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

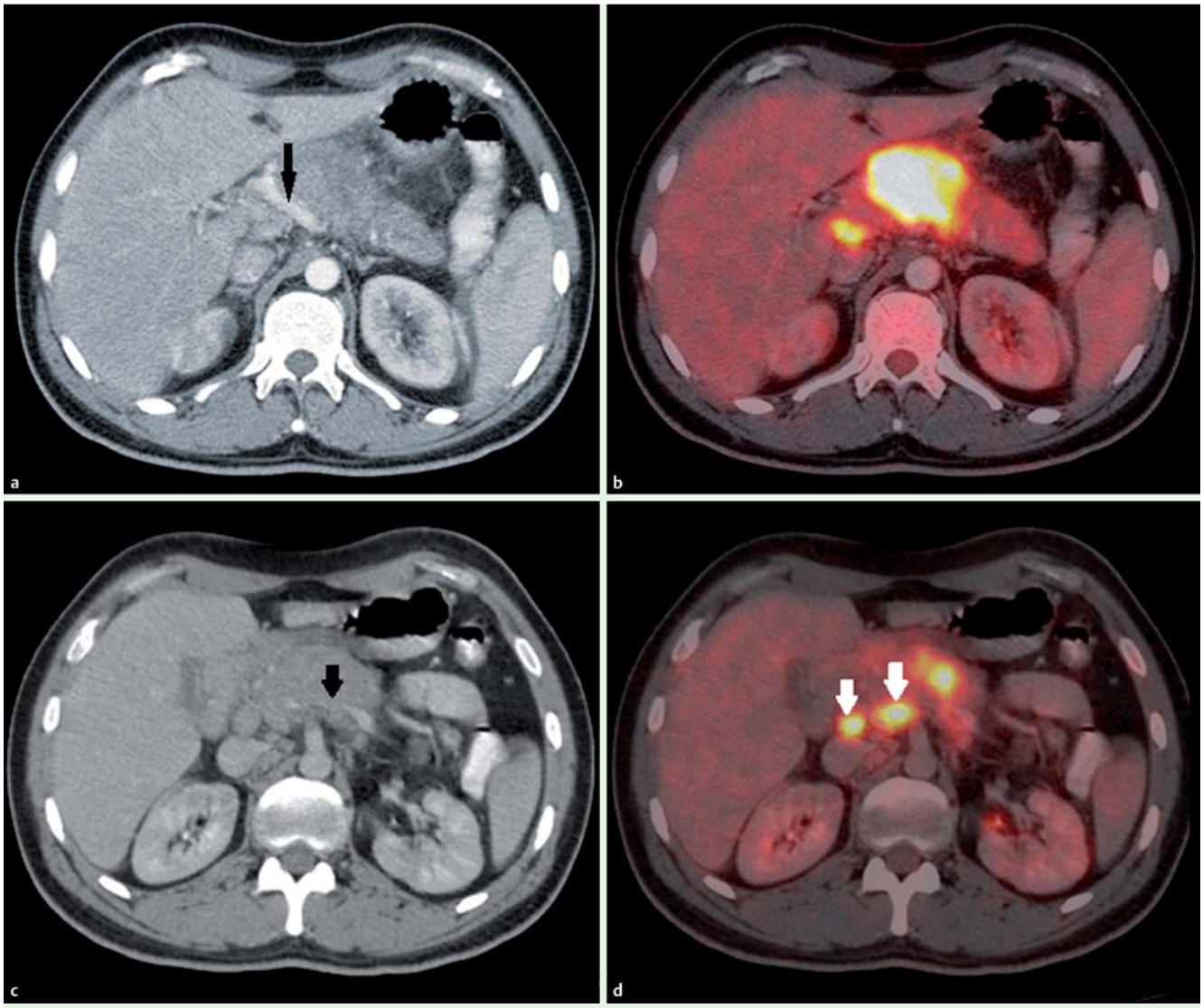

Fig. 1 Axial contrast-enhanced computed tomography (CECT) in a 28-year-old man with upper abdominal pain and loss of appetite and weight. **a** Arterial phase, 1.25-mm sections, showing an ill-defined, heterogeneously enhancing lesion in head and body of pancreas encasing the main hepatic artery (arrow).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

