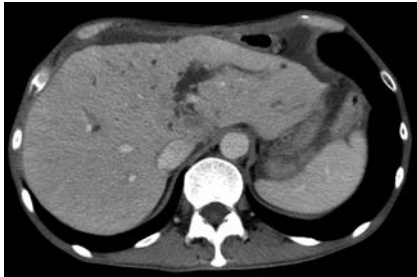
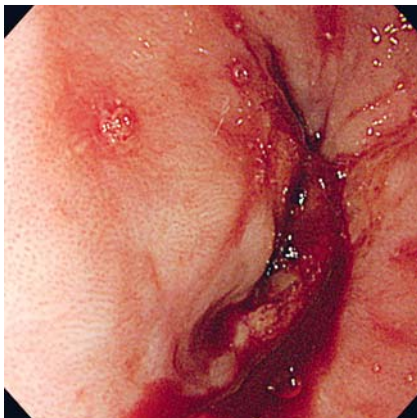


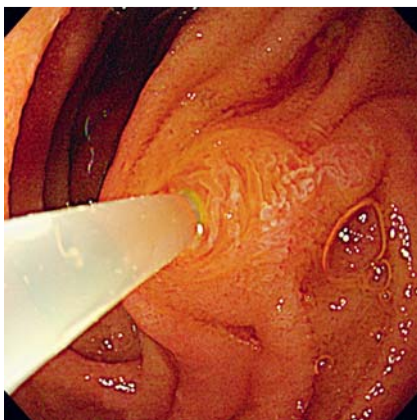
## Conventional upper gastrointestinal endoscope retroflexion method for emergent biliary drainage in a patient with esophageal stricture



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



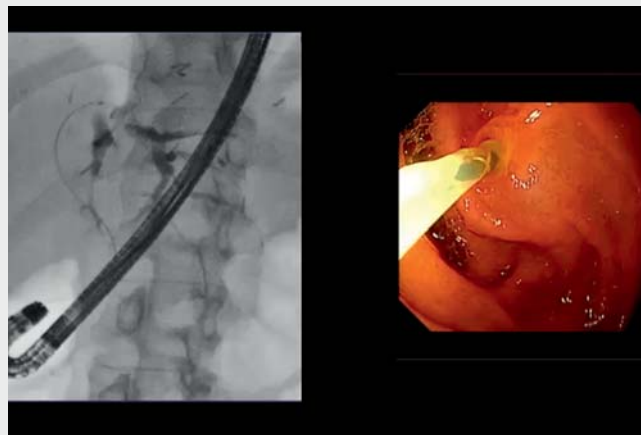
► **Fig. 2** Endoscopic view of a malignant esophageal stricture.



► **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.

## 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

- [1] Sharaiha RZ, Khan MA, Kamal F et al. Efficacy and safety of EUS-guided biliary drainage in comparison with percutaneous biliary drainage when ERCP fails: a systematic review and meta-analysis. *Gastrointest Endosc* 2017; 85: 904–914
- [2] Liao WC, Angsuwatcharakon P, Isayama H et al. International consensus recommendations for difficult biliary access. *Gastrointest Endosc* 2017; 85: 295–304
- [3] Jovani M, Ichkhanian Y, Vosoughi K et al. EUS-guided biliary drainage for postsurgical anatomy. *Endosc Ultrasound* 2019; 8: S57–S66
- [4] Maehara K, Hijioka S, Saito Y. Endoscopic ultrasound-guided hepatico-gastric-tubectomy for bile duct stent obstruction in a patient with recurrent cancer after esophageal cancer surgery with gastric tube reconstruction. *Dig Endosc* 2021; 33: 466–467

## Bibliography

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