Endoscopic ultrasound for the diagnosis of an uncommon cause of obstructive jaundice masquerading as malignancy

Filippo Antonini, Giampiero Macarri
Department of Gastroenterology, A. Murri Hospital, Polytechnic University of Marche, Fermo, Italy

A 42-year-old man with a history of alcohol consumption and smoking habit presented with abdominal pain, jaundice, and weight loss of 3-month duration. Laboratory results were significant for total bilirubin level of 5 mg/dL, direct bilirubin level of 4 mg/dL, aspartate aminotransferase (AST) level of 81 IU/L, alanine transaminase (ALT) 66 IU/L, and alkaline phosphatase level of 1,200 IU/L. An abdominal computed tomography (CT) scan showed signs of chronic pancreatitis and a suspected pancreatic head mass causing obstructive dilatation of the common bile duct (CBD) [Figure 1]. An endoscopic retrograde cholangiopancreatography (ERCP) revealed a 2-cm stricture in the distal part of the CBD. Brush cytology was performed and a plastic biliary stent was successfully placed to relieve the obstruction. An endoscopic ultrasound (EUS) with radial echoendoscope (GF-UE160-AL5, Olympus, Hamburg, Germany) showed a marked thickening of the second portion of the duodenum due to an enlargement of submucosal layer that had a pancreas-like echostructure, without hypoechogenic cavities. The biliary stent was surrounded by this thickened duodenal wall and no mass was found in the pancreatic head [Figure 2]. Results of brush cytology were negative for malignancy. These findings suggested a solid form of paraduodenal pancreatitis (PP) in a patient with chronic calcifying pancreatitis. A rapid clinical improvement was seen soon after alcohol withdrawal and without any other treatment. At a 3-month follow-up visit, the patient was persistently asymptomatic, with the plastic stent still in site.

PP is a distinct clinicopathological entity occurring predominantly inside and around the duodenal wall

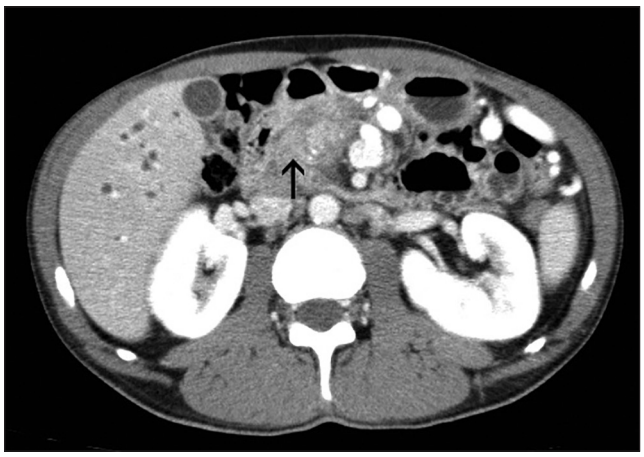

Figure 1. Axial contrast-enhanced CT image showing a hypodense lesion (arrow) in the pancreatic head with biliary tree dilatation

Access this article online	
Quick Response Code:	Website: www.eusjournal.com
	DOI: 10.4103/2303-9027.190926

How to cite this article: Antonini F, Macarri G. Endoscopic ultrasound for the diagnosis of an uncommon cause of obstructive jaundice masquerading as malignancy. Endosc Ultrasound 2017;6:276-7.

Address for correspondence
Dr. Filippo Antonini, UOC Gastroenterologia ed Endoscopia Digestiva, Università Politecnica delle Marche, Ospedale "A.Murri", Fermo - 63900, Italy. E-mail: filippore@yahoo.it
Received: 2015-05-21; **Accepted:** 2016-01-19

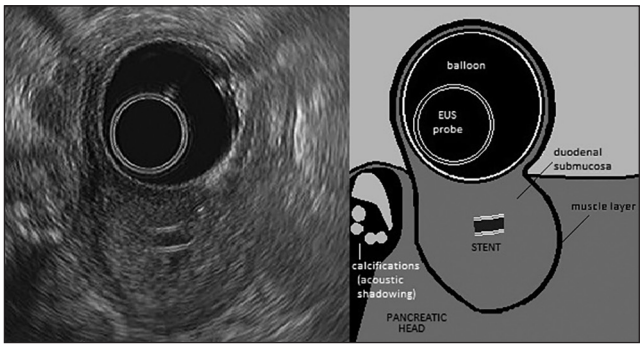

Figure 2. Endoscopic ultrasound view of the pancreatic head showing signs of chronic calcifying pancreatitis and the biliary stent surrounded by thickened duodenal wall that appears with a pancreas-like echostructure

along the minor papilla.[1] It has been reported under various names, including cystic dystrophy of heterotopic pancreas, paraduodenal wall cyst, and groove pancreatitis.[1,2] PP can be classified morphologically as either a solid mass (solid variant) or a cystic lesions (cystic variant) within the pancreaticoduodenal groove or intramurally within the duodenal wall.[1] Patients with a chronic presentation can have evidence of jaundice, as a result of distal CBD narrowing, and chronic weight loss, features that are suggestive of an underlying malignancy.[3] The differentiation of PP from pancreatic head carcinoma can be extremely difficult, and many cases ultimately proceed to surgery because of an inability to reliably make this distinction. EUS allows accurate demonstration of PP. The narrowing of the duodenal lumen accompanied by wall thickening are characteristic features. Cystic lesions and calcifications in the duodenal wall can also be found. In case of jaundice, smooth tubular CBD stenosis and the absence of vascular encasement are suggestive of PP. EUS, in combination with fine-needle aspiration when needed, is a very useful investigation in doubtful cases.[3,4]

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

REFERENCES

1. Adsay NV, Zamboni G. Paraduodenal pancreatitis: A clinico-pathologically distinct entity unifying "cystic dystrophy of heterotopic pancreas", "para-duodenal wall cyst", and "groove pancreatitis". *Semin Diagn Pathol* 2004;21:247-54.
2. Manzelli A, Petrou A, Lazzaro A, *et al*. Groove pancreatitis. A mini-series report and review of the literature. *JOP* 2011;12:230-3.
3. Casetti L, Bassi C, Salvia R, *et al*. "Paraduodenal" pancreatitis: Results of surgery on 58 consecutives patients from a single institution. *World J Surg* 2009;33:2664-9.
4. Brosens LA, Leguit RJ, Vleggaar FP, *et al*. EUS-guided FNA cytology diagnosis of paraduodenal pancreatitis (groove pancreatitis) with numerous giant cells: Conservative management allowed by cytological and radiological correlation. *Cytopathology* 2015;26:122-5.