CASE REPORT

A young woman with abdominal distension

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SUMMARY

We present the case of a 34-year-old woman with haemorrhagic ascites and an extrinsic rectal mass on endoscopy. Endometrioma was subsequently confirmed by laparoscopy and biopsy. Intestinal endometriosis is common, and often mimics other gastrointestinal pathology. Haemorrhagic ascites or intestinal masses are rare presentations of endometriosis, and this is the only reported case of both occurring together. Endometriosis and ascites are more common in women of African descent, and although histological diagnosis requires laparoscopy, MRI has a high negative predictive value; 95% for intestinal endometriosis. Re-accumulation of ascites were prevented by starting a gonadotrophin antagonist.

BACKGROUND

This is a case of two rare presentations of endometriosis presenting simultaneously to a gastroenterology department. Endometriosis presenting with ascites and an intestinal mass has never been reported in the literature before. On reviewing the literature, misdiagnosis is common and we experienced difficulty convincing other specialties of our suspicions. For this reason we would like to increase awareness of this problem.

CASE PRESENTATION

A 34-year-old Nigerian woman presented to accident and emergency department with a 4-month history of abdominal distension and a 4 kg weight loss. She did not report any night sweats or fevers. There was medical or family history of note and she did not take any medications. She had no risk factors for liver disease, apart from the country of her birth. She had moved to the UK 6 months previously.

On examination there was no palpable lymphadenopathy and chest examination was unremarkable. There was gross ascites but no evidence of chronic liver disease. The liver and spleen were not palpable. Breast examination and speculum examination were unremarkable.

INVESTIGATIONS

Blood tests showed a haemoglobin of 9.6 g/dL (115–165), mean corpuscular volume 61.5 fL (80–98), C reactive protein 65 mg/L (<5) and erythrocyte sedimentation rate 33 mm/h (<15). White cell count (WCC), liver, renal and thyroid function were within normal ranges. An ascitic tap confirmed a haemorrhagic exudate (WCC 650/mm³, red blood cells 128 000/mm³, fluid albumin 28 g/L).

A CT of the abdomen confirmed marked ascites and suggested a rectal mass. The patient underwent a flexible sigmoidoscopy that showed a mass

Figure 1 Endoscopic appearance of the rectum with the extrinsic mass visible.

extrinsic to the rectal mucosa (figure 1). Biopsies of this mass showed only normal rectal mucosa. The patient underwent MRI to delineate the pelvic pathology, this is seen in figure 2, a T2-weighted MRI showing a low signal soft tissue encasing the mid rectum and distorting the surrounding mesorectal fat (white arrow). There were incidental cysts in both ovaries (yellow arrows). The laparoscopic picture (figure 3) showed endometrial deposits on the right ovary and left fallopian tube (yellow arrows) that were confirmed on biopsy.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of haemorrhagic ascites includes malignancy (particularly ovarian or colorectal), tuberculosis (TB) and endometriosis.

Figure 2 A T2-weighted MRI showing a low-signal soft tissue encasing the mid rectum and distorting the surrounding mesorectal fat (white arrow).

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Figure 3 Laparoscopic view of the pelvis showing endometrial deposits on the right ovary and left fallopian tube (yellow arrows).

OUTCOME AND FOLLOW-UP

After ascitic drainage, our patient started a gonadotropin-releasing hormone antagonist and her ascites has not reaccumulated 6 months later.

DISCUSSION

Intestinal endometriosis is not rare with intestinal involvement found in 3.8–37% of endometriosis cases. Endometrial infiltration can occur at any level of the intestinal mucosa, but since infiltration starts from the serosal mucosa, lesions are most commonly identified as extrinsic to the mucosa. Early symptoms are rarely catamenial and often include constipation, diarrhoea, bloating and pain.¹

Endometriosis presenting as an intestinal mass is rare, but the most common site is the rectosigmoid (50–90%). In a series of 44 patients with symptomatic intestinal endometriosis, half (23) had an abdominal mass, 8 of these cases presented with obstruction,² but perforation, or even malignant transformation are known.³

Haemorrhagic ascites is a very rare presentation of endometriosis with case reports and series only totalling 63 cases, interestingly 63% of these cases were of African ethnicity, as in our patient.⁴ Despite the outcome in this case, exclusion of malignancy or TB is the priority for investigation. This is the only

reported case of an endoscopically visualised mass and ascites occurring together.

African, nulliparous women of childbearing age appear to be at higher risk of endometriosis.⁵ This patient had presented with non-specific gastrointestinal symptoms and bloating without ascites 3 weeks previously and the underlying diagnosis could have easily been missed. The vigilance in this population is important, since the diagnosis can only be established after thorough investigation has excluded malignancy or TB, and often requires a laparoscopy, although MRI is often diagnostic with a sensitivity of 88% and specificity of 98% for intestinal endometriosis.¹

Learning points

- ▶ Intestinal endometriosis is not rare and can mimic many gastrointestinal conditions.
- ▶ Masses are discovered in half of the patients with intestinal endometriosis.
- ▶ MRI is a useful, non-invasive, diagnostic test for intestinal endometriosis.

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Competing interests None.

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REFERENCES

- 1 Ferrero S, Camerini G, Maggiore ULR, *et al.* Bowel endometriosis: recent insights and unsolved problems. *World J Gastrointest Surg* 2011;3:31–8.
- 2 Yantis RK, Clement P, Young R. Endometriosis of the intestinal tract: a study of 44 cases of a disease that may cause diverse challenges in clinical and pathologic evaluation. *Am J Surg Pathol* 2001;25:445–54.
- 3 Pisanu A, Deplano D, Angioni S, *et al.* Rectal perforation from endometriosis in pregnancy: case report and literature review. *World J Gastroenterol* 2010;16:648–51.
- 4 Gungor T, Kanat-Pektas M, Ozat M, *et al.* A systemic review: endometriosis presenting with ascites. *Arch Gynaecol Obstet* 2011;283:513–18.
- 5 Missmer SA, Hankinson SE, Siegelman D, *et al.* Incidence of laparoscopically confirmed endometriosis by demographic, anthropometric, and lifestyle factors. *Am J Epidemiol* 2004;16:784–96.

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