

# RYGB WITH RECURRENT WEIGHT GAIN

## ENDOSCOPY

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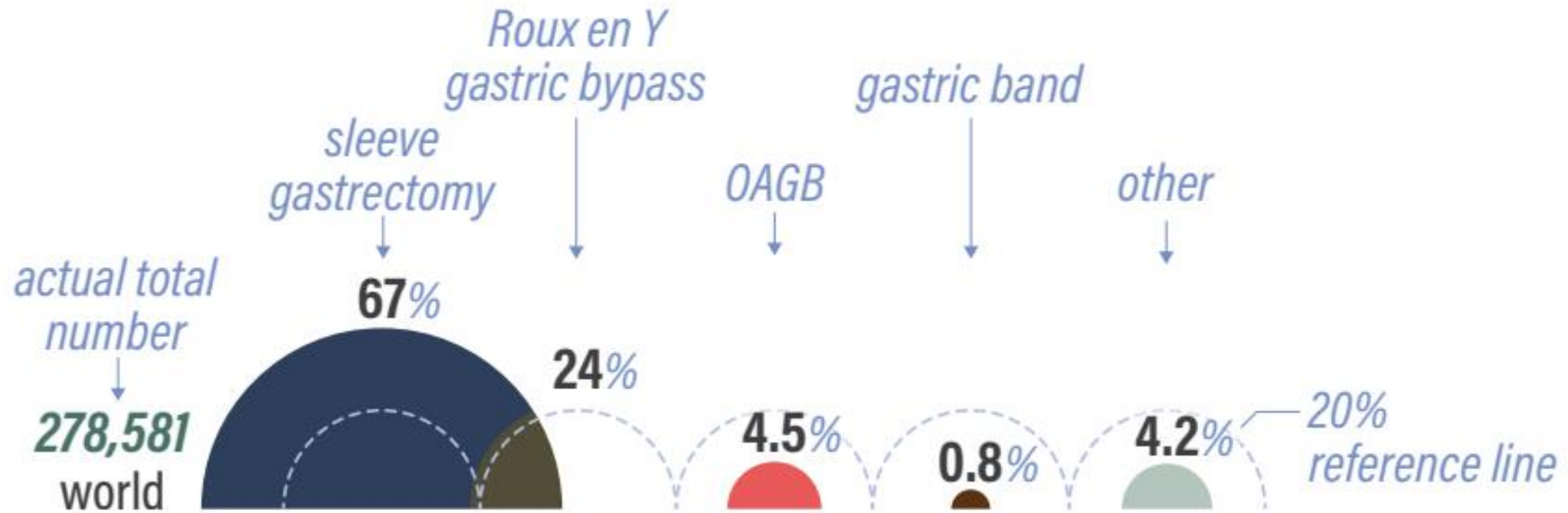
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