

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

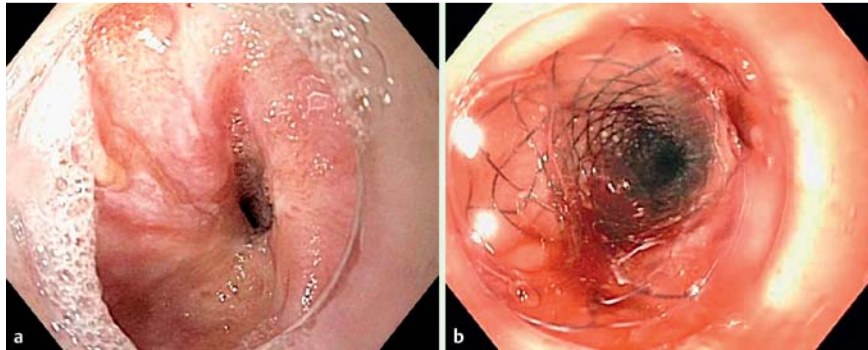


Fig. 1 Endoscopic views showing an intrinsic proximal esophageal stricture: **a** prior to intervention; **b** with a biliary stent successfully deployed within it.



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

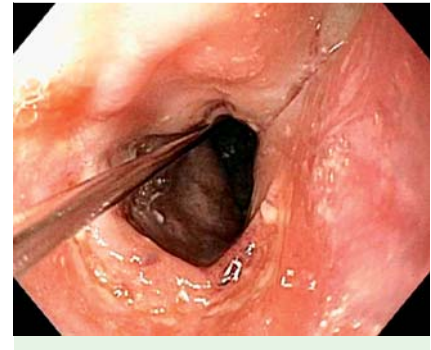


Fig. 3 View during repeat endoscopy showing the dilated stricture following removal of the biliary stent.

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.

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Competing interests: None

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Bibliography

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