence of obstruction. Clinical history and imaging were consistent with giant small bowel diverticulum.
Initially managed conservatively with analgesia, intravenous fluids, PPIs and laxatives; symptoms remained unresolved and a laparotomy was performed. 5cm of small bowel, including the diverticulum (which was located along the mesenteric border) was resected with primary anastomosis. No perioperative complications occurred and the patient was discharged home.
Conclusion:
This was an unusual presentation of a diverticulum given the patient's age, its location and size. The majority of ileal diverticula are Meckel's, congenital 'true' diverticula. Although extremely rare, there are reports of presentation in adults. A cardinal finding in Meckel's Diverticulum is the antimesenteric location, ruling out this diagnosis in this case. No specific management guidelines exist to date, although laparotomies are commonly performed in acute settings to avoid complications: diverticulitis, obstruction, haemorrhage, volvulus, perforation, malabsorption or sepsis.

Survival of Patients Transplanted for Hepatocellular Carcinoma Within and Outside Milan Criteria

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Background: Transplantation for certain patients with HCC represents an excellent treatment option with 5 year survival of over 75% in patients selected using the conventional Milan criteria (1). However, there is a growing body of evidence indicating that these criteria may be too restrictive and the use of expanded criteria can produce comparable 5-year survival (2, 3).
Aims: To determine whether the outcomes in patients transplanted for HCC within and outside Milan criteria are acceptable. Are current selection criteria in the unit too restrictive?
Methods: Patients transplanted for HCC between 2001 and 2016 were identified in the St. Vincent's liver transplant database. For each patient transplanted for HCC, their imaging was analysed using PRP to ascertain tumour size prior to transplant. In the case of multiple tumours the aggregate size was used. If a patient received loco-regional therapy (LRT) the diameter of the tumour pre-LRT was used. Using this information the patient was categorised as within or outside the Milan criteria. A Kaplan Meier curve was generated using SPSS statistics to compare survival outcomes between the two groups.
Results: There were 108 patients transplanted for HCC in SVUH during the period. Based on radiological diagnosis 86 patients were categorised as within Milan and 22 outside the Milan criteria. When comparing the groups we found that there was no statistically significant difference between the two groups in terms of survival (P=0.121). The estimated 5-year survival was similar between the two groups (64% outside Milan, 74% inside Milan) and comparable to the NHSBT standard.
Conclusion: The difference in outcomes between those transplanted for HCC within and outside the Milan criteria was not statistically-significant and survival for both groups was comparable to the NSHBT standard. This supports the consideration of the use of expanded criteria.

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Granulomatous Pneumonitis in Systemic Lupus Erythematous: The Second Case Report

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Introduction:
With the first published case being documented in 2007,[1] and limited further acknowledged cases being noted, this makes this pulmonary involvement in systemic lupus erythematous extremely rare. We present the second documented case of acute granulomatous lupus pneumonitis.
Case description:
A 56 year old woman who presented to our respiratory clinic with generalised and nonspecific symptoms of aches and pains with progressively worsening dyspnoea on exertion. She had a background history of COPD, non obstructive coronary artery disease and gastritis. An initial CT thorax showed patchy consolidation with an interval CT thorax showing worsening multifocal airspace opacification. This was followed up with a bronchoscopy and transbronchial biopsy with granulomatous pneumonitis being diagnosed through histopathology. Further investigations were organised to illicit the cause of the generalized aches, pains and Raynauds syndrome symptoms experienced during winter. This returned a positive lupus serology of ANA positive with a titre of 1600 in a speckled pattern, anti-dsDNA positive with a titre of 800 IU/ml and P-ANCA positive.
Discussion:
This case highlights a rare and infrequently documented example of pulmonary manifestation of SLE. We found a female patient having initially presented with respiratory symptoms, being diagnosed via histopathology with granulomatous pneumonitis and subsequently being found to have positive lupus serology.

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That Sneaking Suspicion, A Case of "Myxoedema Madness"

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Background: This case review explores the potential diagnostic and therapeutic challenges when faced with a patient with sudden onset, isolated paranoid ideation in the context of ongoing physical illness.
Description: The patient, a 63 year old lady, was admitted for neoadjuvant, CROSS regimen, chemoradiotherapy for non-metastatic oesophageal adenocarcinoma. She was NPO due to severe dysphagia and was receiving TPN. She was referred to the Psychological Medicine Service on week 4 of the 5 week regimen due to paranoid thoughts. She believed the cleaners and nursing staff were "bad mouthing" her and plotting to kill her. The patient denied this. Collateral histories were taken from family members who she phoned regularly expressing these beliefs. She attempted to abscond on multiple occasions. Of note she was receiving high dose steroids weekly, prior to chemotherapy and was on a morphine pump. She had no previous psychiatric history and there were no other psychotic symptoms, symptoms of confusion or fluctuating consciousness. She was placed on 1:1 special and started on orodispersible olanzapine 2.5mg.
As investigations a septic screen, MRI-Brain, autoimmune screen were all carried out all were negative for a cause of the paranoia. Olanzepine was titrated up to 10mg with little effect on the delusions. On review of the medications it was noted that she was on Eltroxin for hypothyroidism. Her TFTs showed her to be hypothyroid. The patient admitted to having great difficulty swallowing this tablet and often refluxed afterwards. On referral to the Endocrine team, her eltroxin was increased and the paranoid thoughts settled within days.
Discussion: Although rare, hypothyroid induced psychosis should be considered when a patient presents with psychotic symptoms and a history of hypothyroidism. It may present with any of the psychotic symptoms, but suspicion and paranoia tend to be the most common presenting complaints.

Endocrinopathy side effects in a patient receiving cancer immunotherapy

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Introduction:
Immunotherapies are utilized for the targeted treatment of cancer, however, unlike traditional agents, their side effect profile is not predictable, and therefore difficult to diagnose. This case focuses on Nivolumab, a checkpoint inhibitor of PD-1.
Case description:
66-year-old female, presenting 4 months post-commencement of the immunotherapy drug, Nivolumab.
Complained of confusion, tiredness, and intermittent nonspecific leg pain for the previous week, and vomiting for the past two days. Also reported a two-week history of generalized weakness and two recent falls, neither associated w/ LOC or trauma.
Diagnosed September 2015 with NSCLC, invasive adenocarcinoma, CK7 and TTF1 positive, cTXN3M1b (cervical adenopathy, LN involvement, CNS metastasis), stage IV, EGFR and ALK negative. Underwent right posterior fossa craniotomy and resection of metastasis; whole brain radiotherapy and four cycles carboplatin/pemetrexed. Pemetrexed discontinued in April, second line palliative therapy commenced with Nivolumab.
On examination - grossly normal, some pain on moving lower limbs. Laboratory findings showed high calcium and phosphate levels. Hypercalcaemia was treated with fluids, zolendronic acid, antiemetics. CT TAP + brain, MRI brain + pituitary, isotope bone scan showed stable disease w/ nil cause. Following initial treatment, developed BP 88/60 mmHg, SpO2 86% RA (98% on 4L). Reported 'lightheadedness', confusion, nausea, and was hypophonic. Also generalised pain w/ constant pain in right upper limb. Further investigations showed decreased cortisol and vitamin D3 levels and a positive ANA. Short synachten test supported a diagnosis of adrenal insufficiency, with the hypercalcaemia secondary to the low cortisol. It was thought this may be resulting from treatment with nivolumab, therefore was treated as nivolumab toxicity. Upon discontinuation of therapy, along with high dose steroids, the symptoms resolved.
Discussion:
This case demonstrates one of the many generalised side effects of immunotherapies, despite their targeted nature. These do not follow a pattern or time period, unlike traditional therapies.

A Curious Case of Obscure Gastrointestinal Bleeding

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A 74 year old male was admitted from the heart failure clinic with a Hb of 7.1g/dl, complaining of intermittent melena and recent weight loss of 10kg. Past medical history included ischaemic cardiomyopathy, coronary artery bypass graft, reduced left ventricular function, iron deficiency anaemia, atrial fibrillation with left atrial occlusion device insertion. The patient is an ex-smoker of 40 pack years. Examination revealed bibasal crepitations and was otherwise normal.
Iron deficiency anaemia was previously investigated with OGD, colonoscopy and small bowel capsule endoscopy, all of which were normal. CT TAP showed mediastinal lymphadenopathy, likely secondary to infection, and cirrhosis.
Haematinics revealed microcytic anaemia, characteristic of iron deficiency anaemia. Other bloods, including a liver screen were normal. Faecal occult blood was positive. 1 unit of Red cells was transfused with the aim to keep Hb >9g/dl to prevent cardiac decompensation. Daily transfusions were required.
Repeat OGD showed antral gastritis and colonoscopy showed patchy mucosal erythema and a 15mm polyp. Polypectomy was performed and no site of active bleeding was identified. A push enteroscopy which extended to the proximal jejunum was normal.
CT mesenteric angiogram showed large superior mesenteric vein varices with bleeding evident on delayed imaging. The diagnosis was confirmed with mesenteric angiogram. Transhepatic superior mesenteric venography and embolization was not carried out due to the risk of venous infarct.
Congestive hepatopathy secondary to heart failure is the most likely cause of portal hypertension in this case. Bisoprolol was switched to a non selective beta blocker and clopidogrel was discontinued. Hb has since stabilised with the most recent Hb being 10g/dl on oral iron supplementation.
Superior mesenteric vein varices proves a diagnostic challenge due to the obscurity of its presentation and current management is guided only by previous case studies. It should be considered a differential in obscure GI bleeding.

ACUTE LIVER INJURIES: CAUSES & OUTCOMES

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Introduction:
Acute liver injuries can be the result of many different insults, from drug induced to hypotension. This case depicts an 81 year old gentleman who suffered one such injury and the exact cause is still unknown.
Case:
Male admitted through ED in SJH with a 1/52 history of being "generally unwell", worsening dyspnoea on exertion, frequency and urgency of urine, and confusion.
A known arteriopath with a background including Ischaemic heart disease, Hypertension, T2DM, prior TIA, Parkinson's and Diverticular disease.
Physical exam was notable for a temperature of 38.5 and mild crackles in his right lung base, with bilateral lower limb oedema .Urine dipstick showed protein, blood and leukocytes. IV Augmentin was commenced, aimed at both uro- and respiratory sepsis.
A rapid deterioration over the following days ensued, the most striking of which was a progressive elevation in transaminases. Having been normal on admission, they reached levels as high as >6000 AST and >4000 ALT. Lactate continued to rise also.
Having initially ruled out ischaemic bowel & acute cholecystitis as possible causes, Mr. G was treated as having ischaemic hepatitis. He was commenced on an N-Acetyl Cysteine infusion.
Case Discussion/Conclusion:
Despite having been treated for ischaemic hepatitis, no cause was ever found. No episodes of hypotension were recorded, no evidence of MI, and no evidence of haemorrhage. His treatment with Augmentin was also considered as a possibility for deranged LFTs but he received just 2 doses; it was discontinued after the first initial LFT rise. Following discussion with the Hepatology team, it was proposed that just a small fall in the patient's blood pressure may have been sufficient to result in such a picture, especially given his history of arterial disease. Determining the exact cause of acute liver injuries is a challenge, particularly in the elderly, while prognosis is guarded.

Case Report: A Puzzling Potassium?

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We present the case of an 81-year-old male referred by GP with Hyperkalemia. Upon admission all medications with potential to cause

hyperkalemia were stopped, however despite this, the potassium levels remained elevated. On further analysis, thrombocytosis was discovered, leading to the diagnosis of pseudo-hyperkalemia. Upon discharge, the diagnosis was explained to the patient as was the need to inform the laboratory and phlebotomy services regarding correct procedure in checking serum potassium in the future. However, some time later this gentleman presented once again to the Haematology service, with unexplained hyperkalemia. Further investigations were carried out & treatment protocol for Hyperkalemia was initiated until eventually the true condition was unmasked.

Hyperkalemia is a potentially life threatening medical condition that requires immediate medical intervention; pseudohyperkalemia is a benign condition that warrants no intervention. It should be suspected in patients presenting with serum elevated potassium and platelet levels without concomitant electrolyte imbalances. Failure to recognize this condition can lead to inappropriate laboratory investigations, unnecessary treatments and anxiety for both patient and physician.

Education is paramount in managing this condition. The patient, phlebotomist and laboratory need to be made aware of this condition. Venipuncture needs to be performed without the use of a tourniquet and the sample delivered to the laboratory within one hour for testing. Failure to inform the relevant services of this condition can lead to the over investigation and senseless wasting of resources, better spent elsewhere.

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Objective assessment of Body Habitus in Of Patients in LUH: An audit by the Anaesthetic Department of Surgical Patients undergoing Anaesthesia.

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Recent accurate recording of the surgical patient's weight/mass allows the presiding anaesthetist to tailor effectively the dose of anaesthetic drug and muscle relaxant for surgery, optimising outcomes and minimising morbidity and mortality.

In addition, Body Mass Index BMI (kg/m2) can be an important objective indicator of a patient's likely ease of intubation. Difficult tracheal intubation contributes to significant morbidity and mortality during induction of anaesthesia[1].

Other complications associated with higher BMI include difficulty establishing IV access and the provision of specialised equipment e.g. suitable operating tables, large BP cuffs, large tourniquets, portable ultrasound machines, anaesthetic ventilators capable of PEEP and pressure modalities, and ramp positioning to improve lung mechanics[2]. The need to have onsite of senior anaesthetic personnel experienced in escalating care in the obese patient is also a consideration.

Such challenges facing anaesthetists are increasingly common, owing to the growing prevalence of obesity in the general population, and the ability to predict these potential complications constitutes safe management for those patients at higher risk.

In view of the importance of BMI and accurate recording of patient weight in those undergoing anaesthesia, we decided to prospectively audit existing record taking practices against the recommended recording systems already in place in our hospital.

We believe there are a number of obstacles to satisfactory record taking in the pre-operative anaesthetic workup. These include documentation in imperial units (as opposed to metric units which should be used), whether surgery is emergency or elective, and whether height and weight are recorded at all by the time the patient has reached the anaesthetic room. We anticipate that current record taking in the area of BMI and weight may be improved if these obstacles are quantified and highlighted by the audit process and presented to the relevant parties involved, both in theatre and on the ward.

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Management of Persistent Pneumothorases in the Elderly Population - Patience is a Virtue

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Introduction:

Management of persistent pneumothorases in an elderly population can present the difficult dilemma of balancing appropriate intervention with sensible risk avoidance[1]. This case study demonstrates the benefit of persevering with conservative chest drain therapy in contrast to hastily progressing to surgical intervention.

Case:

Mr JH, an 82 year old male, was admitted to GUH on October 17th 2016 with a right upper lobe pneumothorax on a background of interstitial lung disease. During the first 18 days of admission, two chest drains (12French and 18French) failed to allow lung reinflation. Rigid bronchoscopy with endobronchial valve insertion was unsuccessful in occluding the air leak.

At this stage, standard management of pneumothorax would suggest timely surgical intervention to improve patient outcomes. In consultation with cardiothoracic surgeons, it was agreed that Video-assisted Thoracoscopy would be an appropriate next step. However, on consideration of benefits to risks, this procedure was postponed. A third chest drain (24French) was inserted revealing a 1300ml/min air leak on 10cmH2O suction. Within eight days the leak had reduced to 300ml/min. Chest x-ray showed consistent marginal resolution of the pneumothorax. The chest drain was removed following a
leak-free interval of 72hours. The patient remained in hospital for a further week. On discharge, the pneumothorax had dramatically resolved, save a small portion of the right upper lobe superior to the clavicle.

Discussion:

This case shows that in the setting of pneumothorax in the elderly population conservative management using a wide bore chest drain may be a more appropriate management than surgical intervention. Said population is quite high risk for such procedures and hence it is ideal to avoid them if possible. The above case study shows that continuing with chest drain management may prevent the need to resort to surgical management.

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Emergency Laparotomies at Letterkenny University Hospital: Performance and Outcomes

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Aims/ Objectives: 30-day mortality following emergency laparotomy varies from 3% to 29% depending on case-mix (1). Understanding outcomes is key to improving quality care. This study evaluated comorbidities, timing to investigations, 30-day mortality, and outcomes in patients undergoing emergency laparotomy.
Design/Methods: An ethically approved retrospective review of 155 emergency laparotomies was undertaken at Letterkenny University Hospital from 2013 through June 2016. An initial cohort included 260 performed emergency laparotomies. Not included in the study were 57 gynecological procedures and 32 procedures taking place outside of 24 hours from theatre booking, 3 of which were 30-day mortalities, due to an inability to calculate the P-POSSUM score. 16 of the remaining 171 charts were then excluded from the study, 4 of these falling within our 30-day mortality. Patient demographics, time to investigations, diagnosis, and cause of death were recorded. Expected and observed mortality were recorded using POSSUM score.
Results: 155 laparotomies were performed (50.3% female) with a mean age 63.4 years (±18.5). Indication for the laparotomy was upper GI in 37.4%, lower GI in 24.5%, and biliary in 3.2%. Mean time to diagnostic investigations was 25.9 hours with pre-op CT performed in 84.5% of patients and US in 2.6%. The mean time to operating theatre from booking was 5.1 hours (range 0.0 to 22.8 hours). 53.5% had at least one cardiovascular disease risk factor, 25.2% were on aspirin, and 6.5% were on warfarin. The 30-day mortality was 13/155 (8.4%) for all included laparotomies. Using the P-POSSUM score the calculated predicted mortality was 18.5%, this gave a standardized mortality ratio of 0.45. An observed mortality of 17/171 (9.9%) was seen in all laparotomies eligible for the study.
Conclusions/Action Plan: This study identified significant mortality associated with emergency laparotomy, however results from Letterkenny University Hospital are promising compared to recent reports from the UK.

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Influenza vaccination uptake in haemodialysis and kidney transplant patients at St. Vincent’s Hospital

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Introduction
National Immunisation Advisory Committee (NIAC) guidelines recommend that all patients with chronic kidney disease or immunosuppression due to treatment receive the influenza vaccine[1]. In 2010 the WHO set a goal of 75% influenza vaccination coverage for those eligible[2].
Aim/Objective
This audit was conducted to investigate influenza immunisation rates in haemodialysis and kidney transplant patients at St. Vincent’s Hospital, following the 2015 – 2016 flu season and assess patients awareness of their eligibility for the vaccine.
Methods
A standardised tablet-based questionnaire was distributed among haemodialysis and kidney transplant patients (n = 163), via the audits authors. The questionnaire encompassed, uptake of the vaccine, awareness of eligibility, patient comorbidities, and if applicable, the reason for not receiving the influenza vaccine.
Results
The response rate was 62% (102/163). Among the study population, n = 102, 75.49% of patients were aware of the need for yearly influenza vaccination. The overall immunisation rate in the study population was 64.71%. The immunisation rate results were further subdivided into haemodialysis and kidney transplants patient populations. The rates for these groups were 60.29% and 73.53% respectively.
Conclusion
Immunisation rates among study population are below NIAC and WHO recommendations. Rates of immunisation among the haemodialysis population were significantly lower than those in the kidney transplant population. Due to these results, the authors recommend distributing the influenza vaccine, among patients in clinic or the dialysis unit.
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A Pilot Survey of Sailing Instructors to Explore the Contributory Factors of Drowning in the Irish Sailing Community

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Introduction
The incidence of drowning in Ireland is approximately 140 annually. The aim of our investigation was to explore attitudes towards drowning and its prevention among the Irish sailing community.
Methods
We distributed a short questionnaire of 6 questions Irish Sailing Association Instructors via Facebook. There were 85 respondents.
Using a likert scale respondents answered questions in relation to drowning, contributory factors, preventative measures and the management of drowning incidents.
Results
87% (n = 74) of correspondents strongly agreed it is important for them to wear a personal flotation device (PFD) when on the water, and 97% (n=82) strongly agreed it is important for their trainees to wear PDFs.
38% (n=32) of instructors would not feel comfortable instructing trainees who did not know how to swim, compared with 48% (n=41) who would be comfortable in doing so.
46 %(n=39) respondents answered yes to having gone sailing under the influence of alcohol. Of the 20% (n=17) that answered yes to being involved in a drowning, 2 respondents directly attributed alcohol to being the cause of the drowning incident.
Discussion
Optimal pre-hospital care is a significant determinant of immersion victim outcome worldwide(1,2). Accidental drowning can strike both the experienced and inexperienced. No available data suggests that an increased swimming ability decreases drowning risk, however PFD use can prevent 1 in 2 drowning deaths. (4)

One study reported swimming failure only contributed to 5.4% of drownings, with cold shock, hypothermia, post-rescue collapse and cardiac events considered as the cause in the majority of cases (3). Alcohol is associated with 27% of drownings, with one-third of these incidents deemed intentional. Alcohol increases the probability of ending up in the water, and impacts survival once immersed. (5).

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Mind the Gap – free tissue palatomaxillary reconstruction following sinonasal carcinoma

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Introduction: Extensive palatomaxillary defects have dramatic consequences for speech, deglutition, mastication, and cosmesis. Traditional methods of reconstruction, such as locoregional flaps, alloplastic material, and prosthetic devices often fall short of providing meaningful and functional reconstruction of these defects.
Case Description: A 63-year-old male, ex-smoker, presented with difficulties with intraoral obturator prosthetic use and was assessed for formal reconstruction of his midfacial defect. Four years previously, he underwent extirpative oncological resection of a sinonasal carcinoma with postoperative radiotherapy. He is an ex-smoker of 4-years duration, and recent investigations reveal no locoregional disease recurrence. He presented with absence of the nose, hard palate, premaxilla and a right maxillary deficiency. In this case, we describe the use of a free fibula osteocutaneous microvascular flap to reconstruct the palatomaxillary defect in this patient.
Conclusion: This case describes the current concepts in the reconstruction of large composite midfacial defects with an emphasis on the role of free tissue transfer, including the factors to be evaluated when choosing this reconstructive method, indications of specific donor sites, and the technical procedures involved.

Pulmonary and Renal Sarcoidosis: A Case Report

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Sarcoidosis is a systemic granulomatous inflammatory condition of unknown etiology. Renal insufficiency is not commonly reported, but typically results from hypercalcaemia and hypercalciuria. The most common histological pattern seen is granulomatous interstitial nephritis. We present a case of Sarcoidosis with pulmonary involvement, renal stones, acute kidney injury and interstitial fibrosis, tubular atrophy and microcalcifications on renal histology.
A 40 year old presented following a six-month history of shortness of breath on exertion, dry cough and unintentional weight loss. Initial investigations revealed elevated Calcium (3.39mmol/L), Urea (16.4mmol/L), Creatinine (257μmol/L), Serum ACE (100units/ml) and old calcified lymphadenopathy on chest radiograph. CT thorax revealed bilateral calcified hilar and mediastinal lymphadenopathy and two small non-obstructing calculi in the left kidney, highly suggestive of Sarcoidosis. Renal US demonstrated increased corticomedullary differentiation suggesting structural renal disease. Renal and endobronchial biopsies were performed in an effort to obtain a histological diagnosis. Renal biopsy revealed tubular atrophy (50%), and tubulointerstitial fibrosis (50%) with numerous calcifications. Direct immunofluorescence was negative for IgA, IgG, IgM, C3, kappa and lambda chains. No granulomas were identified on renal or pulmonary biopsy. Vasculitis and autoimmune panels were negative, which in addition to renal biopsy results were in keeping with a diagnosis of Sarcoidosis.
Despite the absence of granulomatous disease on histological samples, the patient was treated as having Sarcoidosis. He was admitted for intravenous hydrocortisone and intravenous fluid hydration. His Creatinine settled from 257μmol/L to 173μmol/L and his Calcium corrected from 3.54mmol/L to 2.64mmol/L. He was continued on oral prednisolone and his symptoms improved markedly. Clinicians often rely on biopsy results to guide management, but histology can often be inconclusive or non-diagnostic due to sampling issues when looking for focal lesions.

