Reminder of important clinical lesson

The transcervical expulsion of a large fibroid

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Summary

A 46-year-old woman presented to the emergency gynaecology unit at the Royal Free Hospital, London, with lower abdominal pain and offensive per vagina discharge. These symptoms developed following a recent uterine artery embolisation around 3 weeks earlier at the same hospital. After initial treatment with antibiotics, this patient re-presented with a fibroid which had prolapsed through the cervix, resulting in pain, distress and more profuse vaginal discharge. This necrotic fibroid was morcellated and removed in theatre. She made an uneventful recovery and was able to go home the following day.

BACKGROUND

The prolapse of a fibroid into the vagina is relatively rare following a uterine artery embolisation but it can cause tremendous distress for a patient, especially if they are not counselled about this before the procedure, as this patient appeared not to be. The transcervical passage of a fibroid may cause inversion of the uterus, and may, if it is not completely expelled, prompt the need for further surgery.

CASE PRESENTATION

A 46-year-old woman presented to the emergency gynaecology unit (EGU) at the Royal Free Hospital with a two week history of worsening lower abdominal pain and profuse, offensive smelling vaginal discharge. She described the pain as constant but with frequent exacerbations.

Three weeks before this presentation to the EGU, the patient underwent a uterine artery embolisation. This was a relatively uneventful procedure with no immediate complications. Access had been gained through the right common femoral artery, and both uterine arteries were selectively cannulated and embolised with less than three bottles of PVA.

In terms of her medical history, the woman was nulliparous and generally fit and well. In June 2010, following an abnormal smear result she had a cone biopsy of the cervix – which showed Grade III cervical intraepithelial neoplasia (CIN3). Follow-up smear results had been normal. Over the preceding months, she had developed worsening heavy menstrual bleeding and had become mildly anaemic. She had been seen in the gynaecology outpatients department where it was felt a Mirena coil might be helpful. However, on examination it was felt she had a bulky uterus, and therefore an MRI was requested. This study showed an intramural fibroid, measuring 8.9×9.7×8.4 cm, displacing the endometrial canal and impinging on the posterior aspect of her bladder. The patient was keen to avoid a hysterectomy and therefore opted for the embolisation procedure.

On examination in the EGU 3 weeks after her embolisation, the patient looked slightly flushed but was afebrile, her heart rate was 82 and her blood pressure was 126/79. On examination of the abdomen her uterus felt bulky, at around 14-weeks size, with mild lower abdominal tenderness. Speculum examination showed a normal looking cervix, and profuse yellowish, offensive smelling discharge. Swabs showed scanty epithelial and pus cells. An ultrasound showed an intramural subserous fibroid measuring 9.3×7.5×10.4 cm. Her blood results showed a raised white cell count 16.49 with a neutrophilia, and a haemoglobin of 10.3. Her C reactive protein was 64. She was discharged with a course of cefuroxime and metronidazole and asked to return for follow-up in outpatients.

One week afterwards, she re-presented to the EGU complaining of a mass coming down into her vagina, associated with difficulty passing urine, and worsening, more profuse vaginal discharge. On examination pale, necrotic looking tissue was visible protruding 2–3 cm outside of the introitus. There was thick purulent discharge.

An ultrasound showed that the uterine fibroid, now measuring 6.8 cm, had prolapsed in its entirety through the cervix. The uterus was normally orientated, with no evidence of inversion.

INVESTIGATIONS

See above.

TREATMENT

The patient was taken to theatre. Under general anaesthetic the prolapsed fibroid was morcellated and removed from the vagina. Examination under anaesthetic showed that there was no pedicle attached to the fibroid.

OUTCOME AND FOLLOW-UP

Histological analysis showed appearances in keeping with a leiomyoma, with areas of ischaemic infarction. The patient made an uneventful recovery and was able to go home the following day.

DISCUSSION

Uterine fibroids are extremely common. In one study the overall incidence was reported to be 29.7 per 1000 patient years.¹ Most studies show that the peak incidence occurs in women in their early to mid-40's, and black women are more at risk, by around a factor of three.² Despite being benign, symptoms such as heavy menstrual bleeding, associated anaemia and pressure symptoms including urinary frequency and urgency can sometimes necessitate surgical intervention.

Uterine artery embolisation (UAE) emerged as an alternative to the traditional surgical modes of management, myomectomy and hysterectomy, in the late 1990s. During the procedure, the arterial plexus supplying the fibroid is identified radiologically and embolised. The UAE versus hysterectomy for uterine fibroids trial, a multicentre trial which took place in the Netherlands, found that UAE patients had a reduced hospital stay (2.7 vs 5.1 days), but were readmitted more often (11.1% vs 0%). Both groups reported similar amounts of satisfaction following the procedure.³

Common adverse effects from UAE include the so-called 'postembolisation' syndrome, comprised of malaise, fever and pelvic pain. This can be managed with simple analgesia. Infection is another possible sequelae: Minor infection has been found to complicate 5.9% of UAE cases. Major infection requiring surgery occurs in 2.6% of cases.⁴

The transcervical passage of fibroids after uterine artery embolisation occurs in 2.2 to 7.7% of cases.⁴ The expulsion of fibroids has been reported as occurring over 3 years following the procedure and so patients should be warned that this type of prolapse may be a late complication.⁵

Learning points

- ▶ Trans-cervical expulsion of a fibroid can be very distressing for patients.
- ▶ They should always be warned about this complication before embolisation therapy.
- ▶ The need for further surgery should this trans-cervical expulsion of fibroids occurs should also be discussed.
- ▶ Morcellation of a prolapsed fibroid may be the most appropriate surgical management for a prolapsed fibroid, but investigations should seek to rule out any inversion of the uterus before surgery.

Competing interests None.

Patient consent Obtained.

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