Case Report

Strangulated right inguinal hernia containing torsion of the greater omentum

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Abstract. Torsion of the greater omentum is a rare condition in which the omentum twists on its long axis to such an extent that its viability is compromised. It is classified as primary or secondary. The secondary cases are usually the outcome of a trapped omental segment in postoperative scarring or wounds or a hernia sac. We report a case of strangulated right inguinal hernia containing torsion of the greater omentum as its contents. Exploration of right inguinal canal revealed indirect inguinal hernia with torsion of the greater omentum within the hernia sac. Though omental torsion is a rare cause of strangulated inguinal hernia but should be included in the differential diagnoses of acute painful inguino-scrotal swellings.

Key words: Omental torsion; strangulation; Inguinal hernia

1. Introduction

Torsion of the omentum is a rare cause of strangulated inguinal hernia, whereby twisting of the omentum may lead to subsequent vascular impairment and eventually progress to infarction of the segment of the omentum distal to the twisting point. We have reported a case of strangulated right inguinal hernia containing torsion of the greater omentum as its contents, secondary to untreated longstanding inguinal hernia.

2. Case report

A 65 year old man presented to our emergency surgical department with pain in right lower abdomen for 3 days that had been mild to moderate for previous 2 days and has been severe on the third day. As per history he had been diagnosed with a right inguinal hernia, but he had not received any surgical treatment.

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Physical examination revealed swelling in right inguinal region which was non-reducible and tender and cough impulse was negative.

Blood examination showed leukocytosis with neutrophilia. Plain abdominal radiograph did not show significant air fluid levels. Ultrasonography showed right inguinal hernia with incarcerated fat. Exploration of the right inguinal canal was performed by inguino-scrotal incision, which revealed indirect inguinal hernia containing greater omentum with twisting around its axis with strangulation and necrosis. (Fig. 1).

Fig. 1. Showing indirect right inguinal hernia containing greater omentum, twisting around its axis with strangulation and necrosis

An omentectomy was done followed by simple prolene darning repair. The resected omentum was submitted for pathological examination, which showed infarction. Post-operative course was uneventful, and the patient has remained healthy on one year follow up.

3. Discussion

Torsion of the omentum is a rare cause of strangulated inguinal hernias. (1). Torsion is more common on right side, the greater susceptibility to torsion of the right side is due to its greater length and size in relation to the left side and its greater mobility. Omental torsion can be classified as primary and secondary torsion, the latter being more common. Primary torsion is believed to be related to local omental anomalies, such as bulky bifid or accessory omentum or abnormally redundant omental veins, but the exact pathogenesis is yet to be uncovered (2-4). Secondary torsion is associated with adhesions to cysts, tumors, inflammatory foci, scars, or hernias. Torsion leads to omental infarction and usually presents as acute abdominal pain.

Concerning the treatment of omental torsion, resection of the involved segment of the omentum has traditionally been the treatment of choice (5-7). In conclusion, although omental torsion is a rare cause of complicated inguinal hernia but should be included in the differential diagnoses of acute painful inguino-scrotal swellings, especially in patients with untreated inguinal hernia.

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