CXR analysis of line and tube misplacement

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Patients in ICU and other higher care units are among the most common population in which supportive lines and tubes are sited. These provide more reliable access for administration of nutrition, medication, oxygen etc. Despite their potential benefit, these lines and tubes are considered foreign bodies and vigilance for associated complications is essential for optimum patient care. Incorrect placement is one of the main causes of complications; one which can be quite easily identified by radiographic means. The aim of this audit is to determine the rate of tube/line misplacement in adult higher care units in University Hospital Galway.
All chest xrays carried out on patients in ICU, HDU, cardiothoracic ICU and CCU over a one month period were analysed. The presence of lines/tubes in all radiographs was recorded and their position determined. The dataset was created within Impax imaging software. Misplacement was pre-defined for each type of line/tube as follows: (1) NG: Tip sub-diaphragmatic, at least 10cm beyond gastro-oesophageal junction, (2) ET: Tip lying 5cm +/- 2cm above carina, and (3) CVC: Tip lying in the SVC or at the cavo-atrial junction. Single observer analysis was used to determine (a) prevalence of each tube and (b) the rate of misplacement. A total of 531 individual chest xrays were analysed from 143 different patients, with results as follows:
Prevalence:
ET tube: 28.8%
NG tube: 41.6%
CVC: 58.8%
Rate of misplacement:
ET tube: 17.3%
NG tube: 3%
CVC: 7.7%
The high rate of ET tube misplacement is concerning in light of the associated complications. Further analysis is warranted to determine time lag between identification of misplacement and correction thereof. There

does not appear to be a current gold standard for rate of tube/line misplacement and this could be addressed.

Management of major post-partum haemorrhage in Portiuncula University Hospital

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Abstract Category: Audit
Aims/Objectives: The aim of this study was to assess the management of major post-partum haemorrhage (PPH) in Portiuncula University Hospital (PUH) in accordance with national guidelines.
Design/Methods: All major PPHs (>1000ml) in a six month period from June-November 2016 were included, resulting in a total of 14 cases. Patients' records were accessed and details such as risk factors, parity and cause of PPH were documented. A number of management criteria were assessed, such as use of Oxytocinon for the active management of the third stage of labour, Oxytocinon infusion for management of PPH, use of syntometrine as a second-line drug, if appropriate bloods and IV access were obtained and if the patient was transferred to theatre.
Results:
The most common risk factors for PPH identified in this study were emergency C-section, episiotomy and induction of labour.
The most common causes documented were uterine atony and vascular issues at section.
Of the 14 cases, 7 were vaginal deliveries and 7 were Caesarean sections. Of those who laboured, all received oxytocinon for the active management of the third stage of labour.
All 14 cases received oxytocinon infusion as per national guidelines, and 5 cases received syntometrine as a second-line drug.
Of those who did not receive syntometrine, 5 received Haemabate and 2 had Cytotec PR. Haemabate was used in 50% of cases over all.
There was evidence in all bar 2 cases that appropriate bloods were obtained.
1 patient was transferred to theatre for manual removal of placenta. 7 were already in theatre for C-section, and of those, 5 were transferred to ICU.
Conclusion: Management of PPH in PUH adheres well to national guidelines. This study can be used in comparison with other local and national data to assess the current trend of rising rates of PPH worldwide.

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Analysis of high dose alert flagged CT procedures on the "Dosewatch" system.

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Purpose: The use of Computed Tomography (CT) has increased exponentially over the past 10 years with growing concern in the medical community regarding the risk from over-exposure to radiation[1,2]. Dosewatch is a software system, which tracks radiation dose information. "Red alerts" are generated when the radiation exposure exceeds preset limits. The aim of this project was to analyse red alerts on the Dosewatch system and identify the causes of dose outliers (true and false alerts).
Materials and Methods: All CT examinations performed at Cork University Hospital from Dec 2014 to June 2015 were selected. Application of specific inclusion and exclusion criteria yielded a dataset of 293 CT examinations, which was analysed in MS Excel via grouping and summary statistics. Patient demographic information and dose measurements were exported from Dosewatch and the PACS database was used to assess scan details.
Results: 60% of the 293 examinations were true alerts. 67% occurred in those over the age of 65, while only 2% occurred in the paediatric population. The commonest studies generating alerts were CT thorax (20%), CT pulmonary angiogram (19.8%) and CT brain (13%). False alerts were most commonly attributed to incorrect study labeling (39%) and addition of an extra study (31%). Regarding true alerts, excess dose was seen more frequently with inexperienced or part-time radiographers, and when patients were incorrectly positioned. The majority of studies exceeded the recommended national diagnostic reference levels[3].
Conclusion: This study highlights several key factors involved in the causes of both true and false alerts in Dosewatch.

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Goodpasture's: A Bad Case

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Introduction: Acute glomerulonephritis presents a number of clinical challenges. Recognising the presentation, performing the appropriate work-up and initiating management in a timely manner is hugely important. This is particularly true of the Rapidly Progressive Glomerulonephritidies, such as Goodpasture's Syndrome, where morbidity is severe and mortality is high.
Case: A young lady presented with abdominal pain and an incidental Acute Kidney Injury was noted upon admission. This injury was presumed to be a secondary issue and went uninvestigated for a number of days before being flagged. Urine analysis revealed sub-nephrotic range proteinuria and haematuria and a work-up for glomerulonephritis began. Among the various antibody studies performed, ANCA and anti-GBM returned positive. Renal Biopsy ensued and showed linear IgG and crescentic change among the glomeruli; these findings are pathognomonic of Anti-GBM disease.
Just days after this initial presentation, the patient developed acute respiratory failure, requiring ICU admission. CT Thorax revealed groundglass opacification and oedema, consistent with diffuse alveolar haemorrhage. This event provided us with a diagnosis of Goodpasture's Syndrome, a Pulmonary-Renal syndrome of alveolar haemorrhage and glomerulonephritis, in association with a positive anti-GBM titre.
Treatment for this condition involves plasmapheresis and immunosuppression, with high dose corticosteroids and cyclophosphamide. The anti-GBM level was measured on a weekly basis to monitor response to treatment and it trended towards normal. Supportive measures for the

kidneys are also important and in this case dialysis was required. Over 10 plasma exchanges were carried out over a three week period. The patient remains dialysis-dependent at the moment although the GFR is improving and there is hope that dialysis may be discontinued in the near future.
Discussion: It is important to remember that a delay in diagnosis of this syndrome may be catastrophic, as good clinical outcomes are often proportional to how promptly the condition is recognised and treated.

An audit evaluating polypharmacy in a geriatric convalescence unit

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Introduction
While the geriatric population grows, and with it the number of chronic comorbidities amongst patients, polypharmacy is increasingly prevalent in geriatric inpatient settings. This study evaluates the medications of 74 geriatric inpatients, concentrating on those taking 10 or more drugs.
Objectives
The primary objective of this study was to ascertain data on the numbers and types of medications of each patient, and to review the necessity of these drugs.
Methods
This was an observational cross-sectional study, compiling the medications of 74 patients. The patients were then categorised into those taking ≥5 medications, ≥10, ≥15 and ≥20. The primary endpoint was the percentage of patients taking over ten medications. Additional endpoints were the mean number of drugs per patient; percentage of patients in the higher categories of ≥15 and ≥20 drugs; and most frequently occurring classes of drugs amongst this population.
Results
74 patients were included, 64 aged >65. The number of patients taking 10 or more drugs was 38 (51%), and the numbers taking ≥15 and ≥20 drugs were 12 (14%) and 2 (3%), respectively. 36 people (49%) were taking <10. The mean and median number of drugs per patient was 10. The most frequently prescribed drugs were supplements (14%), antihypertensives (10%), laxatives (9%), analgesics (8%); and anticoagulants, PPIs, and antidepressants (5% each).
Conclusion
51% of this group of patients were taking ten or more drugs, with 14% taking fifteen or more. It is known that this number of medications is associated with an increased incidence of adverse effects. This audit highlighted the need for medication reviews in half of the selected patients, and while several medications were subsequently discontinued as a result, it showed that given the patient cohort in question, and nature of medications most frequently used, that polypharmacy is largely unavoidable.

A complex case of Pervasive Refusal Syndrome: diagnostic and therapeutic challenges encountered in a psychiatric inpatient unit

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Introduction:
Pervasive refusal syndrome (PRS) is a rare paediatric psychiatric disorder characterised by food refusal, social withdrawal, school refusal, refusal of mobilisation, verbalisation and self-care and an active resistance to help, in the absence of organic or psychiatric illness which can explain the symptoms[1]. This complex case provided a set of challenges in terms of diagnosis and treatment in an inpatient setting.
Case:
A 14 year old girl presented with a two day history of food and fluid refusal, on a background of unexplained psychiatric symptoms which began aged 12. Symptoms evolved over time and most recently included a one month history of social withdrawal, school refusal, disturbed sleep pattern, low mood, poor self-care and reduced verbal communication. Previously symptoms involved periods of over-sexualised behaviour, obsessional tendencies and aggressive outbursts. This was complicated by the diagnosis of neuro-inflammatory brain lesions in the frontal and temporal lobes, two years previously. Clinical examination and blood results were normal. Although the patient's symptomatology continued to evolve in the context of significant psychosocial stressors, brain lesions appeared stable on MRI. The patient was admitted to a psychiatric inpatient unit for observation to gain diagnostic clarity surrounding her presentation.
Discussion:
The patient's medical history proved challenging in out-ruling an organic cause for her presentation. During the admission, the patient displayed a marked refusal to engage with clinicians, a feature consistent with PRS, which made it difficult to diagnose/ out-rule any co-morbid psychiatric conditions such as depression. Recommended treatment of PRS involves intensive multidisciplinary input in an inpatient unit[2]. In this case, attempts at intense intervention in an inpatient setting were counter-therapeutic and caused an increase in symptoms of PRS including food refusal, further placing the girl at risk. In the interest of patient safety, it was decided that therapeutic interventions should continue in the community.

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An audit on maintenance fluid prescription guidelines in general surgical patients in Sligo University Hospital 2016

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Introduction
Adequate maintenance fluids and electrolytes for fasting surgical patients is essential. Prolonged or improper therapy can put patients at risk of volume overload or electrolyte disturbance. NICE have developed a guideline on routine maintenance fluid prescription using estimates of requirements based on patient weight. Most surgical patients should have 25-30 ml/kg/day fluid, 1 mmol/kg/day of sodium, potassium and chloride and 50-100g/day glucose. Patients rarely need more the 3 litres of maintenance fluid a day.
Aim
To undertake an audit comparing maintenance fluid prescription in surgical patients in SUH over 24 hours of being nil by mouth with the gold-standard guidelines set out by NICE to investigate whether these guidelines are being adhered to.
Objectives
· To investigate if fluid prescription in surgical inpatients in Sligo University Hospital is following the gold-standard
· To investigate if patients are receiving fluid in excess to their maintenance requirements
· To investigate if changes can be made to our practice to better guide fluid prescription
Method
This audit was undertaken in collaboration with consultant surgical staff

1. 49 Surgical patients who had been NPO for 24 hours were selected for the audit
2. The level of fluid intake over these 24 hours was investigated along with parenteral sodium, potassium and glucose intake
3. The patient's weight, if available, was identified

Results

Of 49 surgical patients who are nil by mouth from late October to November 2016 8 had weight measured and noted in the chart. All of these 8 were receiving fluid at a rate >30ml/kg/day.

Of the other 41 patients, 3 had been prescribed >3L/day and 31 exactly 3L/day.

Discussion

With unknown weight of the patient, it is not possible to use the NICE guidelines in determining optimal rates of parenteral fluid intake.

The results of this audit should prove there is a need for more consistent guidelines for maintenance fluid prescription and better documentation of patients' weights to uphold a good prescribing standard in SUH. A large proportion of the patients observed are being administered more fluid than is needed to meet their fasting requirements.

We can further the objectives of this audit by looking at electrolyte intake and fluid rates tailored to the weight of the patient in the future.

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From Summer in ICU to (hopefully) Home by Christmas: The Multi-Disciplinary Team in the Care of a Patient after Prolonged ICU Admission

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A 69-year old woman was admitted to Midlands Regional Hospital, Tullamore in August 2016 with caecal perforation secondary to diverticular disease. She had a Hartmann's procedure with resection of a small bowel segment and was transferred to ICU. While in ICU she had a number of complications including AKI and ARDS, the latter of which required intubation and ventilation, and later tracheostomy. The patient had a slow ventilator wean, and was eventually discharged to the ward after 38 days in ICU. On discharge to the ward, she had a tracheostomy in situ and was unable to walk due to critical care myopathy. Her subsequent care is an excellent example of the interdependence of the members of the multi-disciplinary team, which in this case included her primary surgical team, medicine for the elderly, radiology, nursing, physiotherapy, ENT specialist nursing, psychiatry of later life, speech and language therapy, dietician and, not least, the patient's own family and the patient herself. With regard to this interdependence, on the one hand this patient's many medical complications during her recovery (which included LRTI, UTI, norovirus, gout, hypercalcaemia, and intra-abdominal collections) impacted significantly on physiotherapy, tracheostomy wean, ability to deliver nutrition, and mood and motivation. On the other, each of these latter aspects of care and rehabilitation were critical to preventing further medical complications and – as is the aim at the time of writing – to getting this patient home by Christmas.

Commonest tasks Intern On-Call Bleeps in Letterkenny University Hospital

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Objectives

Analysis of on-call bleeps received by Interns at Letterkenny University Hospital (LUH).

Methods

All interns were invited to participate in an audit of bleeps received while on-call over a 20-day period. Interns were provided with a proforma of information to be collected for each bleep. This was then analysed to determine the most common bleeps received while on-call.

Results

A total of 326 calls were logged over the 20-day study period. The most common bleeped tasks were for reviewing patients, charting medications, and cannulation. These three tasks represented 183 (52.5%) of the total bleeps recorded. 62 (19.02%) of bleeps were to review patients, 53 (16.26%) charting medications, and 44 (13.5%) IV cannulation.

Conclusion

The three most common tasks comprised more than half of total bleeps received. These areas represent key targets for implementation of efficiency measures such as electronic prescribing and transfer of tasks. We intend to present these findings at the Letterkenny University Hospital Quality Improvement Forum in order to initiate targeted efficiency interventions. One such proposed intervention would be electronic prescribing as this would decrease the need to be physically present on the ward requiring a prescription. Another potential intervention would be implementation of a prioritized task management system which would allow NCHDs on call to prioritize tasks as they are received. We plan to re-audit the bleeps received after targeted intervention.

An Audit in Novel Oral Anticoagulant Dosage in the Community relative to Local Hospital Prescribing Guidelines

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Background: Non-vitamin K oral anticoagulants (NOACs) first became available in Ireland in 2008. They are an alternative to warfarin in patients with non-valvular atrial fibrillation (NVAF) and in the treatment of venous thromboembolism (VTE). Renal function needs to be regularly monitored in patients taking NOACs. Estimated glomerular filtration rate (eGFR) is acceptable as a measure of renal function for most medications; however it is recommended in current Galway University Hospital prescribing guidelines that creatinine clearance, which is a more accurate representation of renal function be calculated using the Cockroft-Gault equation for NOAC prescribing and dosage adjustment.

Aims: To gather data regarding the appropriateness of NOAC dosing in a cohort of patients in a Galway City general practice.

Methods: Using the Socrates database, all patients currently taking a NOAC (rivaroxaban, apixaban and dabigatran) were identified. Relevant clinical data on these patients was gathered. The GUH prescribing guidelines for NOACs was checked against each patients individual dosage of NOAC.

Results: 50 patients at the time of audit were currently taking a NOAC. Of 27 patients on rivaroxaban, 4(14.8%) were on a higher dose than recommended in the GUH guidelines. 4 of 21 (20%) of patients on apixaban were on a lower dose than recommended. 2/2 (100%) of patients on dabigatran were on the correct dose. Overall 16% of patients were on an incorrect dosage of NOAC.

Conclusion: It is important that the renal function of patients taking NOACs be checked regularly and guidelines be consulted to ensure that they are on an appropriate dose.

Steroid-induced mood changes and the complications in management; A Case Report

Smith S, O' Dwyer, AM

Introduction: A case presentation about the psychiatric side effects of high dose steroids in haematological malignancies, the management options available and the complications that can be associated with these management strategies.
Case: A gentleman in his fifties with Acute Myeloid Leukaemia, being treated for graft versus host disease with high dose prednisolone, developed steroid induced mania and was started on olanzapine. The patient remained elated on high dose olanzapine leading to the addition of haloperidol. The patient began to develop extra pyramidal side effects (EPSEs), namely parkinsonian gait, rigidity and akathisia. The haloperidol was discontinued over two days and a benzodiazepine was started which resulted in marked improvement in the EPSEs.
The patient, whose mood remained slightly hypomanic went on to develop neck dystonia and his shuffling gait worsened. This was treated by tapering and discontinuing the olanzapine dose. Anticholinergic medications were added; first procyclidine, which was unsuccessful, and finally benztropine – with time the dystonia settled.
Throughout this treatment the patient's prednisolone dose was being decreased. When the dose reached 20mg OD he developed symptoms of severe depression; the decision was made to proceed with non-pharmacological management.
Discussion: This case highlights rare side effects of commonly used psychiatric medications such as olanzapine induced dystonia. It also discusses the different anticholinergic options in the treatment of antipsychotic induced EPSEs and dystonias. Finally, non-pharmacological management is often neglected as a treatment option, we explore this further.

An audit of the risk assessment and patient education in the MMUH Emergency Department DVT pathway

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Introduction
Current practice in MMUH ED for suspected DVT includes risk stratification, assessing need for anticoagulation, with return of the patient the following day for venous Doppler ultrasound (US) at an allocated timeslot.
Aims
For patients presenting with suspected DVT, to audit:
Documentation of Well's score +/- D-dimer as an objective measure of risk
Patient education regarding the risks of pulmonary embolism (PE) and of anticoagulation
Patient education regarding US appointment time and location
Methods
The audit involved 41 patients over 4 weeks in November 2016. We reviewed clinical notes to ascertain if Well's score and D-dimer were documented. A patient questionnaire was developed to identify if adequate patient education was received.
Results
6 (15%) patients had confirmed DVT. Well's score was calculated in 16 (39%) of all cases, with 13 (81%) of these scoring >2. D-dimer was measured in 27 (66%) of cases. 24 (59%) patients were anticoagulated prior to US. Only 8 (33%) of these patients were educated on bleeding risk and 9 (37.5%) were advised to seek medical attention in case of head injury/trauma/uncontrollable hemorrhage. 1 (4%) patient experienced adverse consequences secondary to anticoagulation. 28 (68.3%) were advised to seek medical attention if they developed symptoms of PE. 24 (58.5%) were advised to attend US department at the allocated time, however 10 (24.3%) patients were unaware that they were to register at ED thereafter.
Conclusion
Well's score for DVT should be calculated in order to appropriately stratify patients for US Doppler. D-dimer is frequently measured, although not always clinically appropriate due to low specificity. Patient education could be improved with an information leaflet including US appointment time and location, advice on anticoagulation risks and when to seek medical attention. Such leaflets would streamline patient flow in the DVT Pathway, reduce ED waiting times and ensure that all patients receive pertinent education.
Following intervention we will re-audit.

Virtual Surgical Planning for Mandibular Reconstruction

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Introduction: Resection of intraoral cancers involving the mandible, pose significant reconstructive challenges due to the complexity of the anatomy and the necessity for an acceptable cosmetic outcome. The use of virtual surgical planning allows for the creation of a customised solution, based on the patient's own pre-operative anatomy, in order to achieve excellent reconstructive results. We describe our experience of this emerging technology in a recent case.
Case Report: A 78-year-old lady presented with an intraoral squamous cell carcinoma located along her alveolar margin at the level of her lower left first bicuspid. Pre-operative CT confirmed local disease with invasion into the mandible. A PET scan revealed no positive lymph nodes, with no evidence of distant disease. She was counseled on her options and elected for surgery. She was planned for a midline lip split, left hemi-mandibulectomy, bilateral modified radical neck dissections and free fibular osteocutaneous flap reconstruction. Pre-operatively, she underwent a planning CT of her head and neck with ultrafine image slices of 1.5mm, in order to accurately define her mandibular anatomy. She also underwent CT angiogram of her contralateral lower limb to assess vessel patency and to out rule abnormal arterial supply. These scans allowed for computer aided 3D reconstruction of the patient's mandible, from which a customized contoured locking bridging plate was manufactured. Preoperative osteotomy planning was also possible with custom-made osteotomy jigs. This method allowed for an efficient and accurate reconstruction of the patient's defect using her pre-surgery anatomy as a template. The customized contoured plate facilitated a reconstruction with a good cosmetic result and an excellent dental height match to her remaining teeth.
Conclusion: Virtual surgical planning aids in complex mandibular reconstruction resulting in shorter operating times and customised facial reconstruction with excellent cosmetic results.

Intern On-Call Representation of Transfer of Tasks in Letterkenny University Hospital

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Objectives: Measure of implementation of transfer of task (TOT) protocol in Letterkenny University Hospital (LUH) as evidenced by intern on-call bleeps.
Methods: All medical and surgical interns were invited to participate in an audit of bleeps received while on-call over a 20-day period. Interns were provided with a proforma of information to be collected for each bleep including reason of bleep. This information was then correlated and compared against the current TOT protocol: IV cannulation, phlebotomy, discharge, and IV drug administration.
Results: A total of 326 calls were logged over the study period. A total of 62 (19%) of all bleeps received were for tasks that fall under the TOT guidelines. Of these, 71% were for cannulation, 24% were for phlebotomy, and 5% were for discharges. Of note, there were no bleeps regarding IV drug administration highlighting successful task transfer.
Conclusion: SIPTU, the IMO, and the HSE agreed for TOT to commence in January 2016. While timescales were to be implemented locally, implementation was due to have occurred by March 31st 2016.[1] This audit of tasks demonstrates that despite progress achieved regarding TOT, much work still remains. Successful TOT is dependent on achieving buy-in and supporting training of nursing and ancillary staff. It is essential that TOT is implemented on a national level in order to prioritise patient safety.

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Mermaid syndrome: Three cases within one year in UMHL

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The Mermaid Syndrome, officially known as Sirenomelia, is a rare and fatal congenital anomaly. Sirenomelia has an incidence of 1 per 100,000 births. It has a greater chance of occurring in males than females at a ratio of 3:1. (1) Characteristic features include fusion of the lower limbs to varying degrees, genitourinary and anorectal atresia, sacral agenesis, and anomalies of the thoracolumbar spine. (2) The associated complications with kidney and bladder development and function result in sirenomelia being incompatible with life. Maternal diabetes increases the risk for sirenomelia with around a fifth of fetuses with this condition being born to diabetic mothers. (3)(4) Infants with this condition can be classified from Type I to Type IV corresponding to the number of bones present in the lower limb. (5)
Given the rarity of this condition, it is particularly interesting that three cases were identified in UMHL in 2016. The first case was a 28 year old lady, gravida 6 para 4+1, found to have no fetal heart beat and ventriculomegaly on US at 20+2 weeks gestation who was then admitted for induction of labour. The second case was a 34 year old primigravida who went into spontaneous labour at 34 weeks. Upon delivery, the fetus was found to have no heartbeat, one lower limb and ambiguous genitalia. The third case was a 32 year old lady, gravida 5 para 2+2. On US at 18 weeks oligohydramnios was noted. The kidneys, bladder and right lower limb could not be visualized. At 27 weeks, US revealed no liquor and Potters syndrome was thought to be the most likely diagnosis. A plan was made for Induction of Labour at 36 weeks. A live infant was delivered who lived for one hour and one minute.

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Management of urinary tract infections in medical patients: Performance feedback for quality improvement

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Introduction: Urinary Tract Infection (UTI) is common amongst medical patients and is the third most common healthcare associated infection in Ireland, with a point prevalence of 15%.[1] Inappropriate use and duration of antimicrobials is well recognised and responsible for the emergence and spread of antimicrobial resistance.
Aim: This study aimed to analyse cases of urinary tract infection in a regional hospital in Ireland; to determine if the appropriate investigations were being carried out in a timely manner, and also to ascertain if antibiotics were being prescribed according to local best practice guidelines and adjusted appropriately based on sensitivity reports.
Method: Data was collected retrospectively from 21 recent patient admissions where a UTI was diagnosed. Data included the following parameters: symptoms and signs; presence of a urinary catheter; urine dipstick results; urine culture and sensitivity results and the antibiotics prescribed.
Results: 81% of patients had urine cultures sent. Mean time from diagnosis of UTI to urine collection for culture was 1.6 days. 80.9% of patients were prescribed the correct empirical antibiotics according to local guidelines. 85.7% of patients with a positive urine culture were treated with appropriate antibiotics after sensitivities became available.
Conclusion: Results were used to evaluate current practice, provide performance feedback and implement changes in practice via a number of interventional strategies; ultimately with the aim of improving the management of UTIs in hospital patients.
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A red man with intractable itch

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A 59 year old male presented in May 2014, one week post knee replacement with a widespread erythematous scaling skin eruption involving > 90% of his body surface area. He was systemically well, with no palpable lymphadenopathy. Medications included thyroxine and some post-operative analgesia. He had no skin history of note. He was admitted, his medications held and investigated for potential causes of an exfoliative erythroderma. The initial clinical picture suggested pityriasis rubra pilaris (PRP) which was supported by diagnostic skin biopsies. Viral screening for HIV, Hep B and Hep C were negative.
There was minimal improvement following intensive in-patient topical treatment and high dose oral retinoids. Addition of TLO1 phototherapy and subsequent transition from retinoids to methotrexate yielded

intermittent improvements but he continued to flare and suffer severe itch. A short trial of Ustekinumab also proved ineffective.
Three further sets of skin biopsies over the next year which showed features overlapping between psoriasis and PRP but no features of Cutaneous T Cell lymphoma (CTCL). He had no secondary symptoms but due to lack of therapeutic response and some mildly atypical lymphocytes on his blood film, T-cell receptor gene rearrangement studies were requested. Both his skin and blood demonstrated a clonal T Cell population. He has no circulating Sezary cells. PET CT demonstrated scattered nodes on imaging, felt to be reactive based on indeterminate histology from nodal biopsy.
A trial of PUVA photochemotherapy was ineffective due to the challenge of dose escalation on background erythematous skin. Bexarotene treatment has been complicated by rapid escalation of triglycerides and cholesterol on three occasions despite optimization of his hypothyroidism, fenofibrate and statin therapy.
This case highlights the diagnostic challenges in newly presenting erythrodermic patients, the recalcitrant nature of this patient's disease and complications of third generation retinoid therapy. Our patient's erythrodermic CTCL is likely to progress to systemic disease and warrant more aggressive chemotherapy.

