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CLINICAL IMAGE

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Tuberculous peritonitis masquerading as carcinomatosis

Gabriel Motoa[1] | **Salvador Alvarez**[2]

[1]Division of Pulmonary, Allergy and Sleep Medicine, Mayo Clinic, Jacksonville, FL, USA

[2]Division of Infectious Diseases, Mayo Clinic, Jacksonville, FL, USA

Correspondence
Gabriel Motoa, Division of Pulmonary, Allergy and Sleep Medicine, Mayo Clinic, 4500 San Pablo Rd S, Jacksonville, FL 32224, USA.
Emails: gabrielmotoa@gmail.com; motoacardona.gabriel@mayo.edu

Abstract

Tuberculous peritonitis may debut with unspecific symptoms that can pose a diagnostic challenge for clinicians. We present a patient with tuberculous peritonitis masquerading as carcinomatosis. High clinical suspicion, appropriate identification of bacterial isolates of the *Mycobacterium tuberculosis* complex, and susceptibility testing are crucial to select target therapy.

KEYWORDS

Mycobacterium bovis, *Mycobacterium tuberculosis*, peritoneal carcinomatosis, tuberculosis, tuberculosis therapy, tuberculous peritonitis

Tuberculous peritonitis (TP) may mimic the clinical and imaging findings in carcinomatosis.[1] Peritoneal thickening, ascites, or adhesions are nonspecific CT findings in TP and carcinomatosis. Mesenteric and omental changes, macronodules, and splenic abnormalities suggest TP.[2] Identification of Mycobacterium *tuberculosis* complex is crucial to select target therapy.

A 56-year-old Mexican man presented for evaluation of a four-month history of abdominal pain, anorexia, and 5 kg weight loss. He denied fever, chills, or night sweats. His examination was remarkable for diffuse abdominal guarding. Serum laboratory studies were notable for elevated erythrocyte sedimentation rate (26 mm/hour, normal < 13), C-reactive protein (51.5 mg/L, normal < 8 mg/L), CA-125 (309 U/mL, normal < 35), CA 19-9 (50 U/mL, normal < 35), and alpha-fetoprotein (6.6 ng/mL, normal < 6 ng/mL). Chest X-ray and computed tomography (CT) were normal. Abdominopelvic CT showed mesenteric stranding and a thickened, nodular, and enhanced peritoneal wall suspicious for carcinomatosis (Figure 1). At laparoscopy, multiple discrete peritoneal nodules ranging from 3-6 mm in size were found (Figure 2). Biopsy showed necrosis, mural granulomatosis, and positive acid-fast bacilli (AFB).

The patient was placed on isoniazid, ethambutol, rifampin, and pyrazinamide. The cultures grew *Mycobacterium tuberculosis* complex identified by DNA probe. The initial susceptibilities showed INH resistance and later,

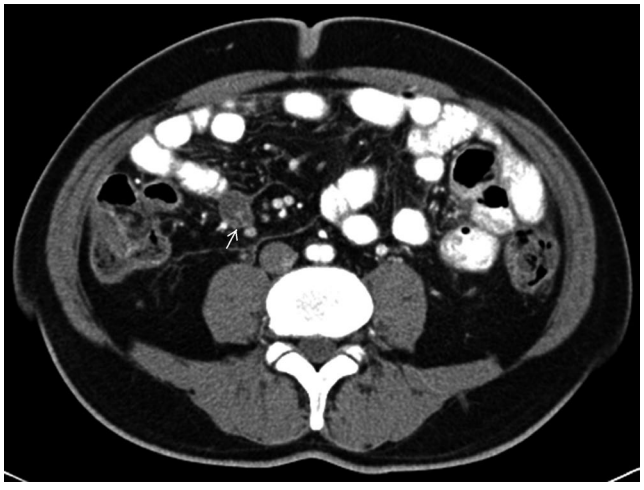

FIGURE 1 Abdominopelvic computed tomography scan shows mesenteric stranding and a thickened, nodular, and enhanced peritoneal wall

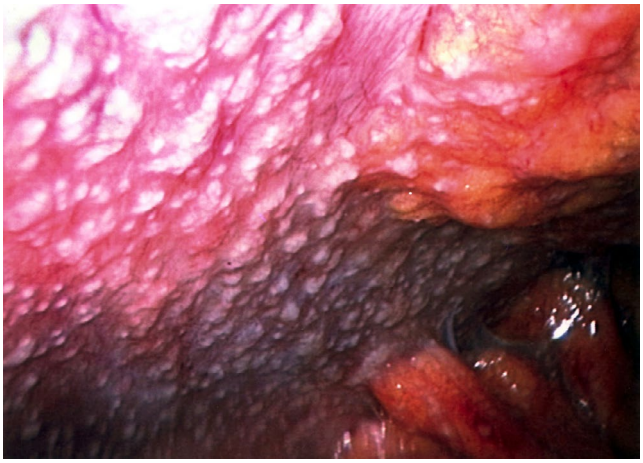

FIGURE 2 Exploratory laparoscopy reveals multiple discrete peritoneal nodules ranging from 3-6 mm caused by *Mycobacterium bovis*

pyrazinamide resistance. The isolate was further identified as *Mycobacterium bovis,* with the usual susceptibility pattern of isoniazid and pyrazinamide resistance. At four-month follow-up visit, repeated laboratory tests, and CT abdomen showed resolution of previously described abnormalities. He received 18 months of antituberculous therapy with complete recovery.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

GM: wrote the manuscript with the help of all the coauthors and has no potential conflicts of interest, financial disclosures, and funding sources. SA: helped in writing the manuscript, took the pictures, reviewed the final version, and has no potential conflicts of interest, financial disclosures, and funding sources.

ORCID

Gabriel Motoa https://orcid.org/0000-0001-6534-2691

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