Two cases of peripancreatic cystic lymphangiomas diagnosed by EUS-guided FNA

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To the Editor,

Case 1 : A 51-year old male was referred for evaluation of a large cystic mass inferior to the uncinate process of the pancreas and anterior to the 3rd portion of the duodenum. He was asymptomatic. No abdominal tenderness or mass was appreciated. MRCP and MRI of the pancreas showed a T2 hyperintense, microlobulated, multiseptated, and multi-cystic mass measuring 6.0 x 5.1 x 3.6 cm overall. Endoscopic ultrasound (EUS)-guided fine-needle aspiration (FNA) of the cyst yielded 18 mL of milky-white fluid (Figure 1). Analysis of the cyst fluid revealed a CEA of 27.3 ng/mL, amylase of 47 U/L, and triglycerides of 6162 mg/dL. Cytology showed no malignant cells. A repeat MRI was obtained at a 1 year interval and showed no change in the lesion.

Case 2 : A 70-year old male was referred for evaluation of a peri-pancreatic cystic mass. He reported feeling well and was asymptomatic. No abdominal tenderness or mass was appreciated on physical examination. Imaging with MRCP and MRI of the pancreas showed a 5.8 x 5.1 x 3.7cm T2 hyperintense, macrolobulated cystic mass with an otherwise normal appearing pancreas (Figure 2). The patient underwent EUS-guided FNA of the cyst yielding 38 mL of an opaque, rust-colored fluid. Analysis of the cyst fluid revealed a CEA of 1.6 ng/mL, amylase of 159 U/L, and triglycerides of 3888 mg/dL. Cell count demonstrated numerous erythrocytes with evidence of moderate cellular degeneration. Cytology showed no malignant cells. All findings were consistent with a peripancreatic cystic lymphangioma (PCL) with hemorrhage into the cyst. The patient has remained asymptomatic for over a year.

Lymphangiomas may involve any organ (1). In <1% of cases, they originate within or around the pancreas. Their pathophysiology remains unclear. Lymphangiomas are either the result of congenital malformations of the lymphatic channels or from inflammation-induced lymphatic obstruction (2). There is a female preponderance (1.8 to 1) and the age of presentation is around age 40 (3). Although PCLs are generally asymptomatic, these lesions can cause nausea, vomiting, and abdominal pain.

Peripancreatic cystic lymphangiomas are generally detected on ultrasound, computed tomography (CT) or magnetic resonance imaging (MRI). These lesions may

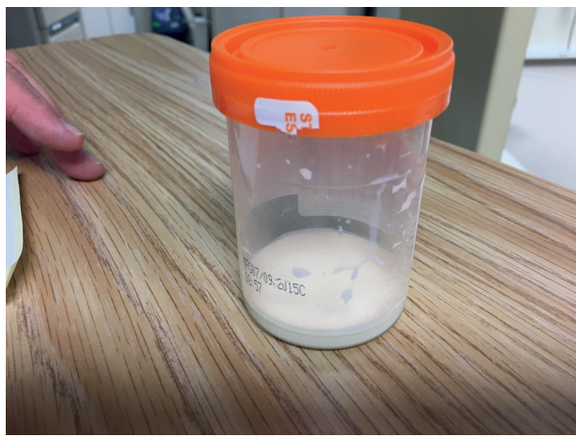

Fig. 1.

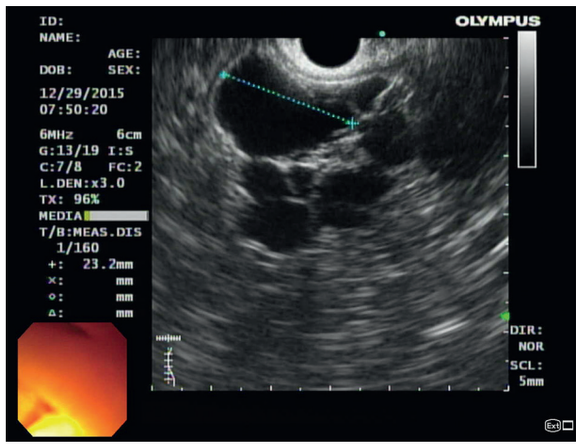

Fig. 2.

be misdiagnosed as pancreatic pseudocysts, mucinous cystic neoplasms, intraductal papillary mucinous neoplasms (IPMNs) or serous cystic neoplasms. Unlike PCLs, these other cystic neoplasms have the potential to progress to malignancy hence making accurate diagnosis essential. Prior to the widespread use of EUS,

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exploratory laparotomy was the procedure of choice for both diagnosis and treatment. However, EUS with FNA is less invasive, requires minimal post-operative recovery and has a lower likelihood of intraoperative and post-operative complications compared to surgical resection.

EUS-guided FNA is integral in the diagnosis of peripancreatic cystic lymphangiomas. The typical finding of FNA is milky white fluid with a high triglyceride level. The fluid from lymphoepithelial cysts will also be white, but the triglycerides will not be elevated. The CEA level of PCLs is low, further helping to distinguish them from pancreatic IPMNs and mucinous cystic neoplasms, which typically have a clear viscous fluid with a high CEA level. Treatment is not needed for asymptomatic lesions. Surgical excision is the mainstay for symptomatic cysts.

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