

LETTER

Laparoscopic diagnosis of abdominal tuberculosis

Dear Editor,

Abdominal Tuberculosis (AT) is a rare disease in developed countries. A 21-year-old African woman from Guinea who presented with chronic abdominal pain was admitted to the hospital. Physical examination revealed tenderness of the abdomen and specifically left lower quadrant pain. Laboratory investigations were normal, except an elevated C-reactive protein 18.1 mg/L. Abdominal ultrasound revealed the presence of ascitic fluid. Computed tomography (CT) imaging showed multiple enlarged lymph node masses in the mediastinum, right and left hilum, and a mass localized on the anterior thoracic wall. Peritoneal lesions, ascites, a mass between the liver and diaphragm and lymph nodes were also present in the abdomen. An ultrasound-guided biopsy of the pelvic mass and a diagnostic abdominal paracentesis were inconclusive, so the indication for a diagnostic laparoscopy was set.

The diagnostic laparoscopy revealed ascitic fluid, violin string adhesions, peritoneal and omental thickening. Biopsy samples were obtained from the peritoneum and a suspect mass. Polymerase chain reaction assay (THERMO FISHER 7900 HT, Real Time PCR Gene expression Profile, Applied Biosystems) of the biopsy specimens, performed in a quality assured laboratory, confirmed infection with *Mycobacterium tuberculosis* and *Mycobacterium bovis*. A culture of a Urine sample confirmed the infection with both microorganisms aforementioned. The patient was treated with isoniazid, rifampin, pyrazinamide and ethambutol and completed a 6-month course without any further complications.

The abdominal cavity is the sixth most common extrapulmonary site of tuberculosis¹. Non-specific symptoms make early diagnosis difficult and this is the main reason for its high morbidity and mortality. The disease usually presents with long-term abdominal pain, fever, night sweats, weight loss, ascites, constipation, and diarrhea. CT may be helpful in the diagnosis of AT. However, findings are usually inconclusive and may mimic other clinical entities such as peritoneal carcinomatosis. Peritoneal involvement is a common feature (77.5 %) and more than half of the cases present with ascites. Lymphadenopathy and stranding of mesenteric fat are also common signs².

There are different studies that support the crucial role of diagnostic laparoscopy in the diagnosis of AT. It is generally accepted as an accurate and prompt diagnostic modality for AT that avoids the morbidity and mortality of laparotomy. Herein we point out the risk of complacency in the case of not considering AT in the differential diagnosis of chronic abdominal pain.

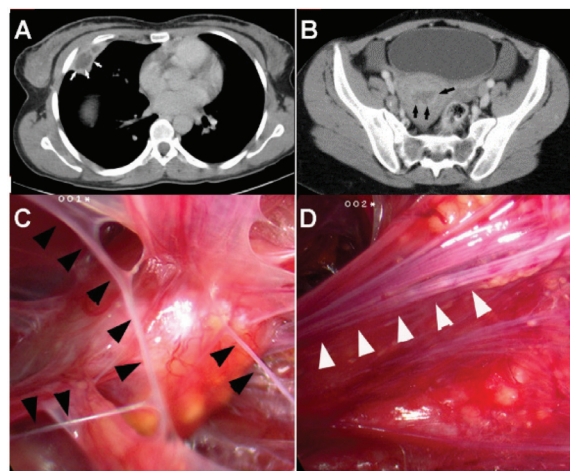


Figure 1: A) Computed tomography (CT) scan of the chest showing a mass localized on the anterior thoracic wall (white arrows); B) CT scan of the abdomen showing ascitic fluid surrounding the uterus (black arrows); C) Laparoscopic images demonstrating violin string adhesions and D) peritoneal and omental thickening in the abdomen.

Conflict of interest

None.

Keywords: Abdominal, tuberculosis, diagnosis, laparoscopy

References

1. Sharma MP, Bhatia V. Abdominal tuberculosis. Indian J Med Res. 2004; 120: 305-315.
2. Sinan T, Sheikh M, Ramadan S, Sahwney S, Behbehani A. CT features in abdominal tuberculosis: 20 years experience. BMC Med Imaging. 2002;2:

Mitsikas D, Kapp T, de Montmollin C

Department of Surgery, Aarberg Hospital, Aarberg, Switzerland

Corresponding Author: Mitsikas Dimitrios, Pediatric Emergency Center, Inselspital, Bern University Hospital, Switzerland, tel: +41787962521, e-mail: dmitsikas@yahoo.gr