

Shedding Light on Acute Epiploic Appendagitis: Diagnostic Challenges and Conservative Management Strategies

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Abstract: *Epiploic appendagitis is an uncommon cause of abdominal pain. It often imitates other inflammatory diseases like diverticulitis or appendicitis. The diagnosis is based on CT scan. By delving into the nuances of conservative treatment approaches, we offer fresh insights and perspectives that challenge traditional paradigms.*

Keyword: Appendagitis, epiploic, primary

Introduction

Among the various abdominal pathologies, acute epiploic appendagitis emerges as a fascinating yet often misunderstood entity. Its elusive nature, coupled with its propensity to masquerade as more sinister conditions, makes it a subject of both intrigue and clinical challenge. In this article we aim to shed light on this often overlooked condition, emphasizing the efficacy and importance of medical therapy in its management. By delving into the nuances of conservative treatment approaches, we offer fresh insights and perspectives that challenge traditional paradigms.

Observation:

A 29-year-old man, with no significant medical history, presents to the emergency department with acute abdominal pain localized around the umbilicus. The pain started suddenly approximately 24 hours ago and has progressively worsened. The patient describes the pain as piercing and constant, exacerbated by movement and palpation.

On physical examination, the patient is febrile. Abdominal palpation reveals marked tenderness in the peri-umbilical region without signs of guarding or peritonitis. Biochemically, there is leukocytosis with a white blood cell count of 12,500/mm³.

An abdominal computed tomography (CT) scan is performed, revealing a focal area of fatty density with peripheral enhancement, consistent with epiploic appendagitis (**figure**). The patient is then started on medical treatment, resulting in significant improvement of symptoms. A 12-month follow-up was conducted without recurrence.

Discussion

Epiploic appendagitis is considered a rare condition, typically accounting for less than 1% of all causes of acute abdominal pain. It primarily affects men aged 20 to 50 years, often those who are overweight, although cases can occur at any age. There is no precise data on a specific geographical distribution of epiploic appendagitis. It appears to be observed relatively uniformly worldwide, although the availability of healthcare services and access to medical imaging may influence the frequency of diagnosis in different regions [1,2].

Epiploic appendages can be found along the colon, with the rectosigmoid junction (57%), ileocecal region (26%), ascending colon (9%), transverse colon (6%), and descending colon (2%) being the most common locations. In our series, the localization was at the level of the ascending colon [3].

The diagnosis of epiploic appendagitis is rarely considered in the setting of acute abdomen, underscoring the importance of imaging in confirming the diagnosis. Abdominal CT allows for accurate visualization of the epiploic appendages and detection of characteristic signs of epiploic appendagitis, including a peripheral oval lesion with characteristic contrast enhancement around the inflammatory area. This lesion is often described as a "cluster of grapes" due to its distinct appearance on imaging [4].

Other imaging modalities, such as abdominal ultrasound and plain radiography, may also be used to evaluate patients with suspected epiploic appendagitis. However, the sensitivity and specificity of these modalities may be limited compared to CT [2,5].

In our case, CT imaging was used to confirm the diagnosis of epiploic appendagitis, highlighting the typical radiological features of the disease. This approach allows for precise evaluation of the extent of inflammation, thus facilitating appropriate management and follow-up of the patient.

The management of epiploic appendagitis primarily revolves around conservative measures, aimed at alleviating symptoms and promoting resolution of inflammation. In the majority of cases, symptomatic treatment with nonsteroidal anti-inflammatory drugs (NSAIDs) is considered sufficient to relieve pain and discomfort associated with epiploic appendagitis. NSAIDs such as ibuprofen or diclofenac are commonly prescribed to reduce inflammation and alleviate symptoms[6].

Antibiotics are generally not necessary in uncomplicated cases of epiploic appendagitis, as the condition is typically sterile in nature and not associated with bacterial infection. However, in cases where there is concern for secondary infection or abscess formation, antibiotic therapy may be considered[7].

In addition to pharmacological management, supportive measures such as rest and hydration may also be beneficial in promoting recovery and alleviating symptoms. Patients are often advised to avoid activities that exacerbate abdominal pain and discomfort, allowing the inflammatory process to resolve spontaneously over time[1].

Surgical intervention is rarely required in cases of epiploic appendagitis, as the condition tends to be self-limiting and typically resolves with conservative treatment. However, in rare instances where conservative measures fail to provide relief or complications such as bowel obstruction occur, surgical excision of the inflamed appendage may be considered[8].

Overall, the prognosis for epiploic appendagitis is favorable, with the majority of patients experiencing symptom resolution within a few days to weeks with conservative management alone. Regular follow-up may be recommended to monitor for resolution of symptoms and ensure there are no complications requiring further intervention[9].

