Endoscopic ultrasonography-guided antegrade stenting combined with hepatico-gastrostomy/hepaticojejunostomy using ultraslim instruments

Techniques for endoscopic ultrasonography (EUS)-guided biliary drainage (EUS-BD) have been developed, and EUS-guided antegrade stenting (EUS-AGS) and EUS-guided hepaticogastrostomy (EUS-HGS)/hepaticojejunostomy (HJS) are suitable for gastric outlet obstruction (GOO) or surgically altered anatomy. EUS-AGS alone carries the potential risk of causing bile leakage from a fistula; however, EUS-AGS in combination with EUS-HGS or EUS-HJS appears safer, as it can reduce the risk of a bile leak [1, 2].

We present two patients who underwent EUS-HGS or EUS-HJS combined with EUS-AGS using ultraslim instruments. Patient #1 was a 62-year-old woman who had undergone a previous total gastrectomy for gastric cancer and later developed obstructive jaundice. First, a B3 branch was punctured using a 19G needle via a transjejunal approach, and a 0.025-inch guidewire (VisiGlide 2; Olympus, Tokyo, Japan) (▶ Fig. 1) was placed. Next, a tapered endoscopic retrograde cholangiopancreatography (ERCP) catheter (01 20 211; MTW Endoskopie, Düsseldorf, Germany) (▶ Fig. 2) was used to dilate the fistula, following successful passage of the guidewire through the stricture. EUS-AGS was then performed using a novel ultraslim uncovered self-expandable metal stent (SEMS; BileRush Selective; 5.7 Fr, 10-mm diameter; Piolax Medical Devices, Kanagawa, Japan) (Fig. 2). Finally, a novel 7-Fr plastic stent (TYPE-IT stent; Gadelius Medical Co. Ltd., Tokyo, Japan) [3] (Fig. 3) was placed to create an EUS-HJS (▶ Video 1).

Patient #2 was a 68-year-old man with GOO caused by gastric cancer who developed obstructive jaundice. EUS-AGS and EUS-HGS were performed as described.
above (▶ Fig.5; ▶ Video2). There were no complications in either case. A covered SEMS (CSEMS) is commonly used to prevent bile leaks in EUS-HGS/HJS. A long partially covered SEMS (PCSEMS; ≥10 mm) can be used to prevent stent migration [4]. However, the thicker delivery system (8.5 Fr) with this long PCSEMS and the cost of two metal stents are of concern. In particular, minimum fistula dilation should be performed during EUS-BD. Therefore, EUS-AGS and EUS-HGS/HJS using various ultraslim instruments (7 Fr or less) in combination can facilitate the procedure and minimize the potential for bile leakage.

Endoscopy_UCTN_Code_TTT_1AS_2AD

Competing interests

A novel ultraslim uncovered metal stent (BileRush Selective; 5.7 Fr, 8-mm/10-mm diameter, 185-cm long) has been developed through collaborative research between Dr. Kawakami and Piolax Medical Devices, Kanagawa, Japan. Dr. Kawakami is a consultant and gives lectures for the Piolax Medical Devices and for Olympus, Tokyo, Japan. Dr. Kubota has no competing interests to declare.

The Authors

Hiroshi Kawakami, Yoshimasa Kubota
Department of Gastroenterology and Hepatology, Faculty of Medicine, University of Miyazaki and Center for Digestive Disease, University of Miyazaki Hospital, Miyazaki, Japan

Corresponding author

Hiroshi Kawakami, MD, PhD
Department of Gastroenterology and Hepatology, Faculty of Medicine, University of Miyazaki, Center for Digestive Disease, University of Miyazaki Hospital, 5200, Kihara, Kiyotake, Miyazaki 889-1692, Japan
Fax: +81-985-859802
hiropon@med.miyazaki-u.ac.jp

References


Bibliography

DOI http://dx.doi.org/10.1055/s-0043-101225
Endoscopy 2017; 49: E88–E89
© Georg Thieme Verlag KG
Stuttgart - New York
ISSN 0013-726X