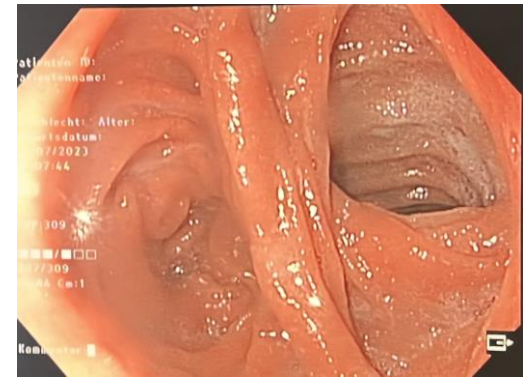
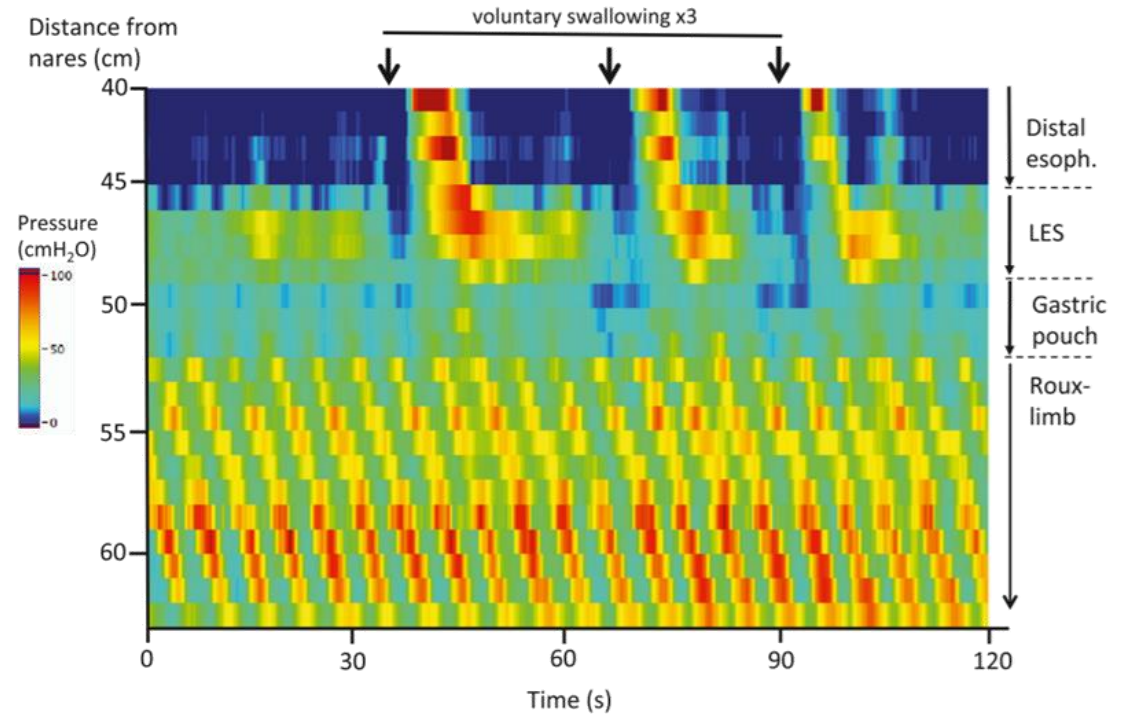
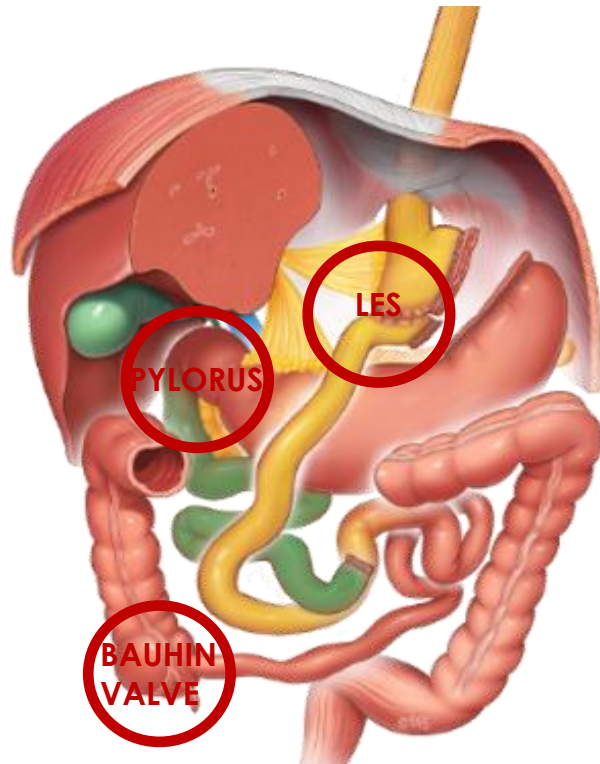
**I have the following potential conflict(s) of interest to report:**

