Re-intervention for recurrent biliary obstruction after endoscopic ultrasound hepaticogastrostomy with partially covered self-expandable metal stent

The use of the endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) method for malignant biliary stricture has increased. A partially covered self-expandable metal stent (PCSEMS) is often selected for the procedure, and re-intervention is challenging because of the long length of stent protrusion inside the stomach. Several re-intervention methods, including trimming and stent penetration using electrical devices, have been reported [1–4]; however, the complexity and time-consuming nature of these procedures pose limitations. Here, we report the simplest of novel re-intervention methods for PCSEMS dysfunction after an EUS-HGS.

A 65-year-old woman with unresectable pancreatic cancer and duodenal obstruction underwent EUS-HGS using a PCSEMS (Niti-S biliary S-type; 8-mm × 10-cm covered stent with a 1-cm uncovered portion; Taewoong Medical, Seoul, South Korea). After 8 months had passed, recurrent biliary obstruction occurred due to bile duct hyperplasia at the stent edge (Fig. 1). Stent removal with a grasping forceps was not possible because it was firmly anchored by the overgrown tissue. Inserting a guidewire and a catheter parallel to the stent to access the bile duct was also not feasible. We therefore penetrated the stent mesh close to the stomach wall with a guidewire (Visiglide2; Olympus, Tokyo, Japan) and a catheter (Tandem XL ERCP Cannula; Boston Scientific Corporation, Marlborough, Massachusetts, USA). These devices were advanced into the stent (Fig. 2), and bypassed the stricture allowing access to the bile duct. The biliary stricture and the stent mesh, at the entry point of the wire and catheter, were dilated with a balloon catheter (REN; 8-mm wide; Kaneka Medix Corporation, Tokyo). A fully covered SEMS (Niti-S biliary S-type; 6-mm × 8-cm long covered stent; Taewoong Medical) was threaded through the dilated tract and successfully de-
ployed (▶ Fig. 3, ▶ Video 1). This procedure was completed without any adverse events. This novel re-intervention method involving penetration of the stent mesh near the stomach wall is simple, safe, and efficient.

References


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Competing interests

None

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