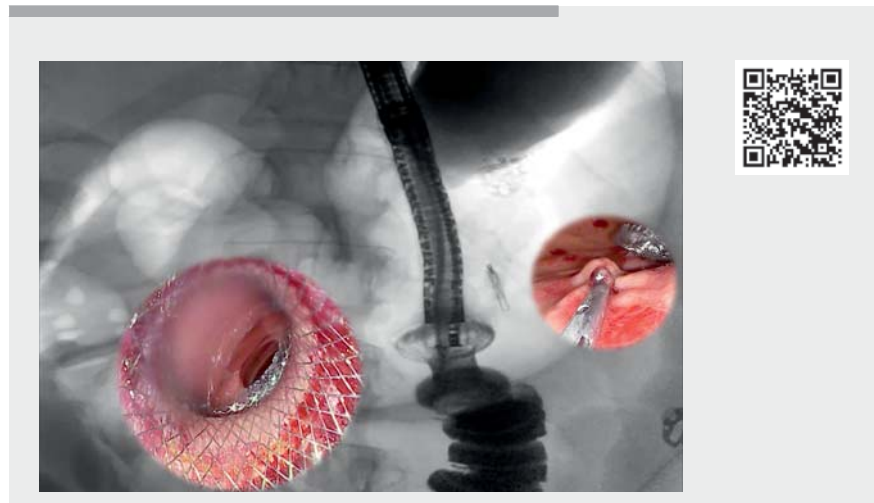


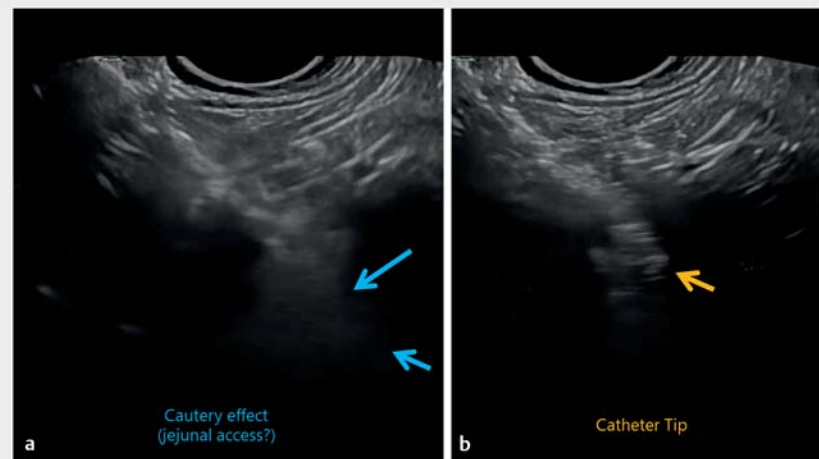
## Redo-endoscopic ultrasound-guided gastroenterostomy for the management of distal flange misdeployment: trust your orojejunal catheter

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 endojejunal 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. 2 a–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. 2 e–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



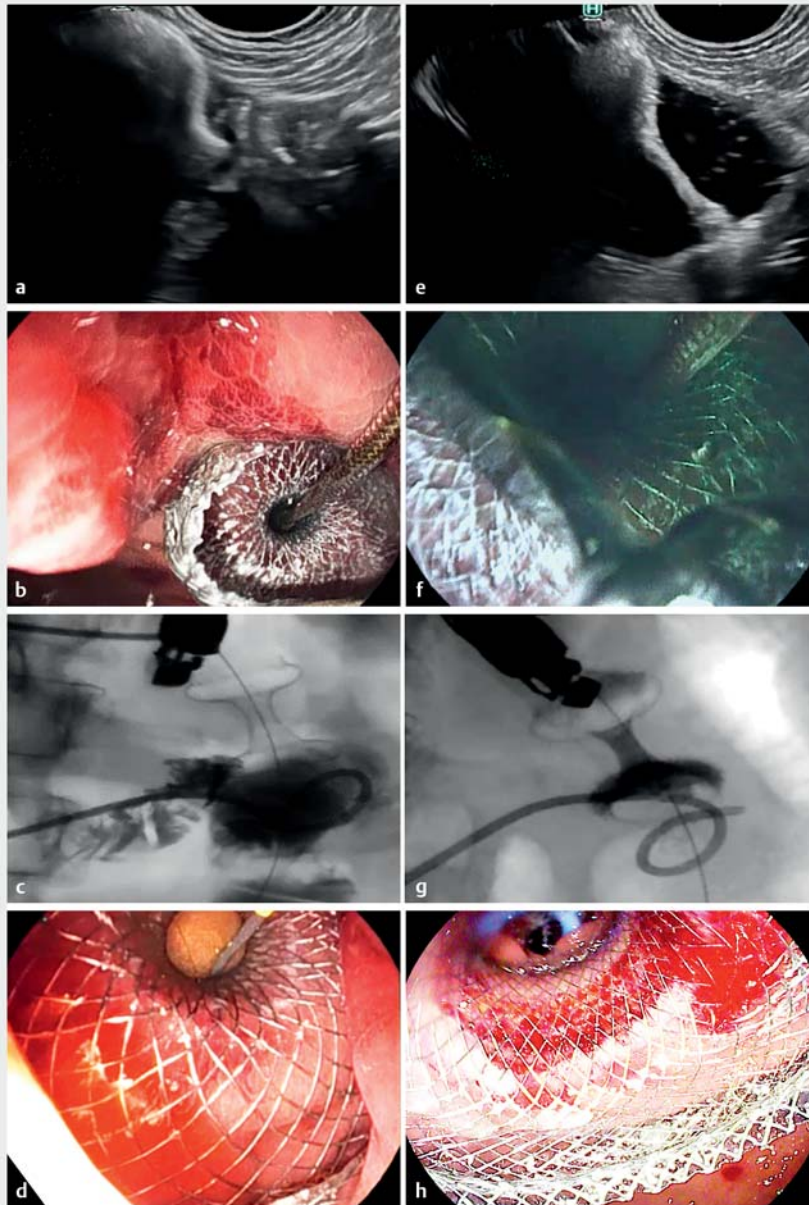
► Video 1 Redo-endoscopic ultrasound-guided gastrojejunostomy for management of initial stent misdeployment.