**Receipt of honoraria or consultation fees**

- USGI
- Boston Scientific
- NovoNordisc
- Cranax Medical Digestive
- Johnson & Johnson USA/Europe
- Lohmann & Rauscher
- Morphic Medical
- Trans.Duodenal.Concepts

# RYGB BYPASS PROCEDURE IS THE SECOND MOST PROCEDURE AROUND THE WORLD



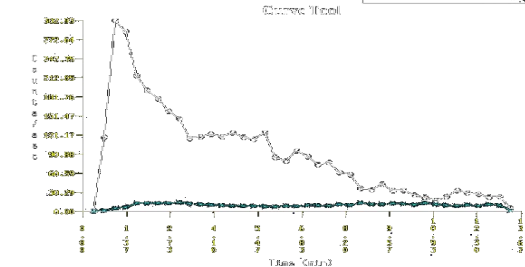
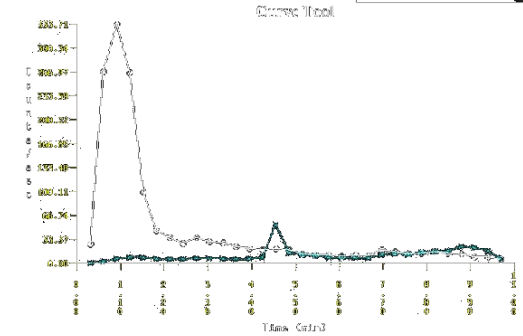


Björklund P, Lönroth H, Fändriks L. **Manometry of the Upper Gut Following Roux-en-Y Gastric Bypass Indicates That the Gastric Pouch and Roux Limb Act as a Common Cavity.** *Obes Surg.* 2015 Oct;25(10):1833-41. doi: 10.1007/s11695-015-1639-1. PMID: 25736230.

