

CASE REPORT

IDIOPATHIC OMENTAL INFARCTION: A RARE CAUSE OF ACUTE PAIN ABDOMEN

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ABSTRACT: Omental torsion leading on to omental infarction is an unusual cause of acute abdominal pain in adults. Often the condition mimics common causes of acute abdomen like acute cholecystitis, acute appendicitis or acute pancreatitis. A review of literature reveals that this enigmatic condition has been managed both non-operatively and by surgery in the past. We report the case of a 46-year-old man who presented with a 4-day history of severe right-sided abdominal pain mimicking acute cholecystitis. Abdominal CT scan revealed a right upper quadrant mass with a whirl-like appearance, suspicious for omental infarction. He was started on conservative management with analgesics and antibiotics. He improved symptomatically and was discharged.

KEYWORDS: Omental infarction, omental torsion.

ABBREVIATIONS: OI= Idiopathic omental infarction, CT= Computerized Tomography.

INTRODUCTION: The incidence of idiopathic omental infarction is increasing on account of improved radiological imaging techniques.⁽¹⁾ Often it is misdiagnosed for acute abdominal conditions like appendicitis, peptic ulcer disease, cholecystitis and pancreatitis.⁽²⁾ Accurate diagnosis of omental pathology on radiographic imaging avoids exploratory surgery and conservative management can be tried using analgesics and antibiotics with optimal fluid management. Here we report a case of idiopathic OI, focusing attention on diagnostic and management considerations.

CASE REPORT: A 46 year old male presented with pain in epigastric and right hypochondrium of 4 days duration, insidious in onset, intermittent in nature, colicky type, non-radiating, subsides with analgesics. It was not associated with vomiting, distension of abdomen, jaundice, or fever. There was no history of any comorbid illness. On clinical examination, pulse and blood pressure were stable. There was tenderness and guarding in epigastric and right hypochondrial region, no free fluid and bowel sounds present. Investigations revealed total leucocyte count, amylase and lipase, renal function and liver function to be within normal limits. Ultrasound abdomen and pelvis showed no sonological abnormality. Upper gastrointestinal endoscopy was normal. CT scan of abdomen showed an encapsulated area of omental fat stranding with isodense streaks and small fluid collections measuring approx. 11.8 x 9.7 x 5.0 cm in the right hypochondrium and lumbar regions between the anterior abdominal wall and left lobe of liver/colon. There were no other significant intra-abdominal findings. He was managed conservatively with analgesics and antibiotics. He responded to these measures and was discharged symptom free in 3 days.

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CECT ABDOMEN AND PELVIS:



Fig. 1

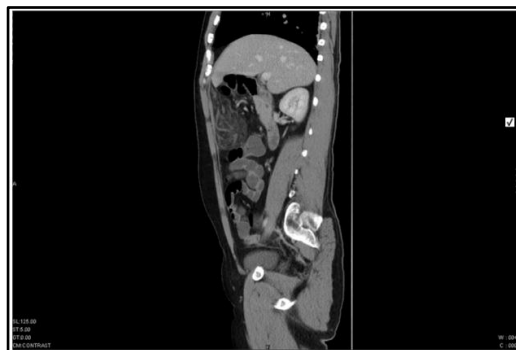


Fig. 2



Fig. 3

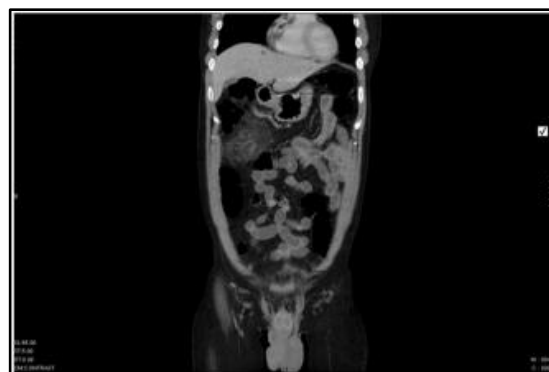


Fig. 4

DISCUSSION: Omental infarction is a rare cause of acute abdomen, often being miss diagnosed as acute appendicitis, peptic ulcer disease, acute cholecystitis and acute pancreatitis.⁽²⁾ It is classified into primary and secondary depending on pathogenesis.⁽³⁾ In primary OI, a mobile segment of omentum rotates around a proximal fixed point resulting in torsion in the absence of any associated intra-abdominal pathology. Primary contributing and precipitating factors include accumulations of omental fat in obese people, trauma, heavy food intake, coughing, sudden body movements, laxative use and hyperperistalsis.⁽⁴⁾ Secondary torsion is more common than primary torsion and is associated with pre-existing abdominal pathology, including cysts, tumours, foci of intra-abdominal inflammation, postsurgical adhesions and hernial sacs.

Because of preponderance for the right side, it was hypothesized that the mobile right half of the omentum has altered vasculature and in obese individuals fatty accumulation in the omentum impedes the distal right epiploic artery, and mass effect precipitates vascular kinking causing venous stasis and thrombosis.^(5,6) This greater omentum irritates parietal peritoneum in multiple locations causing pain in specified sites.

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CT scan of the abdomen can identify localized fat density lesions, concentric linear strands the 'whirl' sign⁽⁷⁾ and hyperattenuated streaky infiltration. The two strategies for omental torsion include conservative medical management and surgical intervention using laparoscopy. Conservative treatment comprises the use of analgesics with or without antibiotics⁽⁸⁾ although this strategy is not without the potential for complications like omental abscess formation. Some advocate conservative management as the initial approach for all patients, while diagnostic laparoscopy is used in those who deteriorate or who do not improve symptomatically. Laparoscopic omentectomy is favored by many as the initial approach of choice (following a diagnostic CT in all patients) because laparoscopy has been shown to result in a shorter hospital stay and less overall cost than conservative management (2 days versus 4 days).⁽⁹⁾

CONCLUSION: Omental infarction is a rare cause of acute abdomen as a result of vascular compromise of the greater omentum. High index of suspicion is required in whom there is pain out of proportion to objective clinical examination and minimal gastrointestinal symptoms. The exact etio-pathogenesis is still unknown. CT scan abdomen is required to rule out other serious acute pathology. Confident diagnosis can obviate surgical intervention in most cases. An initial trial of conservative management, comprising regular analgesia and antibiotics, is recommended in patients who present early in the course of their illness. If the patient's condition does not improve, diagnostic laparoscopy is warranted. Further studies are required to compare the appropriateness between conservative and surgical management.

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