



## **Case report about Epiploic Appendicitis.**

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### **Introduction**

Epiploic appendages are peritoneal structures that arise from the outer serosal surface of the bowel wall towards the peritoneal pouch. They are filled with adipose tissue and contain a vascular stalk. Epiploic appendagitis is an ischemic infarction of an epiploic appendage caused by torsion or spontaneous thrombosis of the epiploic appendage central draining vein.

The true incidence of epiploic appendagitis is not known. However, epiploic appendagitis has been reported in 2 to 7 percent of patients who were initially suspected of having acute diverticulitis and in 0.3 to 1 percent of patients suspected of having acute appendicitis. (2)

Epiploic appendagitis is a rare cause of acute lower abdominal pain. Its clinical features mimic acute diverticulitis or acute appendicitis resulting in being often misdiagnosed as diverticulitis or appendicitis. This frequently leads to unnecessary hospitalization, antibiotic administration, and unwarranted surgeries. Epiploic appendagitis is usually diagnosed with CT imaging, and the classic CT findings include: (i) fat-density ovoid lesion (hyperattenuating ring sign), (ii) mild bowel wall thickening, and (iii) a central high-

attenuation focus within the fatty lesion (central dot sign). Upon confirmation, epiploic appendagitis is considered a self-limiting disease and is managed conservatively with analgesics, occasionally combined with nonsteroidal anti-inflammatory drugs (NSAIDs). Persistence of symptoms or recurrence mandate the consideration of surgical management with laparoscopic appendage excision as the definitive treatment. (1)

In this case report, we discuss a 26-year-old woman who presented with a 2-day history of acute left lower abdominal pain.

### **Case Report**

A 26-year-old obese lady, with no medical background, came to ER with complaint of abdominal pain for 2 days.

She described the pain as dull aching abdominal pain localized to right lower quadrant. It does not radiate. It was associated with nausea. No chills or rigors, and no fever. No urinary symptoms or change in bowel habits was reported.

Examination revealed tenderness over Right Iliac Fossa (RIF) with guarding, and mild rebound tenderness.

All blood investigations came normal with no leukocytosis.

US abdomen was arranged which showed enlarged appendix measuring about 14 mm in diameter with no gross surrounding signs of inflammation “due to thickening of lamina propria rather than thickening of submucosa”.

We decided to do CT abdomen before proceeding to laparoscopic appendectomy.

CT abdomen (with IV and oral contrast) was done at the same day which showed: RIF fatty lesion measures 11x16 mm with minimal surrounding fat stranding, impressive of epiploic appendicitis. Appendix is of normal caliber 6 mm, filled with oral contrast, clear surrounding fat, no evidence of appendicitis.

Pain did not settle despite she was on analgesia and antibiotic.

We decided to take her for laparoscopic Excision of inflamed appendage +/- appendectomy.

Inflamed appendage was found dusky red (infarct), firm at the caecum, which was excised and removed. Appendix also was ligated, divided and removed. Some turbid fluid was found at the pelvis which was retrieved using suction-irrigation.

Patient was shifted back to the ward in good condition, and she was doing well the next day. She returned to her normal activity and was discharged home on the evening of day 1 post-operative day.



## Discussion

Epiploic appendages are fat-filled, serosa-covered pedunculated peritoneal structures extending into the peritoneal pouch from the outer bowel wall (3). The appendages contain branches of a circular end-artery and a central draining vein. Although they can occur anywhere in the colon, they are larger in size and more in number on the sigmoid and transverse colon walls (4). It is most commonly caused by torsion of the epiploic appendages leading to obstruction of its vascular supply followed by necrosis. However, it can also occur due to embolic or thrombotic causes (4, 5). Retrospective studies conducted in the Netherlands and Argentina with 49 and 73 cases, respectively, found that the most common presentation was left lower quadrant pain (69–89%), right lower quadrant pain (8–16%), and pain at other locations including right and left upper quadrant (1.5–3%) (6,7). It is often diagnosed by abdominal CT imaging. The key features on CT imaging include fat-density ovoid lesion also known as hyperattenuating ring sign, mild bowel wall thickening, and a central high-attenuation focus within the fatty lesion which in recent studies has been described as the central dot sign (8). Epiploic appendagitis is usually self-limiting and can be treated, and 92% of the cases were successfully treated as an outpatient with anti-inflammatory drugs (2).

Awareness of this entity amongst clinicians and identification of typical CT findings by radiologists upon initial presentation would help reduce unnecessary antibiotic use, diagnostic testing, unwanted surgical consults, and in some instances unwarranted surgery.

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