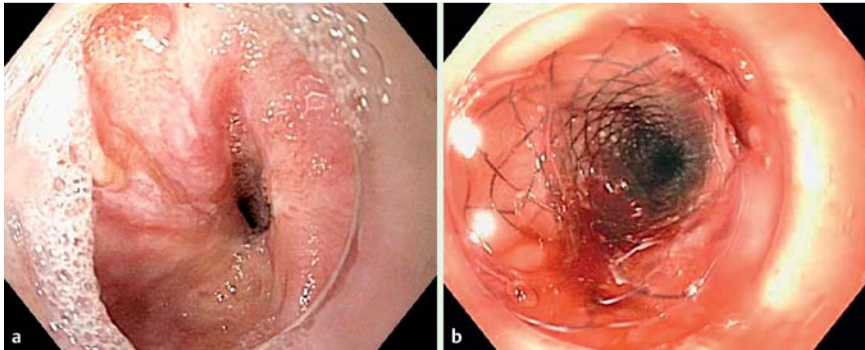


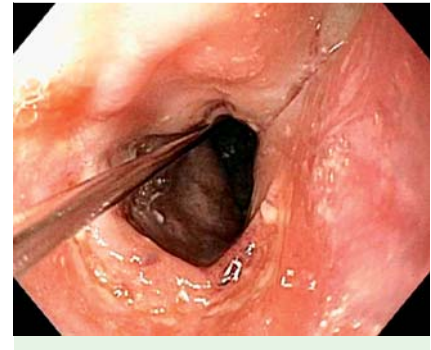
## The novel use of a biliary stent as a temporizing measure in the treatment of severe refractory esophageal stricture



**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.

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 16mm 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 10mm. 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

**References**

- 1 *Laurell G, Kraepelien T, Mavroidis P et al.* Stricture of the proximal esophagus in head and neck carcinoma patients after radiotherapy. *Cancer* 2003; 97: 1693–1700
- 2 *Hindy P, Hong J, Lam-Tsai Y et al.* A comprehensive review of esophageal stents. *Gastroenterol Hepatol* 2012; 8: 526–534
- 3 *Bechtler M, Wagner F, Fuchs ES et al.* Biliary metal stents for proximal esophageal or hypopharyngeal strictures. *Surg Endosc* 2015; 29: 3205–3208

**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](mailto:Silvio.demelo@jax.ufl.edu)