

Primary tuberculosis of the gallbladder in an HIV-positive patient

To the Editor: A 37-year-old woman with untreated AIDS (CD4 count 14 cells/ μ l) presented with a history of haematemesis. She was anicteric, pyrexial and pale and had no peritonitis. The haemoglobin concentration was 6.1 g/dl, the white cell count $7.3 \times 10^9/l$ and the platelet count $107 \times 10^9/l$. Gastroscopy showed two old pre-pyloric ulcers and a perforated ulcer in the first part of the duodenum. Laparotomy revealed a perforated ulcer in the posterior wall of the first part of the duodenum, a gangrenous gallbladder and a perforated necrotic common bile duct with a purulent bilious leak. There was no evidence of abdominal tuberculosis. The ulcer was managed with pyloroplasty and omental patch. A cholecystectomy was performed, with a Roux-en-Y hepatico-jejunostomy and entero-enterostomy. *Helicobacter pylori* eradication therapy and antituberculosis treatment were initiated after histological confirmation of tuberculosis. The patient could not be weaned from the ventilator, her CD4 count dropped to 2 cells/ μ l, and she died of multi-organ failure 16 days later.

Histological examination showed poorly formed granulomas of epithelioid cells, Langhans giant cells and lymphocytes within the gallbladder wall. The presence of acid-fast bacilli was confirmed with a Ziehl-Neelsen stain.

Although abdominal tuberculosis is well recognised in immunocompromised patients, primary tuberculosis of the gallbladder is extremely rare and is poorly described in AIDS patients. This infrequent involvement of the gallbladder has been attributed to growth inhibition of mycobacteria by the high concentration of bile acids.¹ Definitive diagnosis rests on histological and bacteriological evidence of the

bacillus. Although imaging modalities can be useful in other disorders, they very rarely suggest the diagnosis of gallbladder tuberculosis. The positive yield of acid-fast bacilli from bile cytology on endoscopic retrograde cholangiopancreatography (ERCP) is also very low, further complicating diagnosis.² AIDS as a co-morbidity remains a challenge for the surgeon;³ the rate of postoperative complications is high, and patients should be cared for in a high-care setting after surgery.

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