REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

Title:
The role of lumen-apposing metal stents (LAMS) in iatrogenic esophageal perforations secondary to endoscopic dilation of benign short esophageal strictures

Authors:
Jorge Barajas Pérez, Óscar Moralejo Lozano, Diego Muñoz López, Rafael Ángel Gómez Rodríguez, Alejandro Repiso Ortega, Carlos Vicente Hernández, Gema Gigante González-Aleja, Natalia María Arietti López

DOI: 10.17235/reed.2022.8649/2022
Link: PubMed (Epub ahead of print)

Please cite this article as:
Barajas Pérez Jorge, Moralejo Lozano Óscar, Muñoz López Diego, Gómez Rodríguez Rafael Ángel, Repiso Ortega Alejandro, Vicente Hernández Carlos, Gigante González-Aleja Gema, Arietti López Natalia María. The role of lumen-apposing metal stents (LAMS) in iatrogenic esophageal perforations secondary to endoscopic dilation of benign short esophageal strictures. Rev Esp Enferm Dig 2022. doi: 10.17235/reed.2022.8649/2022.

REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

The role of lumen-apposing metal stents (LAMS) in iatrogenic esophageal perforations secondary to endoscopic dilation of benign short esophageal strictures

Jorge Barajas Pérez, Óscar Moralejo Lozano, Diego Muñoz López, Rafael Ángel Gómez Rodríguez, Alejandro Repiso Ortega, Carlos Vicente Hernández, Gema Gigante González-Aleja and Natalia María Arietti López

Gastroenterology and Hepatology Department. Complejo Hospitalario Universitario de Toledo. Toledo

Contact information: Jorge Barajas Pérez at jorgebarper@gmail.com

Keywords: Esophageal strictures. Perforation. stents.

An 81 year-old male with a history of distal peptic esophageal stenosis suffered a small 2-4mm wide asymptomatic iatrogenic perforation during his 4th balloon dilation session. Esophagogram with Gastrografin revealed a contrast leak despite two Hemoclips were placed. A 12cm fully covered self-expandable metallic stent (FCSEMS) esophageal stent (Cook Medical, Ireland) was placed over the perforation. One week later, esophagogram was repeated, observing both persistence of contrast leak and migration of the stent. Then, an AXIOS 15mm lumen-apposing metal stent (LAMS) (Xlumena Inc., Mountatin View, California, USA) was endoscopically placed. No Gastrografin leak was observed on a latter esophagogram. After three weeks both stents (AXIOS and the migrated stent) were removed. During admission, he was treated with broad spectrum antibiotic therapy and parenteral nutrition for 14 days, then resuming oral feeding with the AXIOS stent in place. He remained asymptomatic at all times. Four weeks after discharge, esophagogram revealed no contrast leak.

Discussion

Esophageal stents are increasingly used in the management of esophageal perforations (1). Most commonly used stents are FCSEMS, which are an effective and safe option in

postoperative esophageal leaks (2), but stent migration is a frequent adverse event (26%) (3). Very little to nothing is known about the use of LAMS in this context, however, this kind of stent has proved to be a successful alternative in the management of benign esophageal strictures (alone, no leak involved) (4). We consider LAMS maybe an appropiate first-line approach to benign short esophageal strictures complicated with iatrogenic small perforation during endoscopic dilation, but further prospective studies are needed.

Bibliography

1. Spaander MCW, van der Bogt RD, Baron TH, et al. Esophageal stenting for benign and malignant disease: European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2021. *Endoscopy*. 2021;53(7):751-762. doi:10.1055/a-1475-0063
2. Iglesias Jorquera E, Egea Valenzuela J, Serrano Jiménez A et al. Endoscopic treatment of postoperative esophagogastric leaks with fully covered self-expanding metal stents. *Rev Esp Enferm Dig. 2021* Jan;113(1):14-22. doi: 10.17235/reed.2020.6821/2019.
3. van Boeckel PG, Sijbring A, Vleggaar FP, et al. Systematic review: temporary stent placement for benign rupture or anastomotic leak of the oesophagus. *Aliment Pharmacol Ther*. 2011;33(12):1292-1301. doi:10.1111/j.1365-2036.2011.04663.x
4. Santos-Fernandez J, Paiji C, Shakhatreh M, et al. Lumen-apposing metal stents for benign gastrointestinal tract strictures: An international multicenter experience. *World J Gastrointest Endosc*. 2017;9(12):571-578. doi:10.4253/wjge.v9.i12.571

REVISTA ESPAÑOLA DE
ENFERMEDADES DIGESTIVAS
The Spanish Journal of Gastroenterology

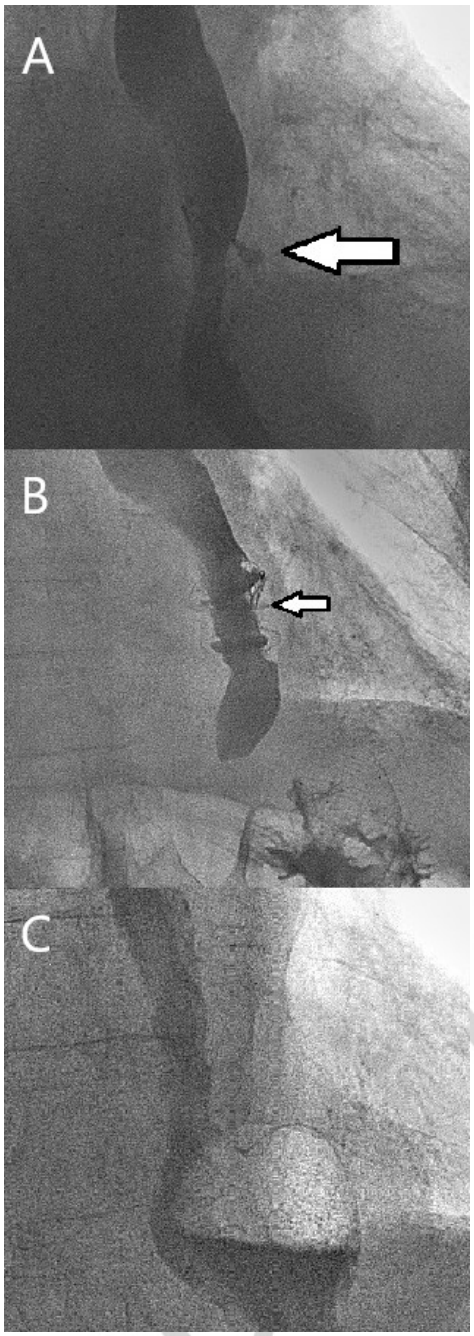

Fig 1. Esophagogram with Gastrografin, three different times. A: Small leak (arrow) in the distal esophagus. Below the leak area the distal stricture can be seen. B: A lumen-apposing metal stent (LAMS) is displayed, with no contrast leak. Along with the stent, two clips placed during the first endoscopy are shown (arrow). The proximal portion of the migrated fully covered self-expandable metallic stent (FCSEMS) can be observed in the gastric cavity. C: Distal esophagus and hiatal hernia below, with no contrast

leak, after the removal of both stents.