Single-session bridge-to-surgery choledochoduodenostomy and duodenal stenting in patient with malignant biliary and duodenal obstruction

Endoscopic ultrasound (EUS)-guided biliary drainage using lumen-apposing metal stent (LAMS) is considered an effective alternative approach when endoscopic retrograde cholangiopancreatography fails in patients with malignant obstructive jaundice. Duodenal neoplastic stenosis may coexist and patient management becomes challenging. Sequential placement of biliary and duodenal stents has been described previously in patients with unresectable pancreatic cancer [1]. We report the case of a 73-year-old man affected by obstructive jaundice, cholangitis, and vomiting due to resectable cancer of the pancreatic head. Secondary duodenal infiltration prevented access to the papilla of Vater, and therefore EUS-guided choledochoduodenostomy (EUS-CD) was performed.

From the duodenal bulb, an 8 × 8 mm LAMS (Hot Axios; Boston Scientific, Marlborough, Massachusetts, USA) was directly deployed, and good biliary drainage was obtained. During the same session, an uncovered 60 × 10 mm self-expandable metal stent (Wallflex; Boston Scientific) was deployed across the 30 mm length of the duodenal stenosis, taking care not to dislocate the LAMS (Video 1). The proximal flange was positioned within the duodenal bulb, adjacent to the LAMS. Subsequent computed tomography scan confirmed the correct position of both stents (Fig. 1). Jaundice progressively resolved, and the patient restarted oral feeding and was referred to surgery. The LAMS distal flange was positioned within the common bile duct; therefore, it was possible to easily perform the usual common hepatic duct jejunostomy. The proximal flange of both stents (LAMS and duodenal stent) was located within the duodenal bulb (and not transpylorically). A pylorus-preserving pancreaticoduodenostomy, rather than pylorus-resecting pancreaticoduodenostomy, was therefore performed [2]. In conclusion, even in challenging patients with malignant distal biliary and duodenal obstruction by resectable pancreatic cancer, bridge-to-surgery single-session EUS-CD and duodenal stenting is feasible and effective. However, attention is required when placing the duodenal stent to avoid LAMS dislocation or compromise further surgical treatment.

Competing interests
The authors declare that they have no conflict of interest.

The authors
Mauro Manno1, Filippo Scopelliti2, Tommaso Gabbani1, Simona Deiana1, Laura Ottaviani1, Sara Vavassori1, Paola Soriani3
1 Gastroenterology and Digestive Endoscopy Unit, Azienda USL Modena, Carpi, Italy
2 Department of Hepato-Pancreato-Biliary Surgery, Pederzoli Hospital, Peschiera del Garda, Italy
3 Corresponding author
Mauro Manno, MD
Gastroenterology and Digestive Endoscopy Unit, Azienda USL Modena, Via Guido Molinari 2, 41012 Carpi (MO), Italy
Fax: +39-059-659250
m.manno@ausl.mo.it

Endoscopy_UCTN_Code_TTT_1AO_2AZ

Fig. 1 Computed tomography scan confirmed correct positioning of both stents.

Video 1 Single-session bridge-to-surgery choledochoduodenostomy and duodenal stenting in patient with malignant biliary and duodenal obstruction.