Reintervention technique with insertion of an uncovered metal stent by a 5.4-Fr delivery system for an occluded endoscopic ultrasound-guided hepaticogastrostomy stent

Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) is indicated for patients with failed endoscopic retrograde cholangiopancreatography (ERCP) [1]. The clinical benefit of EUS-HGS using a long-length, partially covered, self-expandable metal stent (PCSEMS) to prevent stent migration has been reported [2, 3]. However, reintervention can be challenging in the event of stent obstruction because biliary access through a long-length PCSEMS is often difficult. Biliary access through the mesh of the EUS-HGS stent may be a useful reintervention technique [4, 5]. In this procedure, insertion of the device into the biliary tract is a limiting step because the lumen of the mesh is relatively narrow. A novel uncovered self-expandable metal stent (UCSEMS) has recently become available in Japan (YABUSAME; KANEKA Medical, Osaka, Japan) (Fig. 1). As the diameter of the stent delivery system is only 5.4 Fr and the tip is extremely tapered, stent delivery is performed by insertion along a guidewire. Here we describe the technique of reintervention through the mesh of the occluded EUS-HGS stent using the novel UCSEMS (Video 1).

A 78-year-old man had undergone EUS-HGS with a long-length PCSEMS for duodenal obstruction caused by pancreatic head cancer 6 months previously. Although chemotherapy was performed, obstructive jaundice occurred due to stent obstruction, and reintervention was attempted. After inserting an ERCP catheter into the biliary tract through the mesh of the PCSEMS (Fig. 2a), a 0.025-inch guidewire was deployed. Cholangiography revealed stent occlusion (Fig. 2b). The stent delivery system was then successfully inserted through the PCSEMS (Fig. 2c), and the stent was successfully deployed across the stricture site using the novel UCSEMS (8 x 6 cm) with no adverse events (Fig. 2d).

In the case of occluded EUS-HGS stent, the technique of reintervention through its mesh using the novel UCSEMS appears to be useful and should be further evaluated in a greater number of patients.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Takeshi Ogura, Atsushi Okuda, Nobu Nishioka, Masanori Yamada, Kazuhide Higuchi
2nd Department of Internal Medicine, Osaka Medical College, Osaka, Japan

Corresponding author

Takeshi Ogura, MD
2nd Department of Internal Medicine, Osaka Medical College, 2-7 Daigakuchou, Takatsukishi, Osaka 569-8686, Japan
oguratakeshi0411@yahoo.co.jp
Fig. 2 Reintervention through the occluded stent. a An endoscopic retrograde cholangiopancreatography catheter was inserted into the biliary tract through the mesh of the endoscopic ultrasound-guided hepaticogastrostomy stent. b Obstruction of the stent was apparent (arrow). c The novel uncovered self-expandable metal stent delivery system was inserted across the stricture site into the biliary tract. d Stent deployment was successfully performed.

References