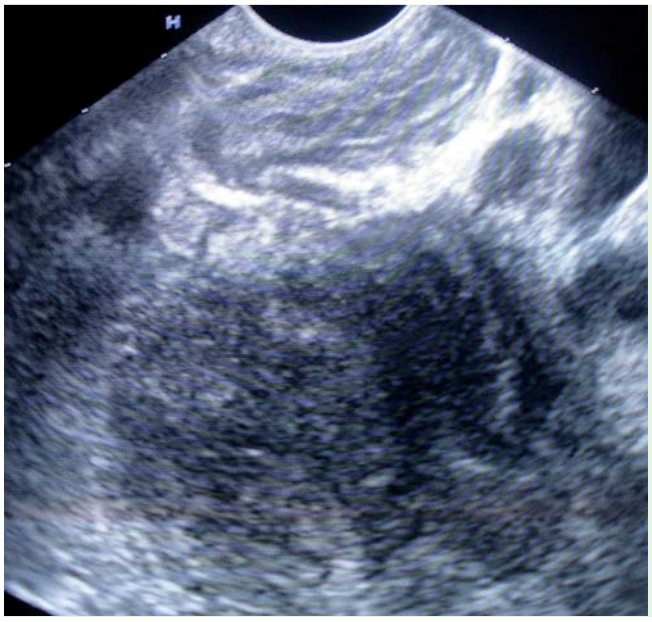

Fig. 2 Endoscopic ultrasound (EUS) showing a well-defined mass lesion in the head of the pancreas.

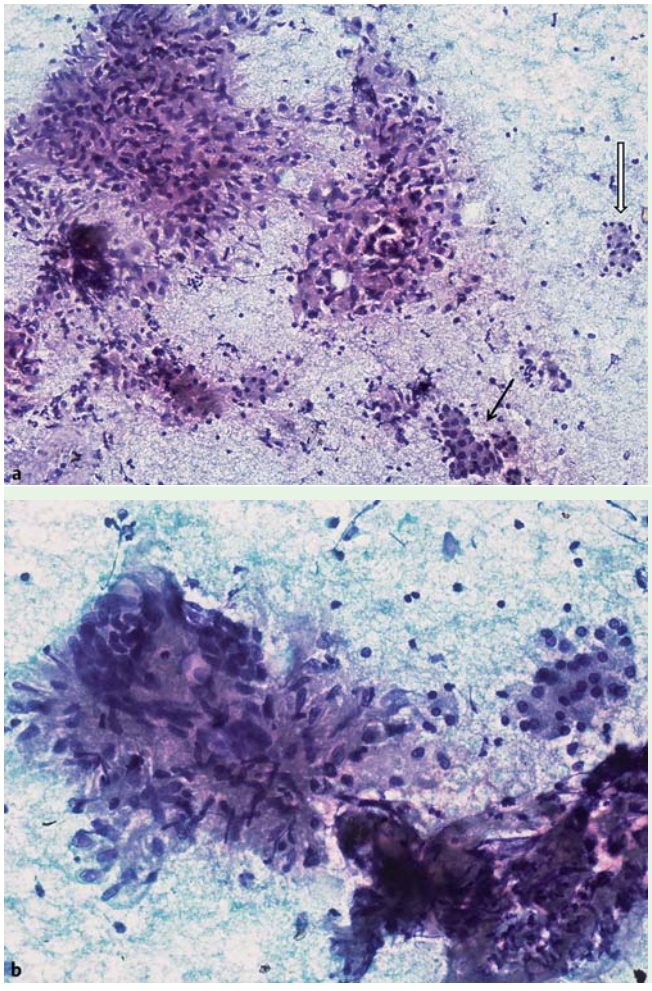

Fig. 3 Photomicrographs showing **a** epithelioid-cell granulomas with a cluster of benign ductal epithelial cells (black arrow) and a cluster of pancreatic acinar cells (thick arrow) (Papanicolaou, magnification × 20), and **b** an epithelioid cell granuloma with a cluster of benign ductal epithelial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

Endoscopy_UCTN_Code_CCL_1AZ_2AI

Competing interests: None

S. S. Rana[1], V. Chaudhary[1], N. Gupta[2], S. Sampath[3], B. R. Mittal[3], D. K. Bhasin[1]

[1] Department of Gastroenterology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India
[2] Department of Cytology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India
[3] Department of Nuclear Medicine, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

References

1 *Rana SS*, *Bhasin DK*, *Srinivasan R* et al. Distinctive endoscopic ultrasound features of isolated pancreatic tuberculosis and requirements for biliary stenting. Clin Gastroenterol Hepatol 2012; 10: 323 – 325
2 *Nagar AM*, *Raut AA*, *Morani AC* et al. Pancreatic tuberculosis: a clinical and imaging review of 32 cases. J Comput Assist Tomogr 2009; 33: 136 – 141
3 *Weiss ES*, *Klein WM*, *Yeo CJ*. Peripancreatic tuberculosis mimicking pancreatic neoplasia. J Gastrointest Surg 2005; 9: 254 – 262
4 *Rana SS*, *Bhasin DK*, *Gupta N* et al. Pancreatic tuberculosis with common bile duct and pancreatic duct dilatation. Endoscopy 2011; 43: E282 – 283

Bibliography

DOI http://dx.doi.org/10.1055/s-0033-1344565
Endoscopy 2013; 45: E317–E318

Stuttgart · New York
ISSN 0013-726X

Corresponding author

S. S. Rana, Dr
Department of Gastroenterology
Post Graduate Institute of Medical Education and Research
Chandigarh – 160012
India
Fax: +91-172-2744401
drsurinderrana@yahoo.co.in