A novel technique to treat dysphagia after endoscopic full-thickness plication for managing gastroesophageal reflux disease

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Dear Editor,

Endoscopic full-thickness plication (GERD-X) is a novel device for the treatment of gastroesophageal reflux (GER). GERD-X (G-SURG GmbH, Germany) (Figure 1) is used to place transmural sutures at the gastroesophageal junction. The gastric cardia is reconstructed, and the valvular mechanism is accentuated to prevent reflux (1).

A 26-year-old man with no comorbidities presented with complaints of heartburn and regurgitation over a period of 2 years. He was diagnosed with refractory GER. Evaluation with 24-hour pH metry (Sandhill Scientific, USA) revealed a DeMeester score of 245 with good symptomatic correlation, and there was endoscopic evidence of severe reflux esophagitis (LA-Grade C) with a lax lower esophageal sphincter (Grade II) according to revised Hill's classification (2). In view of these findings, the patient was offered the option of undergoing GERD-X, and a single transmural pledgeted suture was placed at the lesser curvature to recreate the angle of His. The patient was asymptomatic after the procedure; hence, he was discharged and prescribed a liquid diet. However, the patient returned with dysphagia to both solids and liquids after 1 week, without reflux symptoms. Endoscopy was performed, which revealed the presence of the suture at the distal esophagus causing close opposition of the esophageal lumen with luminal narrowing. The scope was not easily negotiable across the GE junction. In the retroflexed view, the fundal wrap looked well formed. We planned to relieve this obstruction by cutting open the suture pledgets with a loop cutter (FS-5U-1, Olympus, Japan) (Figures 2, 3).

Another transmural plication with the GERD-X device was applied distal to the previously placed suture to remodulate the angle of His and flap valve mechanism. Patient was subsequently followed up at 1 month with 24-hour pH metry and endoscopy, which revealed no signs of reflux. The patient is symptomatically better and currently off proton pump inhibitors.

This is an interesting case of post–GERD-X dysphagia that was managed with the help of an endoscopic loop-cutter device without additional need for surgical intervention. The sutures should be placed close to the squamous lining of the esophagus to prevent dysphagia. The loop-cutter device, originally developed to cut the loop ligator (Endoloop, Olympus, Japan), was used for endoscopic polypectomy of large colonic polyps (3). In fact, it has now found a new role in the current era of minimally invasive endoscopy. The loop cutter has additional advantages: it can be used to cut sutures such as those in revision of endoscopic sleeve gastroplasty.

In typical endoscopic or surgical procedures, multiple things can go wrong unless monitored properly. In pa-

Figure 1. The GERD-X device.

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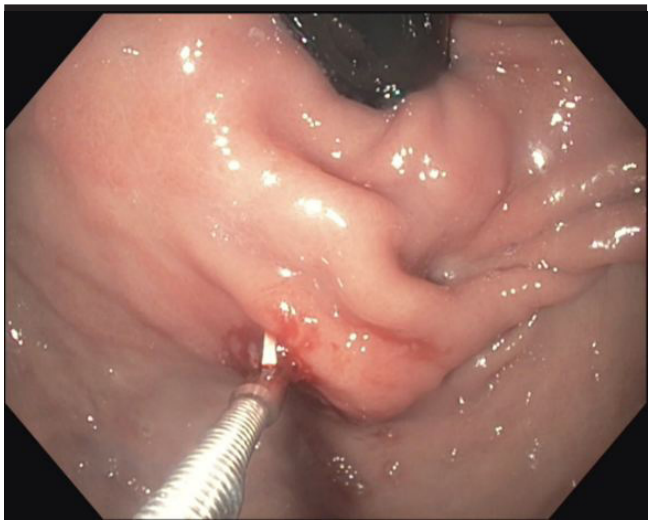

Figure 2. The loop-cutter device holding the suture pledget.

Figure 3. The suture pledget being successfully cut with the loop-cutter device.

tients undergoing GERD-X, success needs to be evaluated at frequent intervals because such adverse events can occur at any point of time and we, as endoscopists, can always expand our imagination to use the range of accessories available at hand effectively to salvage unfavorable situations.

Informed Consent: Informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

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