

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 through 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 gastrotomy 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 gastrotomy 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

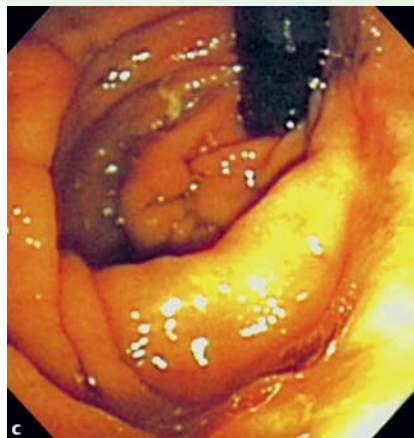
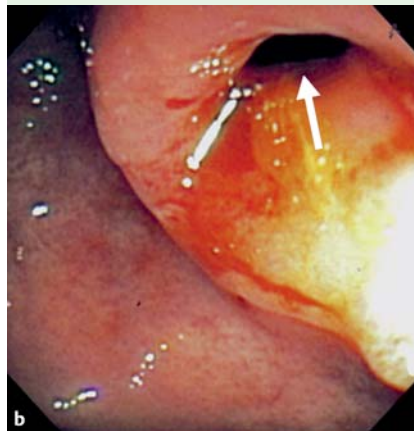
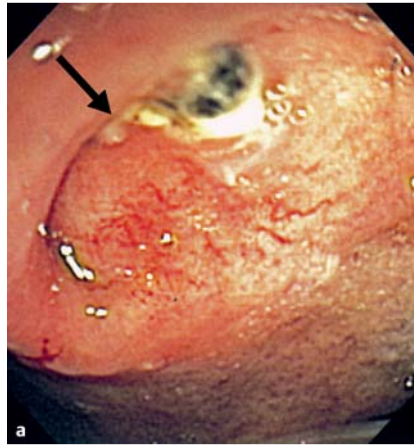


Fig. 1 Gastrogastric communication **a** before and **b** after the passage of a standard gastroscope. **c** Defunctionalized stomach (retroflexed view) as seen after traversing the gastrogastric communication.

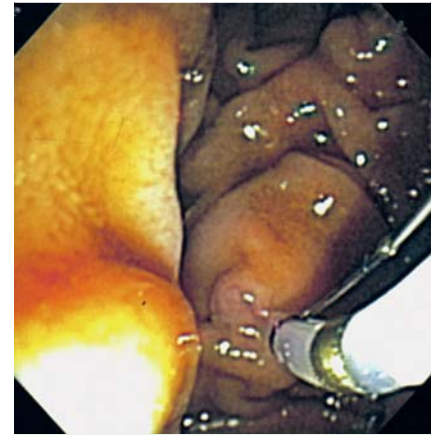


Fig. 2 Standard access to major papilla with a sphincterotome.

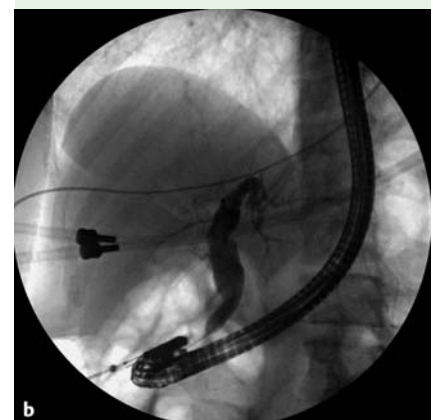


Fig. 3 **a** Bile duct with multiple stones. **b** Successful clearing of bile duct.

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.

Endoscopy_UCTN_Code_TTT_1AR_2AK

Competing interests: None

A. Madan, S. Urayama

Division of Gastroenterology and Hepatology, Department of Internal Medicine, University of California Davis Medical Center, Sacramento, California, USA

References

- 1 *Shiffman ML, Sugerman HJ, Kellum JM et al.* Gallstone formation after rapid weight loss: a prospective study in patients undergoing gastric bypass surgery for treatment of morbid obesity. *Am J Gastroenterol* 1991; 86: 1000–1005
- 2 *Miller K, Hell E, Lang B et al.* Gallstone formation prophylaxis after gastric restrictive procedure for weight loss – a randomized double-blind placebo controlled trial. *Ann Surg* 2003; 238: 697–702
- 3 *Sato H, Tamada K, Kita H et al.* Application of double-balloon endoscopy for afferent limb lesions of Roux-en-Y surgical anastomosis. *Gastrointest Endosc* 2005; 61: AB238
- 4 *Baron TH, Vickers SM.* Surgical gastrostomy placement as access for diagnostic and therapeutic ERCP. *Gastrointest Endosc* 1998; 48: 640–641
- 5 *Baron T.* Double-balloon enteroscopy to facilitate retrograde PEG placement as access for therapeutic ERCP in patients with long-limb gastric bypass. *Gastrointest Endosc* 2006; 64: 973–974

Bibliography

DOI 10.1055/s-0030-1256038
Endoscopy 2011; 43: E73–E74
© Georg Thieme Verlag KG Stuttgart · New York ·
ISSN 0013-726X

Corresponding author

Shiro Urayama, MD

Division of Gastroenterology and Hepatology
University of California, Davis
4150 V Street, PSSB Suite 3500
Sacramento
California 95817
USA
Fax: +1-916-734-7908
surayama@ucdavis.edu