Salvage of a dislodged hepaticogastrostomy stent in the peritoneum with NOTES

Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) is a technique to create a fistula between the stomach and the left intrahepatic bile duct. The technical success rate is high, reported to be 87%–89.5% in expert hands, but the drawback is the procedure-related adverse event rate of 27% [1, 2], with possible events including pneumoperitoneum, choleperitoneum, infection, stent dysfunction, and death [3]. In natural orifice transluminal endoscopic surgery (NOTES), an intentional perforation in the bowel is created to access the peritoneal cavity with an endoscope. We describe here a novel NOTES technique to salvage a misplaced HGS stent from the peritoneal cavity.

The patient was a 68-year-old man with lung cancer that had metastasized to the liver hilum causing compression and stenosis of the duodenum and common bile duct (CBD). He was initially treated with a duodenal stent and a stent in the CBD; however, because of tumor expansion, he redeveloped cholestasis with intrahepatic bile duct dilation, and tumor overgrowth causing stenosis of the duodenum meant that endoscopic retrograde cholangiopancreatography (ERCP) was not possible. After the patient had given informed consent, we therefore attempted an EUS-HGS. The procedure was performed with the patient under conscious sedation. Under EUS guidance, the left intrahepatic bile duct was punctured with a 19G needle, and a cholangiogram was obtained following contrast injection. A guidewire was passed through the needle and the needle was exchanged with a 6-Fr cystogastrotome to create a tract in the liver.
A 10-cm partially covered dedicated HGS stent (Biliary Flange Lasso; M.I. Tech, Seoul, South Korea) was placed into the liver hilum; however, the stent was released erroneously into the peritoneum (Fig. 1a), causing bile leakage. An intentional perforation in the stomach wall was then created near the original site of the HGS to pass a gastroscope with a 12.4-mm cap through. The stent was retrieved and passed through the new orifice into the stomach (Fig. 1b; Video 1). The pneumoperitoneum was treated with acute and delayed decompression (Fig. 2). The patient was placed on antibiotics and octreotide. The stent position was checked by a computed tomography (CT) scan on the second day (Fig. 3), before the patient commenced liquid feeding. Clinically the patient recovered rapidly and was discharged after 1 week.

Competing interests
None

The Authors

Khanh Do-Cong Pham1,2, Dag Hoem3, Arild Horn3, Georg G. Dimcevski1,2
1 Department of Medicine, Haukeland University Hospital, Bergen, Norway
2 Department of Clinical Medicine, K1, University of Bergen, Norway
3 Department of gastro and acute surgery, Haukeland University Hospital, Bergen, Norway

References


Bibliography
DOI https://doi.org/10.1055/s-0043-109426
Published online: 29.6.2017
Endoscopy 2017; 49: 919–920
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos