A case of mesenteric panniculitis requiring an operation

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DESCRIPTION

A 78-year-old man presented with progressive abdominal pain, distension and mucous in the stool over the previous month. Abdominal examination revealed hyperactive bowel sounds and left lower quadrant tenderness over a palpable abdominal tumour. Laboratory results revealed elevated serum C reactive protein levels (2.91 mg/mL) and mild liver dysfunction. Enhanced abdominal CT revealed abnormal mucosal thickening and attenuation of the sigmoid colon and rectal mesentery (figure 1) compatible with mesenteric panniculitis (MP). A tumour was not observed in the subsequent colonoscopy; however, intestinal ischaemia was evident (sigmoid colon to rectum). Antibiotics and subsequent systemic steroid administration did not improve the symptoms or fever pattern.

The pathological findings following an eventual Miles operation indicated adipose tissue degeneration and necrosis, infiltrated inflammatory cells and fibrosis, which were compatible with MP (figure 2). The infiltrated intestine showed mucosal erosion and an ulcer, which appeared to be ischaemic colitis (figure 3). The postoperative course and follow-up were uneventful.

MP is a rare disease characterised by chronic, non-specific inflammation and fat necrosis and fibrosis involving the adipose tissue of the bowel mesentery.¹ Patients may present with a palpable abdominal mass and systemic manifestations of

Figure 2 Microscopic section showing infiltration of fatty tissue by abundant lipid-laden macrophages, consistent with mesenteric panniculitis (H&E staining, $\times 10$).

varying durations, including abdominal pain, fever, weight loss and bowel disturbance.²

Abdominal CT plays an important role in MP diagnosis. Common CT findings include soft tissue nodules, a fatty halo surrounding vessels and nodules and an inhomogeneous fatty mass with higher attenuation.²

Although the possible causative factors include autoimmune disease, infection, trauma, ischaemia, prior abdominal surgery and neoplasm,² the exact aetiology of the disease remains unknown. In the present case, the cause was also undetermined. The prognosis of MP is usually good with supportive treatment.³ However, surgery may be necessary for symptomatic relief,³ as in the present case.

Figure 1 Contrast-enhanced coronal CT scan showing abnormal mucosal thickening (arrow A) and attenuation of the mesentery (arrow B) suggestive of mesenteric panniculitis.

Figure 3 Gross appearance of the resected intestine showing displacement and stenosis caused by swollen and sclerotic mesenteric pannicula (white arrows).

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Learning points

- ▶ Mesenteric panniculitis is a rare disease characterised by chronic, non-specific inflammation and fat necrosis and fibrosis involving the adipose tissue of the bowel mesentery.
- ▶ The prognosis of mesenteric panniculitis is usually good with supportive treatment. However, surgery may be necessary for symptomatic relief, as in the present case.

Contributors TF wrote the manuscript and contributed to the discussion. HY, AM and AI contributed to discussion.

Competing interests None.

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