

PANCREATIC TUBERCULOSIS: A RARE CONDITION MIMICKING PANCREATIC CYSTADENOMA

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Summary: Tuberculosis of the pancreas is extremely rare. Even in autopsies of patients who have died of disseminated tuberculosis the reported incidence of pancreatic involvement is between 2 and 4.7%, and therefore clinical diagnosis is exceptional. We describe an unusual case of primary pancreatic tuberculosis mimicking a cystic tumor of the pancreas in a patient who had no known exposure history, was immunocompetent and had no demonstrable extrapancreatic involvement.

A review of literature of this condition and a discussion of diagnosis and treatment are presented. No other such case has been found reported. **Key Words:** Tuberculosis . Pancreas

Introduction

Tuberculosis of the pancreas is extremely rare. Even in autopsies of patients who have died of disseminated tuberculosis the reported incidence of pancreatic involvement is between 2 and 4.7%, and therefore clinical diagnosis is exceptional¹.

We describe an unusual case of primary pancreatic tuberculosis mimicking a cystic tumor of the pancreas in a patient who had no known exposure history, was immunocompetent and had no demonstrable extrapancreatic involvement. No other case mimicking pancreatic cystadenoma has been found reported in English literature

Case Report

A 38-year-old woman, presented with a two weeks history of mild epigastric pain and no other symptom. There was no pertinent past medical or surgical history. Her vital signs were normal and she was not jaundiced. Abdominal examination was normal. Laboratory data included normal hematological findings and serum electrolyte levels. Liver function tests were all normal. CA 19-9 level was also normal (14.1 U ml⁻¹). Chest x-ray film was normal.

Upper digestive endoscopy was normal. Abdominal ultrasound disclosed a solid tumor in the head of the pancreas. CT scan showed a 5 cm cystic tumor in the head of the pancreas (Fig. 1). RMI disclosed a cystic tumor in the head of the pancreas posterior to the portal vein with 7 cm in diameter. The radiological diagnosis was serous cystadenoma of the pancreas.

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At laparotomy a large, hard and regular mass was found in the head of the pancreas. There was no evidence of liver metastases. There were no enlarged lymph nodes and total enucleation of the tumor could be performed. Gross examination of the specimen revealed a solid tumor with necrotic areas. Macroscopic findings: the specimen consisted of a mass of coalescent lymph nodes, measuring 6.5 x 2.5 x 1 cm. The cut surface was whitish-yellow with caseous necrotic areas. Histologic examination revealed granulomatous inflammatory process characterized by areas of caseous necrosis surrounded by epithelioid cells, lymphocytes and Langhans cells. The histochemical studies using the Ziehl Neelse method showed rodshaped stained red bacilli, confirming the diagnosis of mycobacteria lymphadenitis (Fig. 2).

Postoperative period was uneventful and the patient was discharged in the fifth day. A tuberculin test was negative with 0 mm of erythema and induration. Because of the final pathological diagnosis she was treated with antituberculous agents after surgical recovery. She is well and with no signs of disease 8 months after the surgical procedure.

Discussion

Abdominal tuberculosis is still a problem in developing countries². Although the disease is uncommon in the West, there have been occasional case reports of abdominal tuberculosis. Tuberculosis of the pancreas is rare and may occur as a part of disseminated disease^{3,4,5}. In a review of 300 patients with abdominal tuberculosis, Bhansali⁴ did not report a single case in which there was clinical involvement of the pancreas. Paraf et al. ⁶, studying an autopsy series of miliary tuberculosis found pancreatic involvement in only

