

## Case Report

### Epiploic Appendagitis Mimicking Acute Appendicitis - A Case Report and Review of Literature

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#### Abstract

**Introduction:** Epiploic appendagitis is caused by inflammation of epiploic appendages, which are the fatty outpouchings on the anti-mesenteric surface of colon. Epiploic appendagitis can be mis-diagnosed as acute appendicitis or acute diverticulitis, which can lead to unnecessary hospital admission, antibiotic treatment and even surgery. Herein I present a case of acute epiploic appendagitis, which clinically resembled acute appendicitis.

**Case Report:** A 56 year old male presented with complaints of pain in right lower abdomen. Exam revealed tenderness and rebound tenderness in right lower abdomen. His CT scan showed normal appendix but lucency and fat stranding on the lateral aspect of cecum suggestive of epiploic appendagitis. He was successfully managed with non-steroidal anti-inflammatory medications without surgery.

**Conclusion:** Epiploic appendagitis can easily be confused with appendicitis and diverticulitis, which could lead to inappropriate management. Physicians should be wary of this diagnosis because if diagnosed accurately, most of the patients with epiploic appendagitis can be successfully managed with non-surgical management without hospitalization.

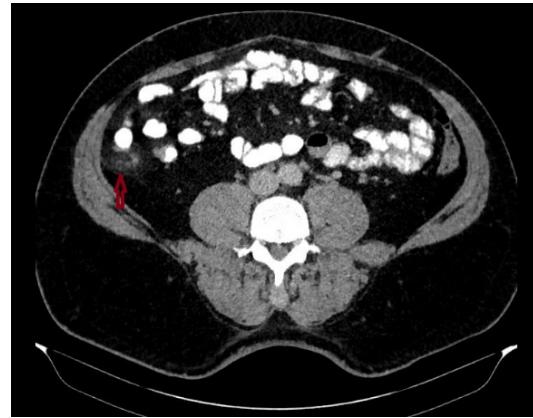
#### Introduction

Epiploic appendages are serosa covered fatty outpouchings on the anti-mesenteric surface of colon. Inflammation of epiploic appendages causes epiploic appendagitis, which is a benign and self-limiting condition [1,2]. Inaccurate diagnosis can lead to unnecessary hospital admissions, antibiotic therapy and surgery. Herein I present a case of epiploic appendagitis, which was successfully managed without surgery.

#### Case Report

A 56 year old male presented to the emergency room with complaint of right lower abdominal pain for one day. The pain was severe and sharp and was non-radiating. He did not have any aggravating or relieving factors. He did have some nausea but no vomiting and was passing flatus. He did not have any significant medical or surgical history. On exam, he was afebrile and hemodynamically stable. He had tenderness in right lower abdomen as well as localized rebound tenderness. The rest of his abdomen was non-tender. His WBC was  $7000/\mu\text{L}$  with no left shift and all other labs were essentially unremarkable. His CT scan revealed 1.5 cm pericecal lucency with surrounding stranding in the epiploic fat suggestive of epiploic appendagitis (Figure 1). Diagnosis of acute epiploic appendagitis was made and the patient was managed with

anti-inflammatory medications as an outpatient. He responded very well and by day three he had complete resolution of his symptoms. He was seen in the office after 2 weeks for follow up and that time he had no abdominal pain or tenderness.



**Figure 1:** CT scan showing pericecal lucency with surrounding stranding in the epiploic fat suggestive of epiploic appendagitis.

#### Discussion

Epiploic appendages are fatty outpouching on the anti-

mesenteric surface of colon [1,2]. The epiploic appendages can be present all over the colon, however they are most abundant in the transverse colon and sigmoid colon [3]. Epiploic appendicitis is caused by either the torsion of appendage or spontaneous thrombosis of central vein draining the appendage. The torsion of appendage or spontaneous thrombosis of central vein causes ischemia, which then leads to infarction and aseptic necrosis of appendigeal fat [4-7]. Epiploic appendicitis is seen in around 2-7 percent of the patients who are presumed to have diverticulitis and in 0.2-1 percent patients who have symptoms suggestive of appendicitis [8]. Its incidence is four times more common in males as compared to females [8]. Obesity, rapid loss of weight and strenuous exercise have been considered the risk factors without clear reasons [1,9]. Epiploic appendicitis affects recto-sigmoid area in around 57% times and ileocecal area around 26% times and that's why it can be confused with diverticulitis and appendicitis respectively [8,10,11].

Patients usually present with acute or sub-acute onset of abdominal pain, which is usually constant, dull, localized and non-radiating. Patients could also have nausea or vomiting [12]. Patients are usually afebrile and have localized tenderness. Localized rebound tenderness is rarely present. Laboratory values are usually normal however rarely WBC, ESR and CRP can be mildly elevated [11,13]. The best diagnostic test is the CT scan, which usually reports epiploic appendicitis as an oval-shaped, paracolic mass with enhanced peritoneal lining and periappendigeal fat stranding [11,14]. Ultrasound is not as good however could be useful if CT scan is not available especially in thin patients [11]. The patients with epiploic appendicitis are usually managed with non-operative management. Patients do well with non-steroidal anti-inflammatory, such as ibuprofen. Anti-inflammatory medications are mainly for pain relief as their role in the disease process is questionable. A few patients might need opiates as well for pain control. Antibiotic is not recommended for uncomplicated epiploic appendicitis. Complete resolution of symptoms is usually seen in 3-14 days [11,15-17]. Surgery is recommended only if symptoms are not getting better or with new symptoms such as worsening pain, vomiting or fever suggesting complications. Surgery involves ligation and resection of the inflamed appendage [15-17]. Sometimes the aseptic necrosis can become an abscess, which would require drainage and antibiotics. Rarely, the inflamed epiploic appendage can adhere to the other viscera or abdominal wall, which can cause obstruction or intussusception [18]. These complications would also be indications of surgical management [18].

In the present case report, patient had clinical findings, which were quite convincing for acute appendicitis. It was only after the careful review of CT scan along-with the awareness of possibility of epiploic appendicitis that the diagnosis of epiploic appendicitis was made. Patient was subsequently managed with non-operative

management without any hospitalization and antibiotics.

## Conclusion

The epiploic appendicitis is seen in around 2-7% patients presenting with symptoms suggesting diverticulitis and 0.2-1% patients who present with symptoms of appendicitis. We as physicians should be wary of this diagnosis in patients presenting with abdominal pain because inaccurate diagnosis could lead to unnecessary hospitalization, antibiotic treatment and even surgery. If diagnosed accurately, most of the patients with epiploic appendicitis could be successfully managed with non-surgical management without hospitalization.

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