Salvaging a malpositioned fully covered self-expanding metal stent for pancreatic fluid collection drainage

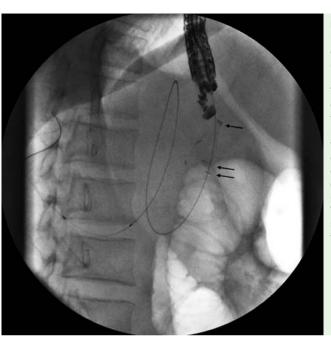


Fig. 1 Radiographic image showing the selfexpanding metal stent (SEMS) that was misplaced at deployment. The proximal (gastric end; single arrow) of the SEMS is nonexpanded and within the cyst wall; the distal end of the SEMS is opened within the area of walled-off necrosis (WON; double arrow). The quidewire is seen still passing through the SEMS.



Endoscopic view showing the fistulous opening being balloon dilated and the internally migrated Nagi stent being caught at its proximal edge with rat-tooth forceps and gently pulled back and repositioned in the desired place.

A 44-year-old man presented with a large, symptomatic pancreatic fluid collection (PFC) 6 weeks after an episode of alcohol-related acute necrotizing pancreatitis. Imaging confirmed an area of walled-off necrosis (WON) measuring 15×12 mm and containing solid debris.

He underwent endoscopic ultrasound (EUS)-guided drainage with the aim of placing a dedicated fully covered self-expanding metal stent (SEMS; Nagi stent, Taewoong Medical, Seoul, South Korea) of 16 mm in diameter and 20 mm in length. The initial steps of the drainage procedure via the stomach (needle puncture, creation of a cystogastric fistula using a coaxial over-the-wire 6-Fr cystotome, and smallcaliber balloon dilation) were uneventful. During deployment of the SEMS, the distal end opened appropriately inside the WON (confirmed on EUS and fluoroscopy); however, at the point of final SEMS release, there was an excessive gush of turbid, purulent fluid into the stomach, which obscured the endoscopic visualization of the SEMS (within the delivery catheter) and its yellow marker (which indicates the proximal end of the SEMS). After its release, the proximal (gastric end) of the SEMS was noted to be within the cyst wall. The guidewire was still in position passing through

the stent (**o Fig. 1**). This untoward event was immediately identified, but unfortunately efforts to reposition the SEMS failed. A 6-Fr nasocystic catheter was therefore placed over the guidewire to drain the collection. There were no post-procedure adverse events.

After 48 hours, a gastroscope (Olympus; diameter 9.2 mm) was passed over the nasocystic catheter keeping the guidewire, which had been re-routed through the oral cavity, inside. The fistulous opening was dilated with 12-mm controlled radial expansion (CRE) balloon (Boston Scientific, Natick, Massachusetts, USA). On entering the cavity, the internally migrated Nagi stent was caught at its proximal edge with rat-tooth forceps and gently pulled back and repositioned in the desired place (Video 1). The patient remained asymptomatic until his discharge. At 6 weeks, after resolution of the WON, the Nagi SEMS was removed.

Technical success rates are generally high when placing a dedicated SEMS for EUS-guided drainage of PFCs [1–4]. A SEMS that is misplaced inside the PFC poses a challenge in terms of repositioning and may require either its removal or placement of a plastic stent through it. An inappropriately placed SEMS in a PFC can be

salvaged with repositioning and reuse of same stent provided the guidewire is in place.

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