CASE REPORT

Epiploic appendagitis with acute appendicitis

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SUMMARY

A 28-year-old woman presented to accident and emergency department with a 1-day history of right-sided abdominal pain. She was afebrile, and haemodynamically stable, and the initial diagnosis was acute appendicitis. A transvaginal ultrasound scan was performed and was suggestive of appendicitis. The patient failed to improve with conservative management, and a laparoscopic appendicectomy was performed the next day to remove an inflamed, non-perforated appendix. Pelvic laparoscopy was performed, which noted normal ovaries and uterus, as well as a hard, swollen, discoloured epiploic appendage of the sigmoid colon. A decision was made not to remove the inflamed epiploic appendage. Postoperatively the patient complained of persisting pain, which settled over 2 days with analgesia and antibiotics. This case is an extremely unusual case of epiploic appendagitis and acute appendicitis. It demonstrates the importance of pelvic laparoscopy in all females with presumed appendicitis, even in the presence of an initial pathology.

BACKGROUND

Epiploic appendagitis (EA) is a relatively recently described and infrequently diagnosed condition.

With the increasing use and accuracy of preoperative CT scanning as well as a continuing trend towards laparoscopic surgery for appendicectomy, the frequency with which EA is diagnosed is likely to increase.

It is important for general surgeons and gynaecologists to be aware of EA as a differential

diagnosis for right iliac fossa pain, and that conservative management is appropriate.

A low threshold for preoperative CT scanning where EA is suspected may prevent unnecessary surgical intervention.

CASE PRESENTATION

A 28-year-old woman presented to the accident and emergency department at our District General Hospital with a 1-day history of right-sided abdominal pain and nausea.

The patient had a raised body mass index (BMI), and had previously been diagnosed with irritable bowel syndrome (IBS), but was otherwise fit and well.

On clinical examination she was afebrile and haemodynamically stable. An abdominal examination revealed right iliac fossa tenderness, and the initial differential diagnosis was acute appendicitis.

A transvaginal ultrasound scan was performed and reported as showing a thick-walled, oedematous appendix suggestive of appendicitis.

The patient was given analgesia and intravenous antibiotics prior to a laparoscopic appendicectomy. The initial laparoscopy finding was of an inflamed, non-perforated appendix (figure 1), which was removed.

Pelvic laparoscopy was then performed which noted normal ovaries and uterus, as well as a hard, swollen, discoloured epiploic appendage of the sigmoid colon (figures 2 and 3).

A decision was made not to remove the inflamed epiploic appendage.

Figure 1 Inflamed appendix following removal.

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Figure 2 Inflamed appendage epiploici on sigmoid colon.

Postoperatively the patient reported of persisting pain, which settled over 2 days with analgesia and antibiotics.

A CT scan performed prior to discharge showed no radiological evidence of colonic abnormality associated with the EA.

INVESTIGATIONS

Initial blood tests showed a normal full blood count with a marginally raised C reactive protein (43).

OUTCOME AND FOLLOW-UP

Postoperatively the patient reported ongoing pain and underwent an abdominal CT scan.

This was reported as showing no abnormality.

The pain settled with conservative management, and the patient was discharged 3-day postoperatively.

DISCUSSION

The term epiploic appendagitis was first introduced in 1956 by Lynn *et al*,¹ who described torsion of an epiploic appendage as a cause of sudden onset right iliac fossa pain.

The proposed pathological mechanism for EA is twisting or torsion of the appendix, with impairment of vascular supply and subsequent necrosis.²

Since this time there have been scattered reports in the literature of EA, with the largest case series (of 10 patients) reported in 2007.³

The first report of EA diagnosed on CT was in 1986,⁴ and preoperative imaging where the diagnosis is considered may avoid unnecessary laparoscopy.

The broad consensus in the literature is that EA is a benign, self-limiting condition⁵ which is best managed conservatively.

In this case it is unclear as to whether the appendicitis and appendagitis were related or coincidental pathologies; it

Figure 3 Necrotic appendage with rim of pus.

may be the case that primary appendagitis caused secondary appendicitis.

Learning points

- ▶ Epiploic appendagitis is a rare condition, with clinical features which may mimic appendicitis or diverticulitis.
- ▶ Diagnosis is often made on a preoperative CT, which can avoid unnecessary surgery.
- ▶ Conservative management is recommended.
- ▶ This is the first reported case of epiploic appendagitis with associated appendicitis.

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Competing interests None.

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