# 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 positron 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

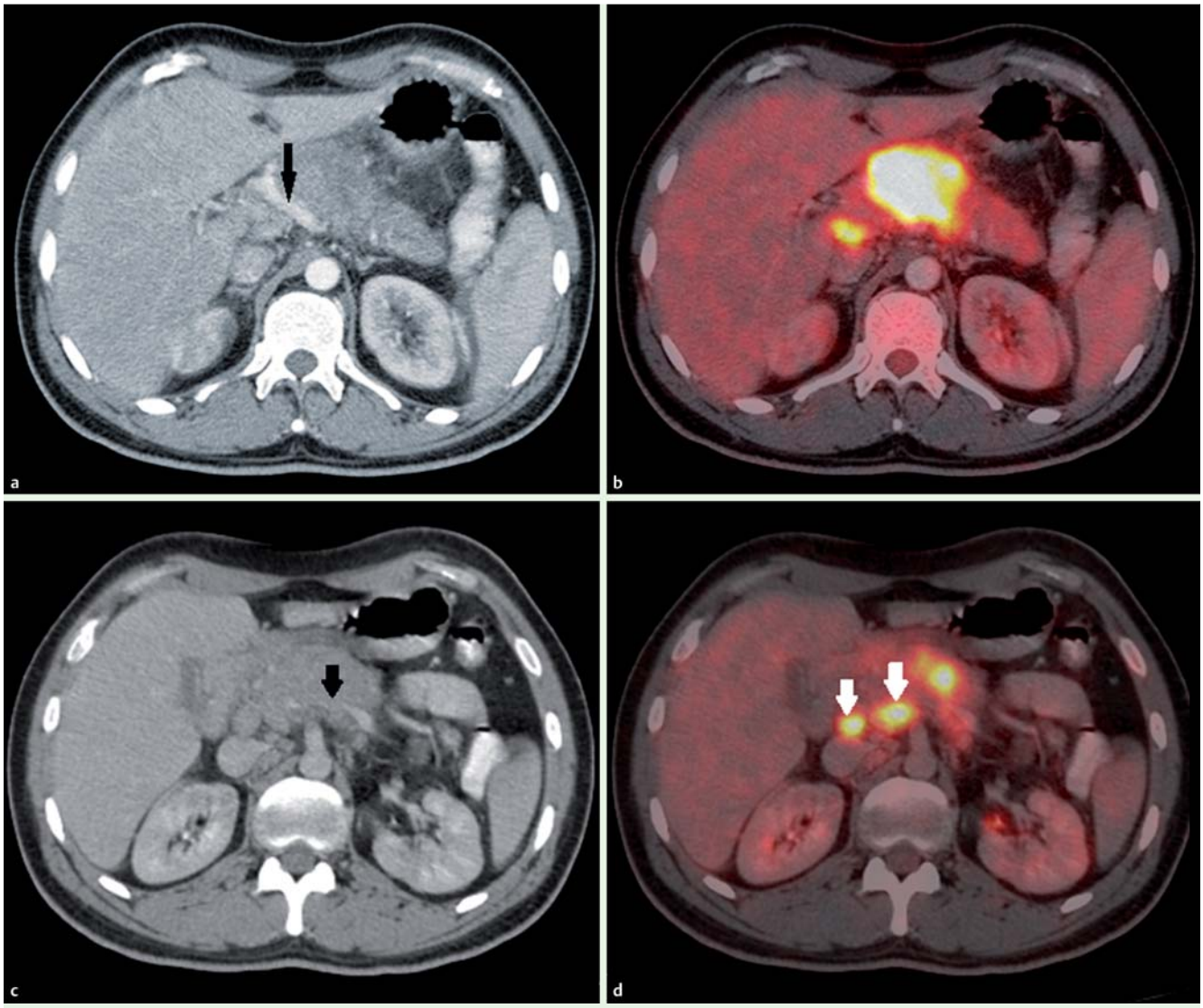


**Fig. 1** Axial contrast-enhanced computed tomography (CECT) in a 28-year-old man with upper abdominal pain and loss of appetite and weight. **a** Arterial phase, 1.25-mm sections, showing an ill-defined, heterogeneously enhancing lesion in head and body of pancreas encasing the main hepatic artery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

