

An obstructive jaundice secondary to juxtapapillary duodenal diverticulum—Lemmel's syndrome

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Background:

Duodenum is the second most common location of intestinal diverticula. Juxtapapillary diverticula account for 75% of the diverticula in the duodenum. Lemmel's syndrome (LS) is an uncommon condition that causes obstructive jaundice due to a juxtapapillary duodenal diverticulum in the absence of choledocholithiasis or neoplasia. Endoscopic retrograde cholangiopancreatography (ERCP) is the gold standard for diagnosing this condition.

Case presentation:

A 63-year-old female with a history of arterial hypertension and cholecystectomy four years prior presented with recurrent episodes of biliary colic and jaundice. Upon physical examination, the patient was icteric, subfebrile (37,6°C) and reported increased sensitivity in the epigastric region. Laboratory results showed signs of cholestasis (bilirubin 89,6 μmol/L, AP 427 U/L, GGT 332 U/L), as well as elevated CRP (21 mg/L). Transabdominal ultrasound revealed dilation of the common bile duct (CBD) with 9 mm in diameter. Choledocholithiasis was initially suspected, but was ruled out when endoscopic ultrasound of the upper gastrointestinal tract confirmed empty dilated CBD with no other pathology. During the ERCP, a diverticulum in the juxtapapillary area of the duodenum was detected, along with narrowing of the final portion of the CBD, without concretions or other pathology. In the context of diverticulum, LS was highly suspected. Pneumatic dilatation of the CBD with through-the-scope (TTS) balloon was performed in the same act, allowing adequate biliary drainage. In the further course, the patient was in excellent clinical condition.

Conclusion:

Most cases of juxtapapillary duodenal diverticula are asymptomatic; however, complications can arise. This unusual case emphasizes the importance of keeping in mind less common differential diagnoses of biliary obstruction to prevent more severe complications such as pancreatitis, perforation or sepsis. In some cases, endoscopic therapy can be an appropriate and effective method of treatment.