

TBC Mimicking Carcinosis in A [18f]-Fdg Pet/Ct

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CLINICAL IMAGE

Abstract: We report the case of a 41-year-old man with a history of long time HBV-related liver disease presenting abdominal pain, weight loss and dyspepsia for 3 months. He underwent an US scan which showed middle-grade ascites and pleural effusion associated with splenomegaly. A subsequent C.E CT scan of the abdomen revealed several areas of peritoneum and omentum thickening, compatible with carcinosis, associated with multiple mediastinal and abdominal lymphadenopathies.

A [18F]-FDG PET/CT was performed, revealing high peritoneal and lymph nodal tracer uptake, compatible with dissemination of an unknown neoplasm. Lung and abdominal fluid as well as a peritoneum nodule resected through laparoscopy underwent cytological investigation. The results were negative for neoplasm, revealing chronic granulomatous inflammation. Afterward, a Ziehl-Neelsen staining of the nodule was positive for Mycobacterium Tuberculosis. The patient was treated with a combination of Antibiotics (Rifampicin, Isoniazid, ethambutol, levofloxacin).

Keywords: [18F]-FDG PET/CT; TBC; Carcinosis; Infection; Pitfalls

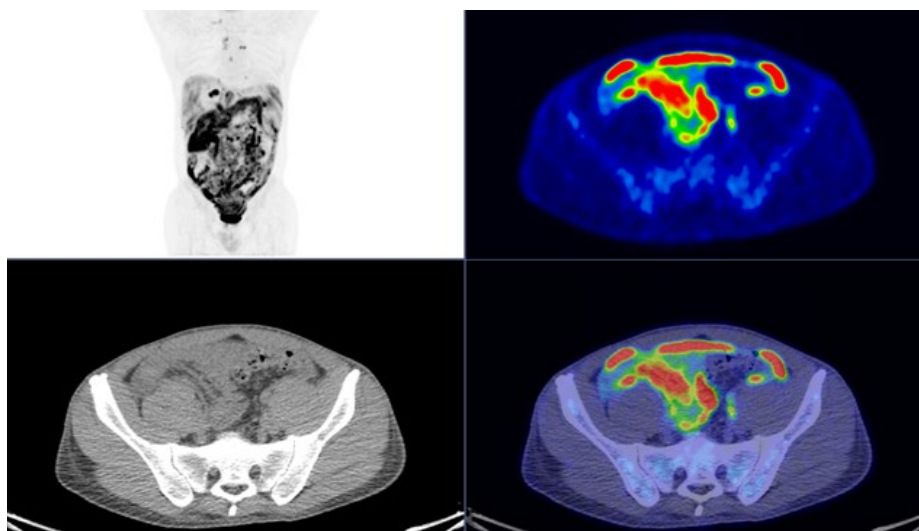


Figure 1: A 41-year-old man with a history of long time HBV-related liver disease presenting abdominal pain, weight loss and dyspepsia for 3 months. Clinical and radiological signs as omental thickening and the presence of multiple abdominal lymph nodes were suggestive of carcinosis [1,2] or of extra-nodal high grade lymphoma. A [18F]-FDG PET/CT was performed, showing tracer uptake of omentum, peritoneum and lymph nodes. An acid-fast bacilli (AFB) staining were performed after excisional biopsy on a peritoneal nodule, and tested positive for Mycobacterium Tuberculosis [3].

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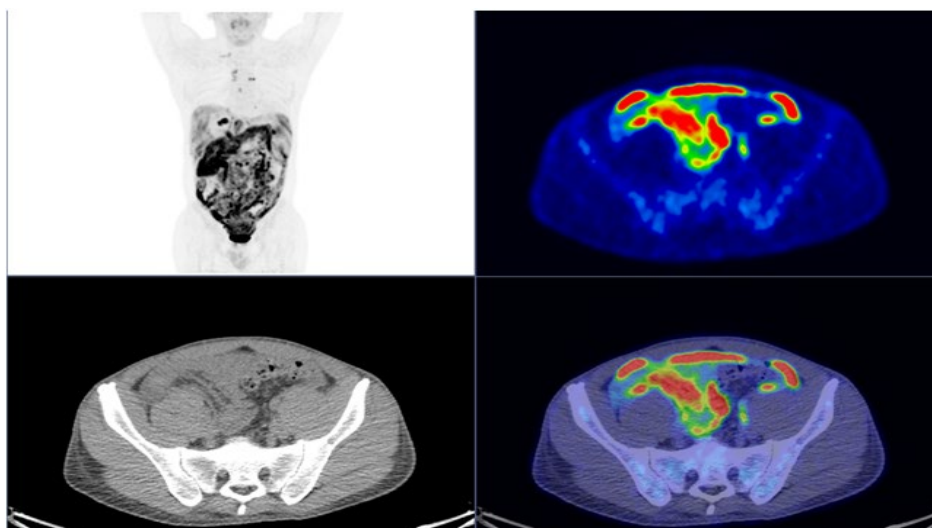


Figure 2: Though there were no relevant findings [4] in both the CT and [18F]FDG scans of the lungs except for a moderate area of pleural effusion on the left lung, PET scan revealed hypermetabolism of chest and sub-clavicular lymph nodes [5]. A latter excisional biopsy of the peritoneum nodule tested negative for malignant cells but positive to Ziehl-Nielsen staining [6]. An antibiotic therapy was initiated, leading to symptom resolution and reduction of lymph nodes and peritoneal nodules size [7]. Peritoneal tuberculosis, while being rarer than its pulmonary counterpart, is an increasing health concern [8]. Misleading clinical and radiological signs [9] can often lead to misdiagnosis and delay in treatment [10].

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