



with their permanent characteristics in this case, the considerable point is that polyester sutures can cause probable significant inflammatory reactions [4], so, monofilament non-absorbable sutures may be preferable.

At the 9th-month follow-up, pelvic examination of the patient revealed normal anatomical position (Aa: -3, Ba: -3, Ap: -3, Bp: -3, gh: 2, pb: 3, C: -7, D: -9, tvl: 9) and no remarkable symptoms or no adverse events were observed.

This procedure, using a device convenient to the abdominal wall concavity, might be considered as an alternative, easy and effective option to treat sexually active women with uterine prolapse and a desire for uterine preservation.

Author contributions

Ali Riza Dogan; Surgeon, conception and design of the operation, last edition of the manuscript.

Omer Lutfi Tapisiz; Surgeon, conception and design of the operation, drafting of manuscript, last edition of the manuscript.

Derya Akdag Cirik; Drafting and writing of manuscript, last edition of the manuscript

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Conflicts of interest

The authors declare no conflict of interest.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.ejogrb.2019.05.032>.

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Uterine pseudoaneurysm: A rare cause of secondary post-partum hemorrhage and its management

Dear editors,

We have recently experienced a case of postpartum haemorrhage caused by pseudoaneurysm of the left uterine artery. By publishing this report, we hope to increase the awareness amongst clinicians on this possible though rare cause of postpartum haemorrhage.

Secondary postpartum haemorrhage is defined as excessive per vaginal bleeding that occurs between 24 h to 12 weeks postnatally [1,2]. The most common causes are endometritis, retained products of conception and subinvolution of placenta implantation site [3]. Other rare but recognised causes include arteriovenous malformation and pseudoaneurysms. One study by Dohan et al found that about 3% of postpartum haemorrhage was caused by pseudoaneurysms [4].

Our patient, a 30-year-old lady in her first pregnancy underwent an uneventful caesarean section for non-reassuring foetal status and was discharged well after delivery. She was reviewed in clinic ten days after delivery and had normal lochia. However, she returned 12 weeks after delivery with complaints of torrential vaginal bleeding. Clinical examination did not reveal any vaginal or cervical lesions and the uterus was normal sized. An ultrasound revealed an endometrial thickness of 10 mm and heterogeneous structure 3.5 × 2.6 × 3.0 cm closely related to the caesarean section scar with minimal vascularity at its periphery suggestive of an organised hematoma. She was treated with oral tranexamic acid, antibiotics and oral progestogens. Her bleeding reduced significantly and she was discharged.

Four months post-delivery, she again presented to the emergency department with heavy per vaginal bleeding complicated by symptoms of anaemia, hypotension and presyncope. She had taken oral tranexamic acid which did not abate the bleeding. A repeat ultrasound showed an endometrial thickness of 12 mm and the previously noted heterogeneous structure measured 2.9 × 2.6 × 2.2 cm with some cystic areas noted within.

In view of her recurrent bleeding episodes, the team was concerned about pseudoaneurysm or arteriovenous malformation and decided to perform a CT angiography, which confirmed the presence of a focal 0.6 × 0.5 × 0.4 cm contrast filled outpouching arising from the left uterine artery within the already known hematoma likely representing a pseudoaneurysm. There was also a short 0.8 cm fluid filled tract extending from the hematoma to the lower uterine wall and into the endometrial cavity which could account for the patient's symptoms for per vaginal bleeding (Fig. 1).

Our consultant interventional radiologist was consulted to discuss further management and counselled the patient on embolization of uterine artery to abolish the bleeding. She underwent left uterine artery embolization using micro coils and gelfoam and a completion angiogram confirmed satisfactory devascularisation of the pseudoaneurysm with preserved uterine parenchymal flow (Fig. 1). Since embolization, the patient's bleeding resolved and has resumed regular menses with normal flow.

Pseudoaneurysm of the uterine artery can result in unexpected and brisk vaginal bleeding leading to anemia and even death. Clinicians may overlook this diagnosis due to its rarity and non-specific presentation on regular ultrasound examination of the uterus without applying colour doppler.