Compliance to antibiotic prescription regulation by medical practitioners in an acute hospital in the West of Ireland

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Abstract Category: Audit
Objective
To determine the compliance of medical practitioners to local antibiotic prescribing guidelines. Patient safety and antimicrobial stewardship are essential aspects of appropriate patient management. Drug prescription kardexes are designed to strengthen these key aspects. We audited kardexes to assess our compliance to local antibiotic prescribing guidelines.
Methods
In a cross-sectional 1-day audit, 161 drug prescription kardexes from 7 wards were studied (ICU, Gynaecology, Elderly Medicine and 4 medical and surgical wards). Wards with higher patient turnover rates were excluded for logistical purposes.
We recorded whether the following sections were completed: patient allergies/no known allergy, indication for treatment, start and stop dates of treatment, prescriber signature(s) and MCRN (Medical Council Registration Number), and prescriber contact details.
Results
Of the 161 patients studied, the majority were admitted under medical teams ($n=141$). 68.9%($n=111$) patients had an allergy status recorded and of those, 14.4%($n=16$) were not signed by the documenter. 59%($n=95$) of patients were prescribed antibiotics, of which, 65%($n=62$) had no indication for treatment documented and in 23%($n=22$) no prescriber contact detail(s) were listed. 1.1%($n=1$) had no prescriber signature, contact details or MCRN provided and antibiotics were administered. In 90.5%($n=86$) of antibiotic prescriptions the prescribers' MCRN was not provided. When indications for antibiotic treatment were documented, 100% were accurate as per clinical notes. 4.2%($n=4$) of prescriptions included a stop date for treatment.
Conclusions
Our audit highlighted a deficit in compliance with antibiotic prescribing guidelines, representing a risk to patient safety and antimicrobial stewardship that could be improved. Re-auditing after appropriate intervention is warranted.

Glioblastoma Multiforme: do we need to think outside the brain?

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Background: Primary brain tumours are classified by their histological/molecular characteristics and account for less than 2% of invasive cancers in Ireland (1). Glioblastoma Multiforme (GBM) is the most common of these (40%) and the most aggressive. Median survival is 16 months from diagnosis and unlike other cancers, distant metastatic sites have only been reported in isolated case reports (2).
Case report: A 48 year-old man presented in April 2014 with confusion and visual disturbances and found to have a mass in his right parietal occipital lobe on CT and MRI imaging. He was diagnosed with a GBM, WHO Grade IV. His tumour was MGMT methylated and no IDH1 mutation was present. He underwent three debulking surgeries between 2014 and 2015 and required a ventriculo-peritoneal (VP) shunt in April 2015 for acute hydrocephalus. He was initially treated with temozolomide/radiation (STUPP protocol), followed by nivolimumab/ipilumab (clinical trial). Clinically and radiologically however, he had disease progression and started bevacizumab in May 2016 with good response.
In September 2016 he presented with reduced appetite and right flank pain. On examination, he had a temperature of 38.2°C and was tender in the right flank, proximal to the VP shunt scar. Investigations revealed elevated inflammatory markers (C-reactive protein 265mg/L, white cell count 12.9 x10^9/L, neutrophils 8.5 x10^9/L). A CT abdomen/pelvis revealed a 2cm hypoattenuated liver lesion. He was treated for a suspected liver abscess with piperacillin/tazobactam with resolution of his pyrexia and biochemical improvement. Re-imaging showed a persistent lesion in his liver however. Biopsy of the lesion proved to be metastatic GBM. Temozolomide was added to his chemotherapy regime, he was discharged and followed in the Oncology day ward.
Discussion: Cases of GBM with extra-cranial metastases are extremely rare (0.5-2%) (2), which is thought to be due to the unique presence of the blood brain barrier and the absence of lymphatic drainage. With newer therapeutic strategies and the improving prognosis in patients with GBM there is an increased likelihood of distant metastases developing. In this case, we suspect that the VP shunt was the most likely mechanism of spread, given the location of his metastatic deposit. This route is rare and only reported in isolated single case series of just two patients (3). This case highlights the need for increased awareness for spread of GBM disease extra-cranially, particularly in the setting of VP shunts.
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Splenic injury in blunt abdominal trauma

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Background: The spleen is a commonly injured in blunt abdominal trauma. In a bleeding patient, splenectomy is life-saving. Immunological

considerations have led to efforts to save functional splenic tissue. Three cases of splenic injury were admitted in a 4-month period and were deemed suitable for conservative management.
Cases
1: 25-year-old male admitted following a blow while playing football. Ultrasound and CT imaging showed laceration of lower pole and lateral spleen close to the hilum and trace perisplenic fluid. On day six of observation, patient became acutely hypotensive with a drop in haemoglobin necessitating urgent open splenectomy. Postoperatively, pneumococcal, meningococcal, Hib and influenza vaccination was arranged and lifelong daily prophylactic penicillin commenced.
2: 77-year-old male with history of CLL presented following an eight-foot fall onto left side. Following initial ultrasound, CT showed splenomegaly with multiple intraparenchymal haematomas with evidence of active arterial extravasation. An episode of hypotension and a drop in haemoglobin was treated with blood transfusion and fluids. No further intervention was required.
3: 25-year-old female presenting following fall onto a metal bar. CT demonstrated multiple splenic lacerations with an intact capsule. Subsequent studies showed stable appearance and no active haemorrhage. Patient was discharged after seven days.
Discussion: Secondary haemorrhage in initially stable splenic injuries is a life-threatening complication. Patient selection is crucial to attenuate this risk. Acute deterioration in initially stable cases is difficult to predict based on CT grading. There is a lack of consensus regarding thresholds for surgical intervention when haemoglobin falls. Clinical observation is successful in the majority of stable injuries[1] however close attention for changes in haemodynamic stability, haemoglobin or changes on imaging may prompt need for intervention. Following splenectomy, careful follow up, adherence to a strict vaccination schedule and lifelong antibiotic prophylaxis is vital to reduce the risk of overwhelming infection.
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Emergency Department: Are we doing too many Chest X-rays

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Introduction
Chest x-rays are commonly used in the Emergency Department(ED) to assess patients. However, chest x-rays are associated with radiation exposure, costs and use of manpower. This study will evaluate if chest x-rays are being over performed in Galway University Hospital, Emergency Department.
Methods
An observational study was carried out over a two-day period in the ED in University Hospital Galway from the 18th to the 19th of November. Patients notes were studied for information regarding the indication for the chest x-ray, if the patient was admitted to hospital and if the chest x-ray was requested in the notes. The PAC system was used to access request information and radiologist report. “Radiation Protection 118 Referral Guidelines For Imaging” issued by European radiology and nuclear medicine in conjunction with the UK Royal College of Radiologists was used to determine if the chest x-ray was indicated. The data was collected onto an Excel Spread sheet and analysed.
Results
Of the 318 patients who attended the ED over the two days 18%(n=58) patients had chest x-rays. 78%(n=45) of indications on the request matched details on patient note, 13%(n=8) details did not match, however, 9% had no clinical notes. 67%(n=39) of the chest x-rays were indicated, 33%(n=19) were not. 33%(n=19) of these patients were discharged by ED while the remaining 67%(n=39) were admitted. 84.5%(n=49) of the chest x-rays performed were reported by the radiology department as normal.
Discussion
There is a large number of chest x-rays being order in the ED with a significant proportion not indicated and a clear majority of x-rays reports returning as normal. In conclusion further teaching to ED staff should be provided in the appropriate ordering of chest x-rays.

An Interesting Case of Neuroendocrine Hyperplasia of Infancy

Abstract Category: Case Report

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Introduction: Neuroendocrine Hyperplasia of Infancy (NEHI) is a rare form of childhood interstitial lung disease (chILD), which was first described in 2005 [1]. Its incidence and prevalence are unknown [2]. Case reports suggest that NEHI usually first manifests before the age of two years [3]. Typical features include failure to thrive, tachypnoea, chest retraction, crackles and hypoxia [3][4]. Diagnosis can be made by computed tomography (CT) imaging in the appropriate clinical context [5].
Case Presentation: A 10 month old female was brought to the emergency department because of vomiting, diarrhoea, fever, decreased oral intake and decreased urination. Her weight centile had dropped from between the 25th and 50th at birth to between the 0.4th and 2nd centile. Her fontanelle was sunken. No cyanosis was present although moderate respiratory distress in the form of tachypnoea, grunting and increased work of breathing was noted as were crackles in both lung fields. Chest radiograph revealed hyperinflation.
She received intravenous fluid therapy. During her admission, her capillary oxygen saturation fell frequently to 86-91%. Mean overnight oxygen saturation was 91%. She required nasal oxygen therapy to maintain an oxygen saturation greater than 94%.
No evidence of coeliac disease, respiratory synctial virus infection or cystic fibrosis was found on investigation. A bilateral groundglass appearance was found on CT imaging of the chest. The patient and her family were informed of the diagnosis of NEHI and home nocturnal oxygen therapy was organised.
Conclusion: NEHI is a rare condition within the spectrum of chILD with an unknown natural history. Prompt recognition of NEHI may enable timely diagnosis and improve disease management and prognosis [3]. Somatostatin analogue therapy can alter the long-term outcomes in other diseases characterized by an increase in neuroendocrine cells [6] – whether this is the case for NEHI remains to be determined.
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Rates of Same Admission Cholecystectomy for Mild Gallstone Pancreatitis in University Hospital Galway (UHG): The Influence of the PONCHO trial

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Background

Cholecystectomy is indicated in patients who present with gallstone pancreatitis, to reduce the risk of recurrent gallstone related complications such as recurrent pancreatitis, cholecystitis, cholangitis or biliary colic. The British Society of Gastroenterology recommends that all patients with biliary pancreatitis should undergo definitive management of gallstones during the same hospital admission, unless a clear plan exists for definitive treatment within two weeks of admission[1]. Similar recommendations have been made by IAP/APA Acute Pancreatitis guidelines, which recommends that cholecystectomy during index admission for mild biliary pancreatitis is safe and recommended[2]. The recommendations were demonstrated with the PONCHO trial, which showed that same-admission cholecystectomy was safe and reduced risk of gall-stone related complications, as compared with delaying surgery[3].

Aims & Hypothesis

We proposed this audit to examine the impact of the PONCHO trial on practices regarding same-admission cholecystectomy in mild gallstone pancreatitis. Our hypothesis is that the release of the PONCHO trial has led to a change in practice at UHG. Admission details were identified using Hospital Inpatient Enquiry System (HIPE) data and clinical notes covering a one year period.

Results and Discussion

Our findings show that same admission cholecystectomy is not routine, and rarely occurs in practice. Of those presenting with gallstone pancreatitis, 90% did not undergo same admission cholecystectomy, with the majority being booked for theatre at a later date. There are inherent problems with this practice, as one fifth of patients awaiting cholecystectomy were readmitted during the audit period with gallstone related disease. These findings have implications relating to healthcare expenditure and increased morbidity. This audit had highlighted the need to re-evaluate same admission cholecystectomy practice in UHG.

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A Comparative Analysis of On-Call Bleeps Received by Medical and Surgical Interns at Letterkenny University Hospital

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Objectives

Comparison of number and type of bleeps received by medical and surgical interns at Letterkenny University Hospital.

Methods

All medical and surgical interns were invited to participate in an audit of bleeps received while on-call over a 20-day period. Participants were given a proforma to collect a standardized dataset from each shift. This information was then collated and analysed.

Results

A total of 326 bleeps were logged over a 20-day study period by 11 medical and 6 surgical interns. Of those bleeps 248 (75%) were recorded by medical interns and 78 (24%) bleeps were surgical interns. There was a daily average of 27.6 bleeps recorded by medical interns compared to an average of 13 by surgical interns. The three most common medical bleeps were: Review Patient (19%), Chart Medications (17%), and Cannulation (10%). The most common surgical bleeps were: Cannulation (25%), Review Patient (18%), and Chart Medications (14%).

Conclusion

Current staffing levels at LUH allocate one surgical and one medical intern on call nightly with the recent addition of a second medical intern for a half-day on weekends. Notably, most surgical patients are located on one ward whereas medical patients are distributed throughout the hospital. Because of this, surgical interns recorded fewer beeps on average than their medical counterparts. This data could be used as evidence to demonstrate the heavy call load experienced by interns at LUH. This data will be fed back to local Medical Manpower to help shape future staffing policy.

Trawling to targeted therapy in thyroid cancer

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Introduction

Papillary thyroid cancers make up 80% of thyroid cancers. They have been shown to encompass several tumour types with specific genetic mutations, which signal through the MAPK pathway. BRAF V600E accounts for approximately 60% of these mutations. This case follows a gentleman with recurrent PTC, first treated in 1995, who 21 years later, is benefitting from targeted therapy based on these recent molecular diagnostic breakthroughs.

Case

A 45-year-old gentleman presented to SVUH with a right-sided neck lump in 1995. He was otherwise asymptomatic with no past medical history. Following work-up he was diagnosed with PTC (Thy5) and treated with a total thyroidectomy. Histology showed multi-focal, node positive disease and he received radioactive-iodine-ablative therapy and thyroxine-suppressive therapy. He remained disease free until 2009 when he presented again with a right-sided neck lump. Fine needle aspirate biopsy showed recurrent disease, which was treated with a modified right-sided neck dissection and radioactive-iodine. Following further recurrence in 2014 he received more radioactive-iodine. In 2015 he presented with a right-sided neck lump again positive for recurrent disease, but no longer iodine avid. Molecular diagnostics showed it to be BRAF V600E positive and he was referred to medical oncology following MDT discussion.

In January 2016 he was started on Lenvatinib, a multikinase inhibitor. At his most recent OPD appointment, the node was no

longer palpable and there were "no cervical lymphadenopathy or masses" on imaging.
Discussion
The incidence of thyroid cancers in the US has tripled in the last 40 years. At the forefront of treatment has been surgical intervention and radiation therapies. Recent developments in molecular diagnostics have provided us with another treatment option, but with trials on these adjuvant therapies in their early stages, it remains to be seen if this patient can be used as a benchmark for future thyroid cancer patients.

Steroid-responsive encephalopathy of unknown origin

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Steroid-responsive encephalopathy associated with autoimmune disorders is a well documented - if rare - phenomenon. [1, 2]
A case is presented of a 79-year-old male who was found unresponsive at home. Family members reported aggressive behaviour following excess alcohol consumption the evening prior to presentation. There was no history of head injury and no prodromal features. The patient had depressed level of consciousness, with a GCS of three on arrival to the ED. Examination revealed spontaneous jerky dyskinetic movements most prominent on the right which increased with noxious stimulus. Withdrawal from noxious stimulus, only of the left lower limb, was the only purposeful movement elicited. Bilateral upgoing plantar reflexes were noted. Pupils were equal and reactive to light and accommodation. Corneal reflexes were intact, but with no blink response to threat.
The patient was intubated for airway protection and admitted to ICU.
No acute changes were found on CT or MRI imaging of his brain. Routine bloods and toxicology screening were normal. Cerebrospinal fluid (CSF) samples on both the day of admission and subsequently two days later were within normal limits and both CSF and blood cultures were negative. EEG was unremarkable. Autoimmune screening including anti-nuclear (ANA), anti-neutrophil cytoplasmic (ANCA), anti-Yo, anti-Hu, anti-Ri, anti-GQ1B, anti-VGKC and anti-TPO antibodies were negative. Thyroid function tests were also within normal limits.
By day five there was no improvement in neurological status despite the absence of further sedation and an empiric three day course of IV methylprednisolone was commenced. On day six an obvious improvement in responsiveness was observed and by day eight our patient was extubated, awake, alert and had no further dyskinetic movements.
Though no definitive diagnosis was made, this case highlights the potential benefits of empiric IV steroid use in cases of diagnostically ambiguous coma after the definite exclusion of an infective cause.

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A comprehensive audit of inpatient prescribing in a regional Geriatric and Stroke service

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Introduction:
Numerous guidelines[(1) (2)(3)(4)]and laws[(5)] dictate how drugs should be prescribed. The concept of "generic prescribing" is regarded as the safest and most cost effective methods of prescribing available[(3).] It is the method of prescribing recommended in most circumstances by numerous national and international organisations[(2,3).] Despite this, there is a relative paucity of data examining whether best practice is being achieved.
Important features of a legally valid prescription include a signature, date, and medical council registration number[(5)]. Local prescribing recommendations[(6)] also suggest including a start date, proposed review date, bleep number and an indication as to whether the patient was on this medication pre-admission.
Method:
An observational study was undertaken of drug kardexs of all inpatients in a busy regional geriatric service. Data were recorded detailing the presence of signature, medical council number (MRCN), bleep number, indication for the medication, it's start date, proposed review date and use of block capitals in prescribing were also obtained.
Results:
In total, 78 kardexs were analysed yielding a total of 857 individual medication prescriptions. Of these 73% (n=623) of medications were prescribed generically. Bleep numbers were included in 61% (n=525). MRCN was provided in 81% (n=692), while medications were signed for and prescribed in block capitals in 97% (n=832), and 82% (n=701) prescriptions respectively. Start dates were recorded in only 36% (n=310) of cases.
Conclusion:
While the rate of generic prescribing was relatively high (73%) compared to other audits[(7)], there remains a need to promote greater adherence to the practice of generic prescribing in line with international recommendations. The audit highlighted some prescribing practices to improve on, in particular the lower than expected recording of bleep numbers, and medication start dates. Other areas which may improve medication safety would be an increased recording as to whether this was a new or repeat prescription. Scheduled NCHD training and re-audit is required.

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Are Teenage Inpatients at University Hospital Limerick (UHL) Housed in Age Appropriate Wards?

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Background

Adolescence is the least understood, least researched and therefore the least resourced of the 7 ages of childhood. Adolescent years are unique, and experiences such as stays in hospital may prey on vulnerabilities and effect emotional development.

Gynaecological pathologies are common among the adolescent population (ovarian cysts, menorrhagia, amenorrhea). Fortunately severe and life-threatening complications are rare, however admission to hospital as an inpatient is not uncommon for investigation to exclude other surgical and oncological pathologies.

Aims

Our objective was to ascertain whether teenage patients admitted to UHL were housed in age appropriate wards.

Methods

For our study we chose the cohort of patients admitted with gynaecological morbidities over the 10 year period 01/07/2006 and 01/07/2016 and then looked specifically at the 14, 15 and 16 year old age group. Data was obtained from the HIPE (Hospital Inpatient Enquiry) electronic database.

Results

Of the 331 patients admitted with gynaecological pathologies over the 10 year study period, 206 were aged 14, 15 and 16 years. Of these only 17% were admitted to an age appropriate ward, meaning 83% were housed on inappropriate wards, which include male and female medical and surgical wards.

Conclusion

The majority of patients with gynaecological morbidities aged 14, 15 and 16 years were housed in inappropriate wards. Our study highlights the need for a specific adolescent ward in our institution.

Case Report: One in a million - Acquired haemophilia A: A case report

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A 92-year-old female presented to the emergency department with reduced vision in the left eye. An IV cannula was inserted into her right antecubital fossa as part of her workup and subsequently removed. Following discharge, she developed a large hematoma at the venepuncture site with tracking of blood through the right upper limb. In the days following discharge, she was noted to have spontaneous bruising on her thigh, buttocks and left chin, spreading to her neck and chest. There was no history of trauma, no prior coagulation disorder and no contributing past medical history. Laboratory investigations revealed an isolated prolonged APTT 115.4 seconds and a haemoglobin drop from 10.7g/dL to 7.6g/dL. Repeat APTT remained prolonged at 96.8 seconds and a full haematology screen revealed a pan-acting inhibitor with FVIII level <1% on factor assay. A diagnosis of Acquired haemophilia A was confirmed with an inhibitor titre >100 BU.

Acquired haemophilia A is a rare but serious condition with a reported incidence ~1.48/million/year.[1] It is a caused by the development of autoantibodies, most frequently IgGk4, directed against coagulation Factor VIII.[1,2] The disease can often lead to life threatening bleeding thus early recognition, diagnosis and prompt treatment is required.[1] It is reported as bimodal in distribution, firstly in young woman postpartum with a second peak among the elderly, often associated with malignancy or drugs. Treatment goals include control of acute bleeding and eradication of autoinhibitors by immunosuppressive therapy, however in the elderly, concomitant comorbidities often limit aggressive therapy.[2] This case report aims to examine the literature surrounding optimal immunosuppressive regimens to achieve complete remission in this rare but potentially life threatening condition.

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A case of Faecal Peritonitis from Inrathoracic Heriation and Closed Loop Obstruction Post Oesophagectomy

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Oesophagectomies resect the oesophagus and restore gastrointestinal continuity. They are a technically challenging operation associated with a number of recognised complications. One of the rarer complications involves diaphragmatic herniation, occuring in <1% of open oesophagectomy patients. They rarely require intervention and the median time to diagnosis is 2 years.

Here we have the case of a 57 year old gentleman who presented with this rare complication acutely. Mr. MK is a 57 year old man admitted for a transhiatal oesophagectomy for a salvage resection of an upper oesophageal SCC post radical chemoradiotherapy.

His initial post operative course was relatively smooth with an expected elective admission to ICU. On the fifth post operative day the patient suffered significant respiratory distress requiring reintubation. While his symtpoms were clinically suspicious for an LRTI radiological imaging revealed something unexpected.

CT revealed herniation of transverse colon into left hemi thorax. The decision was made to reoperate. During surgery it was found that there was a closed loop obstruction of the transverse colon with subsequent infarction and perforation.

This case provides an interesting case of an unusual surgical complication and the opportunity to discuss a number of points.

The impact of major complications on patient's long term morbidity and mortality

The impact of patients baseline comorbitities on developing and surviving complications

The surgical management of diaphragmatic hernia.

A Case of Haemolytic Uremic Syndrome

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Summary: MB is a seventy four year old female Belgian national who presented to the emergency department with a ten-day history of shortness of breath, productive cough with green sputum and a three-day history of diarrhoea and vomiting. Her background history was significant for hypertension, total abdominal hysterectomy with bilateral salpingo-oophorectomy and a recent pneumonia with previous antibiotic treatment from her GP. On exam she had right mid and lower zone dullness to percussion and right-sided coarse crackles on auscultation. She had evidence of end organ damage, oliguria, and a diagnosis of respiratory sepsis complicated by septic shock was made. She was commenced on intravenous antibiotics and was admitted. During her admission she developed a decreased consciousness level, increased confusion and myalgia. Her diarrhoea reoccurred and became bloody with diffuse

abdominal tenderness. Her platelet count decreased and her lactate dehydrogenase increased and she developed new ecchymosis and acute renal failure. On blood film schistocytes were present and haemolytic uremic syndrome was diagnosed. MB was transferred to the intensive care unit, ventilated, a vas-catheter was placed, continuous renal replacement therapy commenced and she received four litres of fresh frozen plasma. Her initial stool cultures from the emergency department taken due to her history of diarrhoea were verotoxin E. coli O157:H7 positive. MB On her admission history it was noted that her diarrheal illness had started after eating soft cheese bought from a supermarket. Hemolytic uremic syndrome is a microangiopathic haemolytic anaemia disease characterized by haemolytic anaemia, acute kidney failure and thrombocytopenia. It is most commonly caused by shiga toxin producing E. coli normally found in contaminated water, meat or produce. As MB did not have risk factors for the other two sources, this cheese is the most likely source of the E. coli.

