Conventional upper gastrointestinal endoscope retroflexion method for emergent biliary drainage in a patient with esophageal stricture

Endoscopic ultrasound-guided biliary drainage (EUS-BD) is being increasingly used as an alternative treatment to percutaneous transhepatic biliary drainage (PTBD) for biliary obstruction in patients in whom transpapillary drainage fails or for whom this intervention is unsuitable [1–3]. Although endoscopic ultrasound-guided intrahepatic bile duct fistulation from a reconstructed gastric tube has recently been reported [4], EUS-BD cannot be performed in patients who have problems with ultrasound endoscope passage in the esophagus. Here we report successful performance of emergent endoscopic transpapillary biliary drainage using a conventional upper gastrointestinal endoscope.

A 53-year-old man who underwent esophageal cancer surgery with gastric

▶ Video 1 Emergent endoscopic biliary stenting was performed using a conventional upper gastrointestinal endoscope.

▶ Fig. 1 Contrast-enhanced computed tomography showed intrahepatic bile duct dilatation due to liver metastases with marked ascites.

▶ Fig. 2 Endoscopic view of a malignant esophageal stricture.

▶ Fig. 3 Cannulation of the bile duct was achieved by retroflexing the scope in the second portion of the duodenum.

▶ Fig. 4 a Endoscopic retrograde cholangiography was performed in the retroflexed scope position. b A 7-Fr, 15-cm straight stent was successfully placed.
tube reconstruction presented 15 months later with obstructive jaundice and acute severe cholangitis. Contrast-enhanced computed tomography showed intrahepatic bile duct dilatation due to liver metastases with marked ascites (▶Fig. 1). We opted to perform emergent endoscopic transpapillary biliary drainage. However, a malignant esophageal stricture was unfortunately identified, and a side-viewing duodenoscope (JF-260V; Olympus Medical Systems, Tokyo, Japan) could not pass through the stricture (▶Fig. 2). We therefore attempted biliary drainage using a thinner conventional upper gastrointestinal endoscope (GIF-H290; Olympus Medical Systems, Tokyo, Japan). The scope passed through the stricture, and cannulation of the bile duct was achieved by retroflexing the scope in the second portion of the duodenum (▶Fig. 3). Finally, a 7-Fr, 15-cm straight stent (Flexima; Boston Scientific, Tokyo, Japan) was successfully placed, and adequate biliary drainage was attained (▶Fig. 4; ▶Video 1).

In this case, EUS-BD was impossible due to the esophageal stricture, and PTBD was inappropriate due to the marked ascites; on the other hand, once the scope passed through the stenosis, transpapillary biliary drainage seemed to be quite reasonable. Transpapillary biliary drainage using a conventional upper gastrointestinal endoscope requires no specialized equipment. This method is worth a try when confronting an esophageal stricture.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Sho Kitagawa, Shori Ishikawa, Keiya Okamura
Department of Gastroenterology, Sapporo Kosei General Hospital, Sapporo, Japan

Corresponding author

Sho Kitagawa, MD
Department of Gastroenterology, Sapporo Kosei General Hospital, Kita 3 Higashi 8, Chuo-ku, Sapporo 060-0033, Japan
bossa0405@yahoo.co.jp

References