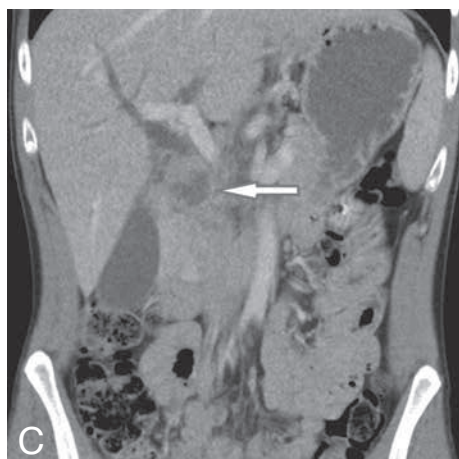


IMAGES IN CLINICAL RADIOLOGY



Paradoxical reaction in non HIV-tuberculosis, a rare case with pancreatic involvement

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A 24-year-old young man presents a sudden hepatic cytolysis and cholestasis after two months of isoniazid, rifampin and pyrazinamide therapy for severe lung tuberculosis. Initial data included heroin consumption history, HIV-negative serology, drug sensitivity and a normal abdominal CT.

The ultrasound showed a dilatation of intra hepatic biliary ducts, as well as of a dilatation of the main biliary duct, this dilatation was caused by an extrinsic mass developing from the head of the pancreas (Fig. A). This mass presents a heterogeneous echostructure pattern and measured 36 x 31 mm. A computer tomography scan of the abdomen was performed. All images were loaded on a clinical workstation with 3D functionalities and revealed a hypoattenuated, heterogeneous mass, with irregular outlines at the head of the pancreas (Fig. B and C), causing a dilatation of the biliary duct upstream. There is no dilatation of pancreatic duct associated. After contrast injection, this mass enhanced in the periphery (arrows), leaving the central necrotic part unenhanced. The possibility of pancreatic tuberculosis is suspected. This diagnosis is then confirmed by an ultrasound guided trans-duodenal biopsy of the lesion. The results demonstrate the presence of a granulomatous reaction associated with the caseous necrosis within this mass confirming a tuberculosis of the head of the pancreas. The patient was treated with sphincterotomy and biliary prosthesis. The liver function test showed that the transaminases back to normal within two days, and the GGT normalized after thirteen days post intervention. The antituberculous treatment was maintained.

Comment

Pancreatic tuberculosis is rare; a paradoxical pancreatic tuberculous reaction has been reported only in one case of abdominal tuberculosis but never, to our knowledge, in pulmonary tuberculosis with no initial abdominal involvement. Paradoxical tuberculosis reaction is defined by clinical or radiological worsening of previous lesions or new ones in patients receiving adequate anti-tuberculosis therapy that initially improved on treatment. Paradoxical reaction is mostly seen in human immunodeficiency virus (HIV) positive patients. The dissemination of abdominal tuberculosis are first to lymph nodes, then liver, spleen, bone marrow and pancreas in rare case. The most common differential diagnosis of a hypoattenuated, heterogeneous mass, developing from the head of the pancreas can be an

adenocarcinoma, hypervascular mass, with or without pancreatic ducts obstruction. Other differentials can be a metastasis, usually from kidney and melanoma, or lymphoma but they rarely cause any biliary duct obstruction and finally, the Langerhans cell tumor, which consists of a hypervascular pancreatic mass, with liver metastases. In conclusion, the possibility of a pancreatic tuberculosis must be thought in cases of a pancreatic mass at a young man treated for lung tuberculosis, although this event remains very rare.

Reference

1. Lee Y.J., Jung S.H., Hyun W.J., Kim S.H., Lee Hle, Yang H.W., Kim A., Cha S.W.: A case of Obstructive Jaundice Caused by Paradoxical Reaction during Antituberculous Chemotherapy for Abdominal Tuberculosis. *Gut and Liver*, 2009, 3: 338-342.

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