Successful ERCP in a Roux-en-Y gastric bypass patient, performed via a small remnant of gastrogastric communication

Endoscopic retrograde cholangiopancreatography (ERCP) can be challenging in patients after Roux-en-Y gastric bypass surgery. We present a case of such a patient with choledocholithiasis who underwent successful ERCP though a remnant of gastrogastric communication.

A 57-year-old female after successful Roux-en-Y-gastric bypass presented with symptomatic choledocholithiasis. ERCP with a pediatric colonoscope was unsuccessful because of the long Roux limb. On the second ERCP attempt with a balloon-assisted enteroscope, we discovered a small opening in the gastric pouch (**Fig. 1 a**).

With a standard gastroscope (Olympus GIF-H180; Olympus, Center Valley, USA), we passed through the opening into distal stomach, proving it was a remnant connection between the gastric pouch and defunctionalized stomach (**Fig. 1 b, c**). A side-viewing duodenoscope (Olympus TJF-160) was then passed through this communication without further dilatation. Subsequently, a standard biliary sphincterotomy and stone extraction were performed (**Figs. 2** and **3**).

With increased lithogenicity induced by rapid weight loss in post-gastric-bypass patients, cholelithiasis occurs in 38% of patients within 6 months, and 41% of these patients develop symptoms [1]. No standardized prophylactic management modality for this patient group has been established thus far [1, 2].

In the case of bile duct stones, added complexity from altered anatomy requires utilization of a pediatric colonoscope or balloon-assisted enteroscope [3] during ERCP or passage of the endoscope through a surgical or radiologically placed gastrostomy as previously reported [4, 5] for the clearance of the bile duct.

Natural access to the major papilla through gastrogastric communication allowed a significant reduction of the procedure time, effort, and risks by avoiding the balloon-assisted enteroscopy or gastrostomy- or enterostomy-access assisted ERCP. This case illustrates that an endoscopist should always seek such an opening in the gastric pouch; research and development into securing a small access route such as through placement of a (temporary or permanent) removable plug or tubing or port into the defunctionalized stomach at the time of initial surgery could be considered to help manage the late biliary complication in this surgical subset.

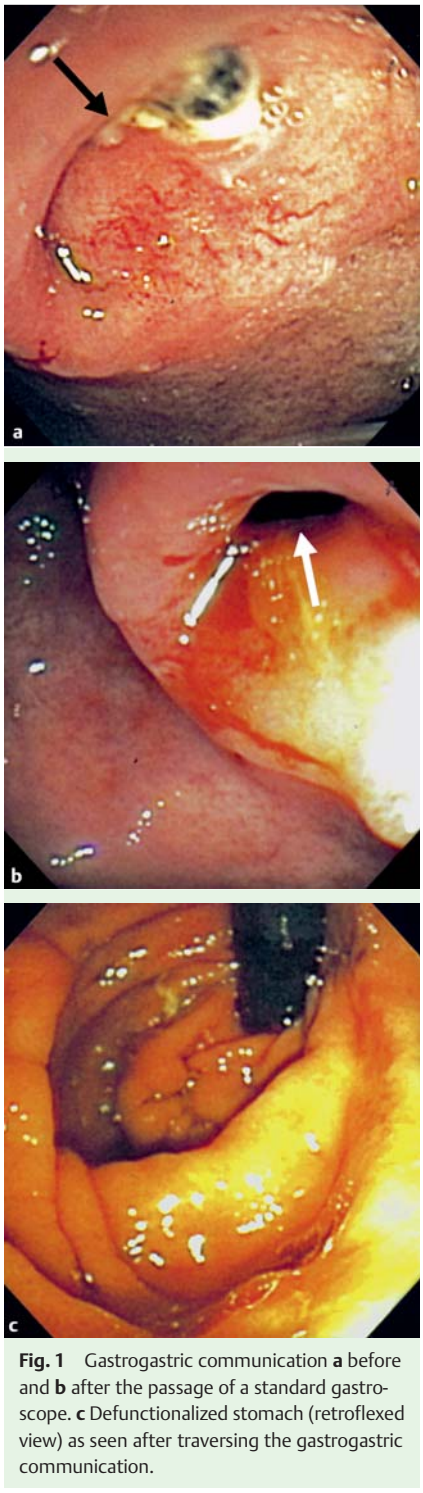

Fig. 1 Gastrogastric communication **a** before and **b** after the passage of a standard gastroscope. **c** Defunctionalized stomach (retroflexed view) as seen after traversing the gastrogastric communication.

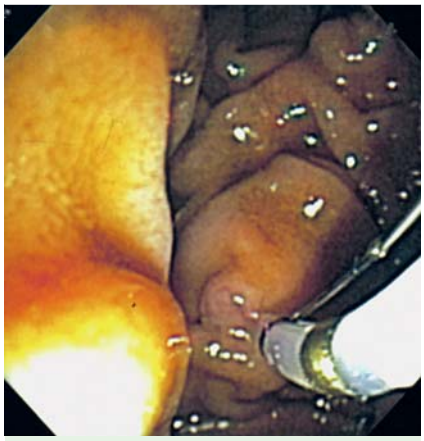

Fig. 2 Standard access to major papilla with a sphincterotome.

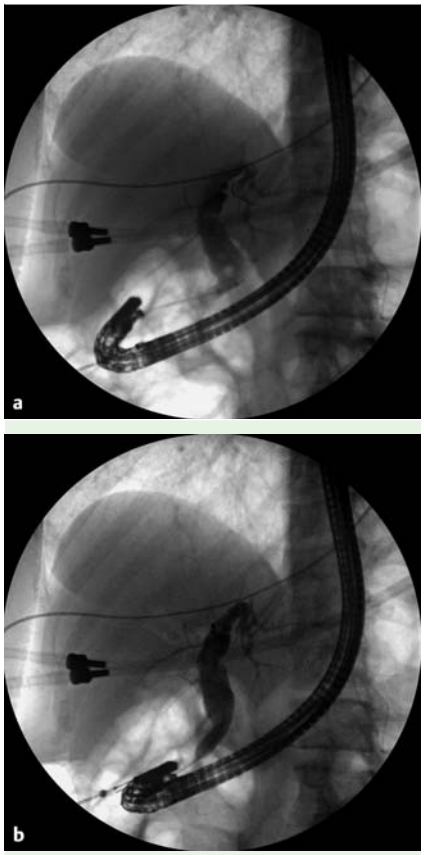

Fig. 3 **a** Bile duct with multiple stones. **b** Successful clearing of bile duct.

Endoscopy_UCTN_Code_TTT_1AR_2AK

Competing interests: None

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DOI 10.1055/s-0030-1256038
Endoscopy 2011; 43: E73 – E74

ISSN 0013-726X

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