Redo-endoscopic ultrasound-guided gastroenterostomy for the management of distal flange misdeployment: trust your orojejunal catheter

A 60-year-old woman developed gastric outlet obstruction (GOO) due to metastatic pancreatic adenocarcinoma. Endoscopic ultrasound (EUS)-guided gastroenterostomy (EUS-GE) was planned using the Wireless Simplified Technique (WEST) [1]. Orojejunal tube (OJT) placement and jejunal instillation of saline and indigo carmine were followed by freehand placement of a 20 × 10-mm electrocautery-enhanced lumen-apposing metal stent (LAMS; Hot Axios, Boston Scientific). Despite jejunal fluid perturbation (▶Fig.1), suggesting successful jejunal access, we observed the following: (i) no endosonographic confirmation of endo jejunal placement of the distal flange after retraction; (ii) no backflow of blue dye after LAMS release; (iii) failed through-the-LAMS aspiration of contrast injected through the OJT; (iv) peritoneum visible through the stent (▶Fig.2a-d). Contrast injection through the OJT showed no jejunal leakage, suggesting either a type I or II misdeployment [2]. The LAMS was removed and the procedure was repeated using an identical endosonographic position (▶Video 1). Once again, acoustic coupling was challenging, but this time, following LAMS placement, blue-dyed fluid and contrast placed via the OJT were aspirated through the stent into the stomach (▶Fig.2e-h). Contrast injection through the endoscope working channel, both on the gastric and jejunal side, showed no leakage (▶Fig.3). The old access point was preemptively closed using endoclips. The patient remained asymptomatic, resumed a semisolid diet on postoperative day (POD) 1 and was discharged on POD 3. Amoxicillin/clavulanate was administered for 7 days.

Misdeployment is one of the most frequent EUS-GE complications [2, 3]. In such cases, it can be challenging to ascertain whether small-bowel integrity is compromised. Fistulas created by electrocautery-enhanced 10.8-Fr catheters might be functionally silent and not always within endoscopic reach [4]. If there is uncertainty regarding small-bowel integrity, surgical exploration should still be considered; however, our case demonstrates that if no leak is demonstrated on both the jejunal (via the OJT) and gastric sides, redo EUS-GE may suffice to complete the procedure uneventfully.
Competing interests

S. van der Merwe holds co-chairs for the Boston-Scientific Chair in Therapeutic Biliopancreatic Endoscopy and holds consultancy agreements with Boston Scientific, Cook Medical and Pentax. All other authors have no conflict of interest relevant for this article.

The authors

Giuseppe Vanella1, Giuseppe Dell’Anna1, Michiel Bronswijk2,3, Maria Chiara Petrone1, Schalk van der Merwe2, Paolo Giorgio Arcidiacono1

1 Pancreatobiliary Endoscopy and Endosonography Division, Pancreas Translational and Clinical Research Center, IRCCS San Raffaele Scientific Institute, Milan, Italy
2 Department of Gastroenterology and Hepatology, University Hospitals Gasthuisberg, University of Leuven, Leuven, Belgium
3 Department of Gastroenterology and Hepatology, Imelda General Hospital, Bonheiden, Belgium

Corresponding author

Giuseppe Vanella, MD
Pancreatobiliary Endoscopy and Endosonography Division, IRCCS San Raffaele Scientific Institute, Vita-Salute San Raffaele University, Via Olgettina 60, 20132, Milan, Italy
vanella.giuseppe@hsr.it

References


Fig. 3 Radiographic images showing: a after the misdeployment, no jejunal leakage of contrast injected through the orojejunal tube; b at the end of the procedure, no gastric leakage of contrast injected under pressure through the endoscope working channel in front of the gastric defect (inset: endoscopic view); c no jejunal leakage of contrast injected through the lumen-apposing metal stent (inset: endoscopic view) after completion of the redo-gastrojejunostomy.

Bibliography

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