# ENDOSCOPIC APPROACH

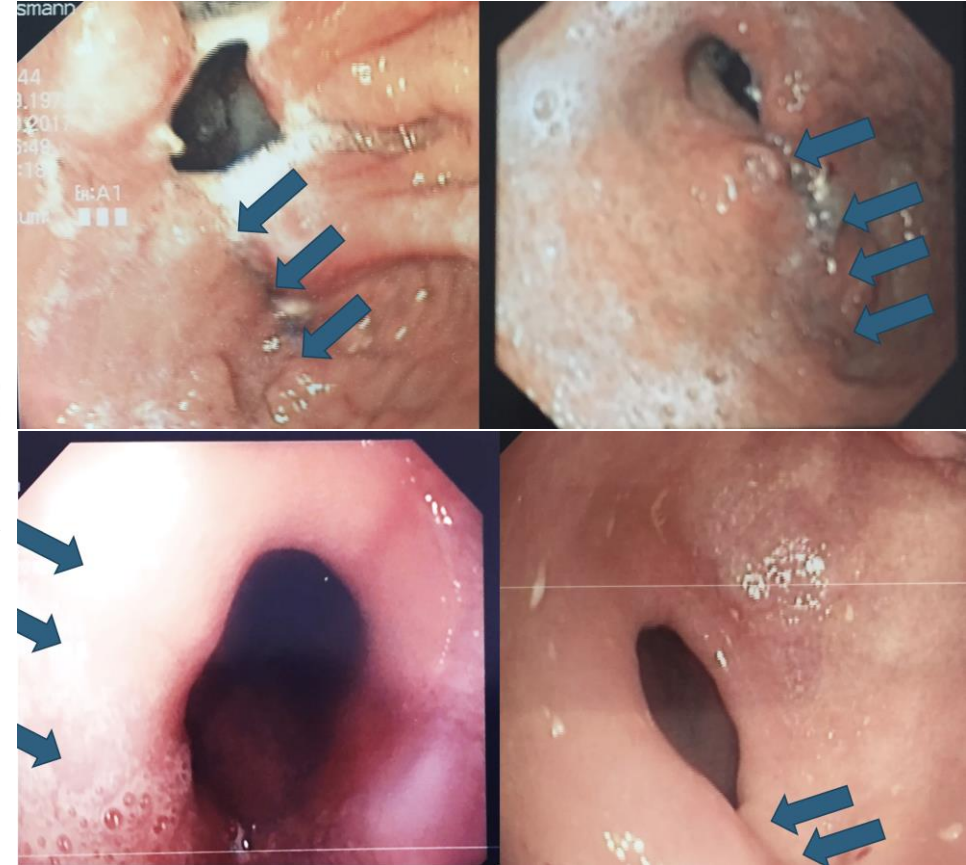
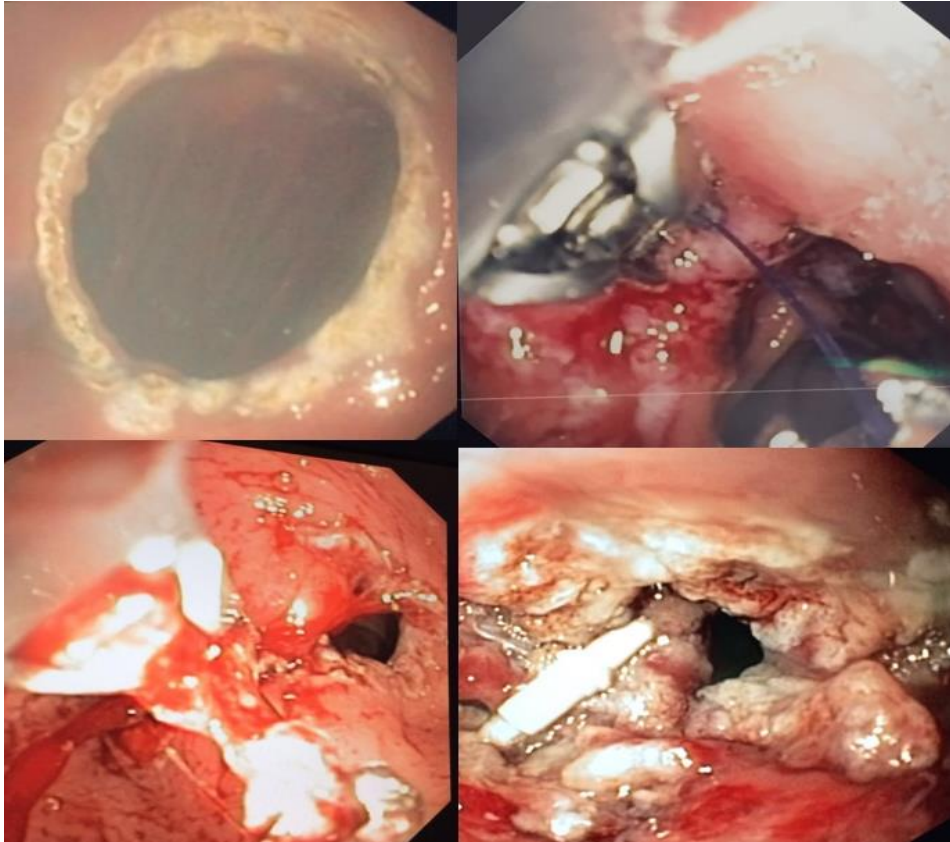
RE-TIGHTENING THE OUTLET SLOWS GASTRIC EMPTYING ( $P < 0.001$ )

