

Torsion Of An Eppiploic Appendix Mimicking Acute Appendicitis

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Citation

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Abstract

Disorders of the epiploic appendages are rare, usually affecting the middle age group(1,2). They are rarely diagnosed preoperatively being commonly confused with diverticulitis of the sigmoid colon and other causes of acute abdominal pain. Conservative treatment with antibiotics and pain relief is usually safe. We present a case of a young female with acute epiploic appendagitis being diagnosed preoperatively as appendicitis and we review the literature.

CASE REPORT

A 16 year old girl presented to our accident and emergency department with 2 days history of right iliac fossa pain which she described as a continuous ache some times radiating to the back. She felt generally unwell and her appetite was poor. There was no history of vomiting although she was nauseated. Her bowels were regular and she denied any symptoms of urinary tract infection. Her past history was not significant apart from the fact that she had irregular periods.

On examination, the patient was comfortable at rest with a temperature of 36.7C, a pulse of 94 beats/min. and a Bp of 113/75. System examination revealed no abnormal findings and examining her abdomen she was markedly tender in the right iliac fossa with rebound tenderness and some guarding. The rest of the abdomen was soft with normal bowel sounds. Per rectum examination was normal.

Laboratory investigations showed a normal Hb, a white blood cell count of 6.5 cells/mm, a normal differential count and normal urea and electrolytes. The urine tested positive for blood (patient was menstruating) but was negative for leukocyte, proteins and nitrates.

In view of the history and the signs on abdominal examination, the patient was diagnosed as having acute appendicitis and was taken to theatre for an appendicectomy. At operation there was some serosanguinous fluid in the right iliac fossa. The appendix looked normal but there was a gangrenous appendix epiploica on the surface of the caecum. The patient underwent an appendicectomy with excision of

the gangrenous necrotic fat on the caecum. Her postoperative course was uneventful and she went home 24 hours after the operation. The histology revealed a congested haemorrhagic and partly necrotic adipose tissue, consistent with the clinical diagnosis of strangulated appendix epiploica. The appendix showed no significant histological abnormality.

DISCUSSION

Epiploic appendages are pedunculated, fatty structures around 2 to 5 cm in diameter scattered all over the colon and covered with peritoneum. They are bigger in size and more prominent on the left side of the colon compared to the right side. Epiploic appendagitis affects the sigmoid colon more than the caecum and ascending colon (1).

Diseases of the Epiploic appendages are difficult to diagnose clinically due to the lack of pathognomonic clinical features but with the increasing use of CT scan for assessing cases of acute abdominal pain, their preoperative diagnosis is now more common. They affect the middle age group with a peak incidence at around the age of 40 years (1). Necrosis of the epiploic appendages is commonly due to an ischaemic event either secondary to torsion or spontaneous thrombosis (2) but can also be due to a non vascular event (3,4). The condition is often confused with diverticulitis of the sigmoid colon but can mimic acute appendicitis when it affects the caecum. Patients usually present with sudden onset of sharp localised pain either in the left or right iliac fossa with minimal gastrointestinal symptoms. The temperature and White Blood Cell count can be normal or slightly elevated.

Both ultrasound and CT scan can be used for reaching the diagnosis of epiploic appendagitis. The infarcted appendix has a characteristic sonographic appearance. It shows as a hyperechoic non compressible ovoid structure near the colonic wall (5). The use of colour Doppler demonstrates absence of blood flow in these lesions (5,6). In addition to confirming the diagnosis in doubtful cases, CT scan is also useful in the follow up of patients treated conservatively (7). Laparoscopy has been used in diagnosing and successfully excising the infarcted appendix (8).

CONCLUSION

In conclusion, acute epiploic appendagitis is a rare condition that can cause a diagnostic dilemma in cases of acute abdominal pain. Conservative treatment with analgesia and antibiotics is usually safe but in cases when the diagnosis is reached during operative exploration the treatment is ligation and excision of the necrotic tissue with seromuscular inversion (1).

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