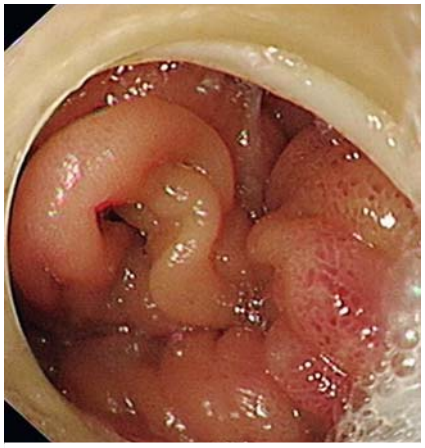
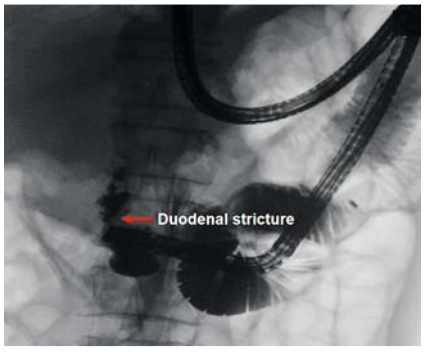
Published online: 2020-12-03

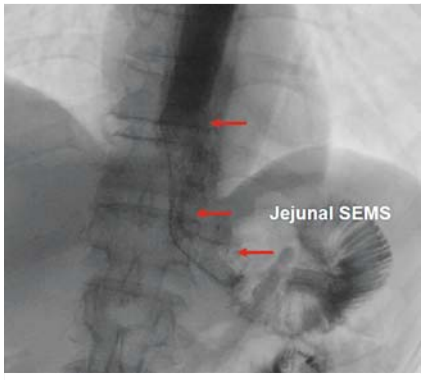
Percutaneous-endoscopic rendezvous via cap-assisted adult colonoscope to deal with biliary and multiple intestine strictures after total gastrectomy



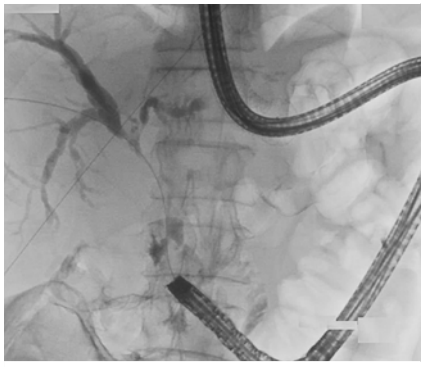
▶ **Fig. 1** Jejunal stricture, causing vomiting, near the esophagojejunostomy.



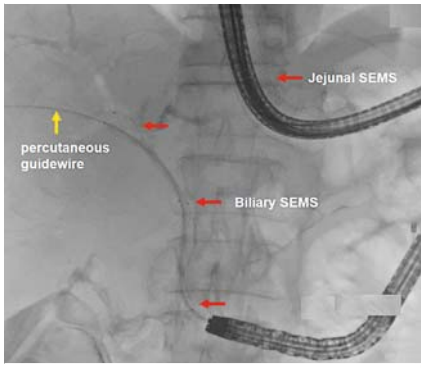
▶ **Fig. 2** The papilla could not be reached by the cap-assisted adult colonoscope because of the duodenal stricture, which was confirmed after injection of contrast agent.



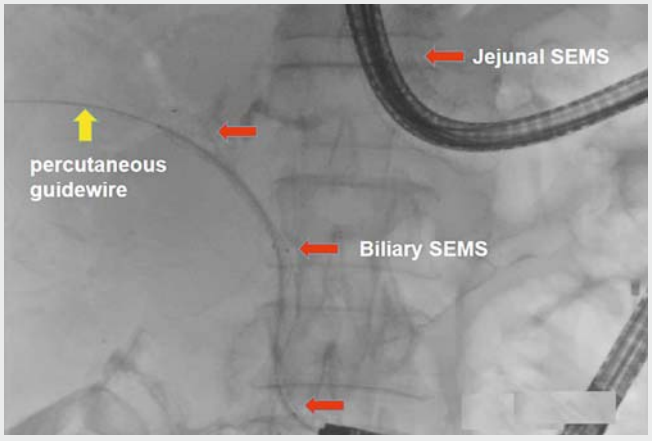
▶ **Fig. 3** An intestinal metal stent, 22 mm in diameter and 8 cm in length, was placed across the jejunal stricture.



