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Postpartum transcervical endometrial resection under laparoscopic control for retained degenerated products of conception

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Abstract We describe a case of postpartum haemorrhage due to retained products of conception that failed to resolve after two attempts of evacuation of retained products of conception. A subsequent histology and MRI scan confirmed retained products of conception despite repeated attempts at treatment. We introduce transcervical endometrial resection as an efficient method of removing degenerated retained products of conception refractory to standard treatment.

Keywords Transcervical · Endometrial resection · Retained products · Postpartum haemorrhage

Introduction

Secondary postpartum haemorrhage is defined as any sudden loss of blood (regardless of volume) from the genital tract occurring after the first 24 h postpartum and within 6 weeks of delivery. The incidence is between 0.5 and 1.5% [1]. The most common causes are retained products of conception and/or infection [2]. Standard treatment is with antibiotics and/or evacuation of retained products of conception (ERPC). Our case highlights the use of endometrial resection as an effective means for removing postpartum products of conception refractory to standard treatment.

Case report

A 30-year-old Caucasian woman in her second pregnancy had an elective caesarean section done at 39 weeks gestation, the indication being previous cae-

sarean section and lower back pain. This back pain was due to L5/S1 disc prolapse and intermittent right sciatica. The operation was uncomplicated; however, the placenta was removed manually after an unsuccessful attempt at continuous cord traction. Following delivery, inspection of the placenta confirmed it was complete.

She remained well until the fourth week postpartum when she started bleeding per vaginum. Bleeding had been ongoing for five days prior to her presentation in the hospital. The bleeding was heavy with passage of clots. There was associated crampy lower abdominal pain.

Clinical examination showed normal temperature, pulse and blood pressure. There was mild suprapubic tenderness on abdominal examination. Bimanual examination revealed a 14-week-size tender uterus, a patulous cervical os, cervical excitation, and bilateral adnexal tenderness. An ultrasound scan showed an echogenic area at the fundus measuring 4.7×3.8×6.0 cm indicating retained products of conception (Fig. 1). She was initially given intravenous antibiotics and ergometrin. An evacuation of retained products of conception was performed. She was discharged on oral antibiotics the following day. The histology showed degenerate and focally inflamed decidua and a few small degenerate chorionic villi with no evidence of trophoblastic disease.

She was admitted six weeks later with a history of continuous bleeding per vaginum with intermittent exacerbations that had not stopped since the evacuation. The ultrasound scan showed that the fundal endometrium was thickened and heterogenous over an area of 4.4×4.1×3.9 cm.

She subsequently had another evacuation of retained products of conception under ultrasound control. Hard tissue was removed from the uterus resembling fibroid tissue. However, no tissue resembling products of conception was recovered. A hysteroscopy was therefore performed following the ERPC, confirming an appearance suggestive of submucous fibroid. This could not be removed with polyp forceps as it was densely adherent to the endometrial cavity.

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Fig. 1 Ultrasound scan showing an echogenic area at the fundus measuring 4.7×3.8×6.0 cm, indicating retained products of conception

She was discharged on oral antibiotics for one week and also prescribed Zoladex injection 3.6 mg subcutaneously monthly for three cycles with the aim of shrinking the submucous fibroid mass.

She was admitted five days later with colicky lower abdominal pain. Conservative management was done with analgesics while the histology report was fast-tracked. The report showed fragments of necrotic degenerative and calcified chorionic villi and deciduas with no evidence of fibroid.

In view of the histology report, an MRI of the pelvis was arranged. MRI findings showed the uterus to be engorged throughout, consistent with postpartum status. There was a mass of low signal intensity adherent to the fundus of the uterus, consistent with retained products of conception (Fig. 2). There was also a significant amount of free fluid around the uterus, consistent with a local inflammatory response.

The patient remained symptomatic. In view of the ultrasound, MRI and histology reports, she was booked for resection of the endometrium under laparoscopic control. Findings at operation include fluffy products of conception at the fundus of the uterine cavity (Fig. 3). Resection of the products to the myometrial base was performed. Roller ball endometrial resection of the fluffy remnants round the fundus was performed (Fig. 4). She was discharged on the same day. The histology report showed calcified retained products of conception with myometrium fragments. The bleeding has settled following this procedure.

