

Hydatid cyst mimicking cystic neoplasm of the pancreatic tail: an endoscopic ultrasound diagnosis

A 59-year-old woman presented with weight loss and left hypochondrial discomfort that had been present for 2 weeks. Abdominal computed tomography (CT) revealed a 12 cm × 11 cm lobulated nonenhancing cystic lesion with intrinsic heterogeneous hyperdense areas (● Fig. 1) and peripheral wall calcification (● Fig. 1b). A provisional diagnosis of cystic neoplasm of the tail of the pancreas was made and the patient was referred for endoscopic ultrasound (EUS) and fine needle aspiration (FNA).

EUS (3870UTK; Pentax Tokyo, Japan) revealed a cystic lesion adjacent to the pancreatic tail and continuous with the spleen (● Fig. 2a). The EUS features were characteristic for an hydatid cyst. Multiple serpentine structures (● Fig. 2b) representing collapsed membranes were seen within the cyst. A daughter cyst (● Fig. 2c) containing echogenic material was noted, and also interspersed calcifications were observed inside the cyst cavity (● Fig. 2d). The echogenic material seen inside the cyst (akin to gallbladder sludge) is termed “hydatid sand” and it settles at the most dependent portion of the cyst. FNA of cyst fluid was not done because of the risk of anaphylaxis from spillage or leak of cystic fluid during FNA [1]. An enzyme-linked immunosorbent assay (ELISA) for *Echinococcus* IgG antibody was positive. The patient was referred for surgery, after initiation of treatment with albendazole at a dose of 15 mg/kg bodyweight in two divided daily doses (not to exceed 800 mg/day) for 28 days.

Hydatid disease is a worldwide zoonosis caused by the *Echinococcus* tapeworm. Ultrasound features are characteristic although they may vary and several classifications based on the cyst appearance have

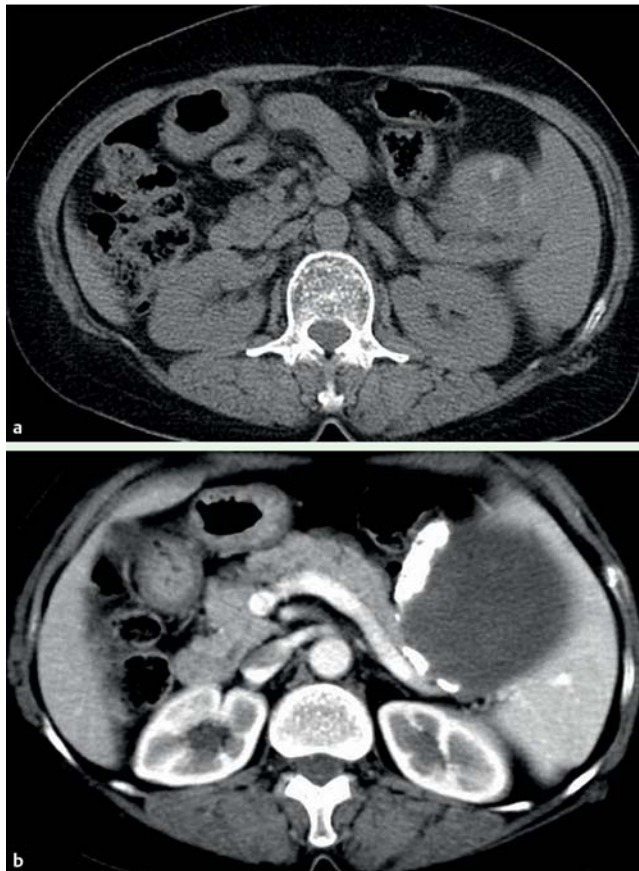


Fig. 1 Abdominal computed tomography (CT) revealed a lobulated nonenhancing cystic lesion with: **a** intrinsic heterogeneous hyperdense areas; **b** thick peripheral wall calcification.

been proposed [2,3]. EUS (as in our patient) can be equally effective in providing high resolution images to demonstrate characteristic cyst features when other imaging modalities are unreliable or unavailable [4]. To the best of our knowledge, this is the first such demonstration in the published literature of EUS visualization of features of an unruptured hydatid cyst.

