



## Same-session endoscopic sleeve gastroplasty and transoral incisionless fundoplication: a possible solution to a growing problem

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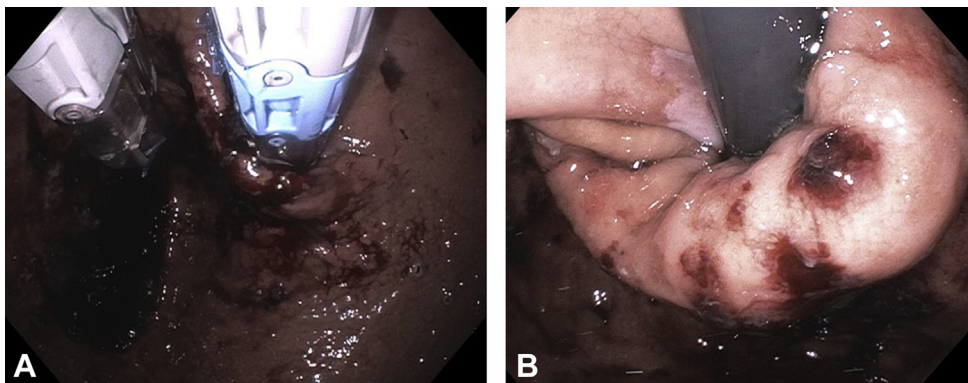
Obesity and GERD have not only been rising in prevalence but also are among the most common conditions seen by gastroenterologists today.<sup>1</sup> Here, we present a 63-year-old woman with class II obesity (body mass index, 36 kg/m<sup>2</sup>; weight, 236 lb), proton pump inhibitor (PPI)-responsive GERD, and Crohn's ileocolitis, who was referred for further management of her obesity and GERD. Despite intensive lifestyle changes, she was unable to lose significant weight. In addition, she required double-dose PPI for her reflux symptoms. Although she experienced some weight loss, she couldn't control symptoms with a daily PPI. She sought an alternative approach, given her lack of interest in surgery and concern about potential adverse events of long-term PPI use.

After reviewing the risks, benefits, and alternatives, the decision was made to pursue an endoscopic sleeve gastroplasty (ESG) and transoral incisionless fundoplication (TIF) in the same session (Video 1, available online at [www.VideoGIE.org](http://www.VideoGIE.org)). We performed the TIF first using the EsophyX Z+ device (Endogastric Solutions Redmond, Wash, USA), creating 10 plications with a total of 20 H-shaped fasteners to reconstruct the valve with a 270-degree wrap (Fig. 1). Next, the ESG was performed using the Apollo OverStitch device (Apollo Endosurgery,

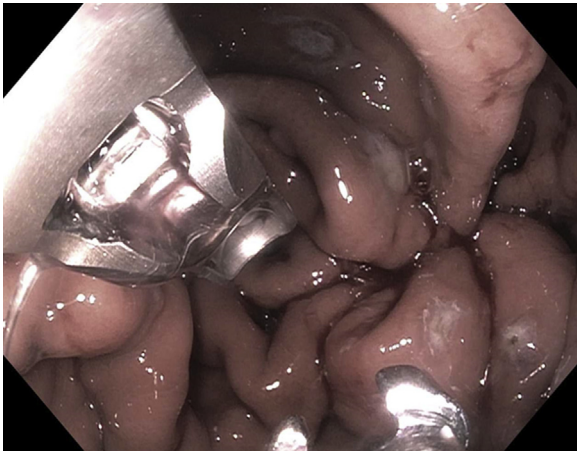
Austin, Tex, USA) with 2-0 DemeLENE sutures in an interrupted sequent stitch pattern to create full-thickness volume-reduction plications, extending from the incisura to the gastric fundus (Fig. 2). A cinching device was used to cinch and cut the threaded suture. The end result was a tubular configuration of the stomach with a markedly reduced gastric body volume.

The total procedure time was 67 minutes (24 minutes TIF; 44 minutes ESG). The patient was discharged home after endoscopy without any adverse events. She was maintained on a full liquid diet for the first 3 weeks. On follow-up 2 months after the procedure, she reported a 43-lb weight loss (18% total weight loss) and 2 inches off of her waistline, with no reflux symptoms on a daily PPI.

Endoscopic therapies have emerged to serve an unmet need in obesity and GERD therapy and are safe and efficacious tools when used in conjunction with dietary and lifestyle changes.<sup>2,3</sup> As techniques and devices mature, it is paramount that gastroenterologists appropriately select patients for these procedures with a multidisciplinary team. In particular, this case was discussed in a case conference with other gastroenterologists (ie, motility specialists) and obesity providers (eg, nutritionist, psychologist). The patient was very bothered by her chronic GERD symptoms



**Figure 1.** Creation of the transoral incisionless fundoplication using the EsophyX device. **A**, Use of the rotatable tissue mold to help create the wrap through full-thickness serosa-to-serosa plications. **B**, The end result with a neo-valve with a 270-degree wrap.



**Figure 2.** Creation of the endoscopic sleeve using the OverStitch device.

and despite prior weight loss reported no symptom improvement; given the chronicity of her symptoms, she sought to undergo both procedures in the same session rather than in a sequential fashion.

Same-session ESG and TIF has not previously been reported; here, we demonstrate its safety and viability as a tailored approach in the treatment of concomitant obesity and GERD.

## DISCLOSURE

*Dr Sbaraiha is a consultant for Boston Scientific, Olympus, and Wilson Cook. All other authors disclosed no financial relationships.*

*Abbreviations: ESG, endoscopic sleeve gastroplasty; PPI, proton pump inhibitor; TIF, transoral incisionless fundoplication.*

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