Acute severe pulmonary oedema associated with severe mitral regurgitation

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Case: A 58 year old lady with a medical history significant for hypertension, dyslipidaemia and chronic kidney disease presented to a regional hospital with a short history of cough and flu-like symptoms. She was tachypnoeic and tachycardic; ECG and bloods were normal and chest X-ray showed patchy bilateral infiltrates. A diagnosis of community acquired pneumonia was made. She subsequently deteriorated with dyspnoea and haemoptysis requiring increasing respiratory supports and eventual admission to ICU for intubation and ventilation. She became progressively hypoxaemic and was transferred to MMUH for multidisciplinary input and consideration for ECLS. On arrival she was poorly oxygenated despite maximal supports with blood stained secretions, no significant signs of shock and dense bilateral pulmonary opacification on X-ray. VV ECLS was initiated for presumptive ARDS. There was rapid improvement in hypoxaemia and resolution of respiratory acidosis. Following stabilisation a TOE was performed, which showed severe eccentric mitral regurgitation with a flail segment on the posterior leaflet.
Acute severe pulmonary oedema secondary to mitral regurgitation due to myxomatous degeneration and cord rupture was diagnosed. A prosthetic valve and IABP were placed. VV ECLS with mechanical ventilation were continued postoperatively - good gas exchange was achieved with low flow ECLS due to improving lung function. On the 4th postoperative day CXR showed improvement in pulmonary oedema and TOE showed good LV function with no shunt. The IABP was removed, VV ECLS was stopped; the patient maintained good gas exchange and was decannulated a day later. Respiratory support was subsequently weaned. Recovery was complicated by critical care myopathy; the patient improved with physiotherapy and on the 21st postoperative day was discharged to the ward.
Discussion: This case demonstrates acute pulmonary oedema and respiratory failure associated with severe mitral regurgitation and the effective use of ECLS as a bridge to definitive diagnosis and treatment.

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This case demonstrates acute pulmonary oedema and respiratory failure associated with severe mitral regurgitation and the effective use of ECLS as a bridge to definitive diagnosis and treatment.

Audit of anticoagulation prescribing in a geriatric population

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Abstract
Background: Oral anticoagulants are indicated for thromboembolic conditions, including stroke prevention in non-valvular atrial fibrillation and the prevention and treatment of venous thromboembolism. Data for the month of October 2014 showed that the cost of warfarin treatment for 30,620 patients was €0.4million with a further cost of €1.5 million for 16,272 treated with direct oral anticoagulants (DOAC's). We aimed to investigate anticoagulant prescribing practises in older adults at our institution.
Methods: The audit was performed on a single afternoon in all geriatric wards in a single purpose built building for medicine for elderly. The kardexes of 110 patients were evaluated for anticoagulant prescribing using the HSE medicines management programme.
Results: The average age of patients was 82.7 years and 53 were female. Twenty-five (22.7%) were on anticoagulant therapy (Apixaban 13, Rivaroxaban 5 and Warfarin 7). Indications for therapy were Atrial Fibrillation in 23 patients and deep venous thrombosis and pulmonary embolism in another two. Three patients had complications which included rectal bleeding, a subacute subdural haematoma and a right arm haematoma. Five patients (20%) were incorrectly prescribed therapy. This included three who were on sub-therapeutic doses, one where treatment was not reviewed after 3 months for a below the knee DVT, and one where warfarin was held after a minor rectal bleed (despite having a long term stable INR and no further investigations)
Conclusion: The commonest oral anticoagulant (72%) used in older adults at our institution were DOAC's. Serious complications from therapy including the risk of intracranial haemorrhage need to be carefully

considered in the 'older' old person. In particular, attention should be given to renal function and body weight when prescribing DOAC's. The decision to stop anticoagulation after bleeding needs to carefully balance risks/benefits after appropriate investigations. Duration of therapy for thromboembolic events should be clearly established and reviewed.

Hallucinations – A case highlighting the challenge of differentiating between psychotic and non-psychotic causes

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Introduction: Patients presenting with hallucinations can pose a significant challenge in terms of diagnosis. Although hallucinations are associated with psychiatric conditions, in particular primary psychotic disorders, they can also be found in a range of organic brain conditions.
Case description: A 76 year old man presented to A&E reporting that he could hear the voice of his 'guardian angel'. After initial investigations found no acute medical cause, he was referred to psychiatric services. This voice had been present for several months. He stated that it represented his thoughts, describing it as his 'alter ego'. He did not describe any other psychotic phenomenon or perceptual disturbances, but did report progressively worsening memory. In view of the history and the CT Brain scan, which showed ischaemic microangiopathy, it was queried whether he had a vascular dementia or vascular parkinsonism. He was readmitted to hospital the following month having being found naked and confused in his front garden. He was transferred to a nursing home and commenced on Risperidone which initially had positive results, but which was later reduced and then replaced with Quetiapine because of an increase in parkinsonian symptoms. He experienced further hallucinations and became increasingly aggressive. He also became sexually disinhibited and had episodes of perseverance and catatonic behaviour. Having displayed minimal effectiveness, Quetiapine was subsequently replaced with Sodium Valproate after the patient had a witnessed partial complex seizure. The patient has now shown marked improvement on an increased dose of same, with no further hallucinations and significantly improved behaviour.
Conclusion: This case highlights the difficulty in accurately diagnosing and treating patients presenting with hallucinations. Antipsychotics are often the first line treatment. However, even atypical agents are associated with extrapyramidal symptoms, which may make differentiating between dementia related psychosis and other potential causes even more challenging.

Biventricular Thrombi and Ischaemic Limb: A Rare Presentation of Dilated Cardiomyopathy

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Background
Dilated cardiomyopathy (DCM) is characterised by ventricular dilatation and systolic dysfunction. Dilatation and low flow state may predispose to thrombus formation, however, the incidence of biventricular thrombi is rare. We describe a patient transferred to a tertiary hospital with DCM complicated by biventricular thrombi and acute lower limb ischaemia due to embolism.

Case Presentation
A 43 year-old man was transferred from a regional hospital with symptoms of heart failure, complicated by an acutely ischemic lower limb. Thrombi were incidentally found to be cardiac in origin. Transthoracic echocardiogram (TTE) revealed biventricular DCM, a partially mobile thrombus at the LV apex, and a mural thombus at the right ventricle (RV) apex. Cardiac magnetic resonance imaging (CMR) demonstrated severe four-chamber dilatation, mid-wall fibrosis, and an ejection fraction (EF) of 15%. There was no evidence of previous infarction, inflammation or infiltration. Coronary angiography was normal. The patient is a current smoker, consumes 30-40 units of alcohol per week and has a family history of cardiac disease. He was commenced on therapeutic anticoagulation and the limb ischaemia resolved, and he was commenced on standard heart failure medications and enrolled for follow-up in our Heart Failure Unit. TTE within two weeks showed resolution of the intracardiac thrombi, however, he has experienced some pleuritic chest pain likely due to small pulmonary emboli.
Conclusion
This case report highlights an exceedingly rare presentation of heart failure with biventricular thrombi and systemic embolization. It outlines the clinical and radiological presentation of DCM with ventricular thrombi, and the potential complications and treatment challenges for this patient cohort.

Paediatric epidural abscess: a case report

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Paediatric spinal epidural abscess is a rare emergency requiring prompt diagnosis and both medical and surgical therapy. This is an infection of the central nervous system, with the most common causative organism being *Staphylococcus aureus*.
A 14-year old male presented to the emergency department of a hospital in the West of Ireland with a ten-day history of progressive severe infrascapular pain with associated fever and night sweats. There was no preceding traumatic injury and neurological examination on admission was grossly normal. He had no significant past medical history and was not taking any regular medications. Initial blood tests revealed markedly raised inflammatory markers and MRI showed a large multiloculated complex bilateral paraspinous collection, extending into the epidural space and also extending bilaterally into the subpleural spaces with a large left-sided intrathoracic collection. Emergency spinal decompression and drainage of the abscess was performed and the patient was subsequently treated with a six-week course of intravenous flucloxacillin.
This case demonstrates the importance of early recognition of this rare surgical emergency and highlights how timely intervention and appropriate management can result in complete recovery. There are a number of associated risk factors including traumatic injury and epidural catheter placement, however our patient had none of these risk factors. Spinal epidural abscess is an extremely rare diagnosis in the paediatric population, with the average age of onset being fifty years. Our patient recovered well and was discharged home following his six week course of antimicrobial therapy.

Primary Intraocular Lymphoma- A Case Report

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Primary intraocular lymphoma (PIOL) is a rare type of extranodal non-Hodgkin lymphoma, with less than 200 cases reported in the literature. It is a subtype of primary central nervous system lymphoma (PCNSL) and up to 65-90% of patients with PIOL will go on to develop central nervous system disease.[1] Conversely, only 15% of patients who present with primary central nervous system disease will develop intraocular lymphoma(1). The optimal treatment for this condition is not clear but usually involves systemic chemotherapy and local treatment, consisting of ocular radiotherapy and intravitreal chemotherapy.
BS is a 68 year old lady, with a background of hypothyroidism and hypertension, who presented with a two month history of unilateral painless blurred vision. Findings on examination were consistent with intermediate uveitis and she was commenced on oral steroids. On return to clinic, her symptoms had not improved and vitreous cells were seen on slit-lamp examination. BS was admitted for investigation of intraocular lymphoma which included a vitreous biopsy, MRI brain and CSF and bone marrow examination. MRI brain identified multiple acute infarcts within the left frontal and parietal lobes. BS had experienced no neurological symptoms. A full stroke work-up was completed and the possibility of intravascular large B-cell lymphoma was also considered. Ultrasound of carotid arteries showed significant stenosis of the left internal carotid artery and a carotid endarterectomy was planned. Cytology from the vitreous biopsy was consistent with non-Hodgkin's B cell lymphoma. There was no CSF or bone marrow involvement and a CT neck, thorax, abdomen and pelvis showed no evidence of systemic lymphoma, thus confirming the diagnosis of primary intra-ocular lymphoma. BS will be discussed by the multi-disciplinary team to determine the optimal management plan.

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Audit of Intermittent Pneumatic Compression [IPC] use in patients on Acute Stroke Unit at the Mater Misericordiae University Hospital

Miller C

INTRODUCTION:
The rate of DVT (Deep Vein Thrombosis) post stroke varies from 20-42%. [1]The clinical significance of DVT is the potential to cause fatal pulmonary embolism (PE) with reported incidences between 10-13%. [2]
The CLOTS3 trial demonstrated intermittent pneumatic compression (IPC) applied to the legs of immobile patients with stroke significantly reduced the risk of DVT and hazard of death over the first 6 months.[3]
METHODS:
Sample: 10 inpatients on a daily basis for two weeks on Acute Stroke Unit between 9th December 2016 – 1 Jan 2017. A target sample size of 50 is expected.
Data Collection: Audit team collate data on a daily basis using a paper data from. A list of standards was compiled according to the CLOTS3 trial demonstrating optimal management.
-IPC' s started within 3 days of diagnosis
-IPC's prescribed on the MMUH drug chart with a daily signature
-IPC's remain in place continuously
-IPC stocking must be turned on and fitted correctly with daily skin checks
Data Analysis: Simple analysis using percentages calculated on excel spreadsheets was used to demonstrate compliance on the Acute Stroke Unit with the above list standards
RESULTS: A mini data collection was performed in order to test the feasibility of the above proposal. Of 5 patients sampled on the 8th December 76% of patients had IPC's in place as per above standards. There was an even distribution between male and female, median age was 75 years. Further results are pending.
CONCLUSION: The evidence for use of IPC stockings as an effective method of reducing DVT risk and improving outcome after stroke is well established. This audit will establish current rates of compliance with IPC stocking use at MMUH and identify areas for improvement if required.
All data will have been compiled and analysed by the 14th of January
The audit team apologizes for lack of data to date.

Attitudes to their roles as researchers: a study of G.P trainees.

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Background:
With an increasing emphasis on the importance of research in clinical medicine G.Ps are expected to both participate in and undertake research projects. Once qualified and in practice they must at the very minimum carry out an annual audit for professional competence. Accordingly, G.P trainees must now undertake a research project.
In this survey we examined how G.P trainees feel about this role within their practice and explore the factors that would facilitate their participation in research.
Aims:
Explore how G.P trainees feel about their role as researchers. Assess which factors would encourage their involvement with research.
Methods:
A 14-item questionnaire was emailed to all 14 ICGP training schemes in the Republic of Ireland. The survey was made available to trainees in all years of training.
Results:
73 G.P trainees took part in the survey. 71% of trainees agreed that research was an important part of their role as a G.P while 20% of trainees disagreed with this view. 53% of those surveyed viewed research as a burden on their role as a G.P. We found that the most frequently agreed factors that would encourage their participation were: research that involved a minimal time contribution, directly affected their patient's care, and on a topic they were personally interested. They also said that some financial incentives to do research and better feedback about study outcomes would encourage participation.
Conclusion:
G.P trainees are the G.Ps of our future. These findings create an insight into how they see their role as researchers and should inform researchers who want to get G.Ps to take part in studies. They should consider G.Ps as part of the research team and give them feedback on the findings. Given the time demands on GPs researchers should be aware of the time research demands and consider some financial reimbursement for same. G.Ps should be given the option to identify, participate in and create research projects that are relevant to their everyday practice.

Left-sided colonic lymphoma presenting as caecal perforation: a case report

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Colorectal lymphoma is a rare entity accounting for only 10-20% of gastrointestinal lymphomas and 0.1-0.5% of colorectal malignancies. Histologically, diffuse large B cell lymphoma and mucosa-associated lymphoid tissue lymphoma make up 90% of non-Hodgkin colorectal lymphomas. It typically presents as bulky tumours in males[1].
A 79-year old gentleman presented to Emergency Department with abdominal pain and distension for two weeks as well as dyspnoea, diarrhoea

for four days and two episodes of bile-like vomit. His vitals were stable however his bloods showed a raised lactate, white cell count, CRP and neutrophilia.
His past medical history was notable for ulcerative colitis and he had recently been complaining of increased diarrhoea but was reluctant to undergo an urgent colonoscopy.
His initial CXR revealed a pneumoperitoneum. CT abdomen and pelvis showed a 13-cm splenic flexure soft tissue mass, invading the diaphragm and lateral abdominal wall, causing proximal dilatation of large and small bowel. There was accompanying pneumatosis in bowel wall and bowel ischaemia.
He underwent a laparotomy at which point it was found he had a small perforation in his caecum with minimal contamination. A subtotal colectomy, a partial gastrectomy and a partial resection of his left hemi-diaphragm were performed.
Histology showed a 14 x 10 x 9.5cm diffuse B cell lymphoma extending into the colonic serosa surface with direct extension into the gastric mucosa and the diaphragmatic surface.
Following a brief ICU stay and rehabilitation he was referred to medical oncology.
Gastrointestinal lymphoma rarely presents with small bowel obstruction and is generally diagnosed at colonoscopy[1]. This case illustrates the need for a high index of suspicion in patients with chronic diseases; longstanding symptoms may resemble underlying malignancy and delay their presentation to hospital. This is compounded by the high morbidity associated with resection of such bulky tumours especially in the emergent setting.

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Synchronous penile carcinoma and eroding nasal carcinoma: a case of neglect in rural Ireland

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Introduction
Advanced cancers that would previously have been declared inoperable and incurable are increasingly coming back into the hands of surgeons. Despite current screening programmes and access to free healthcare, there is still a significant amount of patients who present at an advanced disease stage. There are currently 3000 elderly male bachelors in Ireland, the majority living in rural communities. We present the case of a patient presenting with synchronous advanced cancers, which highlights the lack of awareness and neglect, specifically in a rural society with reduced socio-economic status.
Case Description
This report documents the case of a 73 year old male farmer living alone in rural Ireland. He presented to his GP with an eroding lesion on the nasal bridge which had been present for six years. It was the odour of the lesion that caused him to finally present to his GP. On examination a synchronous penile lesion was discovered.
Biopsies of both lesions confirmed a basal cell carcinoma of the nasal bridge and a synchronous squamous cell carcinoma of the penile tip. The SCC of the penis required a complete penectomy and primary closure, with permanent suprapubic catheter placement. The surgical resection of the BCC of the nasal bridge involved a large en bloc resection of the nasal/cheek lesion with underlying nasal bone and mucosa and part of the maxilla.
A three-stage nasal reconstruction with forehead flap was carried out. A full thickness skin graft was placed on the underside of the flap to act as mucosal lining for the reconstructed nose.
Discussion
This case highlights the severity of surgical resection following delayed presentation with locally advanced disease processes.

A 61 Year-Old Woman with Severe Cough, Stridor, and a History of Breast Cancer

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Case Presentation: A 61 year-old woman was referred to the ENT clinic with a three-month history of cough, which was severe and present at all times, and significant weight loss. Clinical examination of the neck was normal, but biphasic stridor was present. Notable in her medical history was ER-positive breast cancer, diagnosed on routine screening. This had been managed with wide local excision and adjuvant radiation, followed by tamoxifen therapy for 5 years.
Management & Outcome: Flexible laryngoscopy was not tolerated initially. Examination under anaesthesia was attempted, but abandoned due to a traumatic intubation. A pharyngeal tear resulted in tissue emphysema, which was managed conservatively and the patient was discharged. One month later, extensive topical anaesthesia allowed for repeat EUA and laryngoscopy, at which time bilateral vocal cord paralysis was diagnosed. A tracheostomy was sited for airway protection, and the patient was made NPO. MRI neck identified a 1x1cm thyroid nodule, and the Head & Neck Oncology MDT decision was for subtotal thyroidectomy. Specimen histology yielded the surprising finding of breast carcinoma, with well-formed ductal and glandular structures, and ER- and PR- positivity. The patient underwent adjuvant chemoradiotherapy and remained NPO with tracheostomy in situ. A RIG tube was sited for feeding. Two years later, the patient elected to have a laryngectomy to allow PO intake, which was successful. She is currently tolerating normal diet, gaining weight, and is dependent on tracheoesophageal speech. Her quality of life has dramatically improved.
Discussion: Bone, lungs, liver and brain are the most common sites of breast cancer metastases, but thyroid nodularity in patients with history of breast cancer should be treated with reasonable clinical suspicion.

Accessory bile duct leak post laparoscopic cholecystectomy a case report

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Introduction:
In 2012 in Ireland approximately 5,154 cholecystectomies were performed.(1) The duct of Luschka first described in 1863, is now referred to as an accessory bile duct. They are small ducts originating from the right hepatic lobe, which course along the gallbladder fossa, and usually drain in the extrahepatic bile ducts.(2) Accessory bile duct leaks complicate 0.4 – 1.2% of cholecystectomies. (3, 4)
Case report:
A 40-year-old female underwent elective laparoscopic cholecystectomy after two previous admissions with acute cholecystitis. Intraoperatively to control minimal blood ooze from the gallbladder fossa a Matrix Hemostatic Agent was applied and a Robinsons drain was placed. It drained minimal serosanginous fluid. Following removal of drain on third postoperative day the patient experienced severe abdominal pain. An ultrasound abdomen followed by CT abdomen revealed a small amount of fluid around the gallbladder fossa, right colic gutter and pelvis. She was transferred to ICU on becoming hypotensive and febrile. After

resuscitation and antibiotics she underwent a laparoscopy. No evidence of any iatrogenic injury was identified, 800mls of bilious fluid was aspirated and a drain was replaced.
An urgent Endoscopic Retrograde Cholangiopancreatography (ERCP) was arranged which showed a normal biliary tree with a slow contrast leak in keeping with accessory duct leak requiring a stent. The patient recovered well over two weeks and was discharged with outpatient follow up and repeat ERCP. ERCP on repeat showed no leak and the stent was removed.
Discussion:
Injury to accessory bile ducts can result in post cholecystectomy bile leak and abdominal sepsis. Accessory duct damage post cholecystectomy has increased in frequency in the era of laparoscopic cholecystectomy. Most injuries to accessory ducts occur when there is deviation from subserosal plane during dissection of the gallbladder from the gallbladder fossa. In this case the leak was diagnosed at ERCP. ERCP has the dual benefit of being diagnostic and therapeutic with the option of stent insertion.
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Gallstone Ileus: A case based review of an atypical presentation and management

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Case Report
A 58 year old female was emergently admitted with a one week history of epigastric pain, nausea and vomiting. She deteriorated quickly suffering three PEA cardiac arrests. After successful resuscitation, lab results showed a pH 6.86, lactate 21.8 and WCC 40. CT TAP showed a bibasal aspiration pneumonia and small bowel obstruction secondary to a gallstone in the distal ileum. A pre-op PPOSSUM score indicated a mortality of 94.7% and morbidity of 99.8%. An emergency laparotomy and enterotomy was performed with a golf ball sized gallstone removed. The enterotomy was closed transversely to prevent a stricture. No gallbladder surgery was attempted. This patient had a prolonged post-operative course requiring multiple ICU admissions but has since made a full recovery.
Discussion
Gallstone ileus is a very uncommon cause of intestinal obstruction, accounting for 0.3-5.3%[1]. They occur when a gallstone erodes through the gallbladder wall forming a bilio-enteric fistula and arrests, usually at the ileocaecal valve[2]. Diagnosis may be delayed due to its non- specific presentation including colicky abdominal pain, nausea and vomiting. On abdominal x-ray, the classical Rigler's Triad consisting of; small bowel obstruction, pneumobilia and gallstone may be seen. However, on plain radiograph gallstones are easily missed as most are radiolucent and all three elements only occur in 15%. Therefore expert opinion recommends the early use of CT where sensitivity rises to 80%[3]. Management is surgical with enterotomy and extraction alone being the preferred procedure in both low and high risk patients[4]. This reduces the mortality rate from 16.9% to 11.7% when compared with a combined fistula repair as shown in the case series of 1001 patients[5]. However, due to a lack of randomisation, these figures should be cautiously interpreted. Despite this, given the expected presence of inflammation our local guidelines advocate enterotomy alone without inspection of the bilio-enteric fistula.
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A Case of Recurrent Aortic Graft Thrombosis

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Introduction: Arterial thrombosis is a rare entity due to the velocity of flow within the arterial system. We present a case of recurrent aortic graft thrombosis in a patient with a history of Rheumatoid Arthritis (RA) and Open Infrarenal Abdominal Aortic Aneurysm repair.
Case Report: This patient is a 60 year old Caucasian male who presented with ascending bilateral lower limb pain associated with pale, cold feet and decreased power and sensation. The lower limb pulses were impalpable and absent on Doppler bilaterally. An urgent CT Angiogram revealed complete occlusion of the aorta extending into the common iliac arteries bilaterally.
Two stent grafts were placed endovascularly and the patient underwent embolectomy and prophylactic fasciotomy bilaterally. In the postoperative period, he was commenced on therapeutic Tinzaparin and his RA was treated with IV hydocortisone. His full blood counts at this time revealed a neutrophilia in the absence of a raised CRP, thought to be due to steroid treatment. Twelve days later, the patient complained of severe pain in his lower limbs accompanied by absent femoral pulses. CT Angiogram once again showed thrombus within the aortic stent.
The patient was then brought for open aorto-bifemoral graft placement. Nine days later, he developed severe abdominal pain. CT Abdomen showed a non-occluding thrombus in the aorta once again. As yet, no cause has been identified for the thrombotic potential identified in this patient.
Discussion: This patient's unfortunate case highlights the gaps in our understanding of arterial thrombosis. Certainly, it is possible that his aforementioned autoimmune disease has played a role in this graft thrombosis.(1) The role of neutrophils and the more recently discovered neutrophil extracellular traps (NETs) in thrombus formation has been studied in animal models and clinical studies.(2-4) Additional research is needed to clarify the role they play in arterial thrombus pathogenesis.
Word count: 298
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Severe Acute Respiratory Distress Syndrome and Respiratory Sepsis post completion pneumonectomy; response to prone positioning and volume limited ventilation: A Case Study

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ARDS is an uncommon complication of pneumonectomy but one in which the associated mortality is high. Here we present a case of postpneumonectomy ARDS managed with mechanical ventilation and prone positioning in ICU.
A 70 year old white male with a chronic cough and smoking history was investigated for lung cancer 12 years after a left upper lobectomy in 2004 for adenocarcinoma. With chest x-ray revealing a lesion in the remaining left lobe and PET-CT demonstrating FDG avidity, CT guided biopsy was performed and showed tissue consistent with adenocarcinoma. Mediastinoscopy confirmed no lymph node involvement and thus patient underwent completion pneumonectomy by open thoracotomy and with an unremarkable postoperative course was discharged home. However two weeks later patient presented to the ED with acute dyspnoea, a non-productive cough, tachycardia, left sided chest pain and hypoxia (<60% SpO2) which rapidly deteriorated warranting HDU admission and finally same-day ICU admission for hypoxia refractory to non-invasive ventilation. Elevated white cell count revealed likely underlying sepsis as aetiology, transthoracic echo ruled out acute cardiogenic pulmonary oedema, while persistent and progressive diffuse opacity seen on chest x-ray was more definitively characterised as ARDS-like changes on CTPA on day 20 of admission. Empiric antimicrobials, conservative fluid management, and mechanical ventilation by PRVC failed to prevent a progressive drop in gas exchange and a deterioration in PaO2/FiO2 ratio to 13kPA before the decision to prone the patient on day 4 of ICU admission was made and deemed necessary for four days until supine position resumed once more and a tracheostomy was created to allow for continued ventilation. A protracted ICU admission followed with difficulty weaning FiO2 below 70% to maintain SpO2 above 88% before patient passed away after a 33 day ICU admission with hypoxic respiratory failure despite limits of respiratory support.

