A rare case of a pancreatic mass due to accessory spleen; when EUS-FNA is not enough

A 56-year-old man was referred with asymptomatic elevation of pancreatic hydrolase levels. Magnetic resonance imaging (MRI) delineated a pancreatic lesion with a low T1 and high T2 signal (**Fig. 1**). Endoscopic ultrasound (EUS) found an oval, well-defined, isoechogenic, homogeneous mass in the pancreatic parenchyma, without any vascular invasion and no locoregional lymph nodes (**Fig. 2**).

Fine-needle aspiration (FNA) showed small epithelioid cells. Immunostaining was positive for antichromogranin, antisynaptophysin, and anti-KI-67 (5%), and a few cells were positive for anti-CD56. This was consistent with a neuroendocrine tumor (NET).

Octreotide positron emission tomography combined with computed tomography (PET-CT) showed a focal uptake into the pancreas without any other nonphysiological uptake (**Fig. 3**).

CA19–9 and chromogranin levels were normal.

Caudal pancreatectomy with spleen preservation was performed. Histological examination found no proof of NET but did reveal an intrapancreatic accessory spleen (IPAS) (**Fig. 4**). The postoperative period and follow-up were satisfactory.

Accessory spleens may be found in 15% of the population but are rarely located in the pancreatic tail (17%) [1]. Most IPASs have a homogeneous contrast-enhanced appearance on CT and MRI, sharing features with hypervascular lesions (such as NETs) [1].

Octreotide scans have a high sensitivity for detection of gastrointestinal NET (70%–95%). The somatostatin receptors on the surface of splenic lymphocytes may lead to false diagnosis of NET [2]. Nuclear scintigraphic investigations such as those with ^{99m}Tc sulfur colloid can help in identifying IPAS [3].

EUS findings include regular margins and homogeneous echogenicity, ranging from hypoechoic to hyperechoic [4].

FNA reveals small lymphocytes and a mixed inflammatory infiltrate with the appearance of white pulp. Sampling of islet cell clusters from the adjacent pancreatic parenchyma can lead to misdiagnosis.

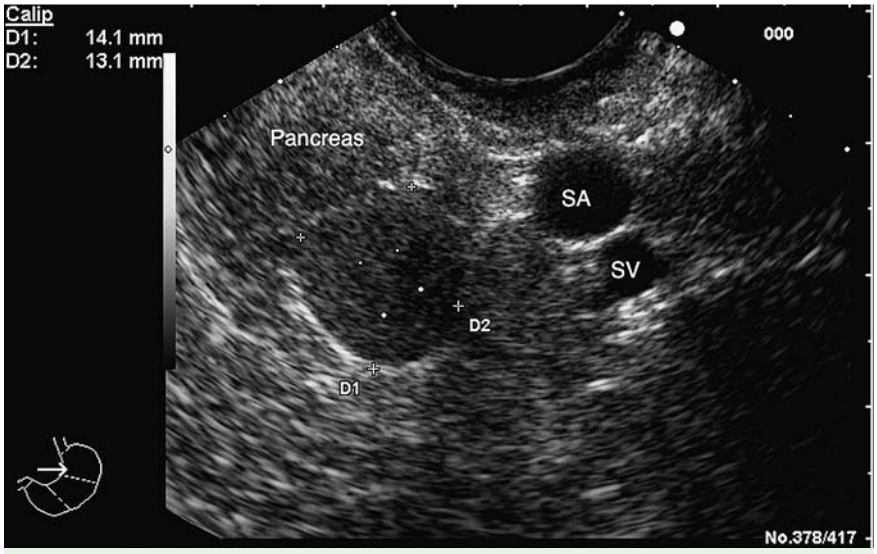

Fig. 1 Endoscopic ultrasound shows an oval, well-defined, isoechogenic, homogeneous, 14-mm mass located in the pancreatic tail. There is no cystic component or calcification (SA, splenic artery; SV, splenic vein).