▶ **Fig. 4** Cholangiography indicated significant stricture of the common bile duct.



▶ **Fig. 5** A metal stent, 8 mm in diameter and 10 cm in length was endoscopically inserted into the bile duct across the biliary and duodenal stricture.



Video 1 Percutaneous-endoscopic rendezvous via cap-assisted adult colonoscope for endoscopic retrograde cholangiopancreatography after total gastrectomy.

A 68-year-old man was admitted with vomiting and jaundice. He had undergone total gastrectomy and Roux-en-Y jejunojejunostomy for cardiac cancer a year earlier. Magnetic resonance imaging indicated abdominal tumor metastasis and dilatation of the intrahepatic bile ducts.

A cap-assisted adult colonoscope was used for endoscopic biliary drainage owing to abnormal anatomy. A jejunal stenosis was found near the esophagojejunostomy and a 1.5-cm-diameter balloon was applied to dilate the stricture (▶ **Fig. 1**). The colonoscope then passed through the stenosis into the duodenum. However, the papilla could not be reached because of the duodenal stricture and cannulation was not performed (▶ **Fig. 2**). Vomiting was not relieved after endoscopic dilation and a 22-mm-diameter uncovered metal stent was inserted (▶ **Fig. 3**). After 2 days, a guidewire was percutaneously inserted into the intra-

hepatic bile duct and on to the intestine through the papilla under X-ray guidance. The cap-assisted adult colonoscope entered the afferent limb and the guidewire was grasped by a biopsy forceps and pulled out through the endoscopy channel. Cholangiography indicated significant stricture of the common bile duct (▶ **Fig. 4**). A self-expandable metal stent, 8 mm in diameter and 10 cm in length was endoscopically inserted into the bile duct across the biliary and duodenal stricture, which also allowed further endoscopic interventions when needed (▶ **Fig. 5**). A nasobiliary tube was placed within the bile duct for better biliary drainage and the guidewire was then removed (▶ **Video 1**). The patient's symptoms resolved and he was discharged after 1 week.

Balloon-assisted enteroscopy is commonly applied for endoscopic retrograde cholangiopancreatography (ERCP) in patients with total gastrectomy and Roux-en-Y jejunojejunostomy [1]. However, special instruments and small-caliber endoscope channel limit its application [2]. In this novel approach, we applied an adult colonoscope with cap to perform ERCP, and percutaneous rendezvous was useful when the papilla could not be reached.

Endoscopy_UCTN_Code_TTT_1AP_2AD

Competing interests

The authors declare that they have no conflict of interest.

The authors

Zhenghong Li, Weiming Dai, Lijuan Yang, Rong Wan, Xiaobo Cai
Department of Gastroenterology, Shanghai General Hospital, Shanghai Jiaotong University, School of Medicine, Shanghai, China

Corresponding author

Xiaobo Cai, MD
Department of Gastroenterology, Shanghai General Hospital, School of Medicine, Shanghai Jiaotong University, Haining Road 100, Shanghai 200080, China
Fax: +86-21-63240090
caixiaobo1979@hotmail.com

References

[1] Li K, Huang YH, Yao W et al. Adult colonoscopy or single-balloon enteroscopy-assisted ERCP in long-limb surgical bypass patients. Clin Res Hepatol Gastroenterol 2014; 38: 513–519
[2] Lopes TL, Baron TH. Endoscopic retrograde cholangiopancreatography in patients with Roux-en-Y anatomy. J Hepatobiliary Pancreat Sci 2011; 18: 332–338

Bibliography

Endoscopy 2021; 53: E380–E381
DOI 10.1055/a-1304-3304
ISSN 0013-726X
published online 3.12.2020

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany