Double-balloon enteroscopy-assisted endoscopic retrograde cholangiography for the treatment of a strictured Roux-en-Y hepaticojejunal anastomosis

Fig. 1 Roux-en-Y gastric bypass in a 49-year-old patient with Mirizzi's syndrome.

Fig. 2 Endoscopic view of a pinpoint stricture of the Roux-en-Y hepaticojejunal anastomosis.

Fig. 3 a,b Diathermic debridement of the stricture makes it possible to traverse the stricture with a 0.035-inch hydrophilic tip guidewire.

Fig. 4 Balloon dilation of the stricture.

Fig. 5 Final aspect after endoscopic therapy.

A 49-year-old patient underwent cholecystectomy and Roux-en-Y hepaticojejunal anastomosis (Fig. 1) for Mirizzi's syndrome. Jaundice, pruritus, choloria, and acholia developed 4 months later. The total serum bilirubin was 21 mg/dL, and magnetic resonance cholangiopancreatography (MRCP) demonstrated intrahepatic bile duct dilation and anastomotic stricture.

Double-balloon enteroscopy was performed, and the hepaticojejunal anastomosis was reached. A pinpoint anastomotic stricture was noted (Fig. 2). After diathermic debridement of the stricture, it was possible to traverse the stricture with a 0.035-inch hydrophilic tip guidewire (Fig. 3a,b). Cholangiography demonstrated a marked dilation of the intrahepatic biliary tree and a long (10-mm)

anastomotic stricture. No filling defect compatible with stones was detected. A 12- to 15-mm balloon (Fig. 4) was introduced over the wire, and the stenosis was successfully dilated to 15 mm (Fig. 5). The serum bilirubin levels normalized in 5 days.

Roux-en-Y hepaticojejunostomy stricture occurs in 10% to 30% of patients and requires prompt intervention [1]. Percutaneous and surgical approaches are the standard treatment options but may be associated with significant morbidity [2, 3]. In this scenario, balloon overtube-assisted enteroscopy provides an option to access the hepaticojejunal anastomosis. As illustrated by our case, the technical success rate of balloon overtube-assisted enteroscopy for postoperative retrograde cholangiography may be as high as 85%, and this technique should be considered as the first option for patients requiring postoperative endoscopic retrograde cholangiopancreatography (ERCP) [4–6].

Endoscopy_UCTN_Code_TTT_1AR_2AC

Competing interests: None

Gabriela F. Paduani¹, Adriana Vaz Saffatle-Ribeiro², Matheus Cavalcante Franco², Fauze Maluf-Filho²

¹ Cancer Institute, University of São Paulo, São Paulo, SP, Brazil

² Department of Gastrointestinal Endoscopy, University of São Paulo, São Paulo, SP, Brazil

References

- 1 Pidigue RS, Chinnusamy P, Jategaonkar PA et al. Laparoendoscopic approach for refractory Roux-en-Y hepaticojejunostomy stricture in an acute setting: a unique case and technique. *Asian J Endosc Surg* 2014; 7: 67–70
- 2 Feitoza AB, Baron TH. Endoscopy and ERCP in the setting of previous upper GI tract surgery. Part I: reconstruction without alteration of pancreaticobiliary anatomy. *Gastrointest Endosc* 2001; 54: 743–739
- 3 Baron TH, Vickers SM. Surgical gastrotomy placement as access for diagnostic and therapeutic ERCP. *Gastrointest Endosc* 1998; 48: 640–641
- 4 Parlak E, Çiçek B, Dişibeyaz S et al. Endoscopic retrograde cholangiography by double balloon enteroscopy in patients with Roux-en-Y hepaticojejunostomy. *Surg Endosc* 2010; 24: 466–470
- 5 Skinner M, Popa D, Neumann H et al. ERCP with the overtube-assisted enteroscopy technique: a systematic review. *Endoscopy* 2014; 46: 560–572

- 6 Skinner M, Velázquez-Aviña J, Mönkemüller K. Using balloon-overtube-assisted enteroscopy for postoperative endoscopic retrograde cholangiopancreatography. *Therap Adv Gastroenterol* 2014; 7: 269–279

Bibliography

DOI <http://dx.doi.org/10.1055/s-0034-1392425>
Endoscopy 2015; 47: E381–E382
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Gabriela F. Paduani, MD

Cancer Institute of University of São Paulo –
Endoscopy
Av. Arnaldo, 251
Cerqueira Cesar
São Paulo 01246-000
Brazil
Fax: +55-11-3893-2000
gabrielapaduani@gmail.com