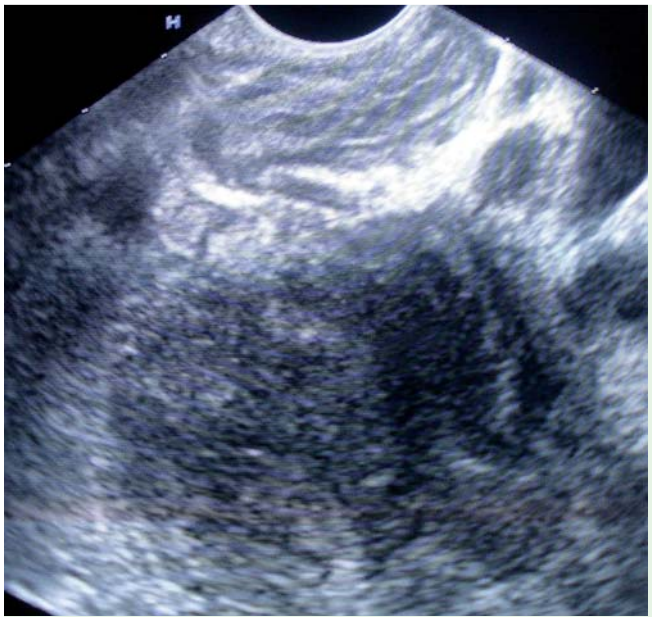

**Fig. 2** Endoscopic ultrasound (EUS) showing a well-defined mass lesion in the head of the pancreas.

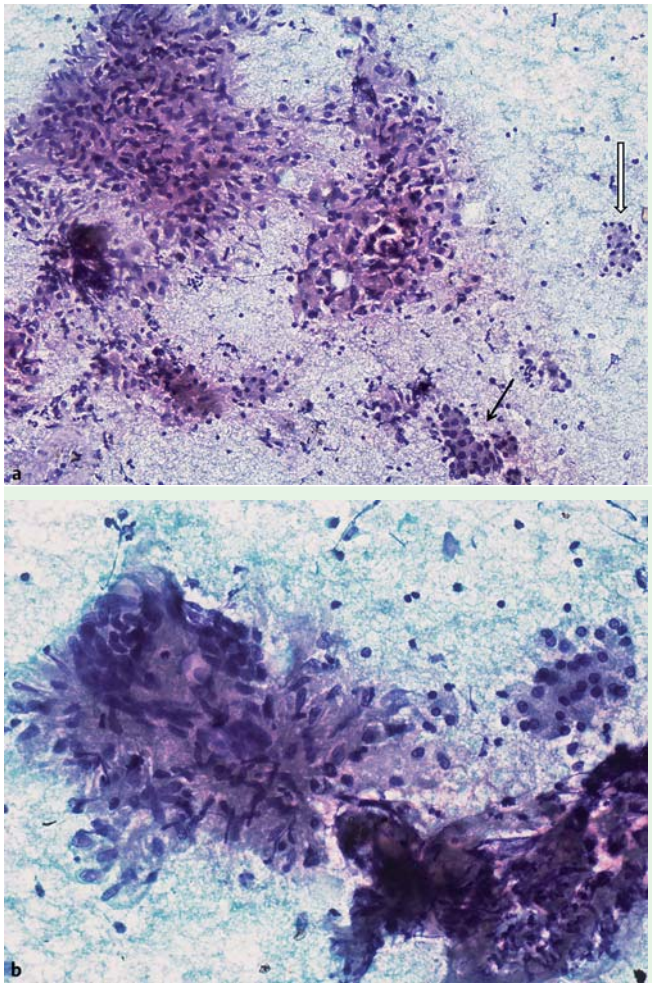

**Fig. 3** Photomicrographs showing **a** epithelioid-cell granulomas with a cluster of benign ductal epithelial cells (black arrow) and a cluster of pancreatic acinar cells (thick arrow) (Papanicolaou, magnification × 20), and **b** an epithelioid cell granuloma with a cluster of benign ductal epithelial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