Endoscopic removal of buried lumen-apposing metal stents used for cystogastrostomy and cholecystogastrostomy

The Hot AXIOS system is a new device for transgastric or transduodenal endoscopic drainage of a pancreatic pseudocyst or the gallbladder [1,2] using a lumen-apposing metal stent (LAMS) mounted on an electrocautery-enhanced introduction system. The device seems to be relatively safe in expert hands; however, the literature on management of its complications is limited [1–4]. Hereby, we report on two patients with embedded LAMSs, which were endoscopically removed.

Patient 1 was a 68-year-old man with a pseudocyst after acute pancreatitis who underwent successful endoscopic ultrasound (EUS)-guided cystogastrostomy with placement of an AXIOS stent (10 × 10 mm). Endoscopic removal of the LAMS was planned 3 months later; however, gastroscopy showed tissue overgrowth at the gastric flange of the LAMS making direct removal of the stent with a rat-tooth forceps or snare impossible. To avoid the patient having to undergo surgery, we opted for endoscopic treatment consisting of forced argon plasma coagulation (APC), needle-knife incision, dilation of the stent, and extraction with a rat-tooth forceps. After the tissue overgrowth had been sufficiently removed from the gastric flange, it was possible to remove the LAMS with a rat-tooth forceps. No complications subsequently occurred.

Patient 2 was a 59-year-old man with acute acalculous cholecystitis who underwent successful endoscopic gallbladder drainage by EUS-guided cholecystogastrostomy with lumen-apposing covered self-expanding metal stents (LAMS) placed for cystogastrostomy with its gastric flange buried by tissue overgrowth for 4 months in a patient who had undergone cholecystectomy. Significant tissue overgrowth by gastric mucosa affecting a lumen-apposing metal stent (LAMS) after a stent dwell time of 4 months in a patient who had undergone cholecystectomy was planned 3 months later; however, gastroscopy showed tissue overgrowth at the gastric flange of the LAMS making direct removal of the stent with a rat-tooth forceps or snare impossible. To avoid the patient having to undergo surgery, we opted for endoscopic treatment consisting of forced argon plasma coagulation (APC), needle-knife incision, and dilation of the stent up to 12 mm (Video 1). After the tissue overgrowth had been sufficiently removed from the gastric flange, it was possible to remove the LAMS with a rat-tooth forceps. No complications subsequently occurred.

Both these clinical cases show that tissue overgrowth at the gastric side of a LAMS can be a complication after cystogastrostomy and cholecystogastrostomy, making regular stent removal with a forceps impossible [1,3]. In such circumstances, endoscopic techniques as described above can be considered as rescue therapy.

Competing interests: Frank P. Vleggaar is a consultant for Boston Scientific.

Tom C. Seerden, Frank P. Vleggaar

1 Department of Gastroenterology and Hepatology, Amphia Hospital, Breda, The Netherlands
2 Department of Gastroenterology and Hepatology, University Medical Center Utrecht, Utrecht, The Netherlands

References

Bibliography
DOI http://dx.doi.org/10.1055/s-0042-107073
Endoscopy 2016; 48: E179
© Georg Thieme Verlag KG Stuttgart – New York ISSN 0013-726X

Corresponding author
T. C. Seerden, MD
Department of Gastroenterology and Hepatology
Amphia Hospital
Molengracht 21
4818 CK Breda
The Netherlands
tseerden@amphia.nl