

Epidermoid cyst within an intrapancreatic accessory spleen: endosonography and confocal endomicroscopy of an unusual pancreatic cystic lesion

A 62-year-old man with a history of a cholecystectomy presented with longstanding right upper quadrant pain. A computed tomography (CT) scan demonstrated a normal spleen with incidental small adjacent splenules and a 2.4×2.3-cm cystic lesion in the tail of the pancreas. The pancreatic cystic lesion (PCL) had not been seen on a CT scan 2 years earlier, while an interim CT scan had revealed a lesion of 1.1×1.1 cm.

An endoscopic ultrasound (EUS) demonstrated a 2.5×2.2-cm anechoic cystic lesion within the pancreatic tail. During EUS, needle-based confocal endomicroscopy (nCLE) demonstrated cellular cords with many red blood cells within the cystic lesion (● Fig. 1 a; ● Video 1). Following nCLE, cyst fluid obtained by fine needle aspiration (FNA) revealed non-diagnostic cytology, an amylase of 183 U/L, and a carcinoembryonic antigen (CEA) level of 2663 ng/mL.

The elevated CEA and increasing size of the PCL were key determinants for the patient to undergo a laparoscopic distal pancreatectomy and splenectomy. An ex vivo nCLE examination of the cyst was performed as per the study protocol (● Fig. 1 b; ● Video 1). Surgical histopathology revealed a benign epidermoid cyst with mural ectopic splenic tissue, compatible with an epidermoid cyst of an accessory spleen (● Fig. 2). The diagnosis was confirmed as being an epidermoid cyst in an intrapancreatic accessory spleen (IPAS).

An IPAS can be difficult to distinguish by cross-sectional imaging and is often evaluated for neoplastic potential [1]. This is the first report of in vivo EUS-guided nCLE visualization of an epidermoid cyst within an IPAS. The cyst with its thin epithelium lacked characteristic nCLE features, but the splenic tissue demonstrated cords of cells suggestive of splenic red pulp. Additional features of other common PCLs were not observed [2]. This study adds to the growing body of literature describing EUS-guided nCLE in PCLs.

Endoscopy_UCTN_Code_CCL_1AZ_2AM

Competing interests: None

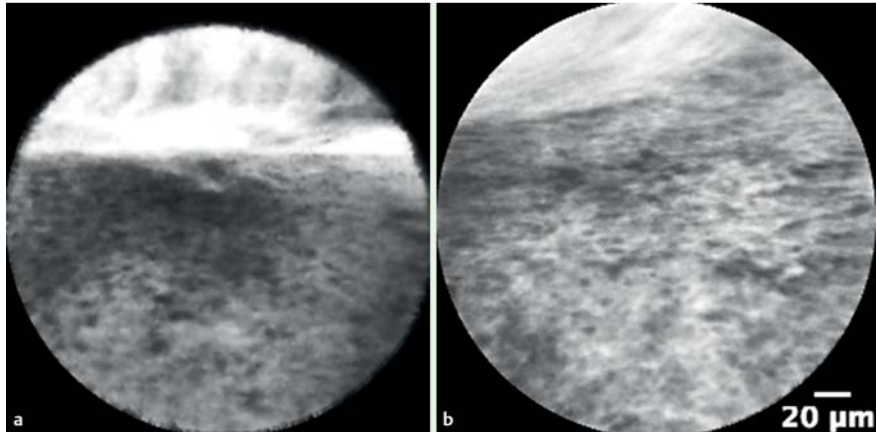
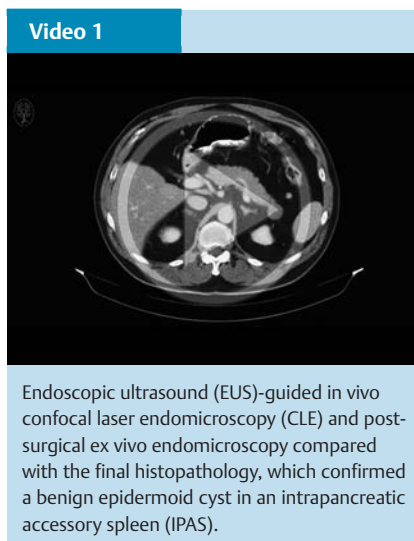


Fig. 1 Appearances of an epidermoid cyst within an intrapancreatic accessory spleen (IPAS) showing cellular cords with multiple red blood cells within the epidermoid cyst: **a** during endoscopic ultrasound (EUS) in vivo needle-based confocal endomicroscopy (nCLE); **b** during ex vivo nCLE.



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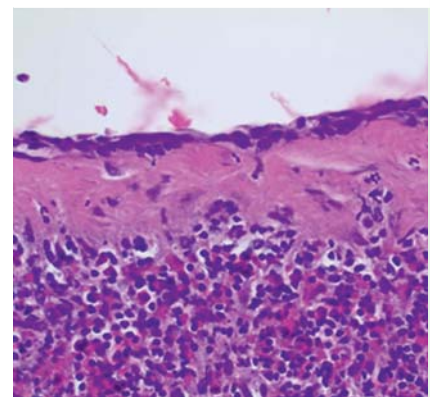


Fig. 2 Histopathology of the epidermoid cyst within an intrapancreatic accessory spleen (IPAS) showing a thin epithelial layer with ectopic splenic tissue.

Acknowledgments

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References

- 1 Uchiyama S, Chijiwa K, Hiyoshi M et al. Intra-pancreatic accessory spleen mimicking endocrine tumor of the pancreas: case report and review of the literature. *J Gastrointest Surg* 2008; 12: 1471–1473
- 2 Krishna SG, Lee JH. Appraisal of needle-based confocal laser endomicroscopy in the diagnosis of pancreatic cysts. *World J Gastroenterol* 2016; 22: 1701–1710

Bibliography

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