Combined endoscopic ultrasound-guided gastrojejunostomy and anterograde biliary stenting

Malignant involvement of the second portion of the duodenum and surrounding structures can create therapeutic challenges. We report a case of combined endoscopic ultrasound (EUS)-guided gastrojejunostomy (GJ) and anterograde biliary stenting in a patient with an infiltrative porta hepatis mass causing gastric outlet obstruction (GOO) and biliary obstruction.

An 83-year-old woman with gastric adenocarcinoma was found to have a malignant biliary obstruction due to infiltration of the porta hepatis and common bile duct (CBD) on magnetic resonance cholangiopancreatography (► Fig. 1). Endoscopic retrograde cholangiopancreatography was attempted, but there was clear evidence of an evolving GOO with malignant involvement of the ampullary region.

We proceeded with combined EUS-GJ and EUS-guided gastrohepatic access with anterograde biliary stenting. The endoscope was advanced beyond the obstruction, and the duodenum distal to the ligament of Treitz was distended with saline, contrast, and methylene blue. The jejunum was identified on EUS and confirmed with needle aspiration. A 15-mm AXIOS electrocautery-enhanced lumen-apposing metal stent (Boston Scientific, Marlborough, Massachusetts, USA) was deployed under EUS guidance; egress of methylene blue confirmed successful placement.

To address the biliary obstruction, a dilated left hepatic biliary radical was identified and punctured with a 19-gauge needle. Cholangiogram was notable for CBD stricture. A 0.025-inch guidewire was advanced anterograde into the duodenum. To facilitate anterograde stent deployment, and because there are no cystotomes readily available in the USA, the AXIOS catheter was reset and used over the wire to create a tract. This allowed for anterograde placement of an uncovered 10 × 80-mm biliary metal stent across the biliary stricture (► Fig. 2). The puncture site was closed with an over-the-scope clip (► Video 1). The patient tolerated the procedure without complications and was discharged to a hospice. This report highlights how EUS can be used for a combined biliary and luminal obstruction, with the reuse of an electrocautery-enhanced catheter for stent delivery.

Endoscopy_UCTN_Code_TTT_1AS_2AG
Competing interests

The authors declare that they have no conflict of interest.

The authors

Michael Ma¹, Daniel Hogan¹, Arvind J. Trindade², Evin McCabe¹, Petros Benias¹
1 Division of Gastroenterology, Lenox Hill Hospital, New York, New York, United States
2 Division of Gastroenterology, Long Island Jewish Medical Center, New Hyde Park, New York, United States

Corresponding author

Michael Ma, MD
Division of Gastroenterology, Lenox Hill Hospital, Northwell Health, 100 E. 77th St., 2nd Floor, Lachman Pavilion, New York, NY 10075, United States
mma1@Northwell.edu

Bibliography

Endoscopy 2022; 54: E277–278
DOI 10.1055/a-1499-6234
ISSN 0013-726X
published online 18.6.2021
© 2021. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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

Endoscopy E-Videos is an open 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. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

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