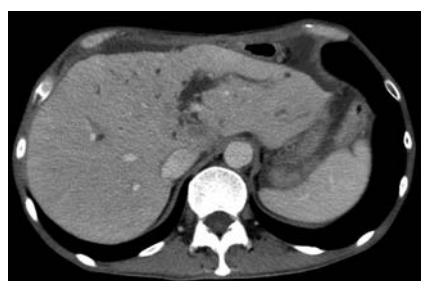
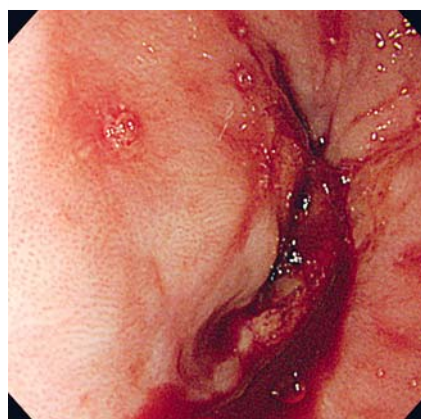


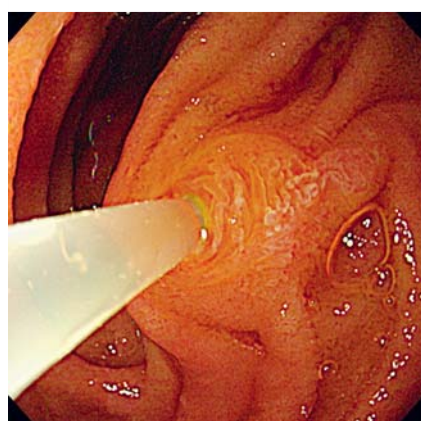
## Conventional upper gastrointestinal endoscope retroflexion method for emergent biliary drainage in a patient with esophageal stricture



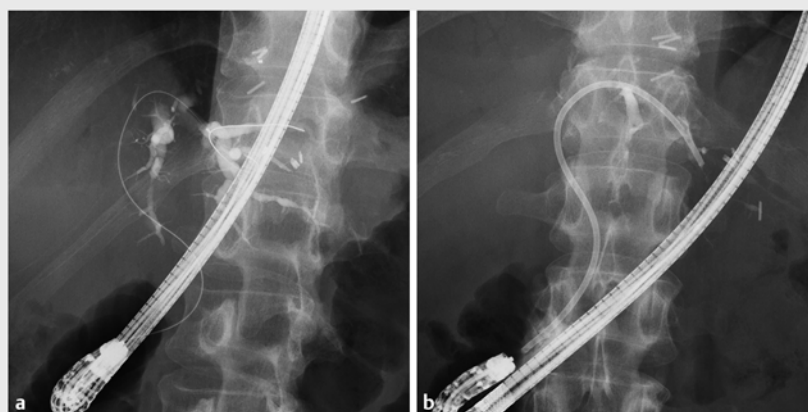
► **Fig. 1** Contrast-enhanced computed tomography showed intrahepatic bile duct dilatation due to liver metastases with marked ascites.



► **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.



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

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

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.

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## Competing interests

The authors declare that they have no conflict of interest.

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