

Hepaticogastrostomy under EUS guidance for a patient with a history of bypass surgery with a new stent design (with video)

Omar Coro, Fabrice Caillol, Laurent Poincloux¹, Erwan Bories, Christian Pesenti, Jean Philippe Ratone, Marc Giovannini

Department of Endoscopy, Paoli Calmettes Institute, Marseille, ¹Department of Endoscopy, CHU d'Estain, Clermont Ferrand, France

ERCP is the gold standard method for biliary drainage. Alternative methods such as the percutaneous transhepatic biliary drainage (PTBD) or surgery have a higher rate of complications.

Hepaticogastrostomy under EUS (EUS-HGS) drainage was developed in 2001 as an additional alternative to PTBD and ERCP.^[1-4]

In this case, we report hepaticogastrostomy for a patient who has undergone a gastric bypass surgery to treat obesity with a new stent design.

A 64-year-old female patient with a history of gastric bypass with esophagojejunal anastomosis and with 6 months of progressive weight loss, abdominal pain, anorexia, jaundice, and asthenia was sent to our medical center [Figure 1].

A 50-mm mass with infiltration of the mesenteric artery and vein was observed in the pancreatic head on computed tomography; this was associated with the

dilatation of the main pancreatic and the common bile ducts. EUS-guided fine-needle aspiration performed in a left lateral position with intubation (22G needle, Cook medical) suggested a diagnosis of pancreatic adenocarcinoma

Drainage by hepaticogastrostomy [Video 1] was performed at the level of the gastric stump in a supine position. Segment III was punctured and a partially covered 10-cm HANARO stent, designed by MI tech in association with Dr. Poincloux, was inserted. The patient was discharged after one night of hospitalization and received chemotherapy after 15 days (four cycles of Folfirinox) [Figures 2-4].

DISCUSSION

Patients with altered anatomy represent a challenge for biliary drainage. Deep enteroscopy-assisted ERCP for Roux-en-Y gastric bypass surgery has a success rate of 63%, and it depends on the length of the Roux limb.^[5]

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Coro O, Caillol F, Poincloux L, Bories E, Pesenti C, Ratone JP, *et al.* Hepaticogastrostomy under EUS guidance for a patient with a history of bypass surgery with a new stent design (with video). *Endosc Ultrasound* 2019;8:66-8.

Video Available on: www.eusjournal.com

Access this article online

Quick Response Code:



Website:

www.eusjournal.com

DOI:

10.4103/eus.eus_15_18

Address for correspondence

Dr. Fabrice Caillol, Paoli Calmette Institute, Marseille, France. E-mail: fcaillol@free.fr

