

Pancreatic tuberculosis presenting as an unusual head mass

A 28-year-old man presented with upper abdominal pain accompanied by loss of appetite and weight. The clinical examination was unremarkable. His laboratory investigations revealed serum alkaline phosphatase of 260 IU/L (normal range: 42–126 U/L) with normal serum bilirubin. Ultrasound of the abdomen showed a well-defined hypoechoic mass, measuring 3 cm, in the head and body region of the pancreas and a nondilated common bile duct and pancreatic duct. Integrated posi-

tron emission tomography (PET)–computed tomography (CT) had similar findings with the mass showing intense 18F-fluorodeoxyglucose (FDG) uptake (standardized uptake value [SUV] value of 15.7) and invading the common hepatic artery as well as the superior mesenteric vein (Fig. 1). The peripancreatic and precaval lymph nodes were also enlarged and showed intense FDG uptake. Endoscopic ultrasound (EUS) also had similar findings, with infiltration of the major

vessels by the mass (Fig. 2). Following EUS-guided fine-needle aspiration from the mass, cytological analysis revealed granulomatous inflammation with negative staining for acid-fast bacilli (AFB) (Fig. 3). The patient started four-drug antitubercular therapy (ATT) and showed a marked improvement in symptoms. After 6 weeks of ATT he is asymptomatic with a normal appetite and complete resolution of abdominal pain.

Isolated pancreatic tuberculosis is very rare, closely mimicking pancreatic cancer both clinically as well as radiologically [1, 2]. It usually presents as a mass lesion in the head of the pancreas and mimics a resectable pancreatic cancer with no vascular involvement; therefore many patients have been diagnosed with pancreatic

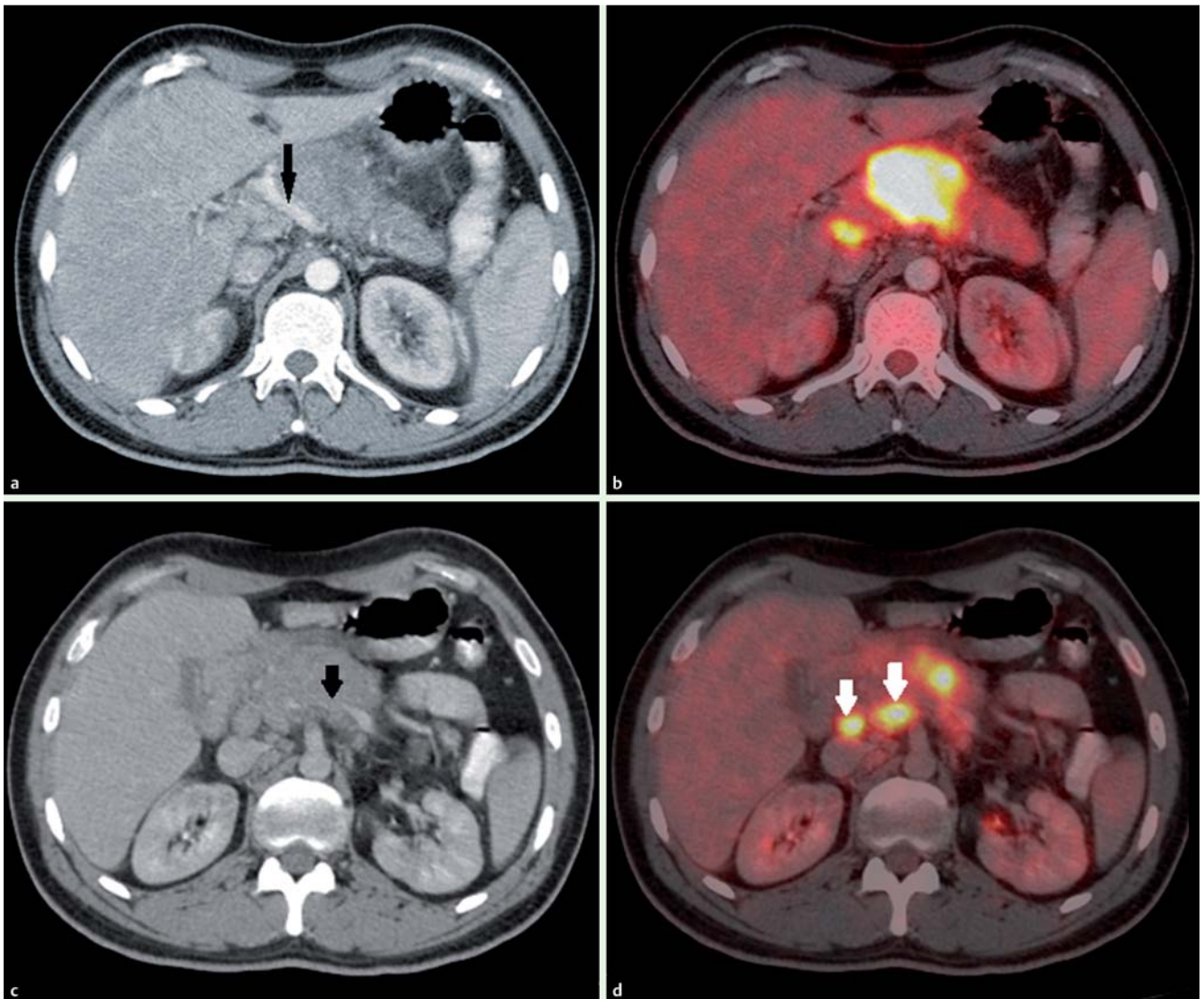


Fig. 1 Axial contrast-enhanced computed tomography (CECT) in a 28-year-old man with upper abdominal pain and loss of appetite and weight. **a** Arterial phase, 1.25-mm sections, showing an ill-defined, heterogeneously enhancing lesion in head and body of pancreas encasing the main hepatic artery (arrow). **b** Corresponding fused positron emission tomography (PET)–

