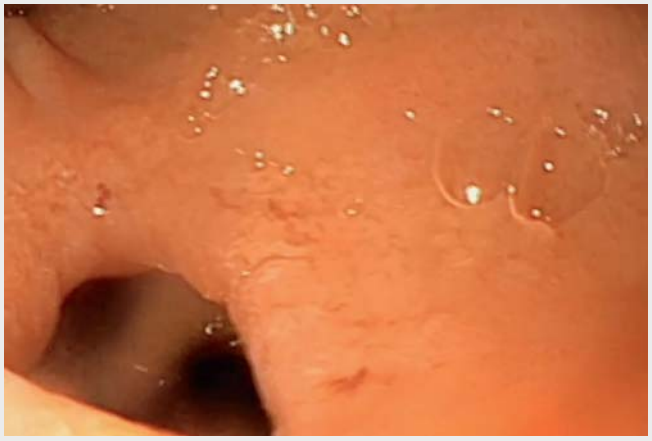
Article published online: 2023-01-16



# Lumen-apposing metal stent placement after endoscopic ultrasound-guided duodenojejunal anastomosis for direct access to excluded jejunal limb: findings after 5 years

OPEN ACCESS

▶ **Fig. 1** X-ray showing that the lumen-apposing metal stent was no longer in place.



**Video 1** Upper endoscopy showing large duodenojejunal anastomosis 5 years after endoscopic ultrasound-guided placement of a lumen-apposing metal stent. The scope could pass through easily and visualize the hepaticojejunal anastomosis.

Since their introduction, lumen-apposing metal stents (LAMSs) have been used successfully for symptomatic intra-abdominal collections [1] and biliary system (gallbladder, common bile duct) drainage [2]. More recently, they have also been used for gastrointestinal anastomosis [3]. We previously reported on a case series of 11 consecutive patients who underwent endoscopic ultrasound-guided duodeno- and jejunojejunal anastomosis with LAMS to obtain direct access to the excluded jejunal limb in patients with hepatico-jejunal stricture [3]. During an average follow-up of 781 days (SD 253.1 days) after duodenojejunal anastomosis, LAMSs were still in place with no evidence of adverse events. The aim of leaving the LAMS in place was to keep patent access to the hepatico-jejunostomy even after resolution of the stricture given its high recurrence rate.

Here we report on two patients 5 years after LAMS placement, at which time a standard follow-up video endoscopy was performed as per protocol.

In both patients, although the LAMS was not found in place (▶ **Fig. 1**, ▶ **Video 1**), a patent duodenojejunal anastomosis, fully epithelialized, was present. It was possible for both forward-viewing and side-viewing scopes to pass through without any difficulties, allowing access to the hepaticojejunal anastomosis. These findings confirmed our expectation that keeping the LAMS in place is safe and permits durable permanent access to the excluded limb, even after LAMS migration. The most likely underlying mechanism is the permanent lateral expansion and shortening force of LAMS on the apposing gut wall, inducing chronic ischemia without trauma, which contributes to the creation of a permanent anastomosis with consequent migration of the LAMS itself.

In conclusion, endoscopic ultrasound-guided duodenojejunal anastomosis through LAMS can create a permanent communication between the two segments, without leak or stenosis, despite stent migration, resulting in a permanent large anastomosis at 5 years' follow-up.

Endoscopy_UCTN_Code_TTT_1AS_2AB

## Competing interests

The authors declare that they have no conflict of interest.

## The authors

**Francesca D'Errico[1,2], Serge Derhy[1], Gianfranco Donatelli[1,3]**

1 Unité d'Endoscopie Interventionnelle, Hôpital Privé des Peupliers, Ramsay Santé, Paris, France
2 Unit of Gastroenterology and Digestive Endoscopy, "F. Miulli" General Regional Hospital, Acquaviva delle Fonti, Italy
3 Department of Clinical Medicine and Surgery, University of Naples "Federico II", Naples, Italy

## Corresponding author

**Gianfranco Donatelli, MD**
Unité d'Endoscopie Interventionnelle, Ramsay Santé, Hôpital Privé des Peupliers, 8 Place de l'Abbé G. Hénocque, 75013, Paris, France
donatelligianfranco@gmail.com

## References

[1] Donatelli G, Cereatti F, Fazi M et al. Endoscopic ultrasound-guided drainage of intra-abdominal diverticular abscess. A case series. J Minim Access Surg 2021; 17: 513–518
[2] Choi JH, Kozarek RA, Larsen MC et al. Effectiveness and safety of lumen-apposing metal stents in endoscopic interventions for off-label indications. Dig Dis Sci 2022; 67: 2327–2336
[3] Donatelli G, Cereatti F, Spota A et al. Long-term placement of lumen-apposing metal stent after endoscopic ultrasound-guided duodeno- and jejunojejunal anastomosis for direct access to excluded jejunal limb. Endoscopy 2021; 53: 293–297

## Bibliography

Endoscopy 2023; 55: E344–E345
**DOI** 10.1055/a-1990-0930
**ISSN** 0013-726X
© 2023. The Author(s).
This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/licenses/by-nc-nd/4.0/)
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 wavers acc. to HINARI are available.

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