

Endosonographically guided gallbladder drainage to treat neoplastic jaundice after Roux-en-Y gastric resection

A 81-year-old man, who had undergone subtotal gastric resection with Roux-en-Y anastomosis for gastric adenocarcinoma 2 years earlier, was admitted to our hospital for obstructive jaundice. Abdominal computed tomography showed a solid mass (30×30 mm) at the pancreatic head, involving the common bile duct and the duodenum and suspicious for portal vein and mesenteric axis invasion (► **Fig. 1**). An endoscopic ultrasonography (EUS)-guided fine needle aspiration was performed and a diagnosis of metastasis of gastric adenocarcinoma was made.

Considering the post-surgical anatomy, and in order to obtain endoscopic biliary drainage, a transgastric intrahepatic EUS-guided approach was attempted. A linear echoendoscope (GF-UCT140; Olympus, Tokyo, Japan) was used but the intrahepatic bile ducts were not dilated enough to access them. However the hydropic gallbladder was clearly visible from the jejunal route.

EUS-guided transluminal gallbladder drainage was therefore performed using a lumen-apposing metal stent (LAMS) (Hot Axios; Boston Scientific, Natick, Massachusetts, USA) with a lumen diameter of 10 mm. The gallbladder was first punctured using a 19G access needle (EchoTip Ultra; Cook Medical, Limerick, Ireland) and a 0.035-inch guidewire (VisiGlide; Olympus) was left inside to stabilize the echoendoscope position. Subsequently the stent was introduced into the gallbladder lumen using its cautery tip. Finally the stent was deployed (► **Fig. 2**), with subsequent rapid drainage of the gallbladder into the jejunal lumen (► **Fig. 3**, and ► **Video 1**), and nasobiliary drainage was inserted through the stent into the lumen of the gallbladder (► **Fig. 4**). The procedure was successful and the patient's jaundice rapidly resolved; after 2 weeks total bilirubin had fallen from 11.3 g/dL to 2.5 g/dL).



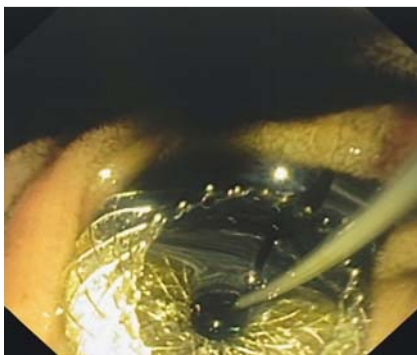
► **Fig. 1** Endoscopic ultrasound (EUS) view of pancreatic mass in an 81-year-old man treated 2 years previously for gastric adenocarcinoma by subtotal gastric resection with Roux-en-Y anastomosis.



► **Video 1** Endoscopic ultrasound (EUS)-guided transluminal gallbladder drainage performed using a lumen-apposing metal stent (LAMS).



► **Fig. 2** The metallic lumen-apposing metal stent (LAMS) stent deployed between gallbladder and jejunum.



► **Fig. 3** Biliary drainage of the gallbladder via the jejunal lumen.



► **Fig. 4** Radiological image of the metallic stent with the nasobiliary drainage from the gallbladder

EUS-guided gallbladder drainage using LAMS is safe and effective in the treatment of acute cholecystitis in high surgical risk candidates [1, 2]. Our case shows the feasibility of this technique also for obtaining palliative biliary endoscopic drainage when other routes are precluded.

Endoscopy_UCTN_Code_TTT_1AS_2AD

Competing interests

None

The Authors

Paolo Cecinato, Maurizio Cavina, Giuliana Sereni, Francesco Decembrino, Veronica Iori, Cristiana Tioli, Romano Sassatelli
Unit of Gastroenterology and Digestive Endoscopy, Arcispedale Santa Maria Nuova-IRCCS, Reggio Emilia, Italy

Corresponding author

Paolo Cecinato, MD

Unit of Gastroenterology and Digestive Endoscopy, Arcispedale Santa Maria Nuova-IRCCS, Reggio Emilia, Italy
Phone: +39-0522-295941
paolo.cecinato@asmn.re.it

References

- [1] Dollhopf M, Larghi A, Will U et al. EUS-guided gallbladder drainage in patients with acute cholecystitis and high surgical risk using an electrocautery-enhanced lumen-apposing metal stent device. *Gastrointest Endosc* 2017. DOI: 10.1016/j.gie.2017.02.027
- [2] Barbera C, Grande G, Alberghina N et al. Single-step endoscopic ultrasound-guided fluoroscopic gallbladder drainage using the Axios lumen-apposing metal stent. *Endoscopy* 2016; 48 (Suppl. 01): E25

Bibliography

DOI <https://doi.org/10.1055/s-0043-113555>
Published online: 29.6.2017
Endoscopy 2017; 49: E215–E216
© 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>