Endoscopic esophagogastric anastomosis using a lumen-apposing metal stent to manage an anastomotic leakage after esophagectomy

▶ Video 1 Endoscopic esophagogastric anastomosis using a lumen-apposing metal stent to manage an anastomotic leakage after esophagectomy.

▶ Fig. 1 The lumen-apposing metal stent was deployed with the distal flange in the stomach and the proximal flange in the esophagus.

▶ Fig. 2 The lumen-apposing metal stent after deployment.

▶ Fig. 3 Dilation of the lumen-apposing metal stent to reach the stomach.

Ivor-Lewis esophagectomy (ILE) for esophageal cancer is associated with a significant risk of anastomotic leakage [1]. Recently, a lumen-apposing metal stent (LAMS) has been used to create an anastomosis between the lumen of two digestive structures [2]. An animal study showed technical feasibility of endoscopic esophagogastric anastomosis with LAMS following ILE [3]. To our knowledge, no case of anastomotic leakage managed endoscopically with LAMS has been described to date.

We describe the case of a 69-year-old man who underwent ILE for esophageal cancer. Chest computed tomography performed 2 days after surgery showed massive dilation of the stomach with high suspicion of postoperative gastroparesis and an emphysematous infiltration around the anastomosis. Gastros-copy showed a circumferential leakage of the anastomosis and the stomach lumen was impossible to find. We decided to create an endoscopic esophagogastric anastomosis with LAMS to manage this leakage and to reach the stomach in order to perform a pyloromyotomy (▶ **Video 1**).

Under endoscopic ultrasound, the stomach lumen was found and punctured allowing a guidewire to be placed inside. The LAMS catheter was advanced over the guidewire and the LAMS deployed with the distal flange in the stomach and the proximal flange in the esophagus (▶ **Fig. 1**, ▶ **Fig. 2**). Aspiration of the gastric lumen was then performed through the LAMS. Repeat upper endoscopy was performed 1 month later. After dilation of the LAMS (▶ **Fig. 3**), an endoscope was successfully passed through the LAMS and pyloromyotomy was performed to manage the postoperative gastroparesis.

This case illustrates the feasibility of esophagogastric anastomosis using LAMS to manage complete anastomotic leakage. In our case, this technique allowed the stomach to be reached and pyloromyotomy to be performed to manage postoperative gastroparesis. However, more data are needed to confirm the role of LAMS in the management of leakage following ILE.

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Competing interests

The authors declare that they have no conflict of interest.

The authors

Thomas Lambin^{1,2}, Marion Schaefer³, Pierre Lafeuille¹, Florian Rostain¹, Jérôme Rivory¹, Mathieu Pioche^{1,2}, Thierry Ponchon^{1,2}

- 1 Gastroenterology and Endoscopy Unit, Pavillon L, Edouard Herriot Hospital, Lyon, France
- 2 Inserm U1032, Labtau, Lyon, France
- 3 Gastroenterology Unit, University Hospital of Nancy, Vandoeuvre-lès-Nancy, France

Corresponding author

Thomas Lambin, MD

Endoscopy Unit – Digestive Disease
Department, Pavillon L – Edouard Herriot
Hospital, 5 place d'Arsonval, 69437 Lyon
Cedex, France
thomaslambin@hotmail.fr

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