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Tubercular pancreatic abscess presenting as Fever and cystic pancreatic lesion with endoscopic management.

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Running Head: Tubercular Pancreatic Abscess

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INTRODUCTION

Isolated pancreatic tuberculosis is a rare presentation of tubercular infection. There are few reported cases of pancreatic tuberculosis diagnosed by endoscopic ultrasound with fine-needle aspiration (EUS FNA) (1-5), though EUS is often used in the evaluation of pancreatic cystic lesions (6). We present a case of a tubercular pancreatic abscess presenting as a cystic lesion in a patient with undiagnosed immunodeficiency. The abscess was aspirated by EUS FNA and treated with endoscopic drainage and anti-mycobacterial medications.

CASE REPORT

A 43 year-old male presented with one week of left upper quadrant abdominal pain and 3 days of fever, without other localizing symptoms. There were no exacerbating or remitting factors for the pain. His only medical history was a positive PPD seven years earlier treated with one year of INH, and infectious colitis nine months earlier treated with metronidazole. During metronidazole therapy he developed acute pancreatitis attributed to the medication.

At presentation, he was febrile to 104°F and diaphoretic, although he appeared comfortable. His chest was clear and pulse was regular at 120 bpm. Bowel sounds were active without abdominal distention. There was moderate left-upper quadrant tenderness without peritoneal signs. Serum laboratories were remarkable only for a sodium of 132mmol/L (135-146) and a hemoglobin of 10.2 g/dL (14.0-17.0); WBC count, platelets, amylase, lipase, liver tests, and creatinine were normal. Abdominal CT demonstrated a 3.6 x 3.0 cm thick-walled cystic mass at the pancreatic neck (Fig. 1) without

peripancreatic inflammation or chronic pancreatitis, not present on imaging 9 months earlier.

Due to persistent fevers, aspiration of the pancreatic cyst was performed. Pre-EUS endoscopy revealed white plaques consistent with esophageal candidiasis. EUS (GF-UCT140-AL5 Olympus America, Center Valley, PA) identified a 3.2 x 2.8 cm thick-walled cyst at the pancreatic genu. The cyst contents were heterogeneous with hyperechoic reflectors. Aspiration (Fig. 2) with a 19G needle (Wilson Cook, Winston Salem, NC) retrieved 6mL of purulent fluid. A cystduodenostomy was established using a 10mm x 40mm balloon dilator and two 6 Fr 7cm double-pigtail stents. A 5 Fr nasocystic catheter was then placed into the cyst for lavage (Fig. 3). Acid fast stain of the aspirate revealed numerous acid-fast bacilli. A four-drug regimen for *M. tuberculosis* was initiated along with clarithromycin for *M. avium* i*ntracellulare*. Cultures grew *M. tuberculosis* after 7 days and clarithromycin was discontinued. The patient's fever and pain resolved 6 days after endoscopic drainage. A one-month follow-up CT demonstrated complete resolution. HIV testing was positive with a CD-4 count of 18/mcl.

DISCUSSION

This is a rare presentation of *M. tuberculosis* as fever and a pancreatic cystic lesion, diagnosed as isolated tubercular abscess by EUS-guided aspiration. The presence of esophageal candidiasis suggested unrecognized immunodeficiency and served as a clue to the diagnosis. A high index of suspicion is necessary to make this diagnosis, particularly in those without known immunodeficiency.

Pancreatic abscesses are most often sequelae of acute necrotizing pancreatitis occurring 2-3 weeks after initial presentation (7-9). Less commonly, they develop in chronic pancreatitis, after abdominal surgery, or secondary to trauma. Enteric bacteria such as *E. Coli* and *Klebsiella* species are isolated in the majority of abscesses. *M. tuberculosis* is a rare cause of pancreatic abscess. Surgical drainage has been standard for pancreatic abscess management with percutaneous and endoscopic approaches being more recently advocated (10). We performed endoscopic drainage on the presumption of bacterial infection when purulent aspirate was retrieved.

To our knowledge, this is the first reported case of an endoscopic cystduodenostomy for therapy of a tubercular pancreatic abscess. Limitations and complications of this technique are analogous to those described for endoscopic management of pancreatic abscesses (10). Endoscopic management of tubercular pancreatic abscesses is feasible and effective.

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