Treatment of Appendicitis: Knowledge and Attitudes amongst an Irish Population

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Introduction
Appendicitis is a common surgical emergency affecting up to 8% of the population. Appendicectomy has for many years been the traditional treatment of appendicitis. However, in recent years, non-operative treatment of appendicitis (NOTA) has been reported as an effective management option.
Aims
To assess the knowledge and attitudes of the general population regarding the diagnosis and treatment options for appendicitis.
Methods
We conducted a cross sectional study of public patients attending Mayo University Hospital over a one-month period. Patients were randomly sampled while awaiting general medical outpatient review and invited to complete a questionnaire. The survey contained an information sheet, consent form and questions which included both open, closed and multiple choice questions.
Results
56 participants (36 female, 20 male) were included in the initial survey period. A high level of awareness of appendicitis as a surgical emergency existed amongst the participants (94.6%). 98% of participants recognised abdominal pain as a key symptom. However, only 30% were aware that appendicitis was associated with nausea. Just 39% of participants would be content to receive non-operative treatment of appendicitis. The main reason participants were reluctant to receive non-operative treatment was a fear of their appendix "bursting" if not removed.
Conclusions
Members of the public attending an Irish hospital display good awareness of appendicitis as an emergency surgical condition. A large proportion of survey participants are reluctant to receive conservative management due to the widespread concern than an appendix left in situ may perforate. In order for non-operative treatment to be adopted with success in Irish surgical departments, increased education of patients will be necessary.

Bypass the gastric band

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A 49 year old female was admitted under Upper Gastrointestinal Surgery with a two day history of severe intractable vomiting and complete dysphagia. She had undergone laparoscopic adjustable gastric banding four weeks previously, in another country. The patient's initial postoperative recovery had been uncomplicated; however her BMI was 35 kg/m^2, with no significant weight loss achieved since band placement, despite failure to progress from a liquid diet.
Clinical examination was unremarkable, and a plain film of the abdomen showed the port *in situ* in the left upper quadrant. Initial blood results showed a mild acute kidney injury, but normal inflammatory markers and lactate. Due to concern regarding band slippage, balloon deflation was attempted under ultrasound guidance, without success. Upper gastrointestinal endoscopy showed no evidence of band erosion, and band deflation was achieved with the patient under general anaesthetic. The patient was discharged after band deflation. Despite deflation, the patient's nausea and vomiting persisted. They were readmitted soon after as an emergency before she could fly to the original surgical service ending up requiring urgent laparoscopy. The band was found to be slipped, with impending gastric ischaemia, and was explanted. The patient's symptoms resolved and postoperative recovery was uncomplicated.
Bariatric surgery is the most effective intervention for obesity, producing significant and durable weight loss, glycaemic improvements and reductions in cardiovascular risk and death for patients meeting criteria for intervention.[1] This case illustrates that due to lack of adequate public services in Ireland, patients are increasingly travelling abroad to undergo bariatric surgery. In such cases, inadequate postoperative follow-up may result in suboptimal weight loss outcomes and increased risk of postoperative complications, highlighting the urgent need for increased access to multidisciplinary specialist centres for the management of obesity in Ireland.

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A not so simple toothache - complicated submasseteric abscess requiring incision & drainage and emergency surgical tracheostomy, complicated by recurrence requiring a further surgical tracheostomy and extensive dissection

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We review the case of a fifty-two year old gentleman who presented to hospital with right-sided facial swelling, and trismus for 2 days. The swelling involved submasseteric, submandibular and right temporal spaces.
The patient had had a toothache in the area 3 weeks previous. At this time the patient's dentist diagnosed an infection in the lower right first molar, prescribed a 5-day course of Amoxicillin and performed a simple extraction. On follow-up with an oral surgeon a submasseteric space infection was detected and the patient was advised to attend the hospital for care under maxillofacial surgeons.
The patient was admitted to hospital that evening, initially managed by IV antibiotics and consented for Incision & Drainage for the following day. Computed tomography (CT) of the head & neck region was ordered for the following day. Of note, the patient was stable, with no shortness of breath or acute airway issues.
Overnight swelling increased considerably and the submandibular swelling spread bilaterally. It was decided the patient was for urgent surgical incision & drainage due to potential airway compromise. During anaesthetic rapid sequence induction, laryngeal trauma resulted in oedema and a period of desaturation, and consequently an emergency tracheostomy was performed. Spaces were drained and corrugated drains placed. There was a short ICU stay.
Post-operatively the patient's condition improved and the tracheostomy was removed 4 days post-op. However persistent leukocytosis and failure to completely improve clinically warranted repeat CT scan of head & neck region, which showed persistence on collections, spreading retropharyngeal, requiring further drainage. Definitive management was planned via exploration of right neck and drainage, dissection of level 2 nodes, and tracheostomy.
This case provides a good example of how a seemingly mi

Incidental detection of a renal cell carcinoma with inferior vena cava thrombus

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Renal cell carcinoma (RCC) accounts for 2-3% of all adult malignancies and up to 30% of patients have metastatic spread at diagnosis. Detection in 50% of cases is incidental and attributed to increased use of abdominal imaging. Despite this, a substantial number of large, advanced tumours are encountered owing to the asymptomatic growth and silent progression of RCC. RCC with inferior vena cava (IVC) involvement has a relatively favorable prognosis when completely resected.
We review the case of sixty-eight year female who presented with an acute abdomen and septic shock. Computed tomography (CT) of the abdomen and pelvis revealed an appendicular abscess and incidental detection of a 6.7 x 5.9 x 6.6cm mass in the upper pole of the right kidney with tumour thrombus extending into the right renal vein and IVC. On imaging with contrast this appeared to be confined to the subdiaphragmatic IVC.
The patient was managed in the intensive care unit until sepsis had resolved. A semi-elective colonoscopy, to investigate for a synchronous bowel malignancy, was clear.
Definitive management was planned as a joint procedure with the colorectal and urology services. Surgery was approached using a midline laparotomy incision and standard approach to right radical nephrectomy. The IVC was opened and the tumour thrombus excised en-bloc.
The appendicular phlegmon was adherent to the ileum. The inflammatory mass was resected with a segment of ileum and primary end-to-end bowel anastomosis performed.
Post-operative histology confirmed a clear cell RCC and appendicular abscess with no evidence of bowel malignancy.
Post-operative ileus and sepsis were managed with nasogastric tube insertion and intravenous antibiotics, respectively. The patient was discharged on resolution of these issues.
This case provides a good example of the often silent nature of advanced RCC and the merits of multidisciplinary management of simultaneous disease processes.

Gallstone Ileus - A Case Report

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Gallstone ileus is an unusual but recognized cause of mechanical small bowel obstruction (SBO). It is caused by impaction of a gallstone in the ileum after being passed through a bili-enteric fistula. The diagnosis may prove difficult as initial investigations such as plain film of the abdomen (PFA) may provide false negative results.[1] Treatment consists of removal of the offending stone after resuscitating the patient.
A 50 year old woman presented to the emergency department with a week long history of coffee ground vomiting. On day of presentation she had had three large volume vomits. Other symptoms included epigastric tenderness and nausea exacerbated by food and anorexia.
Her initial investigation showed raised C-reactive protein and white cell count, hyponatraemia and metabolic alkalosis.
PFA showed an unremarkable gas pattern. This would ordinarily outrule SBO. However, persistent crampy abdominal pain, faeculent vomiting and abdominal distension suggested the obstruction could not be outruled by PFA alone, and CT thorax, abdomen and pelvis (CT-TAP) was done. The CT-TAP showed a gallstone ileus with 1.6cm laminated gallstone in the distal ileum and dilated loops of small bowel measuring up to 5cm. A chole-enteric fistula was also seen between gallbladder neck and the second part of the duodenum with associated pneumobilia. A 6.7cm intraloop collection was seen in the pelvis with pockets of free air, stranding of the mesentery and hyperaemia of the adjacent small bowel loops. Exploratory laparotomy and small bowel resection was performed. CT findings were confirmed intraoperatively. The affected segment of small bowel was resected, and a side to side anastomosis made. The patient was returned to ward post-surgery, and discharged after four days.
Although plain film abdomen is a cheap and easy exam to perform its low sensitivity means that clinical acumen cannot be negated in a case of SBO.

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Appendicitis, a rare occurrence?

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Introduction:
Laparoscopic appendicectomy has become the standard surgical management of acute appendicitis in adults. However, the open approach is still indicated in selected cases. We present such a case involving a mucocele resulting from a low grade appendiceal mucinous neoplasm (LAMN).
The case:
A 31-year old male was admitted with a 3 day history of worsening vague abdominal pain and fevers. Examination revealed tenderness on the right side of his abdomen and his inflammatory markers were raised.
Management and outcome:
A clinical diagnosis of acute appendicitis was suspected. A CT abdomen/pelvis confirmed a markedly dilated appendix (2.3cm) suspicious for a mucocele, with surrounding fat stranding and an irregular appearing wall concerning for a localised perforation. Intravenous Cefuroxime and Metronidazole were commenced. An open appendicectomy was performed successfully using a linear stapler to avoid peritoneal contamination. Histopathological analysis confirmed a low grade appendiceal mucinous neoplasm with evidence of perforation but a clear resection margin.
Discussion:
Mucoceles of the appendix are a rare occurrence (0.3% cases). Controversy exists regarding the classification mucinous neoplasms. Perforation resulting in contamination of the peritoneum risks seeding of the tumor and pseudomyxoma peritoneii which has a high mortality. The open approach and the use of stapling devices can reduce this possibility. The critical distinction LAMN and mucinous adenocarcinoma is pivotal in determining patient management, morbidity and mortality. Therefore the open surgical approach with histopathological examination continues to be paramount when treating a mucocele.

CASE Study
Royal Academy of Medicine of Ireland (RAMI)

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A thirty year-old gentleman had a two week history of an upper respiratory tract infection, followed by a two day history of headache, nausea and four episodes of vomiting. During the night, his fiancé awoke to his generalized tonic clonic seizure lasting <10 minutes, with subsequent unresponsiveness; at which time she called an ambulance. Past medical history included attending a urologist for nocturnal enuresis and the use of a nasal spray.
On arrival to the emergency department, he was apyrexial, normotensive and clinically euvolaemic. GCS was 12/15. An arterial blood gas measurement was taken and his sodium was noted to be 116 nmol/L (Range 133 – 146). An urgent urea and electrolyte measurement was sent and serum sodium was confirmed at 117 nmol/L. His urinary sodium was 115 nmol/L, urine osmolality was 578 nmol/kg and serum osmolality was 244 nmol/kg suggesting syndrome of inappropriate antidiuretic hormone (SIADH).
Within two hours of arrival to the ED he had a further generalized tonic clonic seizure treated with intravenous lorazepam, and he was subsequently intubated and transferred to the intensive care unit (ICU). Further discussion with family revealed that the nasal spray was intranasal desmopressin for treatment of nocturnal enuresis and therapy had been ongoing for over 10 years. He was diagnosed as symptomatic hyponatraemia as a result of desmopressin spray and transferred to ICU for correction of his hyponatraemia. He was extubated on day two of ICU admission and his sodium levels returned to normal over the course of three days.
His desmopressin spray was discontinued and he was subsequently discharged home. He has had weekly follow up sodium levels which have all been normal. Important learning points highlighted with this case include: the importance of careful history taking and consideration of medication in the presence of electrolyte abnormalities, the need for regular reassessment of medications in long term prescribing and patient education of medication side effects.

Haemobilia secondary to a pseudoaneurysm of the cystic artery associated with acute calculus cholecystitis

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Introduction:
Haemobilia is an uncommon cause of upper GI bleed, and when it occurs is most commonly of iatrogenic origin. Haemobilia as a consequence of cholecystitis is yet more rare. We report a case of haemobilia in an eighty-one year old lady arising secondary to a pseudo-aneurysm of the cystic artery.
Case:
Our patient presented with sudden severe epigastric pain with raised serum amylase and deranged LFTs. Abdominal ultrasound indicated acute calculus cholecystitis and a working diagnosis of gallstone pancreatitis was made. Early in her admission, the patient had an episode of melena with co-existing atrial flutter. An OGD was performed which visualized a blood clot at the ampulla of Vater. CT angiogram localized the bleeding to the biliary tree and showed a 15mm pseudo-aneurysm at the porta-hepatis, most likely to be originating from the cystic artery.
We concluded that pancreatitis occurred secondary to clot formation at the ampulla. Three attempts at interventional radiological embolization were unsuccessful in causing definitive thrombosis of the ruptured pseudoaneurysm. Eventual open cholecystectomy with ligation of the pseudoaneurysm neck achieved successful cessation of the hemorrhage.
Discussion:
Four-phase liver CT had demonstrated subacute cholecystitis with features of a perforation in the gallbladder fundus, and it follows that the pseudoaneurysm most likely occurred as a consequence of the concurrent inflammatory process. Of visceral artery pseudoaneurysms, those affecting the cystic artery are particularly uncommon. When they occur they are most frequently as a complication of acute cholecystitis or laparoscopic cholecystectomy. In this report I will highlight similar reported cases of haemobilia occurring as a consequence of cholecystitis. I will also discuss the current management options of haemobilia.

Robotic abdomino-perineal resection: the evolution of minimally invasive surgery.

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Introduction:
As surgical technology advances, we expect patient outcomes to improve. Robotic assisted surgery (RAS) is the latest development in minimally invasive surgery. The benefits with RAS include shorter length of stay, reduced blood loss and improved analgesic requirements. UHL has recently instituted the first RAS platform for colorectal conditions in Ireland, using the Da Vinci Xi Dual Console system. This case report describes Ireland's first robotic assisted APR.
Materials and Methods:
A 60 year-old female presented to our institution with PR bleeding and rectal prolapse, with investigations uncovering a low rectal tumour. She underwent a robotic assisted abdomino-perineal resection.
Results:
The Da Vinci Xi platform allows significantly improved visuals, including live 3D pictures. It allows highly accurate and selective dissection. In this instance, the left colon and rectum were mobilized robotically before exteriorizing the colon and performing the pelvic component as standard. RAS allows precise tissue dissection in the pelvis along anatomical planes. Blood loss was less than 50mls. The patient mobilized and passed flatus within 16 hours of surgery. Length of stay was 6 days in total. This compares favorably with a mean length of stay for open and laparoscopic colorectal procedures of 12 and 11 days in our institution.
Conclusion:
Minimally invasive surgery has been proven to be superior to open surgical techniques through the COST and COLOR trials, with faster return of bowel function and shorter hospital stay. Robotic procedures are the next step in surgical advancements, providing better visual fields, less blood loss, reduced need for analgesia and earlier mobilization, all leading to shorter hospital stays, as demonstrated by this case. In our experience, RAS offers tangible benefits for patient care.

Transfusion-refractory thrombocytopaenia in the setting of intracranial haemorrhage and cirrhosis: a case report.

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Thrombocytopaenia has been identified as a significant predictor of progression of traumatic intracranial haemorrhage. The American College of Haematology guidelines recommend platelet transfusion in CNS bleeding with platelet count less than 100 x 10^9/L.
We report a case of thrombocytopaenia, traumatic intracranial haemorrhage(ICH) and left proximal humerus fracture with haematoma in a 46-year-old female. This is on a background of mixed alcoholic and autoimmune hepatitis. Given the acquired coagulopathy associated with cirrhosis and a platelet count of 40 x 10^9/L on admission, preventing expansion of the IPH and haematoma was our primary concern. Imaging revealed an anteroinferiorly dislocated shoulder with a significant associated risk of avascular necrosis if not surgically corrected.
We commenced platelet transfusion with a target platelet count of greater than 100 x 10^9/L. Serial full blood count monitoring revealed worsening thrombocytopaenia despite transfusion. Post transfusion platelet increment was measured at 30 minutes post transfusion to evaluate response. Two consecutive post-transfusion platelet increments were measured to be less than 10 x 10^9/L and the patient demonstrated evidence of a febrile non-haemolytic transfusion reaction. Immediate surgical correction of her left shoulder and humerus was evaluated to carry significant risk of mortality.
We identified numerous potential non-immune causes of refractoriness to platelet transfusion including concurrent infection, hypersplenism secondary to cirrhosis. Non-HLA matched platelet transfusion was continued while awaiting Human Leukocyte Antigen(HLA) matching and extended platelet specific antibody screening. This revealed the presence of anti-HLA antibodies with evidence of significant alloimmunisation, limiting suitable donors to one on the registered list. Platelet count recovered to greater than 100 x 10^9 after transfusion with 10 units of unmatched platelets.
HLA alloimmunisation presents a challenge in the management of a patient with thrombocytopaenia and significant haemorrhage. This case demonstrates the HLA alloantibody associated refractoriness to platelet transfusion managed with multiple transfusions of un-matched platelets.

An interesting case of recurrent meningitis

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Background
Mr LM is a 58 year old gentleman with a history of recurrent meningitis on a background of an ethmoidal bone fracture. Mr LM presented to the Emergency department with a headache of sudden onset which had gradually gotten worse over the previous six hours and a high grade temperature at 38.8. He was worked up for meningitis. Lumbar puncture confirmed pneumococcal meningitis.
Mr LM had suffered a traumatic head injury and this was the 3rd presentation of meningitis since this event. CT base of skull showed ethmoidal bone fracture. Incidentally it was noted that LM had recurrent rhinorrhoea not associated with other symptoms.
A neurological opinion was sought and CT cisternography was advised. This confirmed that there was a CSF leak in the left posterior ethmoids.
Conclusions
Following an ENT consultation definitive management involving surgical exploration with the possibility of fascial grafting was decided upon.
Discussion
In this case we see one of the most common risk factors for recurrent meningitis. The ethmoidal bone fracture provided a direct route of entry into the CNS for organisms. Interestingly the two other most common causes are colonisation of the nasopharynx and infective endocarditis.

Insulin Infusion Pump Therapy initiation in Children and Adolescents with Type One Diabetes in Ireland (January 2014-September 2015)

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Introduction:
The incidence of childhood type 1 diabetes mellitus (TIDM) is increasing. Intensive insulin therapy with continuous subcutaneous insulin infusion (CSII) therapy improves metabolic control and quality of life and reduces the risk of micro-vascular complications. Severe hypoglycaemia is a barrier to optimising control. The addition of continuous glucose monitoring (CGM) technology provides a more composite understanding of glucose variability to allow more accurate insulin dose titration. Merging both devices has glycaemic control advantages but increases the cost and burden of care.
Aim:
We undertook a national audit of insulin pump use in regional paediatric diabetes centres in Republic of Ireland.
Method:
All regional centres were surveyed on pump initiations (January 2014-September 2015). Data on numbers of pumps initiated, age of patients,

pump type, indication for pump choice, indication for CGM, HbA1c outcomes and adverse events were collated.
Results:
Eight centres providing care to 2104 children with T1DM submitted data for analysis. A total of 272 insulin infusion pumps were initiated in the study period, of which 32.6 % were for children aged < 6 years. Average HbA1c measurements decreased in each sub population during the follow up period. Mean HbA1c (in all age groups) 6 months' post initiation of CSII was 7.6% (60 mmol/mol) (range 6.4-8.4 % (46-68 mmol/mol). There were no serious adverse events during the study period. CGM initiation varied from 0-20% in this population.
Conclusion:
CSII therapy is safe and effective in children and adolescents with T1DM. The use of insulin pumps has increased but CGM technology use is currently limited. Technological advances continue to improve the therapeutic options available to children and adolescents with T1DM. Pump prescribers need to consider multiple factors in matching patients' needs with available technologies to maximise benefit.

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Grey areas: stroke or encephalitis?

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Introduction: Acute onset of psychosis in older patients should prompt a full workup for potential neurological cause of psychiatric symptoms[1]. Atypical presentation and non-specific imaging can make stroke difficult to distinguish from encephalitis.
Case: A 74 year old man with no medical history presented with a 9 day history of anxiety and suicidal ideation. The patient reported intrusive thoughts of self harm and harming others. An organic cause was suspected due to acute onset of symptoms. CT-Brain suggested a right anterior temporal lobe infarct. The patient's psychosis worsened and was associated with a sensation of intracranial pressure. An MRI- brain was performed which showed high T2/FLAIR in the right lateral temporal area with limbic and mesiotemporal sparing, a picture more suggestive of encephalitis. Correlation with CSF and serology was advised. Empirical treatment with acyclovir and ceftriaxone was initiated. An LP was performed which showed raised protein, normal cell count and negative viral serology. Exhaustive investigation of infectious, autoimmune, inflammatory and paraneoplastic processes was negative. Symptomatic treatment was continued with haloperidol and symptoms resolved over 5 weeks.
Disscussion: The acute onset of symptoms and the absence of the classic encephalitic triumvirate of confusion, fever and headache was suggestive of a cerebrovascular rather than neuroinflammatory process[2,3]. The radiological picture was more suggestive of encephalitis, but ultimately CSF findings did not correlate. Repeat interrogation of imaging along with the identification of vascular risk factors, atrial fibrillation and hyperlipidemia, cast further doubt on the diagnosis of encephalitis and made a temporal lobe infarct more likely. This case highlights that stroke without classical focal neurology and encephalitis without prodrome can be difficult to differentiate.

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Usefulness of EDD at Admission: Using EDD to estimate length of stay in surgical patients in Connolly Hospital, Blanchardstown

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Introduction: A&E and inpatient over-crowding remains a prominent issue in Irish hospitals. Utilising an Estimated Date of Discharge (EDD) is an important tool in bed management from the initial assessment through to discharge.
Objective: The aim of this audit was to look at the difference between estimated and actual length of stay (LoS) of patients during general surgical take based on their initial EDD and the potential factors that affected these results. The audit was undertaken with a view to improve accuracy when calculating the EDD, which in turn can be used as an effective tool to aid efficient bed management.
Method: Data was collected on 61 patients admitted under general surgical take over a period of 24 days. Inclusion criteria included all general surgical patients admitted through A&E on the surgical sign-out. Excluded from this audit were self-discharges and patients whose EDD was not calculated on the surgical sign-out. Relevant data was obtained from the surgical sign-out with additional information collected from the patients' charts post-discharge.
Results: The average estimated LoS was 3 days compared to actual LoS which was 6.28 days. Other parameters identified included number of operations, number of consults, ASA grade, initial diagnosis and diagnosis on discharge. Further analysis of these parameters and their relationship with accurate EDD calculations is underway.
Conclusion: Preliminary results show that although EDDs provide a valuable resource for hospitals, they are often still difficult to objectively calculate accurately. In the HSE 2014 document 'Integrated Care Guidance – *A practical guide to discharge and transfer from hospital*[1], setting an Estimated Length of Stay (ELOS) is described as a key element in effective discharge planning. This audit aims to identify some common factors that can affect EDD accuracy, with the potential to expand to other areas of integrated care.

1 Health Service Executive, 2014

TVN and wound care audit: NCHD understanding in UHL involving wound care, wound dressing and the services of the tissue viability nurse.

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Introduction: Chronic wounds by definition are any break in skin integrity lasting longer than 4-6 weeks in duration, [1,2]. Wounds are providing increasing challenges for physicians, affecting thousands, requiring long-standing therapies and dependence on nursing services. Patients are affected mentally, physically, have reduced work capacity and quality of life, incurring significant healthcare costs. Causes including vascular insufficiency, diabetes, pressure, trauma, infection and post-operative, occurring in people of any age. The total healthcare expenditure in UK in 2015 was 4%, figures suggesting £5 billion. In Ireland 66% of public health nurse work times are comprised of wound care.

