Multimodal endoscopic treatment of primary esophago-pleural fistula

A 48-year-old man was admitted to our hospital following the onset of cough, fever, and shortness of breath. Clinical history included psychotic syndrome and recurrent erosive esophagitis. In the emergency room, a chest radiograph showed right pleural effusion. However, despite full conservative management, his condition worsened rapidly. A computed tomography scan revealed communication between the distal esophageal lumen and the right pleural space (Fig. 1). Subsequent upper endoscopy showed extensive ulceration of the esophageal wall, with a small orifice at its distal part (Fig. 2).

An over-the-scope clip (OTSC, 12 mm, traumatic type; Ovesco Inc., Tübingen, Germany) was deployed over the orifice (Video 1). To ensure complete occlusion of the defect, a colonic partially covered metal stent (Niti-S, 22 mm × 10 cm; Taewoong Medical, Inc., Gyeonggi-do, South Korea) was positioned, protecting the orifice against gastroesophageal reflux (Fig. 3).

The patient improved during the subsequent 30 days, and 2 months later, the metal stent was removed using a "stent-in-stent" technique. Subsequent upper endoscopy showed complete healing of the esophageal wall even though the OTSC was no longer in place.

Primary benign esophago-pleural fistula is a rare but challenging condition, burdened by a high mortality and often requiring surgical treatment [1]. Self-expandable metal stents are well known therapeutic techniques used in the management of leaks and fistulas involving the esophageal wall or anastomosis [2]. Furthermore, the OTSC represents a new endoscopic approach for the closure of upper gastrointestinal leaks and fistulas [3]. However, as in the case described above, a tailored and multimodal approach (stent and OTSC) could be safer and more effective than a single modality, avoiding the need for surgery [4, 5].

Competing interests: None

Helga Bertani, Giuseppe Grande, Vincenzo Giorgio Mirante, Isabella Franco, Santi Mangiafico, Raffaele Manta, Rita Luisa Conigliaro
Gastroenterology and Digestive Endoscopy Unit, NOCSAE Hospital, Modena, Italy

Endoscopy_UCTN_Code_TTT_1AO_2AC
References
4 González-Haba M, Ferguson MK, Gelrud A. Spontaneous esophageal perforation (Boerhaave syndrome) successfully treated with an over-the-scope clip and fully covered metal stent. Gastrointest Endosc 2016; 83: 650

Bibliography
DOI http://dx.doi.org/10.1055/s-0042-115940
Endoscopy 2016; 48: E298–E299
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Giuseppe Grande, MD
Gastroenterology and Digestive Endoscopy Unit
NOCSAE Hospital
via Pietro Giardini 1355
Baggiovara di Modena 41126
Italy
Fax: +39-059-3961216
giuseppegrande1984@gmail.com