Roux-en-Y gastric bypass (RYGB) is among the favorite surgical approaches to treating morbidly obese patients, but leads to an increased incidence of cholecocolithiasis. Peroral 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 gastrostomy 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 gastrostomy (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.

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

Endoscopy_UCTN_Code_TTT_1AR_2AH
Endoscopy_UCTN_Code_TTT_1AR_2AK
Endoscopy_UCTN_Code_TTT_1AT_2AB

F. S. Nakao¹, C. J. L. Mendes², T. Szego², A. P. Ferrari¹
¹ Department of Gastroenterology, Universidade Federal de São Paulo, São Paulo, Brazil
² Hospital Albert Einstein, São Paulo, Brazil

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 gastrostomy.

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.
References
3 Baron TH, Vickers SM. Surgical gastrostomy placement as access for diagnostic and therapeutic ERCP. Gastrointest Endosc 1998; 48: 640 – 641

Bibliography
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