"Tissue viability is a growing speciality that primarily considers all aspects of skin and soft tissue wounds and ulceration", [3].

Startlingly a Canadian study reported that most family physicians feel ill-prepared to manage pressure ulcers, suggesting that they do not receive enough training in this disorder, [1].

Aims: The purpose of this Audit was (i) to determine the knowledge base of wound care among the Intern Training Network cohort in UHL, (ii) to ascertain whether NCHD's receive formal wound care education prior to commencement of Intern year, (iii) whether NCHD's feel they would benefit from formal teaching.

Methods: A simple self administered questionnaire was delivered to the UHL Intern Training group 2016, with a response rate of 75% achieved.

Results: Our survey demonstrated an overall lack of confidence and knowledge of wound care amongst interns. We failed to obtain a satisfactory number of SHO survey responses in order to provide a comparison. There is a huge response citing over reliance on tissue viability nurses and non-specialised nurses. Initial results seem to portray a lack of formal education in Irish Medical schools surrounding the area of wounds, ulcers and their care.

Conclusions: Overall it appears Intern clinicians are often unsure about diagnosis and treatment, with a general desire for more wound care education. Very little if any training on chronic wounds is offered in Irish Medical Schools adding to the conclusion Interns are not confident on their knowledge base for treatment of wounds and ulcers. It is clear that there is a need for improved education about these conditions that have huge clinical and economic consequences.

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Audit on the Interval time between Fractured Neck of Femur Surgery and Post-Operative X-ray in UHL

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Introduction: There currently exists, no clinical guidelines regarding when an x-ray should be performed post neck of femur (NOF) surgery. Consequently, there is a lack of clarity and consistency in the performing of these post-operative check x-rays. There exists many complications surrounding NOF surgery, with periprosthetic fracture being the most serious. It carries with it higher morbidity and mortality rates, especially in the elderly population. Published literature demonstrates the incidence of periprosthetic fracture as between 1.5% - 6.8% for uncemented hip hemiarthroplasty and between 0% - 1.8% for cemented.[1] The majority of hip hemiarthroplasties performed in UHL are uncemented.

Methods: A retrospective study was performed on all NOF surgeries carried out in September 2016 in UHL. The type of surgery performed was recorded as well as the date of surgery, date of check x-ray booking and date of check x-ray performed.

Results: The total number of fractured neck of femur surgeries performed was 28. Of these, 21 were hemiarthroplasty, 6 dynamic hip screw (DHS) and 1 long intramedually (IM) nail. The number of days between the surgery being performed and the check x- ray being filmed varied between 1 and 5 days. 43% were performed on day 1 post- op, 82% were performed within the first 3 days post-op. However 7% of check x-rays were not filmed until 5 days post-op. One hundred percent of fractured NOF patients did receive post-operative check x-rays prior to discharge.

Conclusion: In conclusion, 100% of check x-rays are completed before discharge. However some take up to five days to be filmed post surgery, which may delay the detection of periprosthetic fractures. Of all x-rays performed, 21% of those carried out were on DHS, which are superfluous unless specifically requested. Therefore if 21% of x-ray requests were eliminated, there is opportunity for filming the hemiarthroplasty x- rays at an earlier interval.

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A case of IgG4 related disease

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Introduction: We report a rare case of IgG4 related disease which presented under the guise of a pulmonary embolism and sarcoma.

Case report: A 45 year old male, ex smoker who worked as a stonemason presented with a 6 month history of cough, haemoptysis and weight loss. A chest x-ray revealed a right lung nodule and pleural effusion and the patient was referred to a rapid access lung clinic. A CT thorax showed a right sided 3x3cm lobulated lesion in the right lower lobe with several satellite lesions. This was associated with pleural thickening and an incidental finding of a right main pulmonary artery embolism. The patient was anticoagulated with heparin and worked up for a possible malignancy. A PET CT scan found increased tracer uptake within the occluded right pulmonary artery, right hilum, right middle and lower lobe nodules. Amongst the differentials was a pulmonary artery sarcoma. Multiple procedures to obtain a tissue diagnosis were carried out without success. As a result, a right pneumonectomy was performed. Subsequent histopathology reports revealed a significant population of IgG4 plasmablasts in the mass which was suggestive of an IgG4 related disease tumefactive lesion and not a pulmonary embolism or pulmonary artery sarcoma as initially suspected. The patient was referred to Immunology and commenced on steroids. He is currently awaiting consideration for lung transplant.

Discussion: IgG4 related disease is a syndrome of unknown aetiology, manifesting in various ways. Hallmarks are lymphoplastmacycic tissue infiltration of mainly IgG4-positive plasma cells and small lymphoctyes which may be accompanied by elevated serum IgG4 levels. Diagnosing this patient was challenging due to difficulty in obtaining a tissue diagnosis and the similarity on radiological imaging of the IgG4 disease to a pulmonary artery embolism and sarcoma. The condition has proven challenging to treat and transplantation is being considered.

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An Unusual Cause of Pyrexia of Unknown Origin

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Abstract Category: Case report
Introduction:
Hemophagocytic lymphohistiocytosis (HLH) is a disorder of uncontrolled and ineffective immune activation. It is uncommon (incidence is adults is unknown) and its presentation may be nonspecific and vague (with symptoms as diverse as pyrexia of unknown origin, acute liver failure and neurological symptoms, amongst others), making it difficult to diagnose (Schram et al., 2015).
Description/case presentation:
A 75 year old lady with a background of dermatomyositis, seizures and coeliac disease was transferred to GUH following a two month investigation of pyrexia of unknown origin in another institution. She had extensive investigations performed prior to her transfer, all of which were normal or inconclusive. On admission to GUH, she was alert, orientated and appeared well, aside from continuing temperature spikes. However, on day three of admission, she had a seizure, her neurological status decreased and she was transferred to ICU. Input was sought from other disciplines including rheumatology, haematology, neurology and infectious diseases and thorough evaluation of prior investigations was conducted, with some investigations being repeated. She was found to have 6 of the 8 criteria required for a diagnosis of HLH (1): increased ferritin (9,382, which increased further to 27,951), hypofibrinogenaemia, hypertriglyceridaemia, anaemia and neutropenia, haemophagocytosis on second bone marrow aspirate and an abnormal spleen on imaging. She was commenced on appropriate treatment.
Discussion/conclusion:
This case highlights the difficulty in diagnosing HLH. Primary investigations may be normal and the diagnostic criteria for HLH may be absent initially (as in this case), therefore it is important to have a high index of suspicion to request the pertinent tests initially and also to repeat investigations as necessary.
It also highlights the importance of the multidisciplinary approach sharing expertise to reach a diagnosis, particularly in rare diseases.

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DVT diagnosis in Letterkenny University Hospital

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Aims/ Objectives: To evaluate compliance with NICE guidelines for diagnosis of Deep Vein Thrombosis (DVT).
Design/Methods: Retrospective study. Population: All patients who had a leg Doppler ultrasound scan (D-US) in Letterkenny University Hospital from June-July 2015. Review of clinical notes assessing whether NICE guidelines were followed.
Results: 45 patients included in study. 40% were stratified following Wells criteria (60% not stratified and not analysed as non-compliant with NICE guidelines). Group with Wells score: 38% ≥2 (likely); 62% ≤1 (unlikely). Likely group: 11 cases, D-US positive in 2, all treated with anticoagulation. 9 negative, D-Dimer positive in 8, no follow up D-US. Unlikely group: 7 cases. D-Dimer positive in 7, all had D-US, negative in all 7. 4 patients awaiting D-US >4 hours, 2 did not receive interim anticoagulation.
Conclusions/Action Plan: In this selected group of patients in whom a D-US was done to investigate for DVT, 60% were not appropriately stratified with Wells criteria. In those who had a Wells, the NICE guidelines were followed appropriately except in those with a likely Wells score, a negative D-US and a positive D-Dimer. These 8 patients were not offered a repeat D-US as per NICE. In the unlikely group, interim anticoagulation should be offered to patients awaiting D-US> 4 hours, which did not happen in 2 cases. Action plan: 1. Clear guidelines in the ED, medical and radiology departments that no D-US for DVT can be done without stratification with Wells. 2. Education program regarding NICE guidelines. 3. Re-audit in 3 months[1].

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An Incidental Case of Pleurobiliary Fistula

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A 70 year old male presented with a 3 week history of exertional dyspnoea on a background of non-ischaemic dilated cardiomyopathy (ejection fraction 25-30%) and traumatic gallbladder perforation in 2014 (treated conservatively). On admission he had no chest pain and was afebrile. Following intravenous diuresis his dyspnoea improved, however chest X-ray and subsequent CT thorax showed a large right-sided loculated pleural effusion. CT-guided aspiration of this effusion drained a malodorous green/brown fluid and the patient was started on intravenous piperacillin-tazobactam. Initially the drained fluid could not be assessed biochemically due to its viscosity however culture was positive for E. coli, streptococcus aeruginosa and anaerobes – unusual respiratory pathogens. Fluid bilirubin came back elevated at 465 micromoles/L. This prompted an MRI thorax which showed an effusion intimately related with his collapsed gallbladder. Surgical intervention was deemed necessary and the patient underwent open cholecystectomy with drainage of the pleural abscess which was communicating with his gallbladder. He did well post-operatively and was discharged on a 10 day course of antibiotics.
Discussion: Pleural biliary fistulas are a rare complication of abdominal trauma[1]. The exact incidence is not known. Diagnosis relies on identifying a high bilirubin content in the pleural fluid, as well as demonstrating a connection via imaging such as magnetic resonance cholangiography (MRC) or endoscopic retrograde cholangiography (ERC). ERC appears to be preferred[2]. Because of the rarity of this condition there is no consensus as to its treatment – traditionally this involved thoracotomy or cholecystectomy although there have been reports of successful conservative management with pleural[3] or biliary[2] drainage.

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Peri-operative Blood Transfusion Practices and Maximum Surgical Blood Ordering Schedule Compliance in Endovascular Aneurysm Repair Procedures

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Introduction:
The Maximum Surgical Blood Ordering Schedule (MSBOS) provides procedure-specific recommendations for cross-matching of red blood cells. Currently, our institution's MSBOS for Endovascular Aneurysm Repair procedures (EVAR) suggests group and cross-match for 2 units of red cell concentrate (units). The internationally recommended cross-match to transfusion ratio is <2:1.
Methods:
Retrospective data was collected on all EVARs performed in our institution from July 1st 2015 to June 30th 2016. Procedures were individually categorised as elective or emergency, and assessed for compliance with MSBOS. The number of units cross-matched, the number of units transfused, and whether transfusion occurred pre-operatively, intra-operatively or post-operatively was considered. Where compatible, it was noted if electronic cross-matching was employed. Data was analysed using Excel.
Results:
During this period, 69 elective and 13 emergency EVARs were performed. 59% (n=41) of elective and 0% (n=0) of emergency EVARs complied with MSBOS. Regarding elective EVARs, 263 units were cross-matched and 72 units were transfused. Pre-operative transfusions totalled 5 units (6.9% of transfusions), intra-operative transfusions totalled 4 units (5.5% of transfusions) and post-operative transfusions totalled 62 units (86.1% of transfusions). Regarding emergency procedures, 84 units were cross-matched and 25 units were transfused. Pre-operative transfusions totalled 2 units (8% of transfusions), intra-operative transfusions totalled 17 units (68% of transfusions) and post-operative transfusions totalled 6 units (24% of transfusions). Where compatible, electronic cross-matching was employed in 73% of cases. The cross-match to transfusion ratio was 3.7:1 (elective) and 3.4:1 (emergency).
Conclusions:
Our findings demonstrate suboptimal MSBOS compliance for EVARs, with higher than recommended cross-match to transfusion ratios. Unexpectedly high post-operative transfusion rates were noted in elective EVARs. We recommend that our institution's MSBOS for elective EVARs be changed to a Group and Hold, and that post-operative transfusion practices be addressed. This would reduce burden on blood transfusion services, whilst importantly, not compromising patient care.

Is there a still role for the posterior lip augmentation device?

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Introduction
At least 4,500 Total hip replacements (THR) are performed each year in Ireland. The incidence of dislocation after THR ranges from 0.8% to 7% (1). There are numerous stabilizing techniques described after multiple THR dislocations, including trochanteric advancement, revision of components, conversion to bipolar or tripolar arthroplasty and the exchange of a modular head-neck component and the polyethylene liner [2]. The success of these techniques is questionable. Frequently, a revision THR is chosen. We present the results of a, previously described alternative approach, to multiple THR dislocations used in our institution, the posterior lip augmentation device (PLAD).
Aim
To investigate patient outcomes after PLAD insertion.
Method
Retrospective review of the PLAD devices inserted in an Irish university teaching hospital over a 5-year period.
Results
27 PLAD devices were inserted over a 5-year period (n=25). The mean age was 75. The mean duration of time the patient spent in the operating theatre was 87 minutes. 11% (n=3) dislocated their hip afterwards and no patient went onto have THR revision surgery. In 2 of the PLAD dislocations, the hip was relocated successfully without further dislocation. In the third case of PLAD dislocation, a change of positioning of the PLAD was performed.
Conclusion
The PLAD can be used successfully to treat multiple dislocations post THR. It has a high success rate, a low rate of dislocation and did not lead to revision arthroplasty in any case. It may be considered as an alternate option before deciding to revise a THR after multiple dislocations.
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An audit of post-operative notes

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Introduction
Post-operative notes are an essential record of the events of an operation. It is important that information is communicated in a clear and concise manner for the safety of the patient. Post-operative notes serve as a medico-legal document. The Health Service Executive (HSE) have endorsed standards for post-operative operative notes. We set out to audit post operative notes in our institution.
Aim
To audit post-operative notes completed by orthopaedic surgeons in our institution.
Method
The standard used to benchmark our current practice against was the HSE's National Model of Care for Trauma and Orthopaedic Surgery document. Post-operative notes were selected at random from the University Hospital Waterford (UHW) trauma list and compared to the standard. 14 core elements of a post-operative note were recommended. Data was collected and evaluated. After the first cycle of data collection, NCHD's and consultants involved in writing post-operative notes were given a 30 minute education session on best practice. Data was then recollected approximately 2 weeks later.[1,2]
Results
Overall, there was good compliance with the Model of Care standards. The most common omission was "accurate description of any complications or difficulties encountered/solution" in 5/10 notes." The 'Surgeons signature was missing in 2 of the notes and "details of the incision" and "description of findings" was missing in 2/10 notes.
Intervention: An education session with all NCHDs and Consultants resulted in greater than 95% compliance with all 14 standards. Complications, whether they had occurred or not, were documented and minor omissions were included. A pro-forma post-operative note was devised. This is being assessed at hospital management level for potential use in the future.
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An audit of record keeping in the medical notes

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Introduction

Clinical notes serve as a legal account of the treatment a patient has received. Accuracy and clarity is of the utmost importance to communicate between departments and provide an effective patient care plan. Poor note taking may result in poor communication, sub-optimal patient care and increased litigation.

Aim

To evaluate the quality of clinical notes written by doctors before and after educational intervention.

Method

Standard Used: Royal College of Physicians (RCP) – General Medical Record Keeping Standards.[1,2,3]

Orthopaedic charts were chosen at random and applied to the RCP General medical Record Keeping Standards. 29 questions were addressed which involved 11 standards Data was evaluated. All non-consultant hospital doctors (NCHD) and consultants involved in documenting notes were then given a 30 minute education session on what a good clinical note should contain. Data was then re-collected approximately 2 weeks later.

Results

Summary of first cycle: Major omissions were identified in the medical notes such as patient details, timing and dating of the record, authors name, standardised structure and layout, and chronological order.

Intervention: Education session with all NCHDs and Consultants resulted in greater than 95% compliance with all 11 standards.

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Contrast induced nephropathy, are we following the guidelines? A retrospective audit

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Introduction: The Kidney Improving Global Outcomes (KDIGO) guidelines 2012 have made recommendations to reduce the risk of contrast induced nephropathy (CIN) in patients with risk factors predisposing them to renal disease. This audit aimed to explore whether these guidelines were followed for patients undergoing a coronary angiography.

Objectives and standards were selected from KDIGO guidelines 2012

1. Assessment of renal function prior to contrast administration (<3 months for outpatients)
2. Assessment of renal function 48-72 hours following contrast administration for at-risk patients (eGFR<60)
3. Pre-hydration in at-risk patients (eGFR<60).

Methods:

This was a retrospective study. We used a cohort of 155 patients who underwent elective coronary angiography at University Hospital Limerick in September 2016. Blood results were obtained from the hospital electronic reporting system. Patient healthcare records and direct contact with GP was made where necessary. Patient files were checked for evidence of pre-hydration.

Results:

1. Assessment of renal function< 3months prior to contrast administration was achieved in 100% of patients.
2. 17 patients were identified as at-risk (eGfr<60). Renal function was assessed within 48-72hrs following contrast in 2 of these patients.
3. Pre-hydration was given to 9 (52.9%) at-risk patients.

We noted that automated eGFR reporting was only available for 1 (5.88%) of patients identified as at-risk. The median creatinine for at-risk patients was 112 and the interquartile range was between 89-125.

Conclusion

Despite complete testing for all patients' pre-procedure, just over half received prophylactic hydration, and adequate follow up assessment was not achieved.

Our review identified lack of automated eGFR reporting as a probable cause for not recognising patients with reduced kidney function as serum creatinine levels appeared within normal range or slightly elevated.

It is hoped that this audit will raise awareness where standards are not being met and changes are implemented to improve compliance.

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Transfer of Tasks at University Hospital Limerick: Implemented or Not?

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Background: The Health Service Executive (HSE) and unions agreed to transfer four key tasks from Non-Consultant Hospital Doctors (NCHDs) to nurses in 2016[1]. It is recognised that implementation of this agreement will have better outcomes for patients[2]. Anecdotal evidence suggests Transfer of Tasks is not fully implemented at University Hospital Limerick (UHL). The study aimed to *A.* Identify the portion of NCHD tasks classified under the agreed four Transfer Tasks, and *B.* Measure time taken for Interns-on call to complete two common Transfer Tasks; Intravenous Cannulation (IVC) and Phlebotomy.

Methods: *A.* Retrospective data was collected from three wards for September 2016. *Inclusion criteria*: written requests in the Intern Job Book for 'IVC', 'Phlebotomy', 'First Dose Antibiotic Administration' and 'Patient Discharge'. *Exclusion criteria:* tasks not written in the book, illegible writing, phone-call or verbal task requests.

B. Interns on-call were asked to time themselves undertaking IVC and Phlebotomy to calculate the average time taken for task completion. This took place over two weeks on an ad-hoc basis, from point of request to putting away equipment.

Results:*A.* 1116 tasks were requested in September 2016. 37% (*n*=413) were Transfer Tasks including; IVC 20% (*n*=224), Phlebotomy 16% (*n*=182), Discharges 0.6% (*n*=7), First Dose Antibiotics0% (*n*=0). Of Transfer Tasks (*n*=413); IVC 54% and Phlebotomy 44% were the most common requests.

B. Self-timing reports for IVC averaged at 18.8 minutes per task (*n*=50) and 14.6 minutes per Phlebotomy task (*n*=44). Therefore, IVC and Phlebotomy tasks take 3.8 hours to complete during a 14-hour on-call period (27% of on-call time).

Discussion: Interns still spend a significant proportion of on-call periods completing tasks that the HSE has agreed would be transferred to nursing staff, reducing time available for clinical assessments and complex prescribing. Effective reallocation of these tasks may require changing

systems at numerous levels[3]. Barriers to implementation should be investigated and addressed.
Conflicts of Interest: None
Disclosures: None

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Spinal Epidermoid Cyst: Case Report with MRI Features

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Intramedullary epidermoid cysts are rare, representing less than 1% of all intraspinal tumours in adults. Associations include spinal dysraphism and lumbar puncture, particularly with older, non-bevelled needles. Of approximately 50 cases reported in the literature, few have MRI studies. We present the following case with MRI features.
A 60-year-old woman presented with an 18-month history of lower back ache and progressive limb weakness, on a background of an undiagnosed spinal lesion that was under clinical and radiological surveillance for 22 years. Symptoms comprised bilateral lower limb weakness, radicular pain and paraesthesia. No saddle anaesthesia or disturbance of bowel and bladder was reported.
Pertinent positives in the examination included atrophy of the right calf muscles, reduced power on knee extension and flexion of grade 4/5, foot dorsiflexion of grade 3/5, and hypo-reflexia throughout. Sensation was reduced bilaterally in L1-L2.
Medico-surgical history was significant only for T12-L1 laminectomies for incomplete resection of a spinal lesion in 1994. This had presented with predominantly right-sided weakness and radicular pain. The lesion was biopsied but not removed as it was adherent to the cord intra-operatively. Histopathology was non-diagnostic and the patient subsequently underwent radiological surveillance with serial thoracolumbar spine MRIs. MRI spine reported a well-defined intradural, intramedullary 5 cm mass at the level of T12-L1 – cystic in appearance, hypo-intense on T1 and hyper-intense on T2 weighted MRI with fatty droplets at craniocaudal poles.
The patient underwent extension of previous T12-L1 laminectomies to L2. Durotomy was followed by near total removal of the cyst. Caseous material was seen within the cyst and histopathology confirmed a final diagnosis of an epidermoid cyst.
A CSF leak at post-op day 8 was managed conservatively with a lumbar drain and the patient returned to baseline within 2 weeks.

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A re-audit of the prescription of venous thromboprophylaxis in general surgical patients on admission to Letterkenny University Hospital

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Introduction:
Acute venous thromboembolism (VTE) has an annual incidence of 1-2 per 1000 persons. An 8-fold increase in hospitalised medical patients and a 100-fold increase in surgical patients. Last year an audit of VTE prophylaxis on admission to LUH was carried out to assess the level of appropriate prescribing on surgical wards. A risk assessment and VTE prophylaxis protocol was introduced in LUH on the results drawn from this audit in accordance with NICE (N92), ACCP and manufacturer guidelines, to classify patients into three risk categories with definitive VTE prophylaxis for each. A re-audit was performed to assess the benefit of having local guidelines.
Methods:
An audit of medical notes and drug kardexes of general surgical inpatients over a week in October was approved to determine the effectiveness of the new guidelines. Patients were assigned to VTE risk categories of 'low', 'moderate' and 'high'.
Results:
A total of 50 patients were included in the re-audit. 60% were categorised as high risk for VTE, 16% as moderate and 24% as low.
High risk: 36.7% were appropriately charted for LMWH, 36.7% were prescribed an inappropriate dose and 26.7% were not prescribed any LMWH.
Moderate risk: 75% were appropriately prescribed with LMWH and the other 25% were charted no VTE prophylaxis.
Low risk: VTE prophylaxis was over-prescribed in 75% of cases and only 25% of these patients were appropriately charted with TED stockings only.
Conclusions:
From our results we can conclude that a majority of patients in LUH are prescribed for LMWH within the moderate risk category.

References:

Comprehensive VTE prevention program incorporating mandatory risk assessment reduces the incidence of hospital-associated thrombosis.
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Assessment of thromboprophylaxis and concomitant drug prescription in patients with Atrial Fibrillation in a primary care population - findings from a full audit cycle

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Background: Atrial fibrillation (AF) is a common cardiac arrhythmia with an estimated incidence of 5% in patients aged 65 and over. The condition is expected to increase in incidence with an aging population, and confers a significantly increased risk of thromboembolic stroke.

Aim: This audit set out to identify patients with AF within a general practice population, assess their individual risk for stroke using the CHA2DS-VASc score, review their current anti-coagulant treatment in the context of their risk of stroke, and review their currently prescribed medications to identify any other medications which may place them at an increased risk of haemorrhage, when prescribed alongside Warfarin or a NOAC.
Method: The HealthOne database was searched using the terms "Atrial Fibrillation", "Afib", "AF", "Arrhythmia", "Ablation", and the search domain "repeat prescriptions" was searched for all drugs commonly prescribed in AF. The search included patients seen in the previous three years. The primary audit was carried out in January 2016, with the practice re-audited in November 2016.
Results: In January, 60 patients with AF were identified, representing 0.85% of the practice population. There were 46(76.7%) on NOAC monotherapy, 4(6.7%) on Warfarin monotherapy, 5(8.3%) on a NOAC+ Aspirin, 4(6.7%) on Aspirin monotherapy, and 1(1.6%) patient had no thromboprophylaxis secondary to a history of bleeding.
In November, there were 52(89.7%) on NOAC monotherapy, 2(3.4%) on Warfarin monotherapy, 1(1.75%) on a NOAC+Aspirin, 2(3.4%) on Aspirin monotherapy, and 1(1.75%) remained without thromboprophylaxis. Two patients had passed away between audits.
Conclusion: Audit of thromboprophylaxis in AF patients plays an important role in identifying individuals whom may benefit from alteration of their regular prescriptions. This will become increasingly important as the incidence of this arrhythmia increases, in an aging population with increasing numbers of co-morbidities. The practice audited showed very high rates of optimal thromboprophylaxis in their patients with AF.

