

## New indications for fully covered lumen-apposing metal stents: biliary stenting to treat post-sphincterotomy bleeding or ampullary stenosis

Stenting with standard biliary fully covered self-expandable metal stents (FCSEMSs) has been reported as successful treatment for complications after biliary sphincterotomy such as bleeding, perforation, or stenosis [1]. However, in some situations, such as a dilated common bile duct (CBD) or large sphincterotomy, these stents are not watertight, which can lead to persistent bleeding and leakage, or a malfunction [1,2]. A new, shaped, large covered stent could be an interesting solution, with maximal radial and axial force achieving adequate local compression to allow calibration of a stenosis, hemostasis, or a watertight seal to be created [3,4]. Here, we report our early experience with the use of these new stents in the CBD in two patients (►Video 1).

The first patient was an 89-year-old woman who underwent a maximal re-cut after a previous sphincterotomy for residual stones in a dilated CBD. She represented 12 hours later with hypovolemic shock and melena. After resuscitation, she underwent an emergency endoscopic retrograde cholangiopancreatography (ERCP), which showed active arterial bleeding from the roof of the sphincterotomy. Injection of adrenaline, insertion of a standard 10-mm diameter FCSEMS, and forced coagulation of the visible vessel using a CoGasper did not achieve hemostasis. Because of the size of the sphincterotomy and the dilatation of the CBD, we decided to place a fully covered lumen-apposing metal stent (FCLAMS). A 4-cm × 14-mm FCLAMS was successfully delivered with complete hemostasis being achieved. Bleeding did not recur and the stent was removed 5 days later without complications.



**► Video 1** Endoscopic retrograde cholangiopancreatographies performed in two patients during which temporary fully covered lumen-apposing metal stents (FCLAMSs) are delivered: a to treat massive bleeding following a maximally sized sphincterotomy for residual stones; b to treat complete stenosis of a bilioduodenal anastomosis following surgical ampullectomy.

The second patient was a 67-year-old man who had undergone surgical resection of the pancreatic papilla for high grade dysplasia 3 months previously. He presented with acute cholangitis due to complete anastomotic stenosis of the CBD with marked dilatation. A 3-cm × 14-mm FCLAMS was successfully delivered. The patient was discharged on day 1 and has been scheduled for removal of the stent.

The present cases suggest that placement of a transpapillary FCLAMS could be an interesting alternative for treating post-sphincterotomy bleeding and to calibrate stenosis, in patients with a dilated CBD and/or a large sphincterotomy orifice.

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### Competing interests

None

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## References

- [1] Donatelli G, Dumont JL, Cereatti F et al. Revision of biliary sphincterotomy by re-cut, balloon dilation or temporary stenting: comparison of clinical outcome and complication rate (with video). *Endosc Int Open* 2017; 5: E395 – E401
- [2] Donatelli G, Cereatti F, Dumont JL et al. Post-biliary sphincterotomy bleeding despite

covered metallic stent deployment. *SAGE Open Med Case Rep* 2016; 4: 2050313X16645756

- [3] Khashab MA, Messallam AA, Penas I et al. International multicenter comparative trial of transluminal EUS-guided biliary drainage via hepatogastrostomy vs. Choledochoduodenostomy approaches. *Endosc Int Open* 2016; 4: E175 – E181
- [4] Yang D, Nieto JM, Siddiqui A et al. Lumen-apposing covered self-expandable metal stents for short benign gastrointestinal strictures: a multicenter study. *Endoscopy* 2017; 49: 327 – 333

### Bibliography

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