Transverse stent placement for hilar malignant biliary obstruction through an endoscopic ultrasound-guided hepaticogastrostomy route

A 70-year-old woman who had undergone endoscopic placement of multiple stents for hilar biliary obstruction due to gallbladder cancer was admitted with cholangitis. In her previous hospitalization, endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) had been performed for the bile duct at segment III (B3) using a partially covered self-expandable metal stent (SEMS; modified Giobor, 10 × 80 mm; Taewoong Medical Inc., Gimpo, Korea [1]). To manage subsequent episodes of cholangitis, two uncovered SEMSs were placed via the transpapillary route for B7 and B8 in a partial stent-in-stent fashion (►Fig. 1). On this admission, endoscopic drainage was scheduled to manage segmental cholangitis in B8.

In the first session, transpapillary biliary drainage of B8 failed as a cannula could not be passed through the mesh wall of the indwelling SEMS (►Fig. 2a). Therefore, we attempted to access B8 through...
the EUS-HGS stent. Using a side-viewing duodenoscope, we passed a guidewire into the ventral branch of B8 and dilated the mesh of the SEMS using a balloon catheter (▶ Fig. 2b). We then placed a nasobiliary catheter to manage the cholangitis. In the following session, we trimmed the gastric end of the EUS-HGS stent using argon plasma coagulation (ESG-100; Olympus, Tokyo, Japan) to facilitate insertion of the stent [2] and deployed an uncovered SEMS (Niti-S, 10 × 80 mm; Taewoong Medical Inc.) (▶ Fig. 2c; ▶ Video 1). There were no procedure-related adverse events. Endoscopists occasionally face technical difficulties in managing occlusion of SEMSs placed for hilar biliary obstruction. The transpapillary approach is often used for re-intervention for the right-sided biliary system and, recently, the feasibility of EUS-guided hepaticoduodenostomy has been reported [3,4]; however, both procedures are technically demanding. Furthermore, EUS-guided access to B8 is often anatomically impossible. Access to the right intrahepatic bile duct via the EUS-HGS route can offer an alternative strategy in this setting [5].

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Competing interests

None

The authors

Sachiko Kanai*, Tomotaka Saito*, Ryunosuke Hakuta, Yousseke Nakai, Kazuhiro Koike
Department of Gastroenterology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Corresponding author

Yousseke Nakai, MD, PhD
Department of Gastroenterology, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan
Fax: +81-3-38140021
ynakai-tky@umin.ac.jp

References


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