



General Surgery

A RARE CASE OF OMENTAL TORSION PRESENTING AS ACUTE ABDOMEN

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ABSTRACT Omental Torsion has been a rare cause of acute abdomen presenting with no specific clinical features. As such clinical diagnosis is difficult. Most of the cases are Idiopathic without definite cause (Primary torsion). The role of Imaging studies like Ultrasound and especially CT Scan is commendable in arriving at proper diagnosis paving the way for appropriate treatment. Omentectomy of infarcted omentum is the mainstay treatment.

KEYWORDS : Omental Torsion, Omentectomy, Omental Infarction

INTRODUCTION

Torsion of omentum, is a uncommon cause of acute abdomen¹ which is defined as axial twisting of the greater omentum along its long axis resulting in segmental or diffuse necrosis of the omentum. It can be Primary or Secondary. Primary Omental torsion was first reported by Eitel in 1899^{1,2}. Primary is Idiopathic whereas Secondary is due to hernia or postoperative adhesions, large tumour precipitated by exertion, coughing, sneezing. This Case is presented keeping in mind its rarity, high chances of clinical misdiagnosis and role of CT Scan in diagnosis with review of literature.

Case Report

A 23 year old man presented to the emergency Department with upper abdominal pain of one day duration. Pain was dull aching, constant and diffuse. The pain had increased for over last few hours. He had history of vomiting and 4-5 episodes of loose motions for one day. No past history of any operative procedures or any major illness

On examination, patient was conscious, well oriented. Pulse rate was 90/min and blood pressure was 120/80 mm Hg. Per abdomen there was generalised tenderness and guarding present over epigastrium and right Hypochondrium. Blood analysis revealed Leucocytosis: 19,500. Rest all investigations were normal. Abdominal Ultrasound showed echogenic mesenteric fat in upper abdomen with minimum free fluid in perihepatic region. Ct Scan showed extensive thickening and stranding of greater omentum in upper abdomen with thrombosed vessel and twisting of omentum in whirl pattern suggestive of omental infarct. Patient underwent emergency laparotomy which showed infarction of entire omentum with twisting of epiploic vein and artery at 360 degrees. Omentectomy was done. The post-operative recovery was uneventful and patient was discharged on 9th postoperative day. Histopathology confirmed the diagnosis of omental infarction.

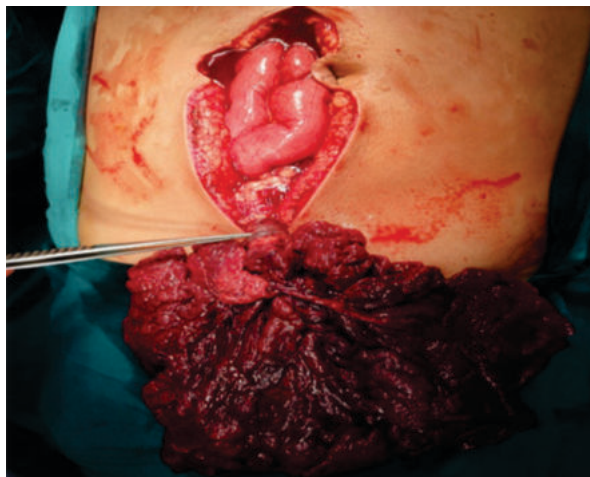


Figure 1 : Showing Omental Torsion Marked.

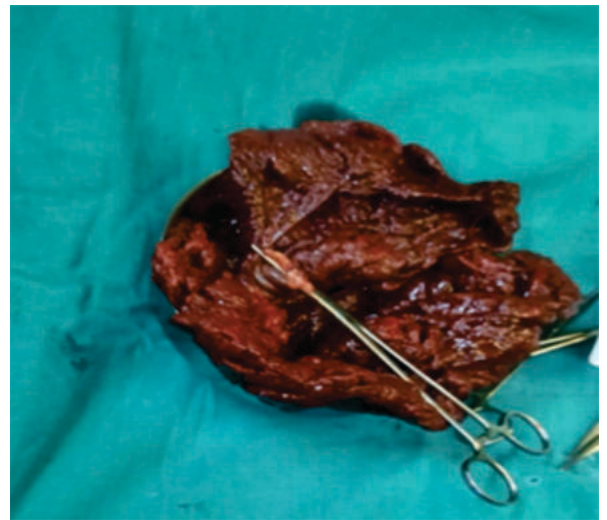


Figure 2 : Showing Omental Necroses Post Torsion.

DISCUSSION

Omental torsion is a rare entity difficult to diagnose clinically as it mimics cholecystitis, ovarian cyst torsion and appendicitis which are other causes of acute abdomen^{1,4,5}. Twice more common in males and mostly seen in 4th and 5th decades of life. When compared to Appendicitis, omental torsion has incidence of 0.0016% to 0.37% whose ratio less than 4 cases per 1000 cases of appendicitis^{6,7}. Two types of torsion are seen Primary and Secondary. Primary is idiopathic with no definite aetiology with about 250 cases reported in literature Primary torsion is usually seen in obese patients (70%)⁸ patients with bifid omentum, accessory omentum. Precipitating factors for torsion being trauma, coughing, sudden change in body position, hyperperistalsis after a heavy meal. All these create a sudden increase in intraabdominal pressure which may lead to sudden twist in omentum leading to torsion². It is postulated that in obesity excess fat unevenly distributed in the omentum acts as a lead point for torsion. Secondary torsion occurs in hernias, tumour or adhesions with the dependant omentum becoming fixed in the torse position and unable to untwist¹. Our patient had only mild obesity, presented as abdominal pain with no definite clinical features and had infarction of the entire omentum with 360 degree twist of the omental vessels.

With clinical diagnosis not clear as in our case, imaging studies like Ultrasound and more so CT Scan play a very important role in arriving at correct diagnosis. Abdominal Ultrasound shows a cake like hyperechoic mass adherent to the peritoneum. More so it rules out Cholecystitis or Ovarian pathology. CT Scan is the gold standard in the diagnosis, also in our case it showed an infarcted omentum as an area of high attenuated fat containing diffuse streaks just beneath the peritoneum with classical whirl pattern. Laparoscopy can be also a

another tool in making correct diagnosis and treatment¹.The standard treatment is laparotomy with omentectomy of the infarcted segment, same was done here .However some cases without complications can be managed by conservative treatment¹.Conservative management can result in abscesses or adhesions .We do not have experience in this type of management.

CONCLUSION

Omental Torsion is a rare surgical condition presenting as acute abdomen with abdominal pain which can mimic acute Appendicitis, Ovarian cyst? torsion, Cholecystitis, Diagnosis is difficult in absence of specific clinical features. When other conditions are ruled out by imaging studies the possibility of omental torsion should be kept in mind and proper investigations should be carried out. The role of CT Scan in diagnosis is highly reliable. Omentectomy gives the cure.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patient understands that their names and initials will not be published and due efforts will be made to conceal their identity but anonymity cannot be guaranteed.

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