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Competing interests: None

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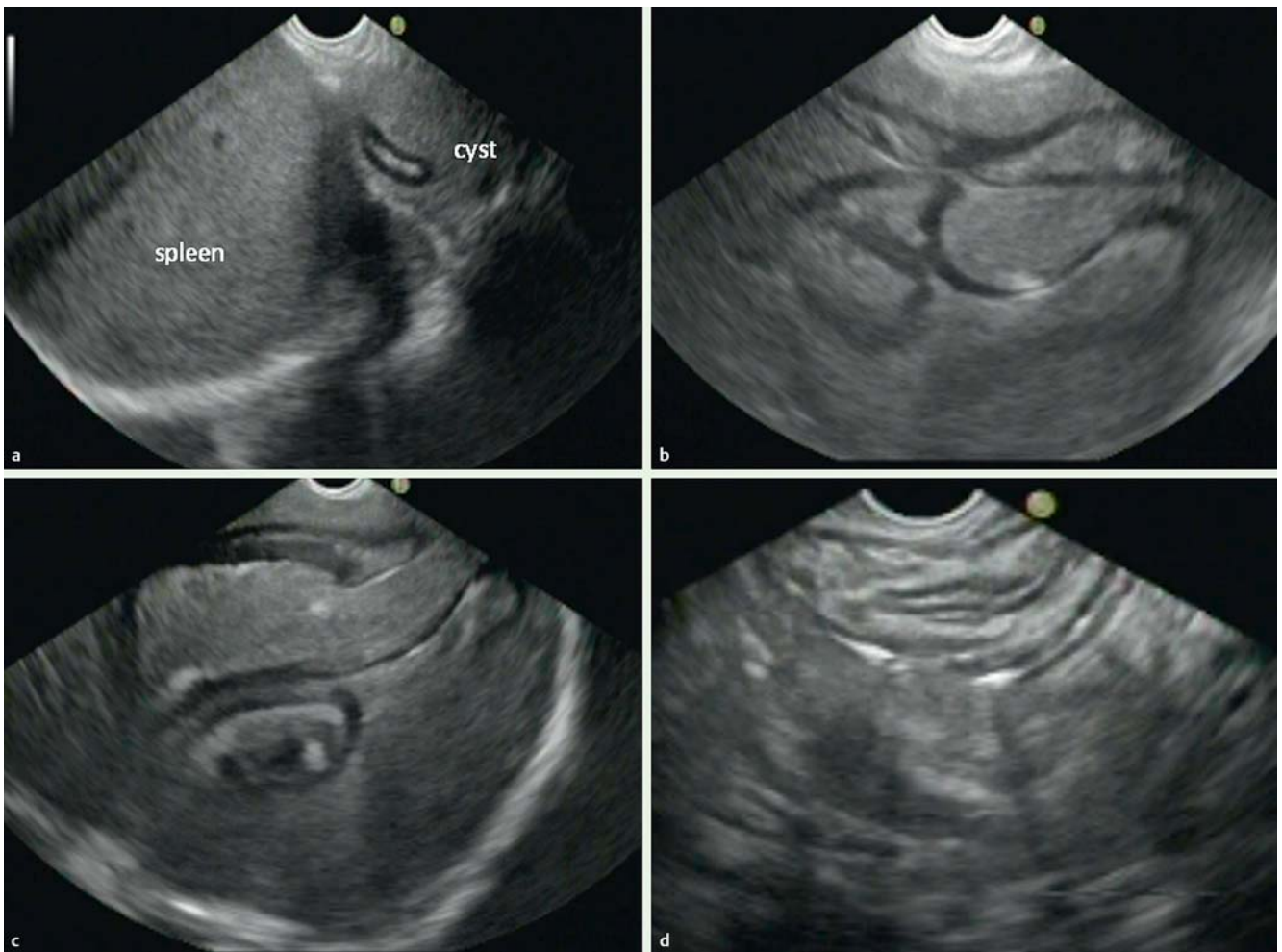


Fig. 2 Endoscopic ultrasound (EUS) appearances of a hydatid cyst. **a** A large cyst continuous with the spleen. **b** Multiple serpentine structures representing collapsed membranes were seen within the cyst cavity. **c** A daughter cyst with echogenic material. **d** Calcifications were also noted within the cyst cavity and on the cyst wall.

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