The novel use of a biliary stent as a temporizing measure in the treatment of severe refractory esophageal stricture

Esophageal stricture is a narrowing of the esophageal lumen that may result from the use of external beam radiation therapy (EBRT) for the treatment of certain malignancies [1]. Endoscopic dilation is the standard of care; however, stenting is occasionally required. Most manufacturers make esophageal stents with a minimum outer diameter of 16 mm and few are available in smaller sizes [2]. Occasionally, strictures are so severe that the smallest esophageal stent that is commercially available is too large. An alternative method that has been reported is the off-label use of smaller biliary stents to treat proximal esophageal strictures [3].

A 57-year-old man had a history of laryngeal squamous cell carcinoma (SCC) treated in part by EBRT. This was complicated by the development of a severe post-radiation stricture that persisted despite multiple endoscopic dilations, including those using corticosteroid injection. An upper gastrointestinal endoscopy revealed an intrinsic severe stenosis that could not be traversed (Fig. 1a). A through-the-scope (TTS) dilator was used to dilate the stricture to a balloon size of 10 mm. Placement of a 16 × 70-mm ALIMAXX-ES esophageal stent (Merit Medical, South Jordan, Utah, USA) was attempted but was unsuccessful as the stent could not be passed through the stricture. A 10 × 80-mm fully covered WallFlex biliary stent (Boston Scientific, Marlborough, Massachusetts, USA) was successfully placed under fluoroscopic guidance (Fig. 1b and Fig. 2).

A repeat endoscopy 3 weeks later revealed that the previously placed biliary stent remained in the correct position without migration. It was retrieved (Fig. 3) and a new 14 × 70-mm ALIMAXX-ES esophageal stent was successfully deployed for continued dilation.

While more data must be collected to assess the safety, efficacy, and long-term outcomes of this method, the off-label use of fully covered metal biliary stents may be considered in patients with severe refractory esophageal strictures that are otherwise too small for traditional esophageal stents.

Endoscopy_UCTN_Code_TTT_1AO_2AZ

Competing interests: None

Scott Steinberg, Joshua Anderson, Silvio W. de Melo

Department of Medicine, Division of Gastroenterology, University of Florida College of Medicine Jacksonville, Florida, USA

Fig. 1 Endoscopic views showing an intrinsic proximal esophageal stricture: a prior to intervention; b with a biliary stent successfully deployed within it.

Fig. 2 Fluoroscopic view of the biliary stent deployed within the esophageal stricture.

Fig. 3 View during repeat endoscopy showing the dilated stricture following removal of the biliary stent.
References


Bibliography

DOI: http://dx.doi.org/10.1055/s-0042-120711
Endoscopy 2016; 48: E392–E393
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Silvio W. de Melo, Jr., MD
University of Florida in Jacksonville
4555 Emerson Street, Suite 300
Jacksonville
FL 32207
USA
Fax: 1-904-633-0028
Silvio.demelo@jax.ufl.edu

Steinberg Scott et al. Biliary stent for severe refractory esophageal stricture... Endoscopy 2016; 48: E392–E393