



A rare cause of acute abdomen – Torsion gangrenous omentum

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ABSTRACT

Omental torsion is a rare cause of acute abdomen which often results in surgical intervention. Preoperative diagnosis with only clinical examination is almost not possible. Preoperative CT will help in possible diagnosis.

KEYWORDS

Case report

A 28-year-old female presented with a 2-day history of right sided abdominal pain which started gradually and remained almost constant with intermittent severe exacerbations. There were no specific aggravating or relieving factors for the pain, and there was no associated vomiting, diarrhoea, or urinary tract symptom. Patient denied any similar complaints in the past. She had 2 times C-sections and once Laparoscopic Tubectomy. On examination she was afebrile, abdomen was soft with tenderness in the right iliac fossa, no masses were palpable. Blood investigations showed a mildly elevated white cell count (13.5). Ultrasound of abdomen was suggesting mild inflamed appendix and no evidence of evidence of Ureteric calculi. A diagnosis of acute appendicitis was made and the patient was scheduled for Open surgery. On opening the abdomen by right lower grid iron incision, a patch of torsioned gangrenous omentum was found, the appendix was normal looking. We found a pedicle which was twisted and responsible for the torsion. The gangrenous omentum was excised. Patient had an uneventful postoperative period. Histology revealed a necrotic and haemorrhagic omentum and a normal appendix.

Discussion

Omental torsion was first reported in 1889 by Eitel. This occurs when the omentum twists along the longitudinal axis resulting in vascular compromise. According to literature¹ omental torsion can be primary or secondary, precise causes for primary torsion are not well recognised, several factors like anatomical variation, accessory omentum and venous malformations have been proposed^{1,2}. Right sided omental torsions are more commonly documented than the left and it has been suggested that this is possibly due to the greater mobility and the length of the omentum on the right side. Precipitating factors are those that cause displacement of the omentum—e.g.

heavy exertion, sudden change in body position, coughing, straining and hyperperistalsis¹. Secondary omental torsions have predisposing factors like scarring from surgeries, foci of inflammation and hernias. Clinical presentation is usually that of an acute abdomen, mimicking appendicitis, cholecystitis or diverticulitis depending on its location. Pain is usually sudden in onset with abdominal tenderness and in some cases peritonism. Associated symptoms like nausea, vomiting or low grade fever may be present. Leucocytosis can also be present. With increasing use of ultrasound and CT characteristic features which suggest omental torsion have been reported. Ultrasound may show a complex mass with mixture of solid and hypoechoic material. The CT finding of an omental fatty mass with a whirling pattern is characteristic of omental torsion.^{3–5} Omental torsion must be considered if preoperative diagnosis is not confirmed during surgery and there is sero-sanguineous fluid in the peritoneal cavity. A thorough and methodical search of the abdominal cavity must be made. With increasing use of laparoscopy this is being made easy without having to extend the incision or use separate incisions. Treatment consists of excising the necrotic omentum and in case of secondary torsion correcting the factor that predisposed to the torsion. After a series study Miguel Perelló et al,⁶ Abadir et al⁷ have suggested conservative management of this condition when it has been diagnosed preoperatively in selected patients. The question of conservative versus operative management would depend on

the presentation and the clinical condition of the patient. In summary, omental torsion is a rare cause of acute abdomen that often mimics common causes of acute abdomen like appendicitis. Pre operative diagnosis by

clinical examination alone is not possible. With increasing use of imaging it is likely that more cases will be reported.

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