Case report

Primary Torsion of the Omentum

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Summary:

Primary torsion of the omentum is a rare cause of acute surgical abdomen. It mimics other surgical emergencies, especially acute cholecystitis and acute appendicitis.

This report is an example of such case with a brief review of some of the literature on the subject.

Introduction:

The description of idiopathic omental infarction has been attributed to Bush[1] (1896), but it was Fited[2] in 1899 who described it in association with omental torsion. Torsion of the greater omentum can be primary (no underlying pathology) or secondary. The latter is far more common. Omental infarction can also occur in the absence of torsion, when it may be idiopathic or secondary, for example to vasculitis, polycythemia... etc.

Case Report:

A 63 year old (Iraqi) patient was admitted with right-sided colicky pain of 3 days duration. He vomited once prior to admission. On examination he was in a shock state. There was a marked tenderness and rigidity over the whole right side of abdomen, mainly the upper part. Rectal examination was normal.

His Hb was 12.6 gm/dl and his WBC was 16.000. Urine analysis, blood urea, serum creatinine, electrolyte, and blood sugar were all within normal limits. Abdominal x-rays, both erect and supine were unremarkable. (Sonography was not available at that time.)

A pre-operative diagnosis of complicated case of acute cholecytitis (such as empyma or impending rupture of gall bladder) was made.

Immediate resuscitation was performed for the patient at once andthen shifted to surgery.

A right upper paramedian incision was

His gall bladder was normal. Further palpation revealed a mass in the right hypochondria and there was a small amount of serosanguinous fluid. This mass was solid and involved the greater omentum. It was black in color with a small area of normal omental tissue. It was adherent to the anterior surface of the right lobe of the liver, and was rotated anticlockwise around a pedicle and loops of small bowel hanged around it.

Discussion:

The etiology of primary torsion of the greater omentum is unknown. Nevertheless, many theories have been suggested.Various anatomical factors such as bifid and accessory omentum havebeen incriminated. Trauma, over exertion, sudden change in posture,over eating, infection and obesity[3] have all been implicated but with little evidence.

An interesting aspect of the pathology of omental torsion is the predilection for the right side. This may well reflect the longer and the larger segment of omentum that usually hangs freely on the right side.

Others attribute this to the higher probability of operating for pain on the right side of the abdomen rather than left-sided pain.The condition affects all age groups, but mainly the fourth and fifth decades, with a reported male preponderance of 2:1.

The most frequent presentation is with right-sided pathology such as cholecystitis, appendicitis, and perforated peptic ulcer. There are

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no distinguishing features of this entity, although over 230 cases (of which Mainzer[4] reviewed 165 patients) have been reported in the English literature to date.

The diagnosis at operation is made oh the bases of omental mass torsion with distal ischemia and absence of other intra-abdominalpathology. Some authors have reported absence of distal fixation, but this is not essential for diagnosis as exemplified by our patient.

Serosanguinous fluid in the peritoneal cavity should alert the surgeonto the diagnosis. Resecting the infracted omentum seems to be all that is needed and recurrence has not been reported. Smooth recovery can be expected.

Conclusion:

Torsion of the omentum is a rare cause of acute abdomen. The clinical course of the disease is virtually indistinguishable from right-sided abdominal pathology. Therefor, a pre-operative diagnosis is rarely made. The cause of secondary torsion of the omentum must be excluded, as this is more common than the primary variety.

Reference:

1. Bush- A case of hemorrhage in the greater omentum. (Lancet 1896).
2. Fitel- Segmental infarction of the greater omentum. (Can J surgery 1899).
3. Adams- Primary torsion of omentum. (Am J surgery 1973).
4. Mainzer- A primary idiopathic torsion of the omentum. (Arch surgl964).

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