A case report of epiploic appendagitis as a mimic of acute cholecystitis

Emily Chan*, Alaa El-Banna

NHS Western Isles, Western Isles Hospital, Macaulay Road, Stornoway, HS12AF, United Kingdom

ABSTRACT

INTRODUCTION: Epiploic appendagitis is a rare cause of acute abdominal pain. It’s presentation often mimics other causes of acute abdominal pain. It is important for clinicians to be aware of an epiploic appendagitis since a delay in diagnosis can lead to unnecessary hospital stay, antibiotic usage and surgical intervention [1–4].

We present a case of epiploic appendagitis mimicking acute cholecystitis in a rural community hospital.

CASE REPORT: A 54 Caucasian male self-presents to the emergency department on a Saturday with severe right upper quadrant pain. He was initially diagnosed as acute cholecystitis and managed with antibiotics. Due to limitations with out-of-hours radiology, an ultrasound (US) scan was performed two days after admission. This US showed no evidence of cholecystitis or gallstones. A computed tomography (CT) scan was subsequently performed which revealed a diagnosis of epiploic appendagitis. The patient was discharged with analgesia and anti-inflammatory medications.

DISCUSSION: Epiploic appendagitis can mimic common pathologies causing acute abdominal pain. Unlike its mimics, epiploic appendagitis is a self-limiting condition and its initial management remains conservative. It is diagnosed with imaging studies such as CT scans. It is important for clinicians to be aware of epiploic appendagitis as a cause for abdominal pain since a delay in diagnosis can lead to unnecessary hospital stay, antibiotic usage and surgical intervention [1–4].

CONCLUSION: A diagnosis of epiploic appendagitis should remain on the list of differential diagnosis for acute abdominal pain. A prompt diagnosis of epiploic appendagitis avoids unnecessary surgical intervention and antibiotic usage.

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1. Introduction

Epiploic appendagitis, also known as appendicitis epiploica, hemorrhagic epiploitis, epiplopericolicitis or appendagitis, is a rare cause of acute abdominal pain [5,6]. Epiploic appendagitis is the ischemic infarction of the epiploic appendages caused by torsion or spontaneous thrombus of the central draining vein. Its presentation often mimics other causes of acute abdominal pain such as appendicitis and diverticulitis [7]. Unlike its mimics, epiploic appendagitis is a self-limiting condition and initial management remains conservative. It is important for clinicians to be aware of epiploic appendagitis as a cause for abdominal pain since a delay in diagnosis can lead to prolonged hospital stay, antibiotic usage and surgical intervention [1–4].

We present a case of epiploic appendagitis mimicking acute cholecystitis in a rural community hospital.

This case report has been reported in line with the SCARE criteria [8].

2. Presenting case

A 54 Caucasian male of normal body habitus self-presents to the emergency department of a rural community hospital with severe right upper quadrant pain (RUQ). Two days prior, he described a mild dull ache in his abdomen. On the day of admission, he developed a sudden onset severe sharp RUQ pain which was sore on inspiration, coughing and walking. No nausea, vomiting, fever or change in bowel habits.

Nil past medical or surgical history.

On examination, he had a soft abdomen with exquisite tenderness localized to the RUQ.

A chest X-ray showed lung field markings throughout with no consolidation, effusion, collapse or air under the diaphragm. Abdominal X-ray showed extensive fecal loading on the right colon with small segment of small bowel dilated loops. Laboratory findings included a white cell count of 8.0 × 10⁹/L, C-reactive protein 30 mg/L, with normal liver function tests and amylase.

With a presentation of acute RUQ pain and mildly raised inflammatory markers, he was initially diagnosed as acute cholecystitis...
and was managed with analgesia and antibiotics (intravenous amoxicillin, metronidazole and gentamicin) as per hospital guidelines. Throughout his admission, his vital signs remained normal and his pain improved with simple analgesia such as paracetamol.

An abdominal ultrasound (US) was performed two days after admission due to the limitations of out-of-hours radiology over the weekend. This ultrasound report showed a contracted gallbladder, no gallstones and no evidence of cholecystitis. In view of his initial examination of a localized and exquisite abdominal tenderness, a computed tomography (CT) scan was arranged to exclude other differentials such as high retrocecal appendix, diverticulitis or perforated viscus. The CT scan showed a gallbladder of unremarkable appearance with no intra or extrahepatic biliary dilatation. There is a fat density structure, approximately 61 × 25 × 25 mm, abutting the fundus of the gallbladder and the adjacent liver. This structure is inseparable from the hepatic flexure appearances is in keeping with acute epiploic appendagitis arising from hepatic flexure, abutting the non-inflamed gallbladder (see Fig. 1). A diagnosis of epiploic appendagitis was made on CT scan.

His antibiotic therapy was stopped, and he was discharged with advice and simple analgesia (paracetamol). No further follow-up organized.

3. Discussion

Epiploic appendagitis, first described in 1956 by Dockerty et al. [8], is the ischemic infarction of epiploic appendage secondary to torsion or spontaneous thrombosis of the central draining vein [9]. It is an uncommon cause for abdominal pain. Its frequency is estimated to be 1.3% with an incidence of 8.8 cases/million/year [10]. A diagnosis of epiploic appendagitis is usually an incidental finding and is found when investigating for other causes of acute abdominal pain [7,9]. Epiploic appendagitis is rare and should not be considered as a top differential diagnosis for abdominal pain; however knowledge of epiploic appendagitis is important amongst a multitude of specialties as it can mimic common causes of acute abdominal pain [9]. A prompt diagnosis of epiploic appendagi-
for CT scanning prevented the need for unnecessary surgery and treatment in our patient.

Although many cases of epiploic appendagitis exist, not many initially present with RUQ pain mimicking acute cholecystitis. There should be an awareness of the existence of epiploic appendagitis presenting as RUQ. A diagnosis of epiploic appendagitis should be included within a list of differential diagnosis for RUQ abdominal pain after common causes have been excluded.

4. Conclusion

Unlike its mimics, epiploic appendagitis is a self-limiting condition and its initial management remains conservative. It is important for clinicians to be aware of an epiploic appendagitis as a cause for abdominal pain since a delay in diagnosis can lead to unnecessary hospital stay, antibiotic usage and surgical intervention [1,2].

Conflicts of interest

Nil.

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Ethical approval

N/A.

Consent

Written consent obtained from the patient.

Author contributions

Emily Chan Conceptualization, Validation, Investigation, Writing–original draft, Visualization. Alaa El-Banna Writing-review & editing, Supervision.

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N/A.

Guarantor

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