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. 1 a). 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 hypoechoic, heterogeneous lesion of the pancreatic body with contact and invasion (> 180°) of the splenic artery and celiac trunk (Fig. 1 b). A 22G needle was used to obtain a specimen for histological diagnosis (Fig. 2 a). 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. 2 b) and the stomach after direct puncture (Fig. 3). There were no perioperative complications and a CT scan performed 1 week later showed a resolution of the jaundice.
later confirmed a decrease in the dilata-
tion of the biliary duct and afferent
limb, with good positioning of the stent.
Histologic results confirmed an adeno-
carcinoma of the pancreas. After the
procedure, the patient improved clinical-
ly and biologically, so allowing chemo-
therapy to be started.
This case illustrates the significant con-
tribution of therapeutic EUS in the man-
agement of ALS after gastric bypass by
creating a gastro-gastric anastomosis
using a LAMS.

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Competing interests
None

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