Retrograde endosonography-guided hepaticojejunostomy after failed rendezvous in a patient with Roux-en-Y anastomosis

Percutaneous or endoscopic ultrasound-guided hepaticojejunostomy (EUS-HJS) is infrequently used for antegrade stent placement or dilation for subsequent endoscopic retrograde cholangiography (ERC) in stenotic bile ducts of patients with surgically altered anatomies [1–3]. However, an alternative approach is required in severe strictures precluding guidewire passage.

A 65-year-old woman who underwent subtotal stomach-preserving pancreaticoduodenectomy with Roux-en-Y anastomosis for Stage II pancreatic cancer 3 months prior presented with fever, jaundice, and tachycardia. Contrast computed tomography (CT) revealed biliary obstruction at the choledochojejunal anastomosis with no visible tumor (▶ Fig. 1). No bile was observed in the Roux limb and the choledochojejunal anastomosis could not be cannulated. Percutaneous transhepatic biliary drainage (PTBD) was performed and symptomatic improvement was observed.

While ERC using the rendezvous technique was attempted 10 days later, a guidewire inserted from the PTBD route could not pass through the stenotic anastomosis. A forward-viewing endosonoscope (TCF-UC260J; Olympus Corp., Tokyo, Japan) was therefore advanced near the anastomosis to identify the bile duct under EUS guidance. The enteric wall was punctured under EUS guidance using a 19-gauge EUS needle (EZShot3; Olympus) where the bile duct was viewed closest to the scope (▶ Fig. 2a, b). A guidewire was advanced into the intrahepatic bile duct and confirmed on fluoroscopy (▶ Fig. 2c). A plastic stent was placed after mechanical dilation (▶ Fig. 2d). Contrast injected from the PTBD catheter flowed smoothly into the Roux limb, confirming successful drainage (▶ Fig. 2e, ▶ Video 1). No complications were observed on follow-up CT and the patient was discharged 4 days later (▶ Fig. 3). The patient remained symptom-free at 24 months with periodic stent replacement.

While there are reports of conversion to EUS-guided hepaticogastrostomy for PTBD catheter internalization after ERC failure [4, 5], retrograde EUS-HJS may be another alternative in severe benign anastomotic stenosis when the anastomosis can be reached with a forward-viewing endosonoscope.

Competing interests

The authors declare that they have no conflict of interest.
The authors

Takeshi Okamoto1, Kenji Nakamura1,2, Minoru Yabuta3, Katsuyuki Fukuda1
1 Department of Gastroenterology, St. Luke’s International Hospital, Tokyo, Japan
2 Department of Gastroenterology, Tokyo Dental College, Ichikawa General Hospital, Chiba, Japan
3 Department of Radiology, St. Luke’s International Hospital, Tokyo, Japan

Corresponding author

Kenji Nakamura, MD, PhD
Department of Gastroenterology, Tokyo Dental College, Ichikawa General Hospital, 5-11-13, Sugano, Ichikawa, Chiba 272-8513, Japan
kenakamura@tdc.ac.jp

References


Bibliography

Endoscopy
DOI 10.1055/a-1443-4244
ISSN 0013-726X
published online 2021
© 2021, Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

▶ Fig. 2 Retrograde endosonography-guided hepaticojejunostomy. a The forward-viewing endosonoscope was advanced near the choledochojejunal anastomosis to the optimal puncture site under fluoroscopic and endosonographic guidance. b The bile duct was punctured with a 19-gauge needle. c Fluoroscopy confirmed proper wire placement. d A plastic stent was placed through the hepaticojejunostomy after mechanical dilation. e Contrast injected from the percutaneous transhepatic biliary drainage catheter flowed smoothly into the Roux limb (yellow arrows), confirming successful drainage.

▶ Fig. 3 Follow-up contrast computed tomography (coronal view) showed the plastic stent inserted through the hepaticojejunostomy (black arrow), which was located near the stenotic choledochojejunal anastomosis (white arrow). No complications were observed.

Okamoto Takeshi et al. Retrograde endosonography-guided hepaticojejunostomy... Endoscopy | © 2021, Thieme. All rights reserved.