► Fig. 1 Endoscopic ultrasound (EUS) images of the first EUS-guided gastrojejunostomy showing: **a** electrocautery-assisted advancement of the lumen-apposing metal stent with a challenging visualization of the puncture trajectory and cautery effect visible (arrows), initially suggesting successful jejunal access; **b** the catheter tip (arrow) at the end of the placement procedure.

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 demon-

strates 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.



► **Fig. 2** Comparison of the first (misdeployed) and second (correctly deployed) lumen-apposing metal stent (LAMS) placements showing: **a–d** signs of misdeployment, with **a** no endosonographic confirmation of intrajejunal flange placement after retraction; **b** no backflow of blue dye into the stomach; **c** failure to aspirate contrast injected via the orojejunal tube (OJT) through the LAMS; **d** peritoneum visible through the LAMS; **e–h** corresponding signs of correct placement, with: **e** endosonographic confirmation of intrajejunal flange placement after retraction; **f** backflow of blue dye into the stomach after release of the proximal flange; **g** aspiration of contrast injected via the OJT through the LAMS; **h** the jejunum and OJT visible through the LAMS.

## 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.

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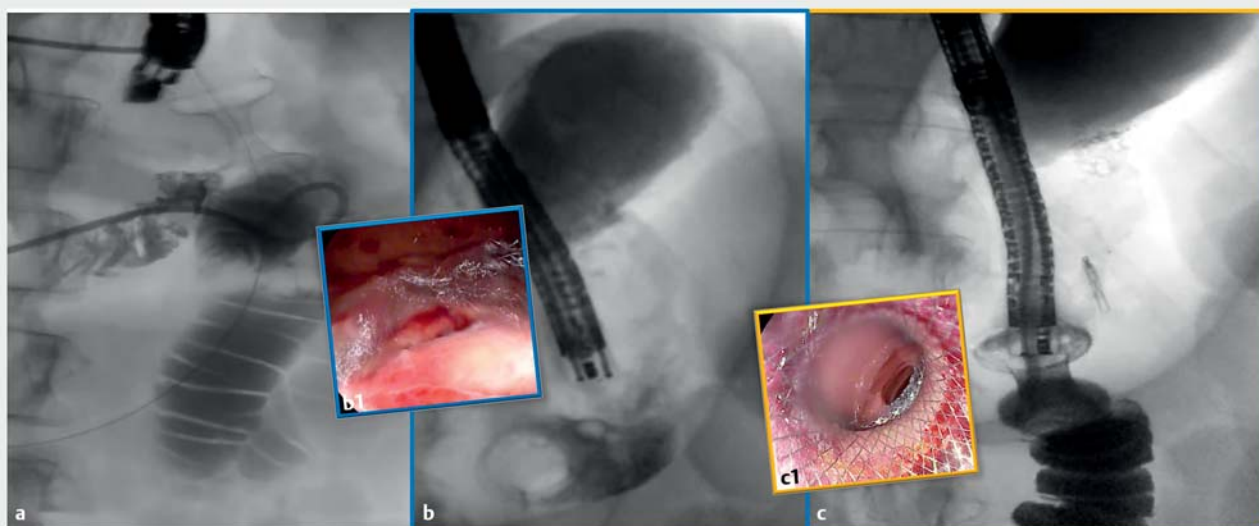
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► **Fig. 3** Radiographic images showing: **a** after the misdeployment, no jejunal leakage of contrast injected through the orojejunal tube; **b** at the end of the procedure, no gastric leakage of contrast injected under pressure through the endoscope 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.

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