Reintervention for stent occlusion after endoscopic ultrasound-guided hepaticogastrostomy with novel use of a precut needle-knife

Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) has gained popularity as an alternative biliary drainage method [1, 2]; however, reintervention after EUS-HGS remains to be elucidated. In EUS-HGS, use of a biliary stent that is longer than 100 mm is recommended in order to prevent stent migration [2, 3]. However, such stent placement occasionally makes reintervention challenging owing to the long length of the stent in the gastric lumen. A few reports have described technical efforts involved in reintervention after EUS-HGS [4, 5]. We describe a patient who underwent successful reintervention via a novel use of a precut needle-knife.

A 74-year-old woman with recurrent pancreatic cancer after pancreaticoduodenectomy presented with recurrent cholangitis. An 8 × 100 mm covered metal stent (Niti-S biliary covered stent; Taewoong Medical, Seoul, South Korea) had been previously deployed during EUS-HGS for biliary obstruction at the hepatic hilum. Stent occlusion occurred 4 months after EUS-HGS. Abdominal computed tomography showed a dilated intrahepatic bile duct, and stent occlusion was confirmed on endoscopy (▶ Fig. 1). Revisionary stent placement was attempted.

First, the advancement of an endoscopic retrograde cholangiopancreatography (ERCP) catheter was attempted via the proximal end of the HGS stent; however, the long stent length in the gastric lumen rendered catheter insertion impossible. Therefore, reintervention through the stent mesh was attempted. A 0.035-inch guidewire (Jagwire; Boston Scientific, Marlborough, Massachusetts, USA) was successfully passed through the mesh of the previously deployed hepaticogastrostomy stent (Niti-S biliary covered stent, 8 × 100 mm; Taewoong Medical, Seoul, South Korea). Using this knife, the stent mesh was broken easily (▶ Fig. 3), and a 7-Fr plastic stent (Flexima; Boston Scientific) was successfully deployed via the stent mesh into the left intrahepatic bile duct (▶ Fig. 4, ▶ Video 1). Cholangitis resolved in a few days.

The use of a precut needle-knife is simple and may be considered as a useful treatment option for reintervention after EUS-HGS.

Competing interests
None

The authors
Kosuke Minaga, Mamoru Takenaka, Ayana Okamoto, Shunsuke Omoto, Takeshi Miyata, Hajime Imai, Masatoshi Kudo
Department of Gastroenterology and Hepatology, Kindai University Faculty of Medicine, Osaka-Sayama, Japan
Using a precut needle-knife, the mesh of the previously deployed hepaticogastrostomy stent was broken easily. Thereafter, a 7-Fr biliary plastic stent was deployed successfully via the stent mesh into the left intrahepatic bile duct.

**Video 1**

Using a precut needle-knife, the mesh of the previously deployed hepaticogastrostomy stent was broken easily. Thereafter, a 7-Fr biliary plastic stent was deployed successfully via the stent mesh into the left intrahepatic bile duct.

**Fig. 3** A precut needle-knife (NeedleCut3V; Olympus, Tokyo, Japan) was inserted over the guidewire and could break the stent mesh easily.

**Fig. 4** A 7-Fr biliary plastic stent (70 mm long, Flexima; Boston Scientific, Marlborough, Massachusetts, USA) was deployed successfully via the stent mesh into the left intrahepatic bile duct.

**References**


**Bibliography**

DOI https://doi.org/10.1055/a-0596-7171
Published online: 13.4.2018
Endoscopy 2018; 50: E153–E154
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

**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