Dear Editor,

Tuberculosis is an important health problem in developing countries. There are several manifestations of tuberculosis. Almost any organ system may be involved. Abdominal tuberculosis may present as nodal disease, peritoneal disease, or organ-specific disease. In this context, the differential diagnosis of peritoneal disease is particularly challenging. Peritoneal tuberculosis closely mimics peritoneal carcinomatosis and vice versa. We present one such challenging case, where despite proven nodal tuberculosis, the peritoneal disease was a manifestation of disseminated malignancy.

A 50-year-old female, a diagnosed case of gallstone disease, was evaluated for pyrexia of unknown origin and was started on antitubercular therapy (ATT) 5 months back based on the identification of necrotic cervical and abdominal lymphadenopathy [Figure 1a, arrows] and detection of acid-fast bacilli (AFB) on the cervical lymph node biopsy specimen. Two months later, she developed ATT hepatitis. A modified ATT regimen was restarted at our center. At the last visit, she complained of abdominal discomfort, loss of weight, and appetite.

Her laboratory data revealed normal serum bilirubin with elevated serum alanine aminotransferase (195 U/L, normal <35) and AST (181 U/L, normal <35) as well as alkaline phosphatase (891 U/L, normal 30–120 U/L). Abdominal computed tomography (CT) revealed no significant retroperitoneal lymph nodes. There were mild ascites with peritoneal and omental thickening as well as nodularity [Figure 1b, arrow]. There was moderate degree of circumferential mural thickening of gallbladder with bilobar intrahepatic biliary dilatation [Figure 1c, arrow]. Common bile duct was dilated till the lower end. Endoscopic ultrasound (EUS) revealed enlarged periportal lymph node. Ultrasound (US)-guided fine-needle aspiration cytology (FNAC) of the gallbladder wall revealed atypical cells along with sheets of reactive mesothelial cells. Immunocytochemistry was negative. Omental sampling revealed only few reactive mesothelial cells. No granulomas were seen. Stain for AFB was negative. EUS-guided FNAC from gallbladder wall revealed no malignant cells. Ascitic fluid cytology was negative for malignant cells. On follow-up, 6 weeks later, the patient complained of increasing abdominal discomfort and distension. Repeat US revealed persistent gallbladder wall thickening and a well-defined hypoechoic lesion in the segment 5 of liver and bulky left ovary. US-guided FNAC of the liver lesion and the left ovary was performed. Cytological examination of the aspirate from liver lesion revealed singly scattered tumor cells with focal clustering (Figure 1d, arrows). The tumor cells were moderately to markedly pleomorphic with coarse chromatin, prominent nucleoli, and moderate amount of cytoplasm, suggestive of adenocarcinoma. Tumor cells with similar morphology were seen in the left ovarian aspirate.

Tuberculosis is an important health problem in both developed and developing countries. A significant proportion of the world’s population is infected with tubercle bacilli. India accounts for the largest proportion of patients with tuberculosis. Tuberculosis most commonly manifests as lymphadenopathy. Necrotic lymphadenopathy is the hallmark of tuberculosis. Besides retroperitoneal and mesenteric lymphadenopathy, abdominal disease presents with peritoneal involvement characterized as wet, fibrotic, and dry type. The peritoneal disease may present as ascites; peritoneal thickening, enhancement; omental fat standing, nodules, caking; mesenteric masses and adhesions. Other manifestations include gastrointestinal involvement leading to bowel wall thickening and obstruction. Ileocecal region is the most commonly involved site. Hepatobiliary, adrenal and genitourinary involvement, is less common.

Findings of peritoneal disease are nonspecific and similar appearance may be produced by nontubercular peritonitis, peritoneal carcinomatosis, and mesothelioma. Mesenteric changes, macro nodules in omentum, smooth omental outline, low-density center, and calcification in peritoneal masses have been reported to be the features favoring tubercular peritonitis.
over peritoneal carcinomatosis.[3] A sensitivity of 69% and 91% was reported for predicting peritoneal tuberculosis and peritoneal carcinomatosis based on CT, respectively. Few other rare manifestations of abdominal tuberculosis have been reported.[4-6] Sharma et al. reported a case of Sister Mary Joseph’s nodule secondary to abdominal tuberculosis.[4] Abdominal tuberculosis presenting as abdominal emergency has also been reported.[5-6]

This case highlights the need to have a high index of suspicion for malignancy even in diagnosed cases of tuberculosis when new findings appear during treatment even before attributing these findings to disease progression due to drug resistance.

**Declaration of patient consent**
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

**Financial support and sponsorship**
Nil.

**Conflicts of interest**
There are no conflicts of interest.

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**Access this article online**
Quick Response Code:  
Website: www.ijmyco.org  
DOI: 10.4103/ijmy.ijmy_62_18

**How to cite this article:** Gupta P, Rana S, Agrawal P. Peritoneal tuberculosis or carcinomatosis: A diagnostic conundrum. Int J Mycobacteriol 2018;7:198-9.