

## Image of the Month

## Dilation of the dorsal pancreatic duct in an asymptomatic patient with pancreas divisum

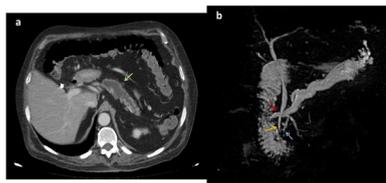
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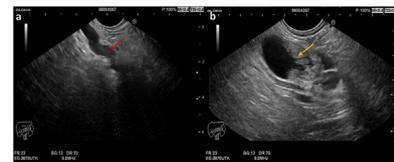


A 74-year-old man was referred to our department because he was found to have a slightly dilated main pancreatic duct in a routine abdominal CT (Fig. 1a). His medical history included acute pancreatitis (a single episode) 18 years before and a prior cholecystectomy (lithiasis). Blood tests revealed serum amylase level, tumor marker levels, fasting plasma glucose and hemoglobin A1c within normal range. The magnetic resonance cholangiopancreatography (MRCP) depicted a pancreas divisum draining the dorsal pancreas through the minor papilla with a rudimentary communication with the ventral pancreatic duct consistent with incomplete PD (Fig. 1b).



**Fig. 1.** Enhanced CT scan images in axial view (a) showing diffuse dilatation of the main pancreatic duct in the pancreatic body and tail (maximum diameter of 22 mm in pancreatic body), with atrophy of pancreatic parenchyma without any pancreatic mass. MRCP 3D images (b) showing incomplete PD in which the dorsal pancreatic duct (red arrow) enters directly in the minor papilla and the ventral pancreatic duct (blue arrow) and main biliary duct (yellow arrow) enter the major papilla. There is also a filamentous connection between dorsal and ventral ducts. Note the diffusely dilated dorsal pancreatic duct.

Dorsal pancreatic duct was dilated (14 mm) with no evidence of pancreatic masses or obstructive causes. EUS confirmed the dilatation of the dorsal duct (14 mm) and revealed the presence of several mural nodules >5 mm within the dilated dorsal duct (Fig. 2).



**Fig. 2.** EUS images showing dilatation of the dorsal duct (a) and presence of digital protrusions within the dorsal duct (b).

From these image features a diagnosis of main duct intraductal papillary mucinous neoplasia of the pancreas (MD-IPMN) was made. After staging showing no distant disease, the patient was proposed to pancreaticoduodenectomy.

Despite of increasing diagnosis of the PD and IPMN, these conditions continue to be rare and PD associated with IPMN is even rarer. Furthermore, as it remains unclear if PD and IPMN may be etiologically related we emphasize the importance of considering the coexistence of MD-IPMN in patients with PD and dilation of dorsal duct, even in the absence of symptoms.

### Conflict of interest

None declared.

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