From this case, we are reminded to consider pseudoaneurysm as a differential diagnosis in a patient who presents with secondary

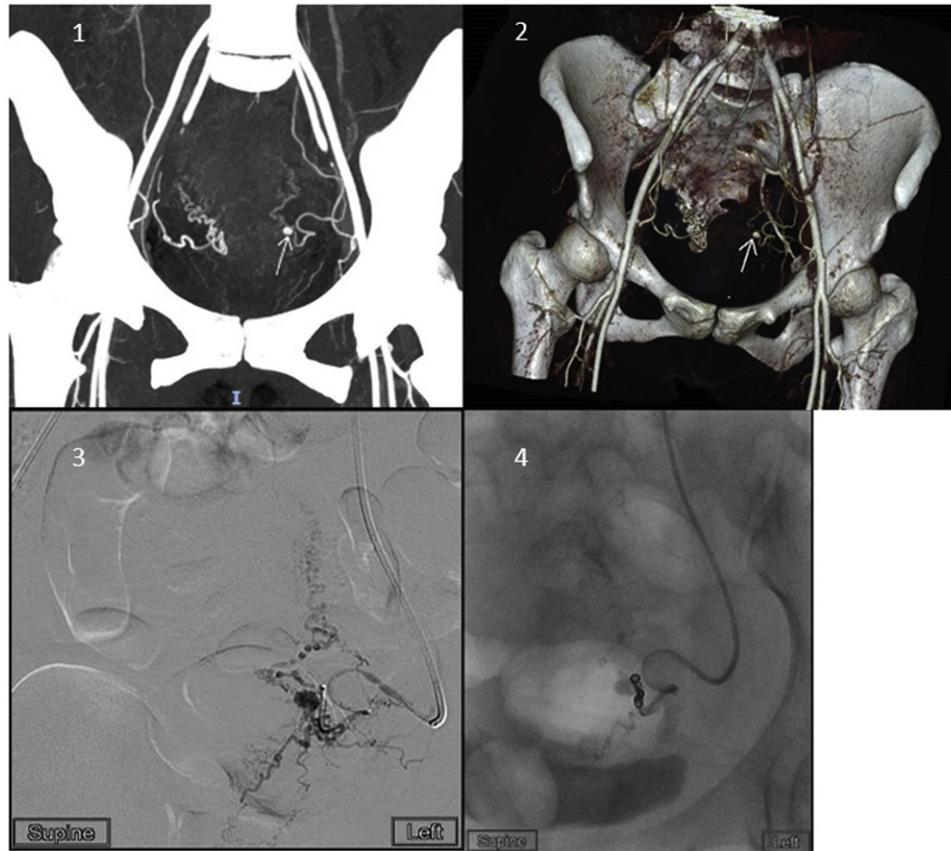


Fig. 1. CT Angiogram images of the patient pre and post-embolization.

Pictures 1–3 show the pseudoaneurysm arising from the left uterine artery prior to embolization whilst picture 4 shows the angiogram image after selective embolization using microcoils.

postpartum haemorrhage which does not respond to usual treatment, especially when bleeding is recurrent. A CT angiogram of the pelvic vessels is gold standard for diagnosing a pseudoaneurysm and allows mapping of the vasculature to plan for embolization. Whilst traditional treatment for uterine pseudoaneurysm include laparotomy bilateral internal iliac or uterine artery ligation and hysterectomy in refractory cases, successful treatment with minimally invasive treatments such as uterine artery embolization have proven to be effective with considerably lesser morbidity and preservation of fertility. Such intervention should be considered and discussed with the patient where the expertise is available.

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Sigmoido-uterine fistula: An uncommon communication!



Dear Editor,

Colouterine fistulas are extremely rare which may be attributed to the thick muscular structure of the uterus acting as a protective barrier. Though colonic diverticular disease is implicated as a common cause of such fistulae, neoplasia of the uterus/colon and iatrogenic trauma could be other etiological factors [1]. Most of these patients do have significant lower gastrointestinal symptoms, but also could be asymptomatic only to present with feculent discharge per vaginam (PV) that compromises patients' quality of life. Surgical management is the corner stone for these fistulae [2]. We describe a case of a 72-year-old woman, presented with fecal discharge PV. Abdominal examination was unremarkable. PV examination showed active feculent discharge through cervical os. Blood investigations and serum tumor markers (CA-125 and CEA) were normal. Pelvic MRI revealed thickened endometrium (16 mm) along with air foci within the uterine cavity. The sigmoid