

Epiploic Appendagitis: A Rare Cause of Acute Abdominal Pain with Conservative Management

Vartan Ara*

Department of Gastroenterology, University of Balamand, Balamand, Lebanon

Corresponding author: Vartan Ara, Department of Gastroenterology, University of Balamand, Balamand, Lebanon, Email: ara@gmail.com

Received date: October 21, 2024, Manuscript No. IPMCRS-24-20058; **Editor assigned date:** October 23, 2024, PreQC No. IPMCRS-24-20058 (PQ);

Reviewed date: November 06, 2024, QC No. IPMCRS-24-20058; **Revised date:** November 13, 2024, Manuscript No. IPMCRS-24-20058 (R);

Published date: November 20, 2024, DOI: 10.36648/2471-8041.10.6.403

Citation: Ara V (2024) Epiploic Appendagitis: A Rare Cause of Acute Abdominal Pain with Conservative Management. Med Case Rep Vol.10 No.6: 403.

Description

Epiploic appendagitis is a rare source of acute abdominal pain, occurring in approximately 8.8 cases per million individuals annually. It is most frequently observed in middle-aged males aged 40 to 50, although it can also be found in older adults and children. This condition arises from the ischemic necrosis or twisting of the epiploic appendage, which results in inflammation and discomfort. The underlying causes typically involve venous thrombosis or torsion that leads to reduced blood flow, swelling, ischemic necrosis and an inflammatory response. Factors such as obesity, existing hernias and intense physical activity are considered key risk factors for this condition.

Traditionally, epiploic appendagitis was incorrectly diagnosed as a more severe abdominal issue, like acute appendicitis, often resulting in surgical intervention. However, with the introduction of advanced imaging methods, particularly contrast-enhanced Computed Tomography (CT), the diagnosis of epiploic appendagitis has become more precise. Consequently, conservative management has emerged as the main treatment strategy, with surgery reserved for uncommon complications.

Diagnostic considerations and clinical findings

We present the case of a 50-year-old male with a Body Mass Index (BMI) of 27 who visited the emergency department with a 3-day history of intensifying pain in the left lower abdomen. This pain was accompanied by bloating and watery diarrhea but was not linked with nausea, vomiting or fever. Physical examination revealed localized tenderness in the left lower quadrant, mild rebound tenderness and hyperactive bowel sounds. Notably, the patient had a history of Hodgkin's lymphoma, treated with chemotherapy 11 years ago and had undergone an appendectomy in the past.

Initial laboratory tests showed a normal White Blood Cell (WBC) count of 7,880/ μ L, normal Alanine Transaminase (ALT) and Gamma-Glutamyl Transferase (GGT) levels. A slight increase in C-Reactive Protein (CRP) to 12.5 mg/L was observed, indicating a non-specific inflammation marker. The differential diagnosis at this stage included acute diverticulitis, colitis and epiploic appendagitis.

The diagnostic imaging performed was an abdominal and pelvic CT scan with contrast, which showed fat stranding adjacent to the mid-descending colon and a hyperattenuating rim sign, suggestive of epiploic appendagitis. The scan also indicated fluid-filled ileal loops with mild mesenteric congestion, which may suggest either resolved or early enteritis. A few diverticula in the sigmoid colon and left colic angle were identified, but there was no evidence of acute diverticulitis. The radiologist's final assessment confirmed epiploic appendagitis at the mid-descending colon. No enlarged lymph nodes were detected, which helped exclude lymphadenopathy as a possible source of the abdominal pain.

Despite the unclear findings, the diagnosis of epiploic appendagitis was established and the patient was admitted for monitoring. Conservative treatment was started, comprising intravenous hydration with 0.9% saline and pain relief, including intravenous dexamethasone and paracetamol. The patient was also given intravenous antibiotics (ceftriaxone and metronidazole) due to possible accompanying enteritis. A surgical consultation was requested, which advised conservative management without the necessity for surgical action. After one night of monitoring, the patient demonstrated significant symptom improvement and was discharged the next day with oral medications, including aceclofenac, mebeverine hydrochloride, esomeprazole, ciprofloxacin and metronidazole.

CT imaging as key to diagnosing epiploic appendagitis

The case illustrates several important aspects of epiploic appendagitis. First, its clinical presentation can be unclear and overlaps with other conditions that result in acute abdominal pain, such as diverticulitis, appendicitis and cholecystitis. The main symptom, abdominal tenderness, is found in nearly all patients, with left lower quadrant pain being the most frequently reported. Less commonly, patients might experience fever, vomiting or diarrhea. Laboratory tests are usually normal or reveal non-specific increases in markers like CRP. In this instance, the slightly elevated CRP and lack of other substantial findings indicated epiploic appendagitis, although a definitive diagnosis was only achievable with CT imaging.

The defining CT finding of epiploic appendagitis is an ovoid mass with surrounding fat stranding and a hyperdense border, often encircled by thickened peritoneum. The presence of a "central dot sign" is strongly indicative of thrombosis in the draining vein of the appendage. On non-contrast CT scans, this mass is generally hyperattenuating and its location in front of the colon helps to distinguish it from other abdominal disorders. In cases where CT is not possible, alternative imaging methods such as ultrasound or MRI can assist in the diagnosis. In ultrasound, a non-compressible, hyperechoic mass with no blood flow seen on Doppler imaging may be noticed.

The treatment of epiploic appendagitis is mainly conservative and surgery is typically unnecessary unless complications develop. Management mostly includes pain relief with Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and sometimes antibiotics for secondary infections like enteritis. Although antibiotic treatment does not decrease recurrence rates, it might be given if there is a concern for an existing infection. In many

many cases, symptoms resolve within 1-2 weeks without needing surgical intervention. However, patients should be carefully observed for possible complications, such as abscess formation or bowel obstruction, which may require surgical treatment.

Conclusion

In summary, epiploic appendagitis is a rare but significant differential diagnosis for acute abdominal pain. Improvements in diagnostic imaging, especially CT scans, have enabled quicker and more precise identification of the condition, shifting management towards conservative care. Despite its generally benign nature, complications can still occur and clinicians should stay alert in monitoring patients for worsening symptoms. More research is required to investigate potential links with conditions like Hodgkin's lymphoma and to enhance understanding of risk factors for complications.