

**Title:**

**Multiple biliary hamartomatosis: an endoscopic ultrasound clinical case**

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**Multiple biliary hamartomatosis: an endoscopic ultrasound clinical case**

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*Dear Editor,*

A 54-year-old female patient was referred to our outpatient clinic in December 2017 due to unresolved epigastric pain. She underwent cholecystectomy in October 2012 due to epigastric pain, without evidence of lithiasis or biliary sludge. Subsequently, the patient continued to present epigastric discomfort with episodes of epigastralgia and was admitted in August 2016.

There was evidence of elevated transaminases AST 125, ALT 97 and GGT 47, with normal amylase, and no specific diagnosis was made on discharge from hospital. Subsequently, a full outpatient study was performed. Abdominal magnetic resonance imaging (MRI) with secretin identified a biliary hamartomatosis (Fig. 1A) and the common bile duct was normal with no evidence of choledocholithiasis. The pancreas divisum complete with pancreatic duct drained through the dorsal duct in the minor papilla and the ventral duct drained together with the common bile duct into the major papilla. The exocrine secretion

was normal, there were no relevant findings on the gastroscopy and endoscopic ultrasound (EUS) identified homogenous pancreatic parenchyma. The fine Wirsung highly suggestive of pancreas divisum and the extrahepatic biliary tract was normal with no lithiasis. The left hepatic lobe had rounded anechoic formations, with no flow and a color Doppler that was compatible with a diagnosis of biliary hamartomatosis (Fig. 1B).

## Discussion

Previous studies using ultrasound have described this entity as a non-specific hypo- or hyperechoic small lesion (1,2). The clinical presentation is variable and may include a palpable abdominal mass, anorexia and weight loss. Large tumors can obstruct the extrahepatic bile ducts and the inferior vena, leading to jaundice and lower extremity edema (3).

The most important value of imaging biliary hamartomas is to differentiate the lesion from multiple liver metastases. Numerous small hypo- or hyperechoic lesions with comet-tail echoes were observed via this procedure (4). Microabscesses may appear as multiple widely scattered lesions and hypoechoic nodules or poorly defined areas, but there is little or no enhancement through transmission. Currently, the laboratory alterations can be explained by this entity. The patient is under strict clinical follow-up with no different objective cause that justifies the abdominal pain. Some authors recommend follow-up ultrasonography examinations due to the risk of concomitant intrahepatic cholangiocarcinoma (5).

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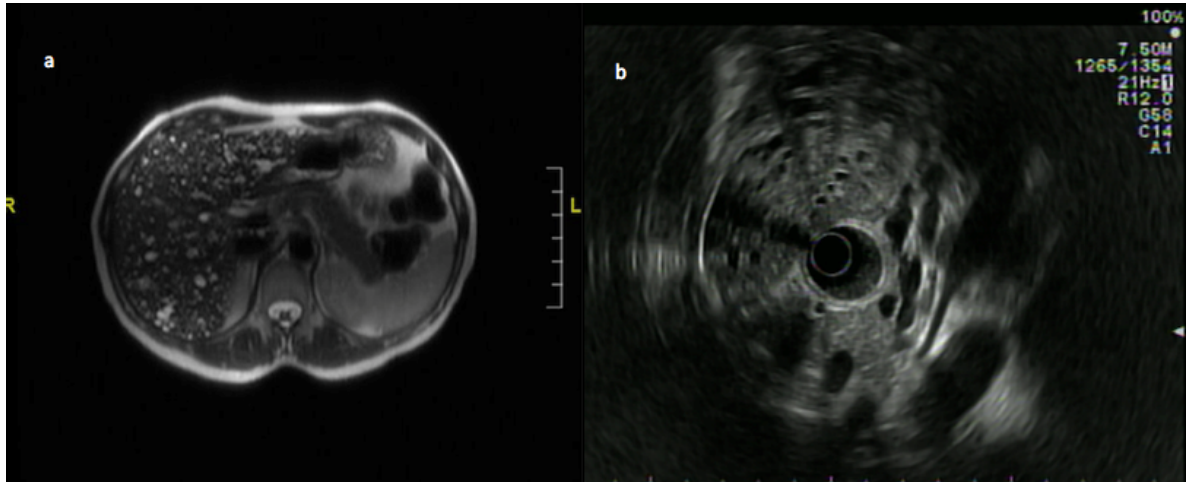


Fig. 1. A. T2-weighted magnetic resonance image showing multiple small hyper-intense lesions. B. EUS image of the left hepatic lobe with rounded anechoic formations secondary to a dilated bile canaliculi.