Intraoperative transgastric ERCP after a Roux-en-Y gastric bypass

Roux-en-Y gastric bypass (RYGB) is among the favorite surgical approaches to treating morbidly obese patients, but leads to an increased incidence of choledocolithiasis. Per-oral endoscopic retrograde cholangiopancreatography (ERCP) represents a major challenge in this situation [1,2]. ERCP through a surgically placed gastrostomy has been proposed as an alternative route for endoscopic access [3–5]. We report a case of endoscopically treated choledocolithiasis via a transgastric approach during laparoscopic cholecystectomy in a RYGB patient.

A 30-year-old woman underwent a RYGB procedure. Preoperative ultrasonography identified only hepatic steatosis. At 7 months after surgery and a 38 kg weight loss, abdominal ultrasound was performed because of noncharacteristic abdominal pain. Cholelithiasis was identified, and a laparoscopic cholecystectomy was planned.

Intraoperative cholangiography revealed common bile duct (CBD) stones, and only partial ductal clearance was achieved (**Figure 1**). A combined laparoscopic-endoscopic approach was attempted. A small gastrotomy with a purse-string suture was performed on the anterior wall. A duodenoscope was introduced through a 15 mm trocar on the upper left quadrant and through the gastrotomy (**Figure 2a** and **b**). The duodenum was occluded to prevent air passage and small bowel distension. Endoscopic sphincterotomy and stone extraction were carried out according to standard techniques (**Figure 3** and **4**). Occlusion cholangiogram confirmed CBD clearance. There was no procedure-related complication, and the patient was discharged on the second postoperative day. The patient is doing well at 8-months' follow up.

Transgastric laparoscopic-assisted ERCP in the management of cholelithiasis in RYGB patients is technically feasible and apparently not associated with a higher complication rate. Its one-step nature may reduce hospital stay and costs.

Figure 1 Intraoperative cholangiography after attempt to remove common bile duct stones.

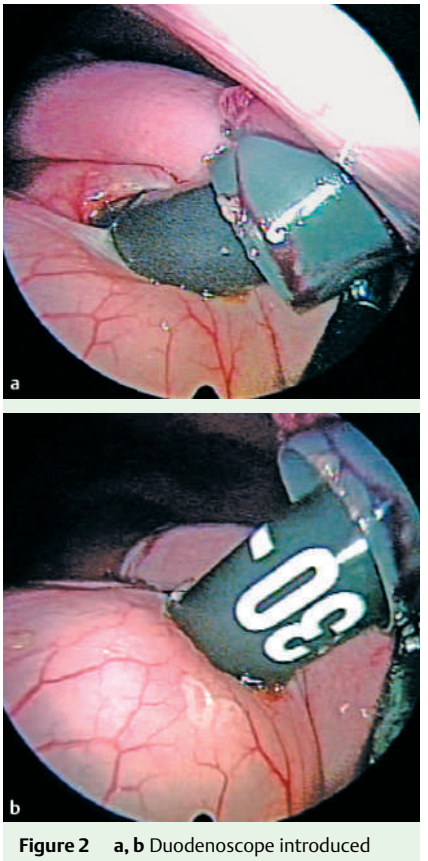

Figure 2 **a, b** Duodenoscope introduced through a 15 mm trocar placed on the upper left quadrant and through the gastrotomy.

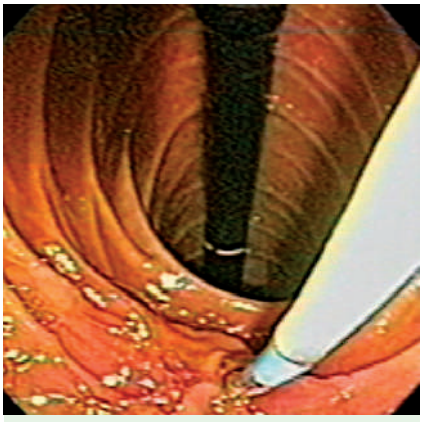

Figure 3 Duodenoscope and sphincterotome in place, immediately before sphincterotomy.

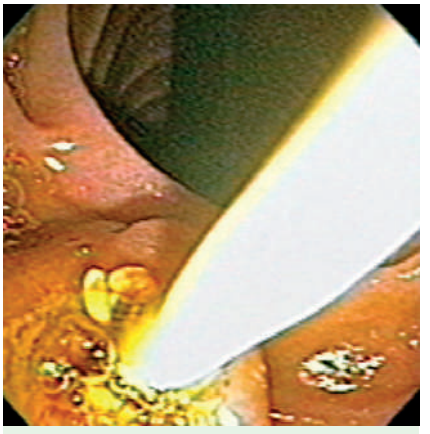

Figure 4 Removal of stone fragments with the extractor balloon from the common bile duct.

Endoscopy_UCTN_Code_TTT_1AR_2AH
Endoscopy_UCTN_Code_TTT_1AR_2AK
Endoscopy_UCTN_Code_TTT_1AT_2AB

F. S. Nakao[1], C. J. L. Mendes[2], T. Szego[2], A. P. Ferrari[1]

[1] Department of Gastroenterology, Universidade Federal de São Paulo, São Paulo, Brazil

[2] Hospital Albert Einstein, São Paulo, Brazil

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.

References

1 *Huang CS, Farraye FA.* Endoscopy in the bariatric surgical patient. Gastroenterol Clin North Am 2005; 34: 151 – 166
2 *Elton E, Hanson BL, Qaseem T et al.* Diagnostic and therapeutic ERCP using an enteroscope and a pediatric colonoscope in long-limb surgical bypass patients. Gastrointest Endosc 1998; 47: 62 – 67
3 *Baron TH, Vickers SM.* Surgical gastrostomy placement as access for diagnostic and therapeutic ERCP. Gastrointest Endosc 1998; 48: 640 – 641
4 *Pimentel RR, Mehran A, Szomstein S et al.* Laparoscopy-assisted transgastrostomy ERCP after bariatric surgery: case report of a novel approach. Gastrointest Endosc 2004; 59: 325 – 328
5 *Matlock J, Ikramuddin S, Lederer H et al.* Bypassing the bypass: ERCP via gastrostomy after bariatric surgery. Gastrointest Endosc 2005; 61: AB98

Bibliography

DOI 10.1055/s-2007-966333
Endoscopy 2007; 39: E219 – E220

© Georg Thieme Verlag KG Stuttgart · New York ·
ISSN 0013-726X

Corresponding author

F. S. Nakao, MD

Rua Belmonte, 599
São Paulo
CEP 05088-050
Brazil
Fax: +55-11-55764049
franknakao@hotmail.com

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.