Our case presented underscores the importance of considering epiploic appendagitis in the differential diagnosis of acute abdominal pain and emphasizes the efficacy and safety of conservative management approaches, supported by recent evidence. By raising awareness of this often overlooked condition and advocating for a shift towards non-operative management strategies, clinicians can optimize patient outcomes and reduce unnecessary healthcare expenditures. Further research is warranted to elucidate the optimal management algorithms and prognostic factors associated with epiploic appendagitis, ultimately improving clinical decision-making and patient care.

Conclusion

Acute epiploic appendagitis presents as a challenging yet often overlooked cause of abdominal pain. The diagnostic relies on imaging. Through our case study and discussion, we've highlighted the importance of considering this condition in differential diagnoses and emphasized the efficacy of conservative medical management. By raising awareness and promoting non-operative approaches, we can improve patient outcomes and reduce unnecessary healthcare costs.

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figure:

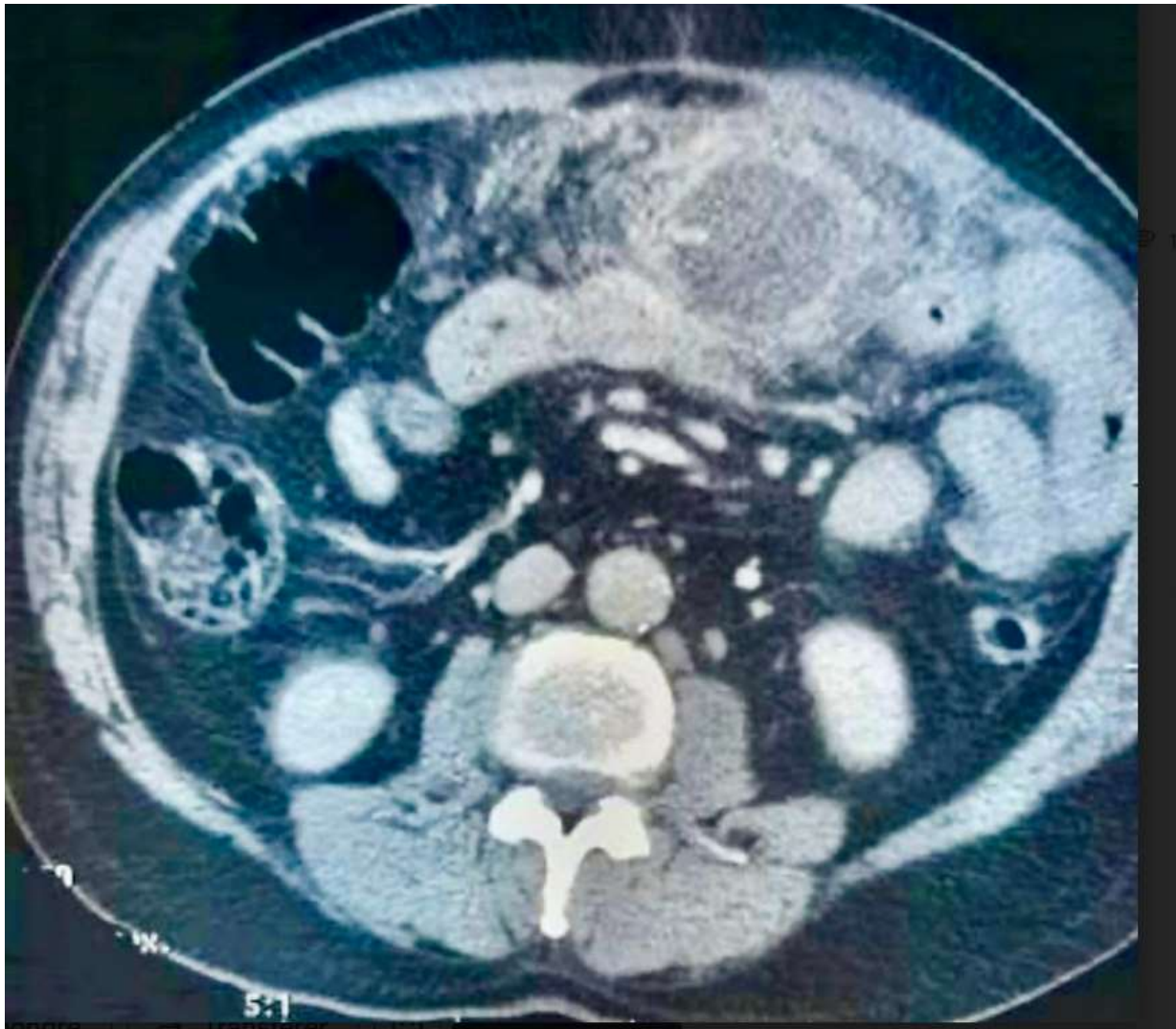


Fig-1: tomography revealed Epiploic appendagitis of the transverse colon