Intermittent omental torsion – an unusual cause of recurrent abdominal pain?

N.J. Parr and R.B. Crosbie

Department of Surgery, Arrowe Park Hospital, Wirral L49 5PE, UK.

Summary: A case of haemoperitoneum arising from an omental haematoma is described. Histology suggests that this resulted from an omental torsion. The omentum, however, was not torted at the time of laparotomy. Furthermore, there was a history of similar episodes of pain over the previous eighteen months. This suggests that spontaneous derotation of an omental torsion may occur, and may be an unusual cause of recurrent abdominal pain.

Introduction

Omental torsion is an uncommon condition which is virtually never diagnosed prior to operation. Some patients give a history of previous episodes of abdominal pain, suggesting the possibility of torsion with subsequent spontaneous derotation. This case adds further support to the concept that chronic intermittent omental torsion may be an unusual cause of recurrent abdominal pain.

Case report

A 26 year old man presented with a 2-day history of colicky abdominal pain, maximal in the right iliac fossa and suprapubic areas. There had been no vomiting or change in bowel habit. Over the past 18 months he had suffered approximately 12 similar episodes of pain, each resolving spontaneously without hospital admission. He recalled no previous abdominal trauma. On examination he was apyrexial with a pulse rate of 64 beats/min. There was diffuse abdominal tenderness without guarding. The haemoglobin was 13.6 g/dl, with a white cell count of 9.4 x 10^9/l and platelets of 237 x 10^9/l.

Two days following admission he noted a lump in the left groin, while straining at stool. Examination revealed a small reducible indirect inguinal hernia. All abdominal pain having subsided, three days later he underwent an elective repair. During this procedure the hernial sac was found to contain a small amount of dark blood. A full laparotomy was then carried out through a separate midline incision. A thin film of altered blood lined the peritoneal cavity, and this had leaked from a small hole in the wall of an omental mass. The omentum was not torted and the abdomen contained no other abnormalities. An omentectomy was carried out.

On opening the specimen, inspection revealed a 10 cm hollow haemorrhagic area filled with blood clot (Figure 1). The surrounding tissue contained distended, thrombosed veins. At microscopy the omentum showed marked congestion with both areas of fibrosis and of haemorrhage. There was no evidence of infarction.

Discussion

Torsion of the greater omentum is a rare surgical emergency. It is known to be associated with intra-abdominal inflammatory foci and with herniae, but some cases are idiopathic. In a review of 165 cases...
from the world literature,1 the majority presented with a single episode of acute abdominal pain, and approximately 50% were febrile or exhibited a leucocytosis. The most frequent pre-operative diagnoses were acute appendicitis and cholecystitis. Fourteen patients gave a history of recurrent bouts of abdominal pain, preceding their final episode by as long as seven years. A more recent review of 20 cases of omental torsion also found that two patients had experienced similar episodes of pain over 2 month and 3 year periods.2 Although not establishing beyond doubt, this suggests that spontaneous derotation of an omental torsion may take place. There has only been one previous report3 in which recent derotation was thought to have occurred by the time of laparotomy.

In the present case the specimen showed the typical features of an acute omental torsion—congestion, with prominent thrombosed veins and areas of focal haemorrhage. However, the omentum was not torted at the time of laparotomy. The prominent fibrosis added further support to the theory that previous episodes of torsion and spontaneous derotation had occurred.

Intermittent torsion of the omentum with spontaneous derotation may be an unusual and previously unrecognized cause of recurrent abdominal pain. Furthermore, we would agree with the advice that careful inspection of the omentum is essential during the course of the so-called negative laparotomy performed for acute abdomen.1

References