



APPENDAGITIS EPILOICA PRESENTING AS A LUMP ABDOMEN: A CASE REPORT

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ABSTRACT

Epiploic appendagitis is a relatively uncommon, non-surgical entity that clinically mimics other conditions requiring surgery and most commonly manifests with acute lower quadrant abdominal pain. Its clinical features are similar to those of acute diverticulitis on left side or less commonly, acute appendicitis on right side or omental infarct. Here we report the case of an apparently healthy 53-year-old woman, who presented to the casualty department of general surgery Assam Medical College and Hospital with right lower quadrant abdominal pain, which had started 96 hours before admission. The patient described the pain to be constant, dull aching; non-radiating, non-migrating pain. There was no history of nausea, vomiting, constipation, diarrhoea, or fever. Abdominal examination revealed localised abdominal tenderness with a palpable right iliac fossa mass. The diagnosis of epiploica appendagitis (EA) was made based on the findings of an abdominal contrast computed tomography (CT).

KEYWORDS :

INTRODUCTION

Appendices epiploicae are small outpouchings of subserosal fat that project into the peritoneal cavity and are lined in two rows parallel to the tenia coli of the colon. They are supplied by two arteries and drained by a single vein¹.

There are approximately about 100 of them and are found most commonly on the sigmoid colon than the cecum, more prevalent and larger in obese patients². Torsion of epiploic appendages, with resultant vascular occlusion leading to ischemia, has been implicated as the cause of epiploica appendagitis. Since each appendage is supplied by two arteries and one vein, the venous component of the appendage is affected first³. These epiploic appendages are thought to act as a defence mechanism assisting in colonic absorption and protecting the blood supply of the colon when it is deranged⁴. Depending on the site of vascular compromise, this condition can mimic other causes of abdominal pain and thus can be a source of diagnostic dilemma.

Here we report a case of a 53-year-old female with epiploica appendagitis. We have discussed in details the presenting symptoms of the patient, the diagnostic workup, management, and the measures to overcome this diagnostic dilemma and review of the relevant literature that are available.

CASE REPORT

A 53-year-old female presented with right lower quadrant abdominal pain, which had started 96 hours before admission to the Department of Surgery Assam medical college and Hospital. The pain was acute in onset in the right iliac fossa which was constant, dull aching in character with no radiating or migration without any aggravating factor but relieved on taking medications. There was no history of nausea, vomiting, constipation, diarrhoea, or fever or history of weight loss and tuberculosis in the past; neither had she a past history of hospital admission. She is a mother of two children delivered by spontaneous vaginal delivery at home. She lives with her husband and two siblings and all are enjoying good health. General examination was within normal limit. Abdominal examination showed local abdominal tenderness with a palpable mass in the right iliac fossa which was hard in consistency, slightly tender, non-mobile, not moving with respiration, smooth surfaced, margins could not be delineated. C-reactive protein (CRP) count was a bit elevated

with a value of 1.1 mg/dL (< 0.5 mg/dL) and all other blood parameters like WBC counts, ESR, serum adenosine deaminase (ADA), serum carcino embryonic antigen (CEA) were within normal limits. A contrast enhanced abdominal computed tomography (CT) was performed which revealed an oval lesion of size (6.7 x 4.7) cm anterior-inferior to the transverse colon with surrounding fat attenuation. A colonoscopy was performed which came out to be normal. A diagnosis of PEA was established. The patient was kept nil per orally and started on parenteral antibiotics, analgesics and fluids. Within two days the pain subsided and the lump size decreased and further recovery was uneventful.

DISCUSSION

It was in 1908 when Briggs first reported a case of torsion of an appendices epiploicae (appendagitis) mimicking appendicitis.⁵ Epiploica appendagitis is an uncommon cause for abdominal pain. Its frequency is estimated to be 1.3% with an incidence of 8.8 cases/million/year.⁶ It often manifests with acute onset of pain abdomen in the left or right lower quadrant.³ The symptoms can mimic and be mistaken for acute diverticulitis, but patients with epiploic appendagitis are usually afebrile, without leucocytosis, nausea, or vomiting.⁷ During an episode of acute epiploic appendagitis, torsion of the appendages causes vascular occlusion, which can result in ischemia, thrombosis, or infarction.³ It was not until 1986 that the CT features for the condition were even described.⁸ Normal epiploic appendages are not typically seen on CT imaging, unless they are inflamed, surrounded by intraperitoneal fluid or calcified.⁹ Computed tomography shows prominent linear soft tissue densities, an increase in CT number of the involved greater omentum, and posterior displacement of the small bowel.⁸

Although the patient's clinical symptoms usually resolve within 2 weeks, CT findings can last for as long as 6 months after the episode, showing some residual soft tissue attenuation.³ The disease occurs in the middle aged people and the incidence peaks at 40 years of age.¹⁰ There is no sex predilection.¹¹

Epiploic appendagitis may also mimic acute cholecystitis if proximal part of transverse colon is involved¹² and ovarian torsion if caecum or sigmoid colon is involved.¹³ MRI is rarely used for its diagnosis. T1- and T2-weighted images of MRI will show a focal lesion that has the signal intensity of fat.

Additionally, contrast-enhanced T1-weighted images show an enhancing rim around the oval fatty lesion.³ An ultrasound of the abdomen generally reveals a hyperechoic, non-compressible pericolonic mass, frequently surrounded by a hypoechoic border.¹⁴ In most of the cases, epiploic appendagitis is self-resolving, with pain control being the only treatment modality. Oral anti-inflammatory medication is usually prescribed for 4-7 days, and antibiotics are not often indicated. Surgery is reserved for patients who does not respond to conservative management, or patients developing complications that cannot be managed non-operatively. In this case, the inflamed appendage would be ligated and resected.¹⁵ The symptoms usually resolve within 1 week without surgical treatment.¹⁶

CONCLUSION

The diagnosis of epiploica appendagitis is uncommon because of its presenting symptoms and signs mimicking other cause of acute abdomen. It presents with an acute onset of pain abdomen with mild tenderness without significant rigidity or guarding along with the blood parameters being within normal limits. Because of the lack of pathognomonic clinical signs and the rarity of the disease condition, PEA can pose a diagnostic dilemma and confuse clinicians. Evaluation of the patient by Computed tomography abdomen can distinguish epiploica appendagitis from other conditions with similar clinical manifestations like appendicitis, diverticulitis or omental infarct. Surgeons should be aware of this disease and keep it as a differential diagnosis in cases presenting with acute abdomen. Most of the patients will recover with conservative management and surgery is reserved for the complicated non responders.

CONFLICT OF INTEREST

No conflict of interest.

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