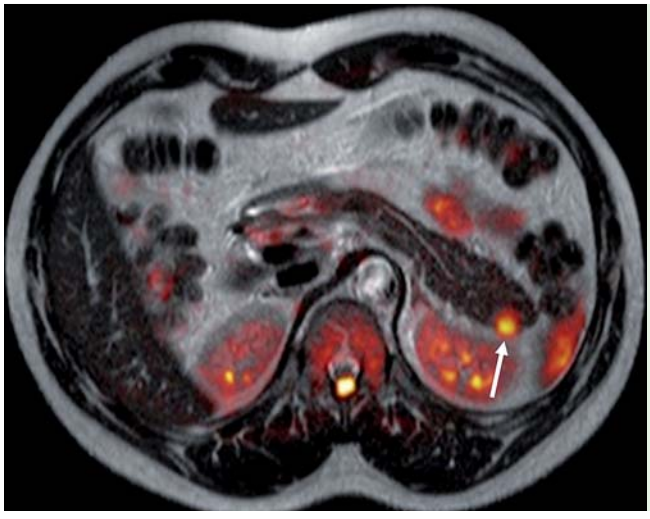

Fig. 2 Axial coregistration of turbo spin echo (TSE) T2-weighted and diffusion-weighted sections shows a well-defined and very bright nodule in the tail of the pancreas (arrow).

CD8 immunostaining of splenic sinus endothelial cells can help in confirming the diagnosis, as done retrospectively on FNA material in our patient [5].

Ultrasound endoscopists should be aware of this entity (IPAS) in order to avoid unnecessary surgery, even when FNA shows cells with NET characteristics.

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Competing interests: None

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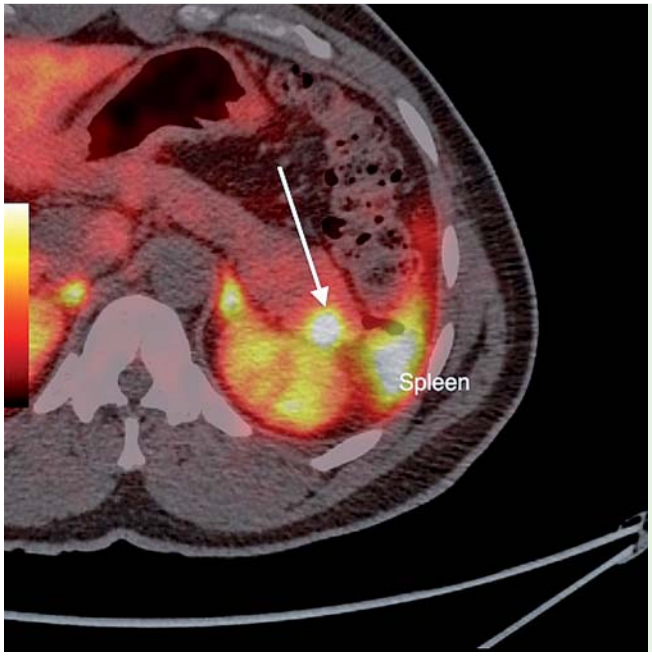

Fig. 3 Octreotide positron emission tomography combined with computed tomography (PET-CT) showing focal uptake in the pancreatic tail (arrow) suggestive of neuroendocrine tumor.

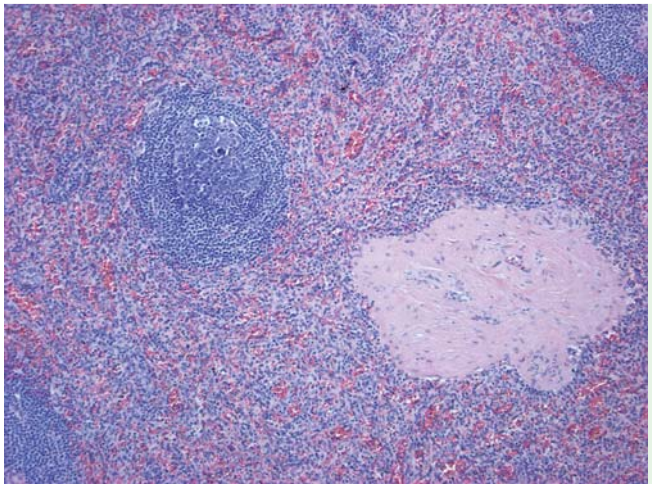

Fig. 4 Histological image (hematoxylin and eosin [H&E] staining) of the intrapancreatic splenic tissue.

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Bibliography

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