Anomalous ovarian artery vascularisation of a large uterine fibroid: successful embolisation

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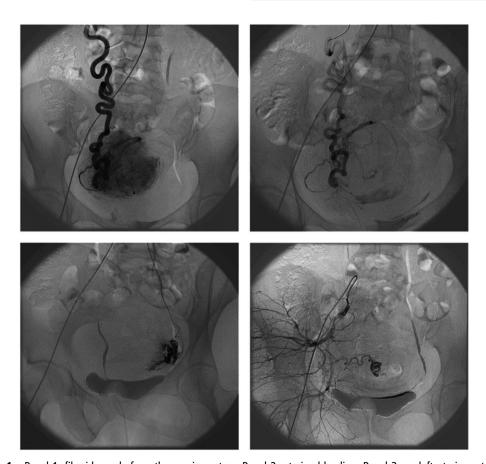
DESCRIPTION

Successful embolisation of an abnormal ovarian artery (OAE) feeding a fundal uterine fibroid is rarely reported.

A 50-year-old woman presented with vaginal bleeding and anaemia. Ultrasound and MRI showed a single large fundal subserosal fibroid. CA 19.9, CEA, CA 125 and LDH were normal. Aortic angiography showed an exclusive supply to a leiomyoma from a hypertrophic right ovarian artery. No feeding from the uterine artery was observed. A microcatheter was inserted to the mid-third of the ovarian artery. Tris-acryl gelatin microspheres, 700-900 µm (embosphere microsphere) were injected until near-stasis was achieved. A bilateral uterine angiogram confirmed no additional vascular supply to the leiomyoma (figure 1). The fibroid volume decreased by 30%, according to MRI over 3 months. Fibroids usually derive their blood supply from the uterine artery, but vascularisation from the ovarian artery is possible. Blood supply to uterine fibroids can also originate from an aortoiliac haemorrhoidal artery or from distal branches of the inferior mesenteric. Uterine artery embolisation (UAE) is a widely accepted treatment for uterine fibroids and ovarian function seems to be unaffected by the procedure.² Compared with UAE alone, the addition of OAE to UAE neither appear to precipitate the onset of menopause nor increase menopausal symptom severity.³ The predominant flow to the peri-fibroid plexus can possibly lead to a targeted embolisation, avoiding damage to the ovary using larger particles (700–900 embospheres).

Learning points

- ► Large fundal uterine fibroids can have an exclusive ovarian artery supply.
- ➤ An isolated ovarian artery embolisation (OAE) can be successful with no need to repeat procedures or necessity of an associated uterine artery embolisation.
- ▶ In our case, ovarian function was preserved after exclusive OAE.



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Figure 1 Panel 1: fibroid supply from the ovarian artery; Panel 2: uterine bleeding; Panel 3: no left uterine artery supply; Panel 4: no right uterine artery supply.

Images in...

Competing interests None.

Patient consent Obtained.

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