Accessory spleens are found in approximately 10% of the general population, of which 16% are intrapancreatic [1]. A previously healthy 49-year-old patient was referred to our tertiary center for further evaluation of a pancreatic mass. She had initially presented to another hospital with nonspecific abdominal pain. An abdominal computed tomography (CT) scan had revealed a solid mass in the tail of the pancreas. Endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) was suggestive of a pancreatic neuroendocrine tumor (PNET).

At our institution, the patient had a normal physical examination with no lymphadenopathy, organomegaly, or a palpable abdominal mass. The patient was referred for EUS-guided tattooing to guide laparoscopic distal pancreatectomy. The EUS revealed a hypoechoic, 2.3-cm mass in the tail of the pancreas. The mass was round and homogeneous, with well-demarcated and sharp borders, and a small cystic component (Fig. 1).

EUS-elastography showed inhomogeneous hardness as compared with the surrounding tissue (Fig. 2). EUS-guided tattooing was carried out by injecting 2.5 mL of sterile, purified carbon particle just proximal to the lesion as the needle was withdrawn to the surface of the pancreas (Fig. 3).

The patient subsequently underwent laparoscopic spleen-preserving distal pancreatectomy without complications. The tattoo was readily identified and demarcated a precise line of resection. Pathologic examination of the surgical specimen demonstrated a cystic mass within the pancreas. The mass had a well-defined capsule within which was splenic parenchyma and a small cyst lined by a layer of benign squamous epithelium. Pathologic diagnosis was consistent with an epidermoid cyst in an intrapancreatic accessory spleen (IPAS) (Fig. 4).

None of the 16 reported IPAS cases were diagnosed preoperatively as they are known to be difficult to clinically distinguish from other tumors. The value of EUS-FNA for their diagnosis needs further study. FNA was not done in the current case because the lesion was presumed to
represent a PNET according to outside pathologic diagnosis.

Elastography is a means of measuring tissue stiffness. Malignant tissue is harder than benign tissue and elastography may be able to differentiate between them [2]. The system is set up to use a hue color map (red-green-blue), in which hard tissue areas are shown in dark blue, medium-hard tissue areas in cyan, intermediate hardness tissue areas in green, medium-soft tissue areas in yellow, and soft tissue areas in red [3]. In the current case, the epidermoid cyst demonstrated inhomogeneous hardness (mixture of blue and green). EUS-elastography has been used for the diagnosis of pancreatic cancer and malignant lymphadenopathy with variable sensitivity, specificity, and accuracy in different studies [3 – 5].

Competing interests: None

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Fig. 4 Epidermoid cyst in an intrapancreatic accessory spleen. Note the thin epithelial lining (top), the layer of splenic tissue, and the associated pancreatic parenchyma (bottom).

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