Received: 2017-04-22; Accepted: 2018-03-13; Published online: 2018-08-27



Figure 1. Pancreatic mass on CT scan

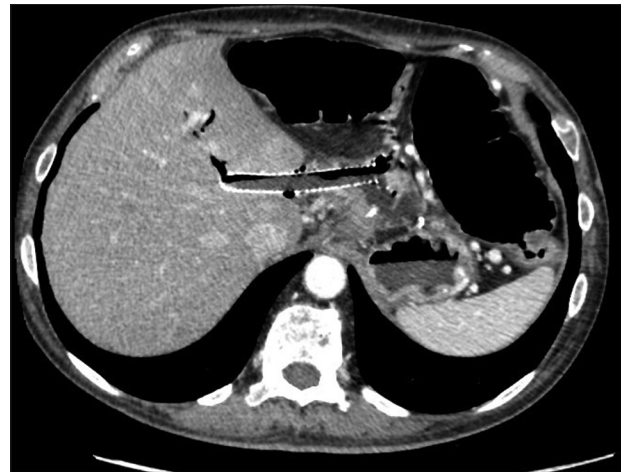


Figure 2. CT scan after EUS-HGS

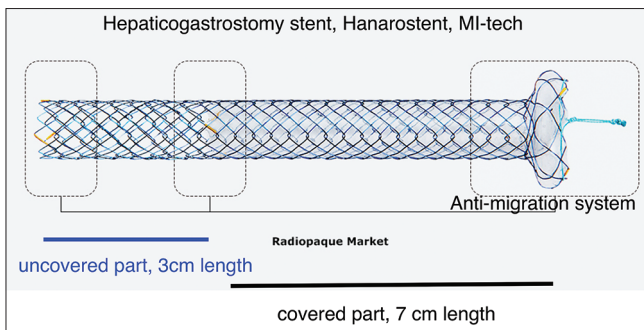


Figure 3. Description of the MI-tech stent

Gastric bypass surgery with excluded stomach is a new challenge for biliary drainage. ERCP through a gastrostomy into the excluded stomach could allow success in 60% of cases.^[6]

Another drainage technique in two steps with the creation of a transgastric fistula first to access the papilla with a duodenoscope has recently been described.^[7]

In our case, drainage with EUS-HGS represents a new indication of EUS-HGS (not yet described after gastric bypass surgery) and has the advantage of involving only one step. The design of this new stent with a long covered portion (7 cm) and a flap to avoid migration probably facilitates drainage.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has provided her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be

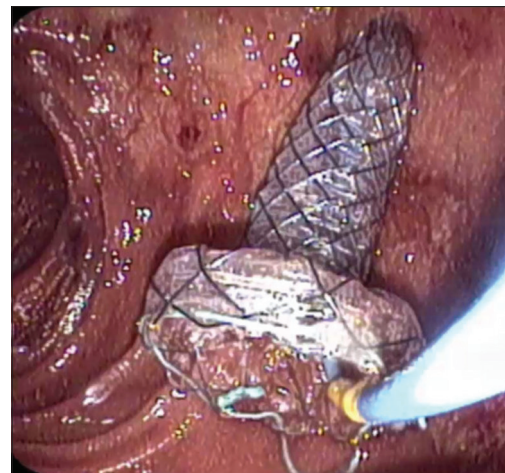


Figure 4. Endoscopic view of the proximal part of the stent

made to conceal her identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

Laurent Poincloux who participated in the design of the stent has no financial disclosure to declare. There are no other conflicts of interest.

REFERENCES

1. Giovannini M, Moutardier V, Pesenti C, *et al.* Endoscopic ultrasound-guided bilioduodenal anastomosis: A new technique for biliary drainage. *Endoscopy* 2001;33:898-900.
2. Bories E, Pesenti C, Caillol F, *et al.* Transgastric endoscopic ultrasonography-guided biliary drainage: Results of a pilot study. *Endoscopy* 2007;39:287-91.
3. Poincloux L, Rouquette O, Buc E, *et al.* Endoscopic ultrasound-guided biliary drainage after failed ERCP: Cumulative experience of 101 procedures at a single center. *Endoscopy* 2015;47:794-801.

4. Ratone JP, Caillol F, Bories E, *et al.* Hepatogastrostomy by EUS for malignant afferent loop obstruction after duodenopancreatectomy. *Endosc Ultrasound* 2015;4:250-2.
5. Shah RJ, Smolkin M, Yen R, *et al.* A multicenter, U.S. experience of singleballoon, doubleballoon, and rotational overtubeassisted enteroscopy ERCP in patients with surgically altered pancreaticobiliary anatomy (with video). *Gastrointest Endosc* 2013;77:593-600.
6. Kedia P, Tyberg A, Kumta NA, *et al.* EUSdirected transgastric ERCP for rouxenY gastric bypass anatomy: A minimally invasive approach. *Gastrointest Endosc* 2015;82:560-5.
7. Ngamruengphong S, Nieto J, Kunda R, *et al.* Endoscopic ultrasoundguided creation of a transgastric fistula for the management of hepatobiliary disease in patients with RouxenY gastric bypass. *Endoscopy* 2017;49:549-52.