=> INCREASING SATIETY AND SATIATION



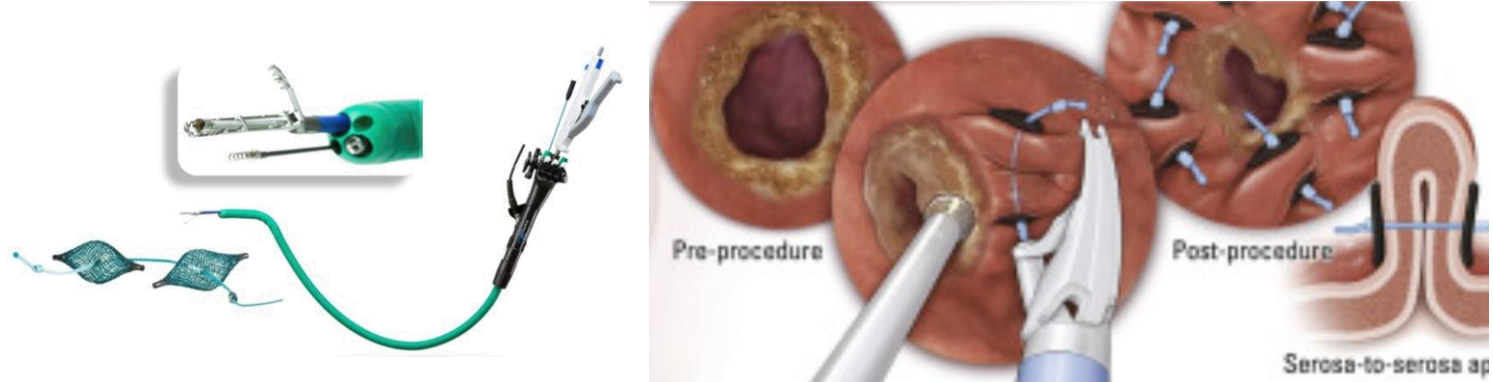
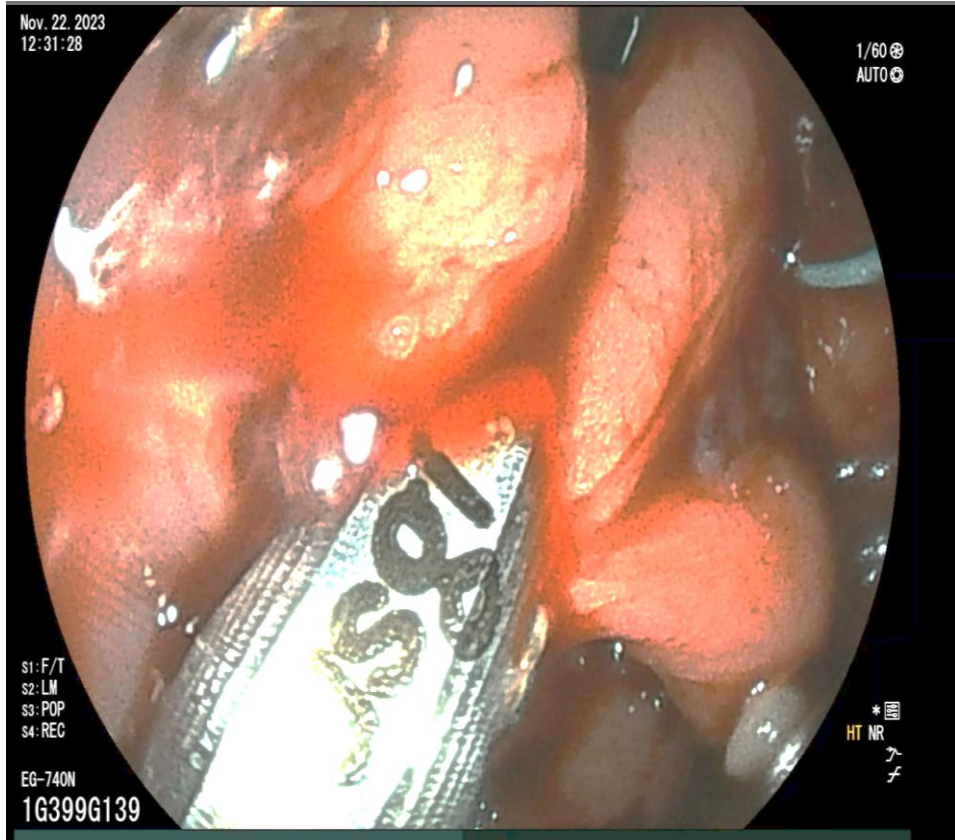
**ENDOSCOPIC APPROACH. REVISION OF THE POUCH-OUTLET  
⇒ PRESERVES BARIATRIC ANATOMY AND POUCH LENGTH**

