Using a gastroscope to accomplish ERCP: a forward-viewing endoscope for cannulation of the intradiverticular papilla

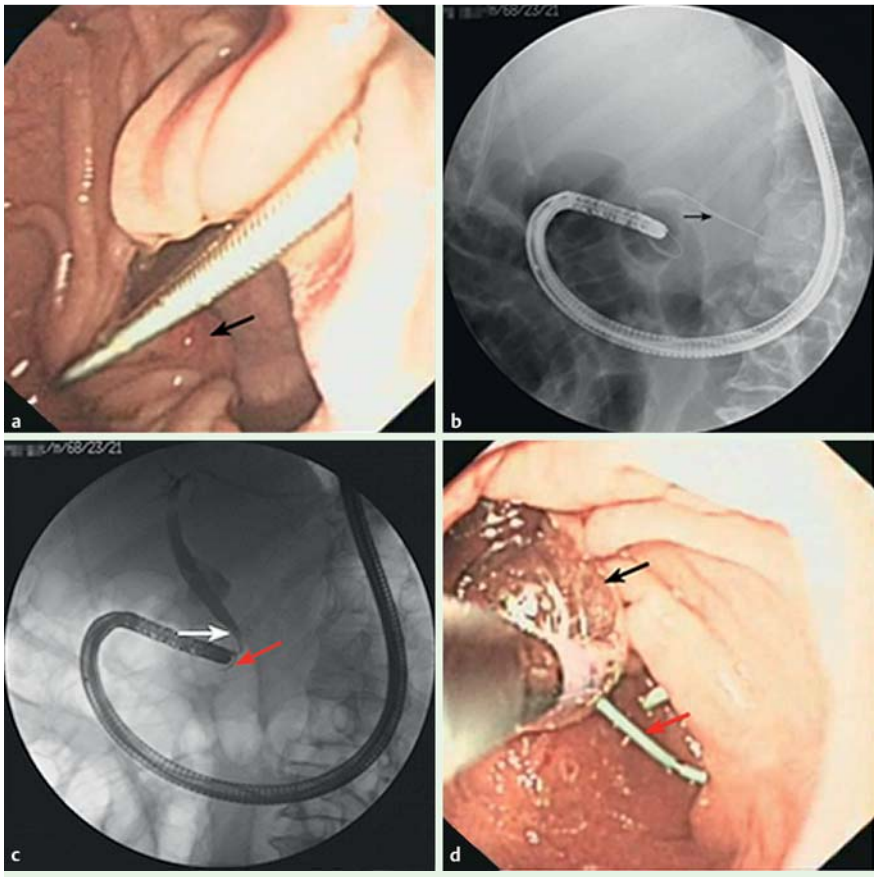

Fig. 1 Biliary cannulation in a patient with periampullary diverticula. **a** View of the intradiverticular papilla (black arrow), with biopsy forceps. **b** The guidewire was inserted into the pancreatic duct. **c** A pancreatic duct stent (red arrow) was used to facilitate biliary cannulation. Endoscopic retrograde cholangiopancreatography confirmed the distal biliary stricture (white arrow), which was caused by the duodenal diverticulum. **d** The patient was treated with balloon dilation (black arrow), and the pancreatic stent was clearly visible (red arrow).

A 68-year-old man was admitted to our hospital with right upper quadrant pain and jaundice. Laboratory studies revealed leukocytosis, elevated liver enzymes, and hyperbilirubinemia. Magnetic resonance cholangiopancreatography examination revealed distal bile duct stenosis. On duodenoscopy, the papilla was hidden within a diverticulum. We tried using two devices simultaneously to perform endoclip-assisted biliary cannulation but without success (**Fig. 1 a**). Thus, the duodenoscope was withdrawn and a gastroscope (GIF Q260; Olympus, Tokyo, Japan) was inserted. Cannulation of the pancreatic duct was achieved but deep access of the common bile duct remained impossible (**Fig. 1 b**). A pancreatic duct plastic stent was then inserted to facilitate biliary cannulation [1]. Endoscopic retrograde cholangiopancreatography (ERCP) confirmed the distal biliary stricture (**Fig. 1 c**). The patient was treated with balloon dilation (**Fig. 1 d**). The patient was discharged 3 days after the procedure without any complications.

The forward-viewing endoscope for ERCP has been used frequently in patients with Billroth II gastrectomy and Roux-en-Y anastomosis [2,3]. To our knowledge, this is the first report describing the use of a gastroscope to perform ERCP in a patient with periampullary diverticula. Garcia-Cano [4] also described their experience of using an ultrathin gastroscope to locate a papilla hidden within a duodenal diverticulum; they then used a duodenoscope to cannulate the bile duct. Alternatively, using the forward-viewing endoscope for ERCP could provide excellent visualization and positioning in patients whose papilla was not observed in the normal location. The forward-viewing endoscope can be recommended for ERCP in such patients.

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Bibliography

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