Endoscopic ultrasound-guided management of malignant afferent loop syndrome after gastric bypass: from diagnosis to therapy

Afferent loop syndrome (ALS) is a known complication of surgical gastrectomy [1], caused by benign or malignant obstruction of the afferent limb, which induces digestive intolerance and reflux cholangitis. With the explosion of bariatric surgery, a new patient population with altered anatomy has emerged [2], presenting new endoscopic challenges. Therapeutic possibilities using endoscopic ultrasound (EUS) are constantly increasing thanks to new devices [3,4]. We present an original case of a patient with ALS due to pancreatic adenocarcinoma that occurred years after a gastric bypass.

The 57-year-old woman presented with abdominal pain, nausea, fever, and jaundice. Her previous history included a sleeve gastrectomy in 2007, which was converted to a gastric bypass in 2008. Laboratory results revealed an inflammatory syndrome with a picture of cholestatic jaundice. The diagnosis of ALS was confirmed by a computed tomography (CT) scan that showed a non-resectable pancreatic tumor invading the 4th part of the duodenum, with digestive and biliary tree dilatation (▶ Fig. 1a). Antibiotic therapy was started with ciprofloxacin and metronidazole.

An EUS was performed for diagnostic and therapeutic purposes (▶ Video 1). First, the examination showed a 40-mm hypechoogenic, heterogeneous lesion of the pancreatic body with contact and invasion (> 180°) of the splenic artery and celiac trunk (▶ Fig. 1b). A 22G needle was used to obtain a specimen for histological diagnosis (▶ Fig. 2). An EUS-guided gastro-gastrostomy was performed, using a lumen-apposing metal stent (LAMS) with an electrocautery-enhanced delivery system (Hot Axios; Boston Scientific, USA) placed between the dilated gastric pouch (▶ Fig. 2b) and the stomach after direct puncture (▶ Fig. 3). There were no perioperative complications and a CT scan performed 1 week after surgery showed resolution of cholangitis and biliary dilatation.
later confirmed a decrease in the dilatation of the biliary duct and afferent limb, with good positioning of the stent. Histologic results confirmed an adenocarcinoma of the pancreas. After the procedure, the patient improved clinically and biologically, so allowing chemotherapy to be started.

This case illustrates the significant contribution of therapeutic EUS in the management of ALS after gastric bypass by creating a gastro-gastric anastomosis using a LAMS.

Competing interests

None

The authors

Laurent Monino1,2, Marc Barthen2, Jean Michel Gonzalez2
1 Department of Hepatogastroenterology, Université Catholique de Louvain, Cliniques Universitaires Saint-Luc, Brussels, Belgium
2 Department of Hepatogastroenterology, Assistance Publique des Hôpitaux de Marseille, Aix-Marseille Université, Hôpital Nord, Marseille, France

Corresponding author

Laurent Monino, MD
Department of Hepatogastroenterology, AP-HM, Aix-Marseille Université, Hôpital Nord, Chemin des Bourrely, 13015 Marseille, France
Fax: +33-4-91968737
laurent.monino@uclouvain.be

References


Bibliography

DOI https://doi.org/10.1055/a-0948-5033
Published online: 2019
Endoscopy
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://journals.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