**TORe PROCEDURE WITH OVERSTITCH  
transoral outlet repair endoscopically**

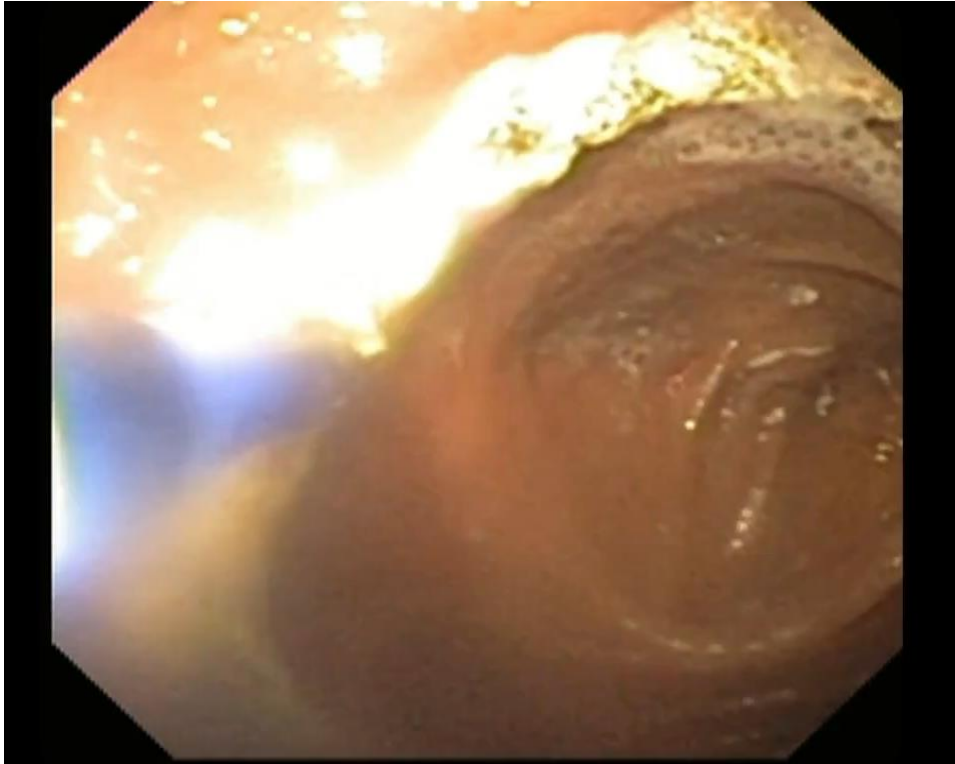


**ENDOSCOPIC APPROACH. REVISION OF THE POUCH-OUTLET  
⇒ PRESERVES BARIATRIC ANATOMY AND POUCH LENGTH**

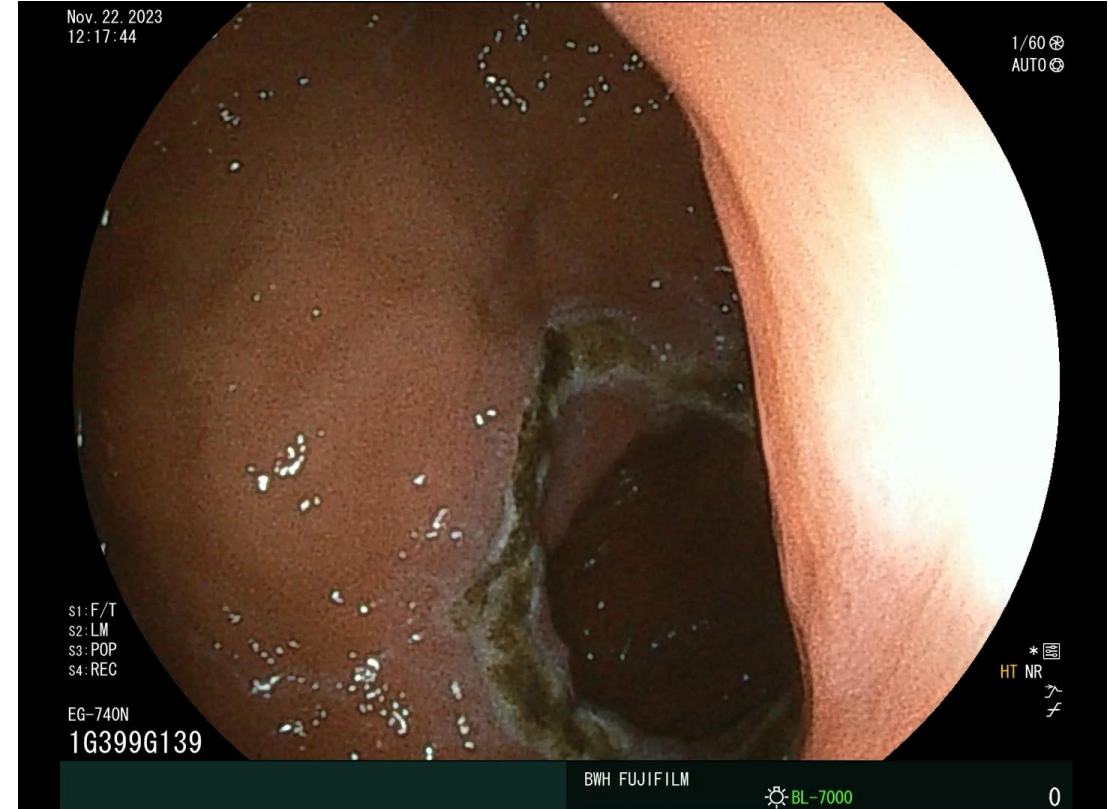
**ROSE PROCEDURE WITH IOP  
restorative obesity surgery**



**TORe**  
OVERSTITCH: Boston Scientific



**ROSE**  
IOP: USGI incisionless operation platform  
(Double Helix-TECHNIQUE)





Review

# Transoral Outlet Reduction (TORe) for the Treatment of Weight Regain and Dumping Syndrome after Roux-en-Y Gastric Bypass

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**Abstract:** Obesity is a chronic relapsing disease of global pandemic proportions. In this context, an increasing number of patients are undergoing bariatric surgery, which is considered the most effective weight loss treatment for long-term improvement in obesity-related comorbidities. One of the most popular bariatric surgeries is the Roux-en-Y gastric bypass (RYGB). Despite its proven short- and long-term efficacy, progressive weight regain and dumping symptoms remain a challenge. Revisional bariatric surgery is indicated when dietary and lifestyle modification, pharmaceutical agents and/or psychological therapy fail to arrest weight regain or control dumping. However, these re-interventions present greater technical difficulty and are accompanied by an increased risk of peri- and postoperative complications with substantial morbidity and mortality. The endoscopic approach to gastrojejunal anastomotic revision, transoral outlet reduction (TORe), is used as a minimally invasive treatment that aims to reduce the diameter of the gastrojejunal anastomosis, delaying gastric emptying and increasing satiety. With substantial published data supporting its use, TORe is an effective and safe bariatric endoscopic technique for addressing weight regain and dumping syndrome after RYGB.



check for updates

Citation: Hakiza, L.; Sartoretto, A.; Burgmann, K.; Kumbhari, V.;

## Five-year outcomes of transoral outlet reduction for the treatment of weight regain after Roux-en-Y gastric bypass

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### Abstract

**Background and Aims:** Transoral outlet reduction (TORe) is a common endoscopic treatment for patients with weight regain after Roux-en-Y gastric bypass (RYGB) with a dilated gastrojejunal anastomosis (GJA). This study aims to assess long-term efficacy of TORe.

