

Rescue endoscopic therapy after malfunctioning choledochoduodenostomy in patient with malignant distal biliary obstruction

Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CD) using a lumen-apposing metal stent (LAMS) has recently been reported as an alternative approach after failure of endoscopic retrograde cholangiopancreatography (ERCP) in patients with malignant obstructive jaundice [1].

Here, we report the case of an 83-year-old man affected by obstructive jaundice (total bilirubin 25 mg/dL, predominantly direct) due to advanced pancreatic head cancer with gallbladder in situ. He underwent ERCP; however, it was not possible to cannulate the common bile duct (CBD) because of serrated stenosis, and therefore EUS-CD was performed.

From the duodenal bulb view, the CBD had a diameter of about 20mm above the pancreatic mass, and no interposing vessels on Doppler flow were present. An 8×8 mm LAMS (Hot Axios; Boston Scientific, Marlborough, Massachusetts, USA) was directly deployed, creating an EUS-CD with initial good biliary drainage into the duodenum.

A computed tomography scan confirmed the correct positioning of the stent, which, together with subsequent decompression of the CBD, resulted in improvement in cholestasis parameters. Nevertheless, 2 days later, obstructive jaundice worsened.

Cholangiography with sphincterotome through the LAMS revealed CBD decompression and the LAMS distal flange located close to the contralateral CBD wall, hampering biliary drainage. A 10×40 mm uncovered self-expandable metal stent (SEMS; Wallflex; Boston Scientific) was placed inside the LAMS with its proximal edge in the common hepatic duct, restoring a functional axis, and allowing biliary drainage (► **Fig. 1**, ► **Video 1**).

The patient remained in a satisfactory clinical condition with progressive resolution of obstructive jaundice and was referred for outpatient oncologic treatment. After 4 weeks of follow-up, labora-



► **Fig. 1** Fluoroscopic image showing complete biliary drainage after self-expandable metal stent placement inside the lumen-apposing metal stent.



► **Video 1** Rescue endoscopic therapy – self-expandable metal stent placement inside the lumen-apposing metal stent – after malfunctioning choledochoduodenostomy in a patient with malignant distal biliary obstruction.

tory tests revealed that total bilirubin levels had returned to normal (1.2 mg/dL). In conclusion, the “SEMS in LAMS technique” can be considered as rescue therapy after malfunctioning EUS-CD. Placement of the uncovered SEMS within the

LAMS restored the functional axis, thus avoiding both risk of stent misplacement and cholecystitis.

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Competing interests

None

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Reference

- [1] Anderloni A, Fugazza A, Troncone E et al. Single-stage EUS-guided choledochoduodenostomy using a lumen-apposing metal stent for malignant distal biliary obstruction. *Gastrointest Endosc* 2019; 89: 69–76

Bibliography

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