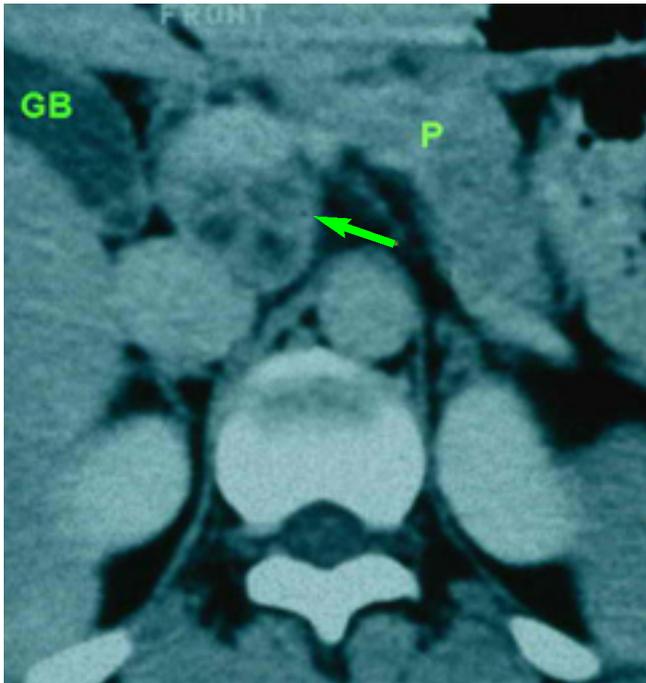


Fig.1 - CT of the abdomen shows a 5 cm cystic tumor (arrow) in the head of the pancreas. GB = Gallbladder. P= Pancreas

2% of patients. Tuberculous infection of the pancreas can also be associated with AIDS, but the present one was not.

Tuberculosis of the pancreas generally presents with signs of acute or chronic pancreatitis, as biliary obstruction mimicking pancreatic carcinoma, or as a pancreatic abscess. In the present case, however, the patient presented with mild symptoms and the cystic tumor image in the head of the pancreas was an incidental radiological finding. This finding and the good general condition of the patient pointed to the surgery with a preoperative diagnosis of cystadenoma of the pancreas. No other case mimicking pancreatic cystadenoma has been found reported in the English literature.

The diagnosis of tuberculosis of the pancreas is limited by its rarity. Ultrasound examination or computed tomography can help to delineate the

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lesion, but alone cannot differentiate between an abscess and a necrotic neoplasm⁷. The diagnosis is most often not suspected prior to celiotomy unless there is evidence of tuberculosis elsewhere.

The pathogenesis of pancreatic tuberculosis is still uncertain. Most cases arise secondary to tuberculous infection elsewhere and are associated with miliary or pulmonary tuberculosis. It is remarkable that our patient did not have signs of pulmonary, intestinal or miliary tuberculosis that could suggest a primary site from which the pancreas could have been secondarily involved⁸. The most likely explanation is that of a hematogenous spread from a small, reactivated, undetectable primary or secondary tuberculous focus⁹.

The present case represents the rare occurrence of pancreatic tuberculosis without disseminated disease. It is of special importance because it presented with radiological and macroscopical characteristics of a pancreatic neoplasm, which supports the fact that histological confirmation is mandatory before a diagnosis of pancreatic neoplasm is established.

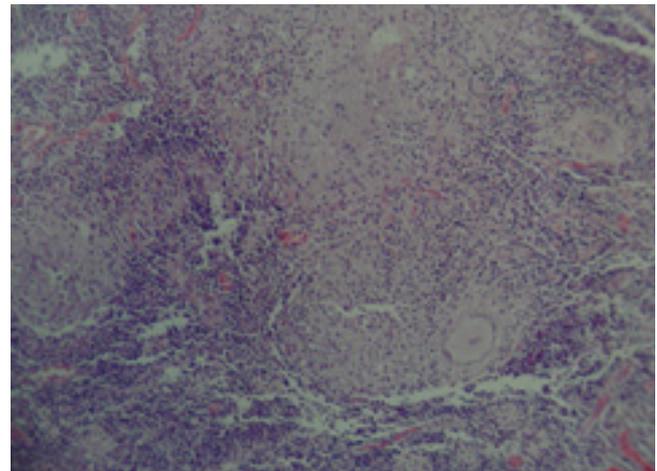


Fig.2 - Microphotograph - Lymph node with epithelioid granuloma with central caseous necrosis and Langhans giant cells (HE x 40).