Discussion

The history of heavy bleeding four weeks postpartum, along with the clinical and ultrasound findings, suggested that our patient had secondary postpartum haemorrhage due to retained placental tissue. Intravenous antibiotics were given and an evacuation was done. Retained placental tissue is commonly infected, so

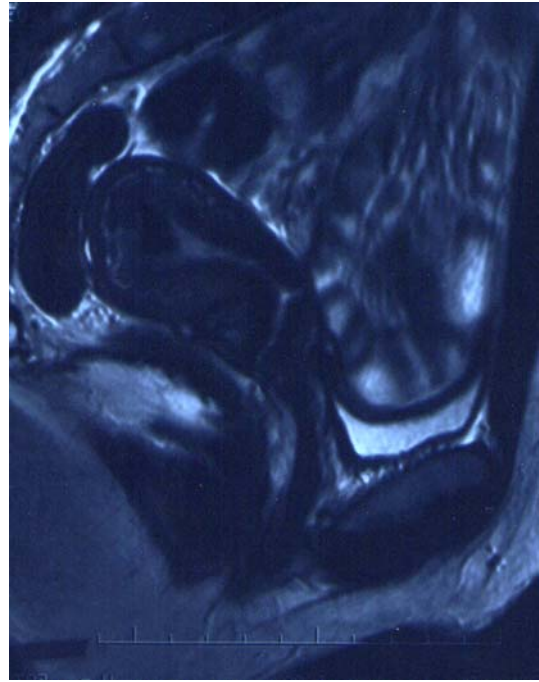


Fig. 2 Mass of low signal intensity adherent to the fundus of the uterus, consistent with retained products of conception

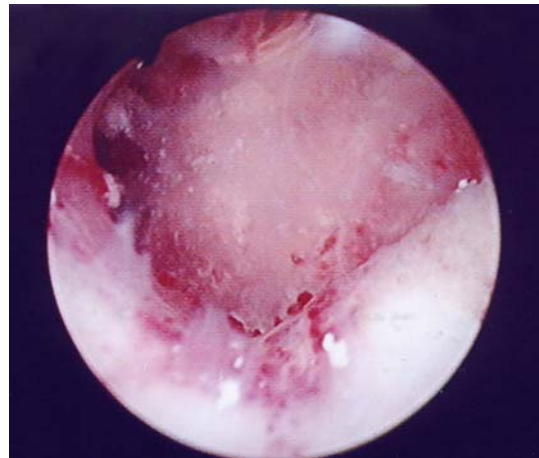


Fig. 3 Fluffy products of conception seen at the fundus of the uterine cavity

intravenous broad spectrum antibiotics should ideally be given prior to evacuation considering it takes an hour for antibiotic levels to peak in the circulation [3]. Hoveyda et al [4] found that 63% of cases of secondary postpartum haemorrhage required a surgical evacuation, and 37% had retained placental tissue confirmed after surgery. In our patient the histology confirmed trophoblast tissue.

She continued to bleed and required another evacuation procedure six weeks later followed by hysteroscopy. The image and texture during the operation suggested a submucous fibroid. However, the histology showed fragments of necrotic degenerative and calcified chorionic villi and deciduas. An MRI scan also sug-

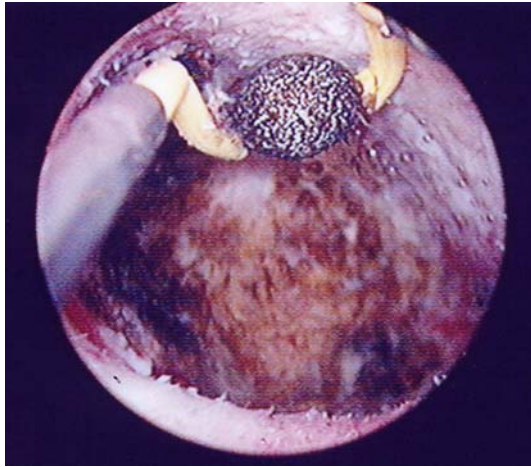


Fig. 4 Roller ball endometrial resection of the fluffy remnants round the fundus

gested retained products of conception. The possibility of a placenta accreta was also entertained, but this was ruled out by the histology and MRI.

An injection of Zoladex 3.6 mg subcutaneous was given to the patient, as it has been suggested that Zoladex induces endometrial thinning, reducing operating time and improving the intrauterine operating environment during endometrial ablation [5]. In our study it softened the texture of the retained trophoblastic tissue.

Four weeks later, a hysteroscopic endometrial resection of the retained products of conception was performed under laparoscopic control. We believe that this is the first time that endometrial resection has been done for retained products of conception. Quen et al [6] described a similar technique of transcervical endometrial resection for placenta increta. Our case suggests the effectiveness of this technique in dealing with postpartum degenerated calcified retained products of conception that are refractory to the standard management of ERPC.

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