OMENTAL TORSION

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ABSTRACT: Omental torsion is a rare cause of acute abdominal pain and clinically mimics acute appendicitis. A 22 years old male presented with symptoms and signs suggestive of appendicitis. The diagnosis of omental torsion was confirmed only during the surgical procedure.
KEYWORDS: Omental torsion. Acute abdomen.

CASE REPORT: A 22 years old male patient was admitted to the hospital with acute pain abdomen of 1 day duration. Abdominal pain was associated with 2 bouts of vomiting General physical examination revealed a patient with normal temperature, pulse rate of 84 per minute and BP of 110/70 mm Hg. The abdomen was soft with acute tenderness in the right iliac fossa.

There was no guarding and no rigidity. Bowel sounds were well heard. All the blood investigations were within normal limits USG abdomen revealed few dilated loops in the right iliac fossa with localized ileus and minimal collection in the right iliac fossa. The Patient was diagnosed with acute appendicitis and underwent appendicectomy through Mc Burney's incision.

About 200 ml of sero-sanguineous fluid was aspirated from the peritoneal cavity. The omentum was seen congested.

Incision was extended and the whole omentum had undergone torsion with focal areas of patchy necrosis.Total omentectomy was done along with appendicectomy. Drain was kept and abdomen closed in layers.

Post operative period was uneventful. Patient was discharged on the 7th day.

The histopathological examination showed mature adipose tissue with congested blood vessels in between. Few adipocytes showed ischaemic necrotic changes, but no inflammatory infiltrate was noted. The histopathological features were consistent with torsion of omentum.

DISCUSSION: Omental torsion is a rare pathology presenting mainly in the 3rd to 5th decade of life with a slight male predominance [1] [2] Patients commonly present with right iliac fossa pain resembling the pain associated with appendicitis. It was first described by Eitel in 1899 [3] [4]. Fewer than 250 cases have been described in the literature so far.

Omental torsion is rarely diagnosed pre operatively and may lead to spontaneous clinical deterioration of the patient. [4] [5]

The omentum twists around its long axis, clockwise at a pivotal point. Consequently vascularity is compromised, resulting in haemorrhagic extravasation, serosanguineous fluid production, necrosis and adhesion formation.

Omential torsion may be primary or secondary. [6] [7] [8].

One third of cases are as a result of primary torsion, which is unipolar with no underlying pathology or distal fixation. [1] [2] [9].

Several predisposing factors have been described.

Eg: Anatomical variations including tongue like projections from the free edge of the omentum, bifid omentum, accessory omentum. [10]

Judy etal in their article described that obesity is an important risk factor for omental torsion in children. [11].

Precipitating factors are those that cause displacement of the omentum.

Eg: Heavy exertion, sudden change in body position, coughing, straining and hyper peristalsis. [10]

Secondary omental torsion is due to an acquired attachment following hernia repair, a surgical scar, tumours or perforated bowel. [12]

The right side of the omentum is more prone to torsion due to its larger size. C T scan is very sensitive for showing an omental mass but not specific for making diagnosis of torsion.

With the advent of laparoscopy, omental torsion is being visualized easily and the chances of missing the pathology at surgery are now rare. Treatment involves resection of diseased segment of omentum and to correct any secondary pathology, if present. It has been observed that, if the omentum is not excised, it may become atrophic and fibrotic and, on rare occasions, the pedicle may even auto amputate, leading to automatic clinical regression. [13].

Also at times in case of untreated situation, one may see omental necrosis because of hemorrhagic infarction, intra abdominal abscesses, peritonitis or bowel obstruction. [13] [14]

CONCLUSION: Omental torsion presents with non-specific symptoms of an acute abdomen and is mainly diagnosed intra operatively. The condition should be considered in then differential diagnosis of acute abdomen and it poses no problems of a therapeutic nature.

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