Endoscopic ultrasound-guided, through-the-needle forceps biopsy in the assessment of an incidental large pancreatic cystic lesion with prior inconclusive fine-needle aspiration

A 68-year-old man underwent endoscopic ultrasound (EUS) and fine-needle aspiration of a large cystic lesion of the pancreatic neck seen incidentally on computed tomography (CT). CT demonstrated a nonenhancing, exophytic, multilocular cystic mass, measuring 82 × 72 mm (▶ Fig. 1, ▶ Video 1). A mural calcific focus was noted posteroinferiorly and a more solid component posteriorly. The CT density averaged 19 HU for the cystic component and 40 HU for the solid component.

EUS showed a mixed solid/cystic-appearing lesion without mural nodules. The cystic component contained multiple mobile ball-like structures (▶ Fig. 2) and the solid component appeared to be hypoechoic and heterogeneous. No infiltration into the surrounding tissue or pancreatic duct communication was identified and the pancreas was otherwise unremarkable. In addition, no lymphadenopathy was present.

EUS-guided transgastric cyst aspiration was performed using a 19-gauge needle, and 8 ml of an opaque, turbid fluid was sent for cytological examination. Amylase and carcinoembryonic antigen (CEA) levels did not contribute to the diagnosis and the results of cytology investigation were inconclusive, revealing only cholesterol crystals, lipid droplets, and scant leukocytes.

A repeat EUS was undertaken to biopsy the cyst wall with dedicated through-the-needle Moray micro forceps (US Endoscopy, Mentor, Ohio, USA) (▶ Fig. 3). The forceps were passed through a 19-gauge needle and allowed precise and targeted sampling of the cyst wall (▶ Fig. 2). In a second pass, the solid-appearing component was targeted and 5 ml of a thick, brown fluid were aspirated.

Histological assessment revealed fragments of keratinizing squamous epithe-
lium with a subepithelial lymphoid infiltrate (Fig. 4). Dense keratin was present on the surface. No goblet cells were seen. The findings were diagnostic for a benign lymphoepithelial cyst [1–3]. Surveillance is not required for this, and surgery is only considered in symptomatic individuals [4,5]. The patient could therefore be discharged.

The novel through-the-needle micro forceps were easy to use and allowed precise EUS-guided sampling of the cyst wall.

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Acknowledgment

We would like to acknowledge US Endoscopy and Device Technologies Australia for the free supply of the Moray micro forceps used in this specific case.

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DOI http://dx.doi.org/10.1055/s-0043-100217
Endoscopy 2017; 49: E109–E110
© Georg Thieme Verlag KG
Stuttgart • New York
ISSN 0013-726X