A clinical audit of Venous Thromboembolism Risk Assessment and Prophylaxis in the acute hospital setting, in the context of a national improvement collaborative

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Introduction: Up to 60 per cent of VTE cases occur during or after hospitalisation, making it a leading preventable cause of death.[1] In Europe, there are 544,000 VTE-related deaths every year. [2] In the US and Europe, VTE-related events kill more people than AIDS, breast cancer, prostate cancer and road traffic accidents - combined. [3] In the UK, over 90% of patients are formally assessed for VTE risk and receive appropriate prophylaxis.[4] In 2016, the HSE launched a national improvement collaborative to improve VTE risk assessment and prevention. As part of this effort, we carried out an audit in the MMUH to assess the proportion of patients who were being VTE risk assessed and prescribed appropriate thromboprophylaxis.
Aim: To measure VTE Risk Assessment Tool use and appropriate thromboprophylaxis in AMAU patients and a subset of general surgical patients at the MMUH.
Objectives: Within 24 hours of admission, all AMAU patients and a single colorectal surgery team should be assessed using the appropriate MMUH VTE Risk Assessment Tool and receive appropriate VTE prophylaxis.
Method: Inclusion criteria: AMAU patients and general surgery patients under the care of Mr Mulsow admitted to the MMUH in October/ November 2016.
Exclusion criteria: Patients who were diagnosed and being treated for a current DVT or PE.
For each patient we recorded whether an MMUH VTE risk assessment tool had been completed and whether thromboprophylaxis had been administered within 24 hours of admission. Where VTE risk assessment had not been clearly documented, we retrospectively noted individual VTE and bleeding risks and assessed whether thromboprophylaxis given was appropriate according to MMUH guidelines.

Results	Medical N=43	Surgical N=17
Patients At Risk of VTE	31 (73%)	16 (94%)
(Minus) Patients at Risk of Bleeding	(4) (9%)	1 (6%)
= Patients suitable for VTE prophylaxis	27 (63%)	15 (88%)
Patients Prescribed VTE prophylaxis	12 (28%)	13 (76%)
Rate of Adequate Prophylaxis	44%	87%
Inappropriate Thromboprophylaxis	0 (0%)	2 (12%)
Dose above recommended level	-	(1) (6%)
Overtreatment, compared to VTE Risk	-	1 (6%)
Risk Assessment forms Completed	0 (0%)	3 (18%)

Barriers identified to not meeting audit standards include a lack of awareness, availability on the wards and online accessibility of the risk assessment tools and the high throughput of patients in the AMAU.
Conclusions: There is a need to encourage use of VTE risk assessment tools and optimise appropriate thromboprophylaxis among both medical and surgical patients in the MMUH. We hope to address this issue by further educating medical staff, making Risk Assessment Tools more readily available and integrating a VTE Risk Assessment Tool into an updated version of the MMUH patient kardex by June 2017.

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PRE-OPERATIVE ASSESSMENT AND CARE AT UCHG AND THE IMPACT OF THE PRE-OPERATIVE ASSESSMENT CLINIC (POAC)

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Background
There has been a push nationally, in the form of the HSE Elective Surgery Programme, to optimise the theatre journey for elective surgery patients. In 2012, an anaesthetist led Pre-Operative Assessment Clinic (POAC) was established in UCHG. Patients scheduled for elective surgery are referred to this clinic (usually 1-3 weeks pre-op) where they are examined, assessed and consented for surgery by a multi-disciplinary team. Candidates are selected from the POAC to attend the Theatre Admissions Lounge - an expedited route to surgery.

Aims
(1) Outline recently established services in pre-operative assessment and care at UCHG, namely the POAC and TAL
(2) Evaluate the impact of the POAC
Methods
Cohorts of patients undergoing elective surgeries under 5 consultants from January-April 2011[n=111] (before POAC) and January-April 2013[n=132] (POAC[n=69]/ No POAC[n=63]) were compared for day of surgery admission (DOSA) rates and surgery cancellations. Surveys were distributed to patients attending the POAC to evaluate their opinion of the service.
Results
· Patient route to theatre through the POAC/TAL mapped.
· DOSA rate increased from 15% (January-April 2011) to 38% (January-April 2013 POAC group) and 29% (January-April 2013 overall).
· Rate of surgeries cancelled after admission decreased from 9% (January-April 2011) to 0% (January-April 2013 POAC group) and 6% (January-April 2013 overall).
· Survey reflected that patients were "happy with the overall experience".
Conclusion
The POAC has improved the theatre flow process at our institution and patient satisfaction with the service has been demonstrated.

Venous Infarction and Stroke

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Abstract category: Case report
Intern Network: West Northwest Intern Training Network
Background
Stroke is a frequently encountered disease entity in our hospitals and our community, accounting for a large proportion of the morbidity and disability associated with vascular disease in Ireland and indeed worldwide. This case describes stroke occurring secondary to venous sinus thrombosis and subsequent venous infarction – an uncommon aetiology of a common disease process.
Case Report
This is a case of a 66-year-old lady who was transferred to the Stroke Unit in Sligo University Hospital (SUH) from Elche General Hospital in Alicante, Spain where she had presented with a 4-day history of confusion, personality change and incoherent speech associated with episodes of altered levels of consciousness and periods of amnesia following an unwitnessed fall. No significant past medical history.
On examination expressive and receptive dysphasia was evident but otherwise central and peripheral neurological examinations were normal. Vitals and all other systems examinations were normal. She remained dysphasic on presentation to SUH.
Neuroimaging: CT brain on presentation showed a left sided parietotemporal haemorrhage within the brain parenchyma with associated vasogenic oedema and midline shift towards the right side. There was also a small left sided subdural haematoma. CT angiogram revealed a thrombus in the left sigmoid and transverse venous sinuses and the left jugular vein.
The imaging was consistent with a venous infarct with haemorrhagic transformation. Repeat CT brain four weeks later in SUH showed a resolving picture overall with complete resolution of the subdural haemorrhage. Speech and language therapy was the main focus of rehabilitation in this case.
Discussion
· Venous sinus thrombosis and venous infarction as a cause of stroke.
· MDT care within the stroke unit and rehabilitation post-stroke.
· Anticoagulation: when to consider in a case of co-existing thrombosis and haemorrhage.

An audit on the filing and labelling of ECGs in medical notes of medical inpatients in UHG

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Introduction:
Coronary heart disease is a major burden to health in Ireland. Approximately 10,000 people die each year from coronary heart disease(1). The effectiveness of the treatment of acute coronary syndrome (ACS) is dependent on the efficiency of the diagnosis. A crucial part in the diagnosis of ACS is ECG changes. For this a comparison is needed with a prior ECG. To maximise the efficiency of the diagnosis, one must be able to quickly locate, assess and compare a previous ECG in the volume of patient notes on the ward.
Aim:
The aim of this audit was to assess access to reliable prior ECGs in inpatient medical notes. These should be recent, labelled, filed appropriately and signed off as appropriate and accurate in the current clinical picture. This ensures fast and efficient analysis of any ECG changes in an emergency situation. The results were compared to guidelines set by The Society for Cardiological Science and Technology (SCST) as a standard.(2)
Method:
A chart review was performed on 100 current inpatients on 6 medical wards in UHG. The charts examined had sections in particular for clinical measurements, including ECGs. These charts were examined for presence of prior ECGs, including an ECG from this admission, the location, labelling, binding and signing off of the most recent ECG. Appropriate labelling was patient name, board number and date of birth clearly and appropriately recorded on the ECG.
Results:
7% of the charts had no prior ECGs. Of the rest, 15% didn't have one from this admission. When looking at the most recent ECG in the chart, 38.7% were not filed appropriately, 13.9% were not labelled fully, 17.2% were not secured in the chart and 72% were not signed off as reviewed by a doctor as accurate and appropriate.
Discussion:
There has been no previous data of this kind recorded previously in Ireland for comparison. Objectively, the data shows we can improve across the board. This is a joint responsibility between the doctors and administrative staff on the wards. Education will be supplied to ward clerks about the importance of filing ECGs and transferring them to new volumes of patient notes, in case of an acute cardiac event. Reminders will also be given to those performing ECGs about the importance of labelling, filing and signing off every ECG taken. The audit will be repeated six months after the supplementation of this education, and results will be monitored for improvements.
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The first application of a WiSE system in an Irish patient

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Introduction
The Wireless Stimulation of the Endocardium (WiSE) system is a novel alternative to conventional cardiac resynchronisation therapy (CRT).
Case Description
A 42 year old gentleman presented to the heart failure clinic in PHB for routine follow-up. He was diagnosed with hypertrophic cardiomyopathy (HCM) at 22 years of age (which has since become dilated with poor ventricular systolic function) and atrial fibrillation 12 years later. Repeat echocardiograms demonstrated moderate to severe mitral regurgitation. An implantable cardioverter-defibrillator (ICD) and pacemaker was inserted in 2008, and changed in 2014. At previous outpatient appointments, he complained of worsening symptoms of heart failure, despite optimal medical therapy, and had been referred for consideration of heart transplantation. In May 2016 at St. Vincent's University Hospital, Dublin, he was the first Irish patient to have a WiSE system fitted. At this follow up outpatient appointment, six months later, this gentleman noted a much improved quality of life. Measured exercise tolerance and dyspnoea on exertion had both improved.
Discussion
CRT has been shown to reduce morbidity and mortality in select patient populations[1]. WiSE systems are an alternative for patients who either fail to improve with conventional CRT or who suffer lead placement issues. This innovative approach involves the insertion of a tiny electrode into the left ventricular endocardium (replacing the traditional coronary sinus lead), which then generates the desired electrical current when subjected to ultrasonic waves from a transmitter, implanted in a left intercostal space. The "Select-LV" trial[2], a non-randomised multi-centre study of 35 patients, demonstrated the feasibility of direct, wireless left ventricle pacing. Promising results were seen at one and six month intervals, with 84% of participants clinically improved at six months. Commercial implants of the WiSE system began in Europe in 2016.

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Falls and Fracture Characteristics of Femoral Fracture Patients who present to an Orthopaedic Unit

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Introduction: Fall-related injuries have a major health impact both in Ireland and internationally. These injuries increase the economic burden on health services as well as the workload for Emergency Departments.
Objectives: In this pilot study, we sought to evaluate the use of a standardised orthogeriatric assessment and utilise the resulting data to guide future research.
Method: A total of 13 patients were audited.
Inclusion Criteria: Age over 64, presenting with a femoral fracture secondary to a fall during an assigned three month period.
Interventions audited: We used standardised orthogeriatric assessment which includes an assessment of 12 falls risk factors, 10 fracture risk factors, a bone health assessment, and a syncope assessment.
Data collection: data was collected by detailed history and collateral history-taking using a standardised proforma.
Results: The average age of the study population was 79 years. 4 (31%) participants were male and 9 (69%) were female. 7 (54%) of the participants reported only 1 fall in the past year. 3 (23%) reported more than 3 falls in the past year. On average, 4 risk factors were present in our participants with the following as most common: a) poor strength, balance or gait (62%), b) high falls risk medication (54%), c) urinary incontinence (46%), and d) diagnosis of cognitive impairment/dementia/delerium (46%).
Conclusion: Our pilot study implies the need for a larger scale study, but independent of such results the risk factors associated with femoral fracture secondary to a fall are consistent with prior studies. We recommend a standardised falls assessment to be carried out on all patients presenting to hospital following a fall. Such a screening tool would efficiently identify the individual at risk of recurrent falls, and appropriate subsequent preventative measures could be taken.

Psychosis in a Socially Isolated, Homeless Immigrant

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Background:
The number of homeless people in Ireland continues to rise. Psychiatric illness is prevalent among those living on the street, however they are often either lost to follow-up or remain undiagnosed and untreated. Of those homeless in Ireland, a proportion are immigrants, in whom language and cultural barriers can be challenging.
Case presentation:
YH is a 38-year-old Chinese lady who presented to SVUH in August 2016. She was brought to hospital by the Gardaí following a psychotic episode and subsequently involuntarily admitted. She displayed symptoms of paranoia, ideas of reference, perceptual abnormality, delusions of control, telepathy, auditory and tactile hallucinations, and denied any previous psychiatric history at this time.
With treatment as an inpatient, YH's clinical condition improved. However, she absconded and the treating team was unable to contact her as she had no relatives in Ireland and no Next-Of-Kin. She was declared a missing person to Gardaí before being re-admitted in a similar manner 4 weeks later. It transpired that YH had been homeless in Dublin for 1 year and was socially isolated. She told us that she had been treated at a psychiatric hospital in China and refused to allow the team to obtain a collateral history.
This lady is an educated individual with a Masters Degree in Theology, yet was facing deportation to China on the basis of an expired visa as a consequence of her relapsing condition. YH was afforded a Stamp 4 Visa by the Irish Government on humanitarian grounds. Her symptoms are reducing and she has regained insight. Significant social challenges, namely social reintegration and re-engaging with her PhD studies will be key to her discharge plan.
Conclusion:
This case highlights the significant social challenges to psychiatric teams in treating patients who are homeless and socially isolated. It also underscores the importance of a collateral history in assessing psychiatric patients as well as the role for transcultural psychiatry in our health service.

The Phantom Phaeo

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Introduction: This is the case of a patient presenting with headache and hypertension, found to have metastatic paraganglionoma to the vertebrae. He had previously had resection of a phaeochromocytoma but had been lost to regular follow up and appropriate surveillance.

Case Description: The patient is a 36 year old gentleman who was referred from a regional hospital to a tertiary care facility for further investigation of vertebral metastatic disease. He had initially presented with a history of headache- diffuse, dull in character, intermittent and progressively worsening. On examination he was found to be hypertensive with a blood pressure of 180/97. The remainder of physical examination was normal. Initial laboratory investigations were within normal limits.
A careful history revealed that the patient had previously had a 6.5cm left-sided intra-abdominal secretory paraganglionoma resected at a different centre 18 years previously. In light of his raised blood pressure, there was a high clinical suspicion of disease recurrence and progression.
CT and subsequent MRI imaging revealed multiple vertebral metastases. Attempt at biopsy was abandoned due to bleeding.
The Endocrinology team took over care in order to further investigate and manage. Plasma metanephrines were more than ten times the upper limit of normal. An MIBG Scan demonstrated moderate uptake in some of the lesions. An Octreotide Scan showed multiple avid metastatic lesions with greater uptake than in MIBG. These findings were discussed at a multidisciplinary level. It was decided that the patient was a candidate for PRRT (peptide receptor radionucleotide therapy). He has been referred to Uppsala, Sweden for consideration of same. Genetic screening has been sent to the UK for SDHB testing and potentially full next generation sequencing panel.
Case Discussion: This complex, unusual case highlights the importance of regular follow up as an integral part of the management strategy in phaechromocytomas. It also demonstrates the difficulty in approach to active management of recurrent disease.

Presentation of Polyarteritis Nodosa

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Introduction: A case report on the presentation, diagnosis and treatment of Polyarteritis Nodosa (PAN). In England PAN has an annual estimated incidence of 4.6 cases per million. [1] [2] It commonly affects men more than women and has a peak incidence at 45-65 years. [3]
Case presentation: A 76year old female presented with a 2 week history of fatigue, weight loss, night sweats, generalised myalgia and a burning skin pain.
Her background history includes hyperthyroidism and hypertension. She is an ex-smoker with a 10 pack year history and is a non-drinker.
On examination, she had had livedo reticularis on both thighs but no other abnormal findings; no swelling or erythema and she had full range of motion of all joints.
Admission bloods revealed raised inflammatory markers. Her CRP reaching a peak of 349.83 mg/L, ESR 130 mm/hr and her Hb dropped to 8.7 g/dL 14 days post admission. Inflammatory markers, Alkaline Phosphatase and GGT remained elevated and she repetitively spiked temperatures.
No source of infection was found and normal OGD, CT TAP and Echocardiogram.
After excluding infection, GI malignancy and hepatitis the patient underwent a muscle biopsy. The report revealed necrotising vasculitis of medium-sized epimysial arterial blood vessels in keeping with PAN.
Discussion: Following her diagnosis she was commenced on oral steroids and discharged home. One week later she felt a clinical improvement of symptoms and her inflammatory markers were trending back to baseline with her ESR dropping to 81 mm/hr and her CRP dropping to 62.23 mg/L.
PAN is a multi-systemic disease that can be a challenge to diagnose; that may have serious implications on quality of life if undiagnosed and untreated.
Clinicians should have a level of suspicion for PAN in patients that have a similar presentation to this case. [1] [2]

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Thiamine is Everything

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A twenty two year old male Kuwaiti native, studying in Ireland, presented to the emergency department having been found by friends on the floor of his home with lower limb weakness and confusion. His background was significant for a sleeve gastrectomy two months previously in Kuwait, a one week history of minimal oral intake, and BMI of 46. Initial examination revealed a tender abdomen and he was initially treated with broad spectrum antibiotics for presumed intra-abdominal infection. Possible decreased power in the lower limbs was noted but difficult to assess as the patient was poorly cooperative with examination. Radiological investigations revealed no abnormality however, and his clinical condition deteriorated over the course of the day. He was not oriented to person, time or place and speech was nonsensical. Lumbar puncture showed elevated protein, normal white cells and glucose; and he was treated empirically for viral encephalitis with acyclovir. Over two days, his GCS progressively declined necessitating transfer to ICU for intubation and sedation. On examination, he had total ophthalamoplegia and decreased tone in all four limbs. A presumptive diagnosis of acute Wernicke's encephalopathy was reached which was supported by typical MRI finding findings of diffusion restriction in medial thalami, mammillary bodies and brainstem. High dose intravenous thiamine was commenced. Four weeks later, he has been extubated. His GCS is 13/15, he follows one stage commands, asks simple questions, has regained purposeful eye movements, has normal upper limb movement but flaccid paraplegia of the lower limbs. Thiamine deficiency is a rare but recognised complication of bariatric surgery arising from both reduced oral intake and malabsorption. Incidence and pathophysiology vary depending on the type of surgery. This case emphasises the importance of post-operative follow up in this cohort of patients and highlights that Wernicke's encephalopathy occurs in settings other than alcohol dependence.

Pleural and Pericardial Effusions in a Patient with Rheumatoid Arthritis

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Introduction:
Rheumatoid arthritis(RA) is a progressive,multi-systemic, inflammatory disease, primarily affecting the joints of the hands and feet bilaterally[1]. RA is characterised by persistent synovitis leading to erosive joint damage[1]. However, extra-articular symptoms correlate with disease severity and can add significantly to morbidity and mortality [2].

Case:
We present the case of a 70 year old lady with a history of RA who was admitted following a 2 week history of chest pain and shortness of breath. She was diagnosed with RA in 2015 with positive anti-CCP(>340) and RF(402) and was on Methotrexate 10mg weekly.
Her history described a pleuritic, constant, central chest pain. Chest X-ray on admission demonstrated bilateral pleural effusions with compressive atelectasis of the lower lobes. CT thorax identified a co-existing pericardial effusion. The differential included infective aetiology versus serositis secondary to RA. Thoracocentesis and pleural fluid analysis revealed an exudative, sterile effusion that was gram stain and Ziehl-Neelsen negative, with a cell count >1000. The working diagnosis was RA associated serositis and high dose prednisolone, bone and gastro-protection and Pneumocystis jirovecii pneumonia prophylaxis were commenced. The patient had an excellent clinical response and will be considered for a biologic disease modifying anti-rheumatic drug(DMARD) such as Tocilizumab if prolonged pleural fluid cultures for Tuberculosis are negative.
Discussion:
Currently, DMARDs such as Methotrexate are first line in RA treatment, with biologic-DMARDs used as adjuncts if the disease remains active. Treatment with Tocilizumab, a humanised monoclonal anti-IL-6 receptor antibody, is recommended by NICE if DMARDs/TNF-α inhibition has failed or the patient is intolerant to Rituximab[3]. Recent case reports highlight success in treating patients with RA-associated pericardial effusion with Tocilizumab[4-6]. IL-6, a pro-inflammatory cytokine, has been noted to be over-expressed in pericardial aspirates in RA[5]. This highlights a potential role for IL-6 inhibition in the treatment of RA.

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Incarcerated Femoral Hernia

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A hernia is a protrusion of a viscous, or part of a viscous, through a congenital or acquired opening in its containing cavity. A femoral hernia is most commonly a protrusion of small bowel through the femoral canal. It is less common than inguinal hernia but has a higher incidence of incarceration and strangulation due to the smaller diameter of the femoral ring. In this case, a female patient presented to the Emergency Department of Mayo University Hospital with a painful swelling in her right groin consistent with a femoral hernia. This swelling had been present for over a year but had begun to increase in size and become more tender. On examination, the swelling was irreducible. The patient was immediately taken to theatre for repair of this femoral hernia. During the procedure, the hernial sac was found to contain the right fallopian tube. As the tube was still viable it was reduced back into the abdominal cavity and the femoral ring was narrowed. The patient had an uneventful post-operative course. The herniation of fallopian tube through the femoral canal is a rare occurrence. In a previous case report on the same subject it was stated that only 15 similar cases had been recorded. Therefore, we present this case to raise awareness of unusual contents of femoral herniae.

Testicular Pain in Acute Appendicitis

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Appendicitis is one of the most common conditions treated by General Surgeons on call. The textbook symptoms for this condition are initially pain in the umbilical region which subsequently migrates to the Right Iliac Fossa . There can also be associated nausea, vomiting and anorexia. In this report, we present a case of a young male who presented to the Emergency Department of Mayo University Hospital with left testicular pain. This was initially treated as a torsion until this diagnosis was ruled out by ultrasound of the testes. The working diagnosis was then changed to right epididymo-orchitis. However, a repeat ultrasound revealed the presence of free fluid in the abdomen and features suggestive of an inflamed appendix. Consequently, a laparoscopic appendectomy was performed which confirmed the diagnosis of acute appendicitis. Free fluid was also drained from the abdomen. The patient recovered post-operatively without any complications.
Testicular pain is not a commonly recognised symptom of acute appendicitis. In reviewing the literature there has only been a handful of cases. The theory put forward for the cause of the testicular pain is the presence of free fluid in the abdominal cavity. The purpose of this case report is to show that a condition as common as acute appendicitis can present in many forms. The surgeon on call must be aware of these variable presentations of common pathologies to prevent the patient from suffering any serious complications.

Ustekinumab in Crohn's Disease: A Single Tertiary Centre's Experience

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Introduction:
Few options exist for patients with Crohn's disease (CD) who fail both thiopurines and biologic therapy. Ustekinumab is a new monoclonal antibody acting against IL12 and IL23, shown to be effective for moderate/severe CD.
Aims:
In the Mater Hospital, 8 patients have been treated with Ustekinumab since 2013 and all were included in the study. We aimed to examine the demographics and indications for using ustekinumab, and evaluate patient tolerance and clinical remission in our cohort.
Methods:
Data was collected from our IBD database, electronic patient record and medical notes.
Results:
The baseline characteristics of the patients are as follows: median age 33.5 years [16.7- 41.7]; median time since diagnosis 12 years [4-19]. 7 patients had previously underwent surgical management, including 2 with ileostomies.
The indication for starting therapy for all 8 patients was refractory disease. All had previously tried azathioprine which was discontinued in 3 due to

loss of response and 3 due to intolerance. 5 had loss of response to infliximab or adalimumab and 3 had experienced a reaction to same. 3 had failed methotrexate.
Median time since starting ustekinumab was 1.2 years [4.0months- 3.8yrs]. All received the standard induction regime of 90mg subcutaneously at Week 0 and 45mg on Weeks 1-3. 7 were placed on 90mg subcutaneously 8-weekly and 1 on 45mg 4-weekly. On this regime, 4(50%) were successfully maintained in clinical remission. 2 patients have continued mild symptoms on ustekinumab, though interval reduction has not been attempted in these patients. 2 patients have discontinued ustekinumab due to inadequate response.
Conclusion:
In our cohort of moderate/ severe CD patients, many of whom had previously failed thiopurines and anti-TNF therapy, 50% were maintained in clinical remission with Ustekinumab. Tolerability to this novel therapy appears promising though long-term follow-up is required to determine safety and side effects.