computed tomography (CT) image showing intense 18F-fluorodeoxyglucose (FDG) uptake (SUV maximum 15.7) in this lesion. **c** Venous phase, 1.25-mm sections, showing the mass lesion invading the superior mesenteric vein and the confluence (arrow). **d** Also seen are enlarged para-aortic and precaval lymph nodes with intense FDG uptake (arrows).

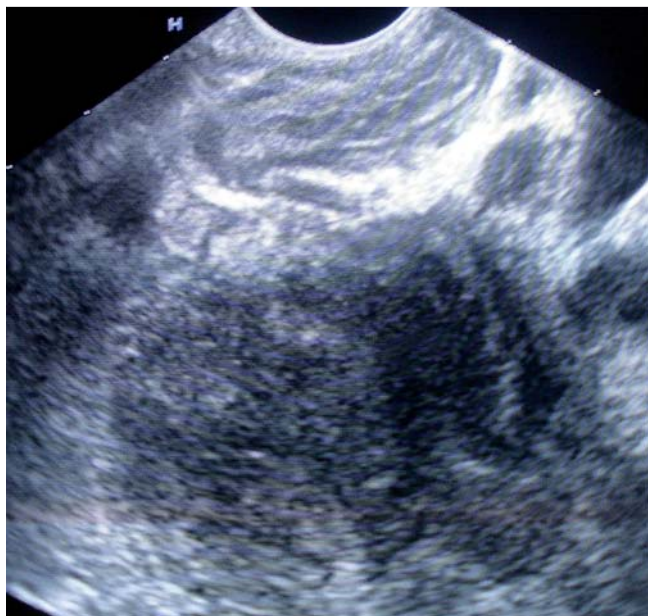


Fig. 2 Endoscopic ultrasound (EUS) showing a well-defined mass lesion in the head of the pancreas.

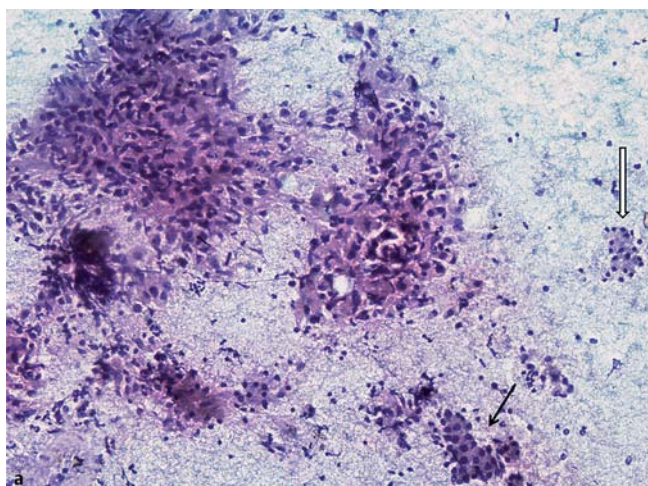
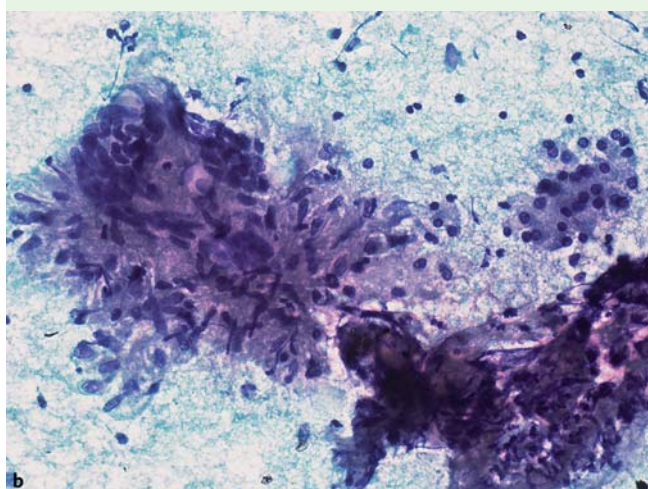


Fig. 3 Photomicrographs showing **a** epithelioid-cell granulomas with a cluster of benign ductal epithelial cells (black arrow) and a cluster of pancreatic acinar cells (thick arrow) (Papanicolaou, magnification $\times 20$), and **b** an epithelioid cell granuloma with a cluster of benign ductal epithelial cells (Papanicolaou, magnification $\times 40$).



tuberculosis following Whipple resection [3]. Pancreatic tuberculosis causing local vascular invasion has been very rarely reported and our literature search did not reveal any reports of arterial involvement in pancreatic tuberculosis [4].

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Competing interests: None

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Bibliography

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