Revisionary antireflux metal stent placement for stent occlusion after endoscopic ultrasound-guided hepaticojejunostomy

Endoscopic ultrasound-guided biliary drainage (EUS-BD) has been recently recognized as a new treatment option for obstructive jaundice with a surgically altered anatomy [1]. However, stent occlusion has been reported to occur in 10.7% – 25% of cases following EUS-BD [2, 3]. Reflux of food residue from the gastrointestinal tract into the stent is thought to be causing stent occlusion; therefore, a stent that can prevent food reflux needs to be developed to ensure longer-lasting stent patency. We report the first case in which revisionary placement of an antireflux metal stent was useful for stent occlusion following EUS-BD (▶ Video 1).

An 85-year-old man who had undergone distal gastrectomy with Billroth II reconstruction for gastric cancer presented with biliary obstruction due to lymph node metastasis. For biliary drainage, EUS-guided hepaticojejunostomy (HJS) was performed via the afferent limb. A dedicated 7-Fr × 14-cm plastic stent (TYPE-IT stent; Gadelius Medical, Tokyo, Japan) was placed without complications (▶ Fig. 1). However, 2 months later, the patient presented with recurrence of jaundice and cholangitis. Endoscopic reintervention for stent occlusion was attempted using a forward-viewing gastroscope. A 0.025-inch guidewire was inserted into the biliary tree along the HJS stent (▶ Fig. 2); the stent was removed with grasping forceps. After cholangiography, a 10 × 80-mm antireflux covered metal stent (Niti-S Biliary Long-Covered ComVi Stent; Taewoong Medical, Gimpo, Korea) was placed through the HJS fistula (▶ Fig. 3). This stent has a 7-mm-long funnel-shaped antireflux valve designed to prevent food reflux [4]. The patient completely recovered within a few days; currently, at over 6 months after the procedure, he is continuing chemotherapy without stent dysfunction (▶ Fig. 4). Antireflux biliary stents have been reported to be useful in transpapillary drainage under ERCP [4, 5], but their usefulness in transmural drainage under EUS is unknown. The case reported here indicates that placement of an antireflux metal stent could be useful to manage stent dysfunction following EUS-BD and achieve long-term stent patency.

E-Videos

Video 1 Revisionary antireflux covered metal stent placement for stent occlusion after endoscopic ultrasound-guided hepaticojejunostomy.

Fig. 1 Endoscopic ultrasound-guided hepaticojejunostomy (HJS) performed using a dedicated 7-Fr × 14-cm plastic stent. a Endoscopic view, b fluoroscopic view.

Competing interests

None
The authors

Kosuke Minaga, Mamoru Takenaka, Ayana Okamoto, Shunsuke Omoto, Ken Kamata, Kentaro Yamao, Masatoshi Kudo

Department of Gastroenterology and Hepatology, Kindai University Faculty of Medicine, Osaka-Sayama, Japan

Corresponding author

Kosuke Minaga, MD, PhD

Department of Gastroenterology and Hepatology, Kindai University Faculty of Medicine, 377-2 Ohno-Higashi, Osaka-Sayama, 589-8511, Japan

Fax: +81-72-367-2880

kousukeminaga@med.kindai.ac.jp

References


Bibliography

DOI https://doi.org/10.1055/a-1032-8272
Published online: 2019
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X