



Medical Imagery

Peritoneal changes in intestinal tuberculosis



A 19-year-old woman attended the emergency room with a 5-day history of epigastric pain. Physical examination revealed abdominal tenderness. Laboratory data showed a high level of white blood cells (WBC count $16.25 \times 10^9/l$) and high C-reactive protein (CRP 180 mg/l). Her chest X-ray was normal. An abdominal computed tomography scan revealed concentric wall thickening of the pyloric and duodenal regions and intra-peritoneal effusion. A perforated duodenal peptic ulcer was suspected and an emergent surgery was performed. Intraoperatively, multiple nodules were found on the serosa of the small bowel and peritoneum, with dense adhesions (Figure 1). Biopsies were performed. The pathological examination using Ziehl-Neelsen staining revealed caseating necrosis with epithelioid

granulomas, leading to the conclusion of intestinal tuberculosis (Figure 2). *Mycobacterium tuberculosis* was incriminated. Four drugs were administered for 2 months: isoniazid, rifampicin, pyrazinamide, and ethambutol. Isoniazid and rifampicin were continued for 4 months. After 6 months, the patient was examined in the clinic outpatient department. She was asymptomatic and had gained weight.

The BCG vaccination and the effectiveness of medical treatment of pulmonary tuberculosis have decreased the frequency of intestinal tuberculosis (Colditz et al., 1994). The rarity of this condition has made it a secondary focus in the case of acute abdominal disease (Jadvar et al., 1997; Debi et al., 2014). Intraoperative diagnosis remains difficult (Jadvar et al., 1997; Debi et al., 2014). The medical

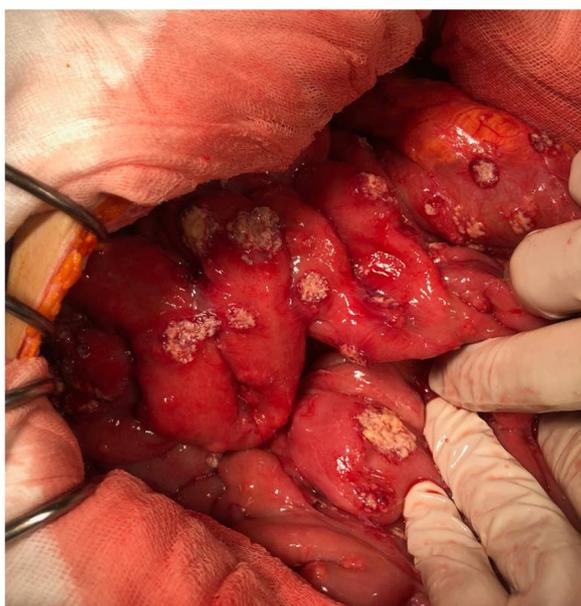


Figure 1. Intraoperative view showing multiple nodules on the serosa of the small bowel, with dense adhesions.

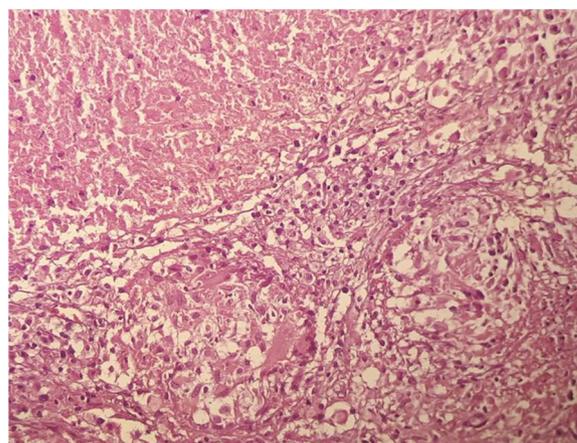


Figure 2. Pathological picture showing caseating necrosis with epithelioid granulomas (hematoxylin and eosin, $\times 100$).

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treatment of the intestinal location is effective, but does not always allow a surgical procedure to be avoided (Debi et al., 2014).

Conflict of interest

No conflict of interest to declare.

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Ethical approval

Written informed consent was obtained from the patient for the publication of this case report and the accompanying images.

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