

Epiploic Appendagitis: An uncommon surgical diagnosis

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SUMMARY

Epiploic appendagitis or appendices epiploicae, is a rare cause of abdominal pain in patients with mild signs of abdominal pathology. It mimics diverticulitis or appendicitis clinically as there are no pathognomonic features. It is a surgical diagnosis presenting with localised, sharp, acute abdominal pain, not associated with symptoms like nausea, vomiting, fever or suggestive laboratory values. With the availability of abdominal CT scans and ultrasound, it will frequently be a differential diagnosis preventing unnecessary surgery for patients. However, it may be erroneous and therefore clinical judgement is of paramount importance. This report highlights this rare presentation and identifies management guidelines.

KEY WORDS:

Epiploic appendagitis, Appendices epiploicae, Appendicitis, Diverticulitis

INTRODUCTION

Epiploic appendages contain fat and blood vessels and are visceral peritoneal out pouching of the colon. Appendagitis is a benign and self-limiting condition of epiploic appendages which is classified into two types, primary epiploic appendagitis which results from spontaneous thrombosis of the veins draining the appendages in absence of any torsion or ischemia and secondary epiploic appendagitis which develops due to inflammation of adjacent structures like appendicitis, diverticulitis or cholecystitis. Epiploic appendagitis usually presents with acute abdominal pain mimicking acute diverticulitis or appendicitis on clinical examination. Computed tomography (CT) scan has an important role in diagnosing appendagitis and thus avoiding unnecessary surgery.¹

CASE REPORT

A 38-year-old male, social drinker and non-smoker, presented with sudden onset left iliac fossa pain, associated with nausea, vomiting and mild abdominal distention for four days. He had no change in bowel habits. The pain was fixed and colicky in nature with no radiation of pain. He had no constitutional symptoms and was previously well. He had no previous surgery. Clinically he was afebrile with only rebound tenderness at left iliac fossa. Routine blood investigation was normal, white cell count (WCC) was 7.8×10^9 . Urine microscopy was normal. Initial working diagnosis was diverticulitis in view of the symptoms. He underwent a contrast enhanced CT abdomen which showed an oval lesion in contact with the colon wall surrounded by inflammatory

changes with a hyper attenuating rim which confirmed the diagnosis of Epiploic appendagitis. He was managed conservatively with NSAIDs and discharged home day three with an outpatient follow up for colonoscopy. On follow up two months later he was asymptomatic and was not keen for colonoscopy.

DISCUSSION

Appendices epiploicae was first described by Vesalius in 1543, and only in 1956 the term Epiploic appendagitis was introduced by Lynn et al. describing a diagnosis associated with rapid onset localised right or left lower abdominal pain.³ It is an ischemic inflammatory condition of the epiploic appendage without inflammation of the surrounding organs.³ An epiploic appendage has small supplying arteries and a draining vein from the colonic vasa recta. This narrow pedicle is susceptible to torsion due to the pedunculated shape resulting in pain from ischemia or spontaneous venous thrombosis of draining vein.³

In a case series published by Nagaich et al., it showed that this condition occurred more frequently in males than females and usually affects those in the 3rd to 5th decade of life. Patients usually presents with a localised, sharp, non-migratory pain with no other symptoms such as fever or vomiting. Presentation was at the lower abdominal quadrant, more commonly on the left. Routine laboratory investigations, as seen in our patient, was equivocal, however C-reactive protein (CRP), an inflammatory marker is mildly elevated.¹ A common differential diagnosis for acute abdominal pain is acute colonic diverticulitis, however patients are febrile with diffuse abdominal pain associated with rebound tenderness and a raised WCC, ESR and CRP.²

Prior to the onset of computed tomography (CT), a diagnosis of appendagitis was usually a postoperative diagnosis, however with the liberal use and widespread availability of imaging modalities such as CT abdomen and ultrasonography, this diagnosis is becoming more common preoperatively, thus negating unnecessary surgery. Sites most commonly affected are adjacent to the sigmoid colon, descending colon and right hemicolon.⁴ The classical appearance on CT in epiploic appendagitis is an oval lesion with central hyperattenuation of fat surrounded with inflammatory changes.⁴ Occasionally the colon wall may be thickened, intestinal obstruction and abscess formation are rare, and the latter may require more invasive methods of management. As compared to acute colonic diverticulitis, which on abdominal CT demonstrates inflamed diverticula or thickened bowel wall more than 4 mm³.

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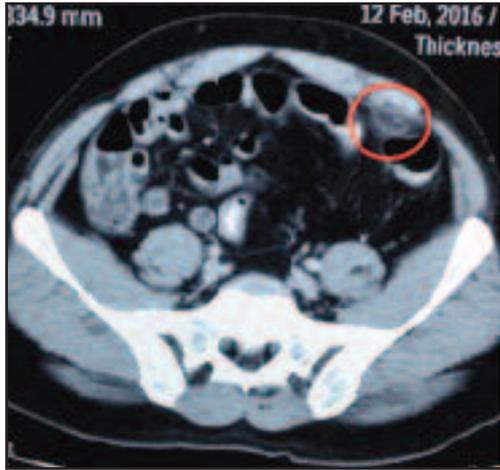


Fig. 1: CT image of abdomen showing epiplonic appendagitis.

Management for epiplonic appendagitis based on most surgical literature is conservative. It is a self-limiting condition which responds within 10 days with the use of non-steroidal anti-inflammatory medication. Antibiotic therapy is rarely required unless associated with complications such as abscess formation. However, as seen by Sand et al., there is tendency for recurrence in some patients treated conservatively and surgical intervention is necessary for cases of recurrence.¹ In the event surgery is required, laparoscopic approach is favoured with a simple ligation and excision of the appendage.³

In conclusion, epiplonic appendagitis is a surgical diagnosis presenting with localised, sharp, acute abdominal pain and not associated with symptoms like nausea, vomiting, fever or suggestive laboratory values. It is a rare differential diagnosis to sigmoid diverticulitis and appendicitis. With the availability of abdominal CT scans and ultrasound in most hospitals throughout the country, epiplonic appendagitis will be diagnosed more frequently in the future and must be remembered as a rare differential diagnosis which can prevent unnecessary surgery for patients. However, it is a radiological diagnosis which can be erroneous, hence, clinical judgement will always be of paramount importance.

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