VIDEO CASE REPORT

Gastric bypass outlet reduction by use of a single-channel endoscope



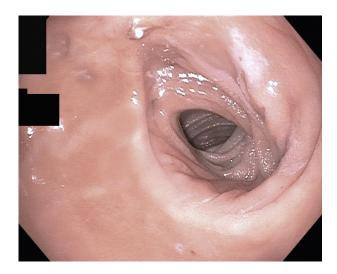
Qais Dawod, MD,¹ Danny Issa, MD,¹ Jack Husney, MD,² Reem Z. Sharaiha, MD¹

We present a case of transoral gastric outlet reduction (TORe) by use of a new endoscopic suturing system with a single-channel endoscope; to our knowledge, this is the first such description to be published. A 36-year-old woman with morbid obesity and obstructive sleep apnea had undergone Roux-en-Y gastric bypass surgery many years earlier. She lost a total of 125 pounds after surgery; however, she regained 110 pounds 1 year later. She underwent a laparoscopic adjustable gastric band placement 6 years before her current presentation, which resulted in minimal weight loss and severe nausea and vomiting. The decision was made to proceed with TORe (Video 1, available online at www.VideoGIE.org).

The procedure was performed with the patient in the left lateral decubitus position and under general anesthesia. A GIF-1TH endoscope (Olympus Corporation, Center Valley, Pa, USA) was advanced into the stomach, and evidence of post-Roux-en-Y anatomy with a gastrojejunostomy was observed. The gastric pouch outlet was enlarged and measured 3.5 cm in diameter (Fig. 1). The edges of the outlet were treated with argon plasma coagulation to ensure tissue destruction for

subsequent apposition (Fig. 2). The OverStitch Sx (OverStitch; Apollo Endosurgery, Austin, Tex, USA) was fitted over the GIF-1TH endoscope and reinserted into the gastric pouch. The Apollo OverStitch device was then used to allow the needle to capture full-thickness bites (Fig. 3). A running stitch was used around the outlet in a counterclockwise fashion to reduce its size. A total of 2 sutures were used in a pursestring fashion. A cinch was used to tighten the sutures. The end result was a reduced outlet size (Fig. 4). The patient was discharged home after the procedure in a good status.

Transoral outlet reduction is a novel, incisionless, minimally invasive technique developed to treat weight regain related to pouch and outlet enlargement after gastric bypass. The majority of patients with outlet enlargement regain approximately 30% of their lost weight. Multiple studies are now available to support the feasibility, efficacy, and safety of TORe in achieving weight loss in these patients. OverStitch Sx is a new endoscopic suturing system, a modification of the original OverStitch, that offers the advantage of being compatible with multiple single-channel



 $\textbf{Figure 1.} \ \ \text{Gastric pouch enlargement 3.5 cm in diameter.}$



Figure 2. Gastric pouch outlet edges after argon plasma coagulation.

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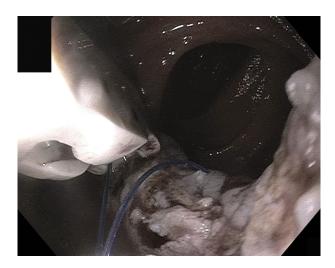


Figure 3. Apollo OverStitch device capturing full-thickness bites, followed by use of pursestring technique to place a running suture around the outlet edges.

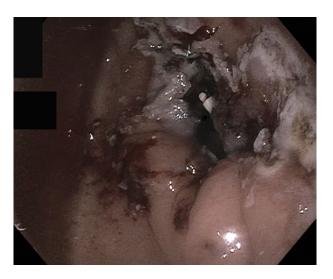


Figure 4. End result showing reduced outlet size.

endoscopes, aiding in maneuverability, and that can be customized to the endoscopist's preference, eliminating the specific need for double-channel endoscopes. To our knowledge, this is the first study to report its feasibility in the treatment of a patient with post–gastric bypass outlet enlargement.

DISCLOSURE

Dr Sharaiha is a consultant for Boston Scientific, Olympus, and Cook. All other authors disclosed no financial relationships relevant to this publication.

Abbreviation: TORe, transoral gastric outlet reduction.

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New York Presbyterian Hospital/Weill Cornell Medical Center (1); Mount Sinai Beth Israel (2), New York, USA.

If you would like to chat with an author of this article, you may contact Dr Sharaiha at Rzs9001@med.cornell.edu.

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