

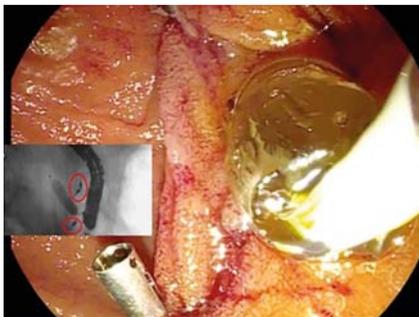
## Elastic-band traction technique for cannulating intradiverticular papilla during endoscopic retrograde cholangiopancreatography



► **Fig. 1** Endoscopic view of intradiverticular papilla.

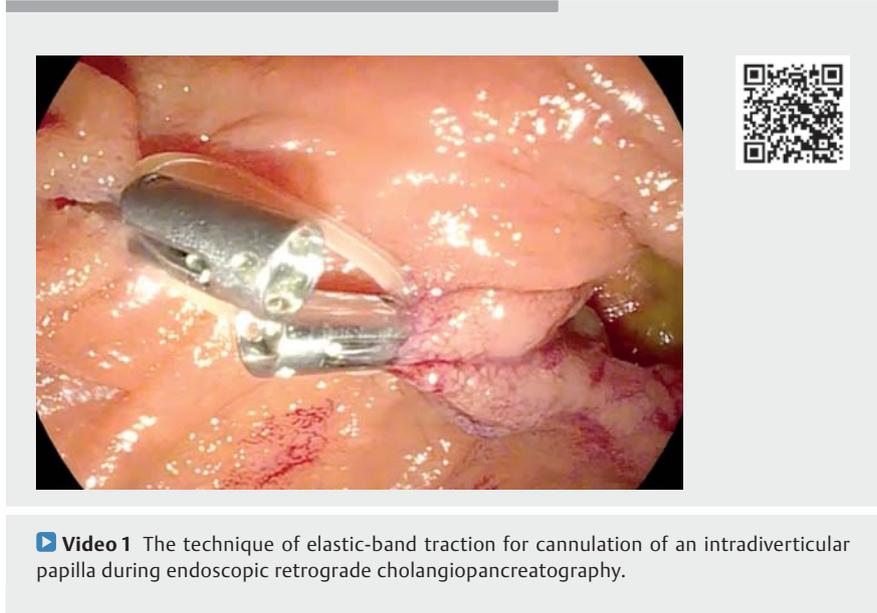


► **Fig. 2** Elastic-band traction technique with metallic clip of intradiverticular papilla.



► **Fig. 3** Endoscopic and radioscopy view of papilla dilation.

An 84-year-old man attended the emergency department because of jaundice, fever, and abdominal pain. Blood tests showed an increase in conjugated bilirubin and cholestasis markers. He un-



► **Video 1** The technique of elastic-band traction for cannulation of an intradiverticular papilla during endoscopic retrograde cholangiopancreatography.

derwent abdominal ultrasound, which revealed common bile duct dilation (12mm in size) and the presence of several bile stones. Diagnosis of acute cholangitis was made [1] and he underwent urgent therapeutic endoscopic retrograde cholangiopancreatography (ERCP), according to guidelines [2].

During the procedure, a large diverticulum with deep intrapapillary Vater's papilla was found, making papillary cannulation impossible (► **Fig. 1**). After several cannulation attempts using both 20 mm and 25 mm cutting wire sphincterotomes and different guidewires, together with changes in the patient's position, the endoscopist performed an unusual traction technique to bring the papilla out of the diverticulum and allow visualization of the orifice. A metallic clip with a small dental elastic band attached was placed at the edges of the diverticulum; then, a second metallic clip was attached at the opposite side of the elastic band and fixed to the duodenal mucosa a few centimeters away from the diverticulum. This technique allowed the duodenal fold around the diverticulum to be stretched,

exposing the intradiverticular papilla outside the diverticulum. The technique was repeated to allow a second clip to be placed 1 cm from the first, to provide additional fold stretch (► **Fig. 2**, ► **Video 1**). As a consequence of this maneuver, the papillary orifice was sufficiently exposed to allow deep bile duct cannulation at the first attempt, with subsequent biliary sphincterotomy and 10-mm balloon papillary dilation and extraction of several bile stones (► **Fig. 3**).

The use of dental elastic bands is common for endoscopic submucosal dissection of gastrointestinal lesions [3]. This case illustrates the use of elastic bands in a traction system during ERCP to expose an intradiverticular papillary orifice and allow bile duct cannulation.

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### Competing interests

The authors declare that they have no conflict of interest.

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