Adult Onset Still's Disease: A Diagnostic Challenge

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Introduction: Adult-Onset Still's Disease (AOSD) is a rare condition similar to systemic-onset Juvenile Idiopathic Arthritis. A diagnosis can only be made after exclusion of infectious, malignant and other inflammatory conditions and is based on clinical grounds. Clinical manifestations are heterogenous and can pose a significant diagnostic challenge.
Case: A 36-year-old female presented with pain and swelling of the left knee associated with fever. She was admitted with a presumed diagnosis of septic arthritis, commenced on antibiotic therapy and underwent an arthroscopic knee washout the following day. Despite this treatment, she continued to spike high-grade temperatures and was resistant to two further antibiotics. It was noted that each temperature was accompanied by a pink maculopapular rash on the limbs and trunk which disappeared on resolution of the temperature. On further analysis of her history, it was noted that she described a UTI the previous month treated with a course of Co-Amoxiclav and had a sore throat for one month prior to her presentation above. Family history was unremarkable and she had no history of foreign travel. All blood, joint and urine cultures, autoimmune tests and an infectious disease work-up were negative. WCC, Neutrophil count, CRP, ESR and Ferritin were raised. She experienced significant symptomatic improvement with NSAIDs and was commenced on a course of steroids. All laboratory parameters significantly improved. Subsequently the Glycosylated Ferritin was noted to be significantly low. She fulfilled 7/8 Yamagauchi 1992 criteria for AOSD.
Discussion: AOSD is a rare inflammatory condition. Criteria such as the Yamaguachi Criteria are helpful as a guide to directing towards a likely diagnosis, but it remains a diagnosis of exclusion, considering the wide differential diagnosis. As timely diagnosis can improve prognosis, an index of suspicion for AOSD is important when patients present with unexplained fevers accompanied by rash and musculoskeletal symptoms.

A Giant Osteochondroma of the Distal Femur – A Rare Cause of a Complete ACL Rupture

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Introduction
Osteochondromas are benign chondrogenic exostotic lesions that arise from the surface of bone. We describe the rare case of a complete destruction of the anterior cruciate ligament (ACL) secondary to a large intercondylar osteochondroma involving the ACL foot print.
Case
A 29-year-old gentleman was referred with instability and pain of his left knee on a background history of a osteochondroma that had been completely excised from his left distal femur 12 years previously. He described difficulty walking on uneven surfaces and on ascending and descending stairs. He also reported a 'clicking' sensation. On examination of his knee, flexion was reduced to 80 degrees and Lachmann's test was positive. An xray followed by subsequent CT and MRI scans were preformed which showed a 12cm bony exostosis extending inferiorly into the intercondylar notch with full thickness tear of the ACL. The medial and lateral collateral ligaments were intact. He underwent ACL reconstruction with a semitendinosus graft which was successful. At 10 months follow up the gentleman was pain free with no further reports of instability of his knee.
Discussion
Osteochondromas are benign cartilage-capped bone tumours. Most are asymptomatic and incidental findings, however some may present as painless swellings or as pressure on surrounding structures, as seen in our case. Approximately 30% occur in the femur, the second most common site following the tibia (43%). Resection is the treatment of choice in those who are symptomatic but, as demonstrated here, recurrence may occur. In less than 1% of cases they can undergo malignant transformation to chondrosarcomas. To our knowledge this is the only reported case of complete destruction of the ACL secondary to a large intercondylar osteochondroma involving the ACL foot print. Despite the defect, ACL reconstruction was successful in stabilising this gentleman's knee.

An Audit to Determine Whether Medical Patients are Prescribed Appropriate Thrombophylaxis

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Background: The global disease burden due to venous thromboembolism (VTE) is high with an annual incidence ranging from 0.75 - 2.69/1000 individuals in the population[1]. The 30-day case fatality rate after VTE has been shown to be 10.6%, with a 1-year case fatality rate of 23%[2.] The CACCP antithrombotic and prevention of thrombosis guidelines[3] recommend pharmacological thromboprophylaxis for acutely ill medical patients except those at a high risk of bleeding. The guidelines recommend thromboprophylaxis with low molecular weight heparin (LMWH), low dose unfractionated heparin (UFH), or fondaparinux.
Aims: To assess adherence by general medicine and medicine of the elderly physicians to the CACCP guidelines[3] with regard to appropriate medical thrombophylaxis prescribing.
Methods: Fifty current inpatients were chosen at random from the medicine of the elderly electronic patient database at University Hospital Limerick (UHL). Inclusion criteria were patients admitted under the care of medicine of the elderly, in September 2016, with a minimum hospital inpatient duration of 3 days with no maximum duration. Data was recorded using a proforma sheet that included age, diagnosis, expected length of stay, thromboprophylaxis given, type of thromboprophylaxis, contraindications to thromboprophylaxis and thromboembolic risk factors. Statistical analysis was performed using Microsoft excel.
Results: 61% of patients (n=31) included were prescribed thromboprophylaxis. The majority of this group (n = 26) were prescribed enoxaparin as thromboprophylaxis. 3% were given TEDS in combination with enoxaparin. 19 patients (39%) did not receive thromboprophylaxis, 12 of these had a reported contraindication. Therefore, 7 patients (14%) were not adequately treated according to guidelines.

Conclusion: The findings of this audit demonstrates an overall compliance of 86% with the CACCP prevention of thrombosis guidelines. This is important as hospitalised medical patients are at increased risk of VTE due to numerous comorbidities. We recommend further audits within UHL to assess overall hospital compliance.

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Assessment of existing lay-person knowledge on the role and use of an Automated External Defibrillator in amateur sports clubs

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Introduction: Automated External Defibrillators (AEDs) have become increasingly available in sports clubs, allowing members to defibrillate with minimal delay if necessary. However, it is currently unknown whether members of the public are sufficiently prepared or willing to use an AED.

Aim: To investigate knowledge and attitudes among sports club members toward AEDs, and to examine the potential benefits of an educational programme as an intervention for increasing awareness and willingness to use an AED.

Method: A number of selected Cork GAA clubs were visited and participants aged ≥16 were asked to complete a 25-point questionnaire relating to current awareness and attitudes towards AEDs, and their willingness to use the device. Each participant then attended a 2-hour small-group teaching session where they were educated on the role and use of an AED, with opportunity to practice AED use in a controlled environment. After receiving teaching, each individual again completed the questionnaire.

Results: 142 people participated in the study and their responses were compared before and after participation in the teaching session. Before teaching, the average level of knowledge regarding AED use was relatively low. The most common reason identified for unwillingness to operate an AED was lack of knowledge on how to correctly use the device. Paired data analysis showed that attendance at a 2-hour educational programme led to a statistically significant improvement in layperson awareness and understanding of AED use, and increased confidence and willingness to use an AED.

Conclusion: A structured educational programme can increase layperson awareness, confidence and willingness to operate an AED.

Quick cognitive screening: the 6-item cognitive impairment test and the temporal orientation score

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Introduction

The standardised Mini Mental State Examination (sMMSE) is a gold standard cognitive assessment, but takes 10-15 minutes to complete. The 6-CIT and TOS have been suggested as short, accurate cognitive screens, allowing routine screening of all older in-patients and hence earlier diagnosis and treatment of dementia/cognitive impairment. This study hypotheses that the 6-CIT and the TOS compare favourably to the sMMSE. The main aim of this study is to assess the accuracy of the 6-CIT and TOS compared to the sMMSE in screening for dementia in older in-patients.

Methods

Patient (N=216) were selected from the Cork-IDEAS study and their records were analysed. Demographics, sMMSE, 6-CIT and TOS results were manually extracted. A subset of 22 patients underwent timed cognitive testing using the 6-CIT and TOS. All statistical analysis was carried out using IBM SPSS version 20 and MedCalc version 15.8.

Results

There was significant correlation between sMMSE and both 6-CIT and TOS scores ($r = -0.695$, $p<0.001$ and $r = -0.531$, $p<0.001$ respectively), strongest for the 6-CIT. The mean time taken to complete the 6-CIT was 3.03 minutes. Using previously reported cut-offs for dementia (8/9, i.e. 8=normal; 9=dementia), the 6-CIT had sensitivity of 79.2 and specificity of 85.6 (AUC=0.82) compared to the accepted sMMSE score cut-off for dementia (≥24/30=normal). As a preliminary quick screen, a cut-off of 5/6 (sensitivity 92.2, specificity 64.7) would safely avoid the need for further testing in 44% of patients (i.e. 96/216 patients scored ≤5).

Discussion

Both the 6-CIT and TOS compared favourably to the sMMSE. The 6-CIT out-performed the TOS. Using "sensitive" cut-offs, the 6-CIT could prove a useful quick screening test for dementia, reducing the numbers of patients requiring a longer cognitive test in a busy hospital setting.

An audit of unnecessary repeat blood tests performed in the Acute Medical Unit in Tallaght Hospital

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Background:

Laboratory testing is the single highest-volume medical activity and drives clinical decision-making across medicine.[1]The overall scale of excess testing in Tallaght Hospital is worrying despite a duty to assist in the efficient use of healthcare resources[2] and cause minimal harm to patients.

Aim:

To identify the number of excess blood tests carried out in the Acute Medical Unit (AMU) and estimate the cost of same.

Methods:

Retrospective analysis of 24 inpatient's collection of bloods during their stay. Blood tests analysed: Full blood count (FBC), C-reactive protein (CRP), coagulation, liver, renal and bone profiles. Any abnormal test result warranted repeating. Repeat blood testing following a normal result was deemed excessive. Clinical indications for blood tests were excluded. Excess cost was calculated from unit cost of each test; a figure that excluded labour and equipment costs.

Results:

Of 24 patients, 614 blood tests were taken in total, 249(40%) of these were excessive. The cost of these excess tests totaled €95. All patients underwent at least 1 excess blood test. The mean length of stay was – 7.29 days (range 1-38 days). Breakdown: 120 FBCs, 44 (37%) excessive, €44 waste. Forty coagulation profiles, 7 (17.5%) excessive, €14 waste, 127 renal profiles, 52 (40.9%) excessive, €4.92 waste, 112 liver function tests, 56 (50%) excessive, €12 waste, 104 bone profiles, 55 (53%) excessive, €5.45 waste. Lastly, 111 CRPs, 36 (32%) excessive, €15 waste.

Discussion:
Forty percent of bloods taken were excessive. This risks unnecessary venipuncture complications, undue pain and psychological distress. The total excess cost of €95 in this small cohort highlights the amount of waste and emphasises the need for improving requestor's approach to ordering blood tests and in turn saving on health service expenditure.
Recommendations:
Propose a reminder system for hospital software, provide requestor education and re-audit to identify change in practice.

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A case report of surgical management of poorly differentiated follicular carcinoma of the thyroid

Thyroid cancer is often low grade with a positive prognosis. However spread beyond the thyroid drastically changes this, 10 year survival for thyroid cancer that extends outside the thyroid drops from 91% to 45%. With many vital surrounding structures susceptible to direct invasion it can make the management of this disease challenging and devastating for the patient.
A 74 year old male presented to the emergency department with a one day history of dyspnoea, a hoarse voice and a four month history of right 3x3 cm midline neck lump. His vitals were stable on arrival and auscultation of the lung fields revealed stridor and wheeze. A right vocal cord palsy was discovered on nasal endoscope examination. Work up included CT, PET CT, FNAs, open biopsy and panendoscopy. Eventually the final diagnosis was discovered; invasive poorly differentiated thyroid follicular cancer infiltrating the thyroid, larynx, trachea and soft tissue. The patient was deemed suitable for surgical intervention, and he favoured this option over radiotherapy. Laryngopharyngectomy and thyroidectomy with stoma formation was performed just over one month after his first presentation. He progressed well post op with full multi disciplinary team input. A tracheostomy tube placed intra-operatively was removed day 2 post surgery. On day 10 post op assessment via a oral niapan swallow test concluded that it was safe to allow oral intake. He was discharged just over two weeks after his surgery. He has also been referred for radiotherapy. Currently he is not keen to have radiotherapy but it is still being discussed. This case illustrates the insidious way in which this rare type of thyroid cancer can present. It also convey's the challenges and discussion that the surgeon faces when deciding whether surgery is a viable and appropriate intervention for treatment of this kind of malignancy.
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Suppurative Thrombo-Phlebitis leading to a threatened limb in a patient with Sickle Cell Disease

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Introduction: Arterio-venous fistula (AVF) formation is sometimes necessary for patients with sickle cell anaemia requiring frequent vascular access. While successful in most cases, a small proportion will suffer complications, including the infrequent phenomenon of fistula thrombosis.
Case presentation: We report the case of a 26-year-old female who presented with sudden onset pain in the region of her brachio-basilic AVF, with associated chills, rigors, and vomiting. Of note her recent medical history was significant for an upper limb DVT, secondary to a thrombosed peripherally inserted central catheter (PICC), for which she was being treated with therapeutic low molecular weight heparin. Suppurative thrombo-phelbitis was diagnosed, and was initially managed with therapeutic low molecular weight heparin and empiric IV antibiotic therapy. Six days later, she developed acute limb ischemia necessitating emergency re-vascularisation.
Discussion: Vascular access can present a significant hurdle in the management of patients with sickle cell anaemia. The formation of an arterio-venous fistula, while rarely performed, is successful in the majority of patients. However, given the high propensity for embolic phenomenon in patients with this condition, the prospect of future re-intervention for fistula thrombosis must be considered. This case demonstrates the successful management of this potentially devastating complication via a surgical approach, while comparing the available options for vascular access in these patients by way of a systematic literature review.

The presentation of manic catatonia in the acute hospital

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Mrs C is a 64 year old lady with a longstanding history of bipolar disorder who was admitted for inpatient psychiatric treatment of a manic episode. She presented initially with irritability, elation and pressure of speech, with limited insight. Her family became concerned following a 2 day unexplained disappearance and dangerous behaviour in the street. Despite treatment with lithium, aripiprazole and diazepam as an inpatient she continued to deteriorate to the point of developing incontinence, incoherent speech and waxy posturing. She developed poor dietary intake and lithium levels rose to 1.118. Sodium levels rose to 157mmol/L at which point she was transferred to the acute hospital.
Medical work-up was unremarkable. A trial of IV valproate and 12mg lorazepam was performed and Mrs C was felt to be unresponsive to either. Medical treatment was for diabetes insipidus with hypernatraemia secondary to lithium toxicity free water deficit with dehydration. Some small improvement continued over several days, with Mrs C beginning to verbalise. At this point small sentences were all that could be used to determine Mrs C's mental state, and her descriptions of herself as 'very well, thank you' and her doctors as 'wonderful' were deemed to be inappropriate to her circumstances, suggesting an underlying mania. She remained largely unresponsive to treatment and with ongoing poor oral intake, and as such a decision was made to transfer her for ECT treatment. Of note, Mrs C's psychiatric history is significant for previous responsiveness to ECT, on these occasions for treatment resistant depression.
ECT remains a treatment of choice for treatment resistant catatonia, with recent studies showing an 80.8% response among patients with bipolar disorder with severe catatonic features.[1] With a decreasing availability of approved ECT centres around Ireland it will continue to be an important treatment option for those with treatment resistant disease.

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Aberrant Salience in Psychosis: Investigation of the influence of a history of substance abuse on salience processing in psychotic disorders

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Introduction
Patients with schizophrenia demonstrate aberrant salience processing (i.e. misattribution of attention to stimuli that would otherwise be neutral) which is thought to underlie psychotic symptoms including hallucinations and delusions. It is unclear how factors, such as exposure to cannabis which has been linked with the development and exacerbation of psychotic symptoms in patients with schizophrenia, might impact on salience processing.
Aim
To investigate the relationship between aberrant salience, self- reported history of substance use, and presence and severity of psychotic symptoms in patients diagnosed with a psychotic disorder versus healthy controls.
Methods
25 patients diagnosed with schizophrenia and 41 controls completed four questionnaires: Aberrant Salience Inventory (ASI); Schizotypal Personality Questionnaire (SPQ); Cannabis Experience Questionnaire (CEQmv); Community Assessment of Psychic Experiences (CAPE).
Results
Patients with schizophrenia demonstrated higher aberrant salience levels than controls ($P < 0.01$). Patients also showed significantly higher schizotypy scores across the three subscales of the SPQ (all $P < 0.001$), as well as increased scores across all psychosis- related subscales in the CAPE (all $P < 0.05$). Non-parametric analysis revealed significant positive correlations between aberrant salience levels and SPQ (total and all subscales) scores, as well as elective CAPE domains (all $P < 0.05$) in both groups. Frequency of cannabis use was associated with increased aberrant salience levels across all groups ($P < 0.001$). More frequent cannabis use was associated with higher SPQ scores ($P < 0.001$) and increased scores in the CAPE subscales ($P < 0.01$).
Conclusion
Patients with schizophrenia report impaired salience processing, and higher aberrant salience values are associated with increased schizotypy levels and cannabis exposure in both patients and controls.

THE HPV VACCINE CRISIS!

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Introduction: In 2011, the HSE began offering the Gardasil HPV vaccine free of charge to first year secondary school girls. Since then, there have been a number of claims suggesting adverse effects associated with the vaccine, and heavy media coverage of these cases.
Aims: A survey was developed to assess the opinions of nurses, midwives and allied health professionals towards the HPV vaccine and how recent media coverage has impacted this.
Materials & Methods: A 12-question paper survey was compiled, assessing basic demographic information, vaccination status and the perceived impact of the media coverage on their opinion of the HPV vaccine.
Results: 188 people completed the survey, of whom 76 have children and 122 do not. With regard to routine vaccinations, 93.4% of participants with children and 97.3% of those without, have vaccinated or would vaccinate their children. However, only 30.2% of participants with eligible children have consented to HPV vaccine, compared to 61.6% of those without children, who hypothetically would vaccinate. 86.1% of participants were aware of the media coverage about the HPV vaccine. The media coverage made 23.9% more likely to give consent for the HPV vaccine, 34% less likely and 39.9% stated it would make no difference.
Conclusion: It is clear from these results that the media coverage is affecting opinions and decisions to vaccinate, even within the nursing and allied health professions. Participants stated they felt media coverage was the only source of information around the vaccine and adverse effects. This highlights that there is a role for staff education within the hospital.

Trimodal therapy outcomes for intermediate risk Prostate Cancer Patients

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Introduction:
Intermediate-high risk prostate cancer patients include all those with either Gleason score≥7, a PSA level> 10 and <20 or stage >T2. Trimodal therapy for prostate cancer involves six months of androgen deprivation therapy, followed by 46Gy of external beam radiotherapy, then a brachytherapy boost. Previous studies have shown trimodal therapy can achieve tumor control with improved biochemical disease free survival. However this is at the cost of increased toxicity. The aim of this study is to evaluate the incidence of biochemical failure and gastrointestinal/genitourinary toxicities after trimodal therapy.
Methods:
This is a retrospective study of all patients treated with trimodal therapy for prostate cancer from 2008 to 2016 in GUH. Two hundred and three patients (n=203) were identified from database for study inclusion. Prostate specific antigen (PSA) levels, International Prostate Symptom Score (IPSS), and Expanded Prostate Cancer Index Composite (EPIC) score were recorded for each patient at each follow up. Biochemical failure is defined per the Phoenix criteria of a PSA level >2ng/ml on 2 occasions. IPSS and EPIC scores were used to quantify the level of GI/GU toxicity.
Results:
At one year the IPSS and EPIC scores that were recorded showed 8.79% and 17.44% patients had no symptoms, 62.63% and 46.5% had mild symptoms, 30.76% and 30.2% had moderate symptoms and finally 4.39% and 5.81% had severe symptoms. Biochemical failure occurred in 17.29% of patients within 5 years. Median follow up time was 4 years.
Conclusion:
The majority of patients receiving trimodal therapy experienced mild GI/GU toxicities at one year. 25% of patients that Biochemical failure occurred in had initial PSA of >10 and 75% had a Gleason score >7 and <10.

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Traumatic brain injury from shotgun pellets accessing brain via the orbital foreman- A Case Report

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Abstract

Introduction: Shotgun assaults cause low velocity injury and are dependent on the distance between the gun and the injured patient. Unless very close to the assaulted, penetration of a shot is usually confined to superficial injuries.

Summary: We describe however the following case. A 41year old gentleman was shot from forty feet whilst hunting with a friend. There was evidence on admission of pellet lodged in right external oblique abdominal muscle, pellets in soft tissue of right upper arm, a pellet in right thumb and in 4th metatarsal and lastly multiple pellets to the face. He presented unconsciousness with a best GCS of 8/15. CT brain demonstrated two pellets in right frontal lobe, shattered particles of pellet in parietal lobe, left posterior thalamus, left occipital lobe and lastly in posterior orbit of right eye. The one pellet accessed his brain via the right orbital foramen and shattered into multiple pieces inside his skull. He required assisted ventilation, enteral feeding and neurosurgical transfer. Following extubation he had right sided hemiparesis, severe diminution of right eye vision, seizures and cognitive impairment. He is rehabilitating slowly.

Conclusion: Despite the general assumption that shotgun injuries from a distance are unlikely to result in a deep penetrating trauma, this case illustrates the potential of entry to brain parenchyma through the orbital foramen.

Keywords: Shotgun, brain injury, facial trauma.

Evaluation of influenza vaccination among eligible patients with prolonged in-hospital stay.

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Introduction:

Influenza is an important global cause of morbidity and mortality and vaccination remains the single best public health initiative. Much of the focus to date has been on community vaccination, however in 2015 there was a large outbreak of nosocomial related influenza in St. James' Hospital.

Aim:

The aim of this audit is to investigate the number of inpatients who have received influenza vaccination during a prolonged inpatient stay.

Method:

Data were collected from a cohort of 104 inpatients. Inclusion criteria included age >65years, or <65 years with a chronic medical condition eg COPD. All patients audited had length of stay >40 days. Data were collected by reviewing charts and the prescription Kardex of suitable patients. Patients reviewed were under care of medical, surgical and medicine for the elderly teams.

A Consultant Microbiologist gave feedback to lead clinicians in all hospital specialties, highlighting the patients under their care who had yet to be vaccinated.

Following this intervention, a subgroup of 42 patients of the original cohort were re-audited.

Results:

Of the initial 104 patients reviewed, results showed that 20.19% of patients received vaccination. Average age of patients reviewed 77.49years, standard deviation 12.607, and confidence interval of 2.423. 25% of COPD patients vaccinated compared to 19% of non-COPD patients. 24% of MedEl patients were vaccinated compared to 17% of medical, and 18% of surgical.

Re-audit results showed 19% of 42 patients were vaccinated following intervention. Of this subgroup, only 20% of COPD patients were vaccinated.

Consclusion:

Results from this audit demonstrate that 20.19% of eligible patients received vaccination against influenza whilst in hospital. Given the strong indications for vaccination and prior inpatient outbreaks, we recommend hospital-wide education. This audit outlines the need for persistent feedback to ensure compliance with influenza vaccination, and a suggested benefit of appointing Physician and Nurse Champions throughout the hospital annually. Identification of patients at risk of influenza and compliance of vaccination may be optimised via a reminder system through Electronic Patient Record (EPR) when St. James' Hospital becomes paperless.

A re-audit of the prescription of venous thromboprophylaxis in general surgical patients on admission to Letterkenny University Hospital

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Introduction:

Acute venous thromboembolism (VTE) has an annual incidence of 1-2 per 1000 persons. An 8-fold increase in hospitalised medical patients and a 100-fold increase in surgical patients. Last year an audit of VTE prophylaxis on admission to LUH was carried out to assess the level of appropriate prescribing on surgical wards. A risk assessment and VTE prophylaxis protocol was introduced in LUH on the results drawn from this audit in accordance with NICE (N92), ACCP and manufacturer guidelines, to classify patients into three risk categories with definitive VTE prophylaxis for each. A re-audit was performed to assess the benefit of having local guidelines.

Methods:

An audit of medical notes and drug kardexes of general surgical inpatients over a week in October was approved to determine the effectiveness of the new guidelines. Patients were assigned to VTE risk categories of 'low', 'moderate' and 'high'.

Results:

A total of 50 patients were included in the re-audit. 60% were categorised as high risk for VTE, 16% as moderate and 24% as low.

High risk: 36.7% were appropriately charted for LMWH, 36.7% were prescribed an inappropriate dose and 26.7% were not prescribed any LMWH.

Moderate risk: 75% were appropriately prescribed with LMWH and the other 25% were charted no VTE prophylaxis.

Low risk: VTE prophylaxis was over-prescribed in 75% of cases and only 25% of these patients were appropriately charted with TED stockings only.

Conclusions:

From our results we can conclude that a majority of patients in LUH are prescribed for LMWH within the moderate risk category.