

The endosonographic appearance of a type-A choledochocoele

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An 83-year-old woman with a history of idiopathic pancreatitis 20 years previously presented to the pancreaticobiliary clinic for evaluation of a 1.5-cm periampullary mass. The mass was incidentally detected on a computed tomography scan (Fig. 1) obtained during an episode of diverticulitis that resolved with medical treatment. Endoscopic ultrasound (EUS) revealed a cystic ampullary lesion that communicated with the common bile duct (Fig. 2C). The pancreatic duct was seen to drain separately into the major papilla. Endoscopically, the subepithelial mass was proximal to the major papilla orifice (Fig. 2 A,B). The patient was diagnosed with type-A choledochocoele and was referred back to the clinic to discuss potential therapy options.

Choledochocoeles are cystic expansions of the intraduodenal segment of the main bile duct and are classified according to their location compared with the major papilla [1]. Type-A choledochocoeles are cystic expansions of a portion of the intra-ampullary bile duct and can be seen as submucosal bulges proximal to the major papilla. The bile duct drains into the choledochocoele, which drains to the duodenum via the ampullary orifice. Conversely, a type-B choledochocoele is a diverticulum of the intra-ampullary common channel and can be seen distal to the major papilla. Both types of choledochocoeles can lead to biliary obstruction, pancreatitis, nonspecific gastrointestinal symptoms or (rarely) malignancy. Treatment should relieve ductal obstruction, remove associated stones or sludge, and assess for dysplasia, whether by resection or drainage into the bowel lumen via endoscopic or surgical techniques.

Choledochocoeles can be misdiagnosed as other periampullary tumors, although endoscopy delineates the



Figure 1 Cross-sectional computed tomography image of the incidentally-identified periampullary mass on coronal view

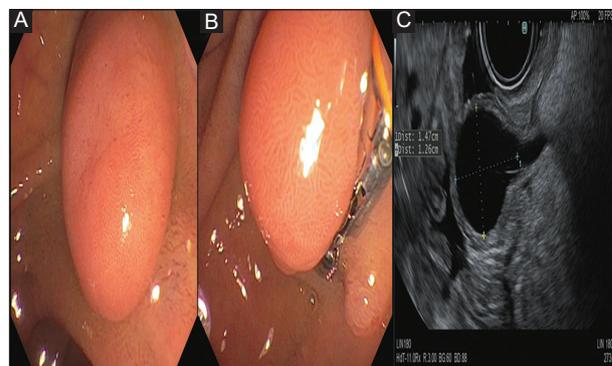


Figure 2 Endoscopic view of type-A choledochocoele showing as a submucosal mass (A), with a proximal relation to the major papilla (B). Endosonographic view of the choledochocoele showing its continuity with the common bile duct, as seen from the second portion of the duodenum (C)

submucosal nature of these lesions. EUS demonstrates the cystic nature of the lesion, its relationship to the periampullary ducts, and distinguishes choledochocoeles from duodenal duplications (which typically involve deeper layers of the duodenal wall).

Reference

1. Law R, Topazian M. Diagnosis and treatment of choledochocoeles. *Clin Gastroenterol Hepatol* 2014;12:196-203.

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