

Lemmel's Syndrome: A Rare Cause of Cholestasis

Síndrome de Lemmel: Uma Causa Rara de Colestase

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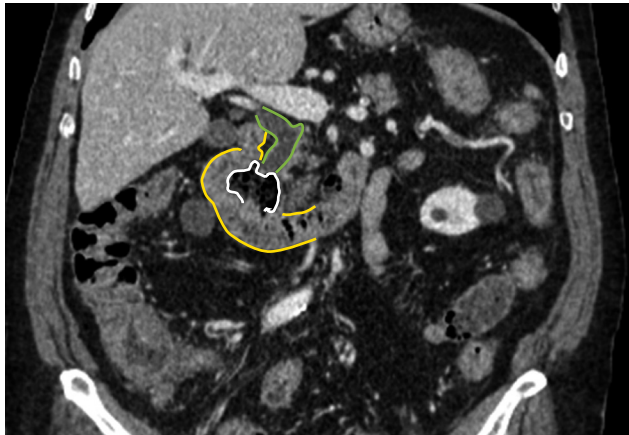


Figure 1 – Coronal reformat of contrast-enhanced CT shows the presence of a diverticulum (38 x 24 mm, white line) in the second portion of the duodenum (yellow lines) and common bile duct dilation (green lines). The duodenal diverticulum is well depicted as a gas-containing sac protruding from the inner wall of the duodenum.

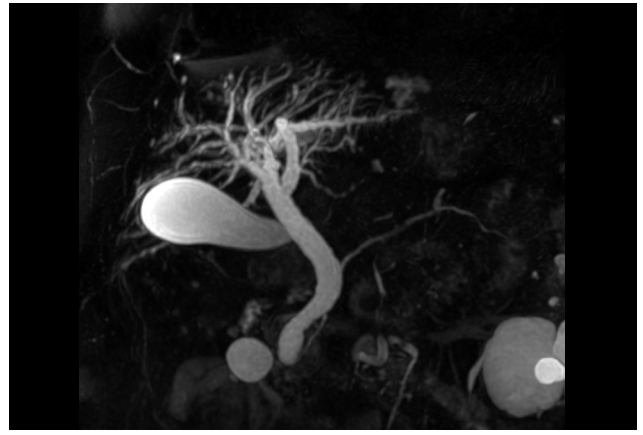


Figure 2 – 3D MIP MRCP showing dilation of intra-hepatic and extra-hepatic bile ducts with caliber transition at the distal part of the common bile duct adjacent to the pancreatic papilla, with no evidence of intraductal stones or dilation of the main pancreatic duct. The duodenal diverticulum is not depicted in this sequence due to its low fluid-content.

A 72-year-old male was admitted with infectious colitis. Laboratory tests revealed enzyme elevation with a cholestatic hepatitis pattern [total-bilirubin: 2.5 mg/dL (< 1.2 mg/dL), direct-bilirubin: 1.42 mg/dL (< 0.3 mg/dL) AST: 460 IU/L (< 40 IU/L), ALT: 467 IU/L (< 50 IU/L), GGT: 977 IU/L (< 60 IU/L)], which persisted after patient discharge. Computed tomography (CT) showed a duodenal diverticulum of the second part of duodenum and dilation of the biliary tree, with no evidence of pancreatic lesions (Fig.1). A magnetic resonance imaging study, which included a cholangiographic sequence, (Fig. 2) confirmed the duodenal diverticulum and biliary dilation. Endoscopic ultrasonography (EUS) was

performed to exclude peri-ampullary tumor. The biopsy did not reveal tumor cells. A diagnosis of Lemmel's syndrome (i.e., juxtampullary duodenal diverticulum compressing the intrapancreatic bile duct resulting in obstructive jaundice in the absence of cholelithiasis or other detectable obstacles) was done.

Duodenum diverticula are most frequently asymptomatic.^{1,2} Lemmel's syndrome was first described in 1934,³ but to date, very few cases have been published. The diagnosis is confirmed by imaging, including barium meal, EUS, endoscopic retrograde cholangiopancreatography, CT or magnetic resonance cholangiopancreatography.^{4,5}

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

PATIENT CONSENT

Obtained.

CONFLICTS OF INTEREST

All authors report no conflict of interest.

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