Pancreatic cystic lymphangioma in a 6-year-old girl, diagnosed by endoscopic ultrasound (EUS) fine needle aspiration

Pancreatic cystic lesions are challenging clinically because they represent a spectrum of different lesions, ranging from benign to malignant. At times, the final diagnosis is made only at surgery. We report a final diagnosis of a pancreatic cystic lymphangioma, made using endoscopic ultrasound fine needle aspiration (EUS-FNA) in a young girl, with cytological examination and measurement of the level of triglycerides in the intracystic fluid.

A 6-year-old girl showed evidence of a pancreatic head cystic lesion on transabdominal ultrasonography. Magnetic resonance imaging (MRI) showed a multilobular cystic lesion, with an inverted C shape, around the splenomesenteric confluence (Fig. 1). The MRI also showed a small, irregular area, which was suspected of being a solid component within the lesion. Endosonography with linear array showed a micro-macrocystic lesion, 4 cm in diameter, in the pancreatic head and uncinate process (Figs. 2, 3).

No solid mass was seen. EUS-FNA with a 22 G needle was carried out to evacuate the lesion. The intracystic fluid appeared milky and viscous (Fig. 4).

Intracystic fluid analysis showed amylase/lipase 200/1720 U/L, carcinoembryonic antigen (CEA) 0.2 ng/mL, and triglycerides 10570 mg/dL. Cytology showed normal lymphocytes. The final diagnosis was pancreatic cystic lymphangioma. Abdominal ultrasound confirmed the presence of an unchanged lesion at 1 year follow-up and the patient remains asymptomatic.

Cystic lymphangioma of the pancreas is an extremely rare, benign tumor of lymphatic origin [1, 2]. Possible locations are in the retroperitoneum, within or outside the pancreas [3]. Histologically, it appears as a polycystic lesion, with the cysts separated by thin septa, and lined with endothelial cells. It can be difficult to distinguish this lesion from other pancreatic cystic lesions. A final diagnosis is often achievable only by histopathological examination of the resected lesion [1-3]. In cases of pancreatic cystic lymphangioma, EUS-FNA with cytological examination and measurement of the level of triglycerides in the intracystic fluid can provide a safe and accurate diagnosis [4, 5].

Fig. 1 Magnetic resonance (MR) image of the pancreatic cystic lesion (yellow arrow, mesenteric vein; red arrow, suspected solid area).

Fig. 2 Endoscopic ultrasound (EUS) view of the pancreatic cystic lesion (yellow arrow, microcystic area; red arrow, macrocystic area).

Fig. 3 Endoscopic ultrasound (EUS) view of the microcystic area (arrow).
Competing interests: None

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Fig. 4 The intracystic fluid.