**Methods:** This was a retrospective review of prospectively collected data on RYGB patients who underwent TORe for weight regain or inadequate weight loss. The primary outcome was efficacy of TORe at 1, 3, and 5 years. Secondary outcomes were procedure details, safety profile, and predictors of long-term weight loss after TORe.

**Results:** A total of 331 RYGB patients underwent 342 TORe procedures and met inclusion criteria. Of these, 331, 258, and 123 patients were eligible for 1-, 3-, and 5-year follow-ups, respectively. Mean body mass index (BMI) was  $40 \pm 9$  kg/m<sup>2</sup>. Pre-TORe GJA size was  $23.4 \pm 6.0$  mm, which decreased to  $8.4 \pm 1.6$  mm after TORe. Patients experienced  $8.5 \pm 8.5\%$ ,  $6.9 \pm 10.1\%$ , and  $8.8 \pm 12.5\%$  total weight loss (TWL) at 1, 3, and 5 years with follow-up rates of 83.3%, 81.8%, and 82.9%, respectively. Of 342 TORe procedures, 76%, 17.5%, 4.4%, and 2.1% were performed using single pursestring, interrupted, double-pursestring, and running suture patterns, respectively, with an average of  $9 \pm 4$  stitches per GJA. Pouch reinforcement suturing was

# Endoluminal Revision (OverStitch™, Apollo Endosurgery) of the Dilated Gastroenterostomy in Patients with Late Dumping Syndrome After Proximal Roux-en-Y Gastric Bypass

Christine Stier<sup>1</sup> • Sonja Chiappetta<sup>1</sup>

|        | 14 patients<br>2M/12F<br>Age | Time elapse<br>from RYGB<br>to<br>endoluminal<br>revision | Weight<br>at RYGB | Weight at<br>endoluminal<br>revision | Weight 6<br>months<br>post-<br>overstitch | Sigstad<br>Score<br>pre-<br>revision | Sigstad<br>Score<br>4 weeks<br>post-<br>revision | Score<br>of<br>visual<br>pain<br>scale<br>(0-10) | C-reactive<br>protein<br>at 2. Post-<br>OP day |
|--------|------------------------------|---|-------------------|--------------------------------------|---|--------------------------------------|--|--|--|
| Median | 39,50                        | 55,29   | 144,04            | 91,90                                | 80,75                                     | 12                                   | 2,50   | 0,46   | < 5  |
| SD     | 11,17                        | 30,48   | 32,95             | 30,40                                | 22,90                                     | 4,18                                 | 2,06   | 1,13   |  |

**TBWL: 12.1%**

# Endoscopic management of dumping syndrome after Roux-en-Y gastric bypass: a large international series and proposed management strategy



Eric J. Vargas, MD,<sup>1</sup> Barham K. Abu Dayyeh, MD, MPH,<sup>1</sup> Andrew C. Storm, MD,<sup>1</sup> Fateh Bazerbachi, MD,<sup>2</sup> Reem Matar, BSc,<sup>1</sup> Adrian Vella, MD,<sup>3</sup> Todd Kellogg, MD,<sup>4</sup> Christine Stier, MD<sup>5</sup>

Rochester, Minnesota; Boston, Massachusetts, USA; Würzburg, Germany

**TABLE 2. Baseline characteristics**

| Variable  | Value        |
|---|--------------|
| Age, y  | 44.9 ± 9.2   |
| Weight, kg  | 98.4 ± 22.7  |
| Female, %   | 84           |
| Baseline weight at time of Roux-en-Y gastric bypass, kg | 143.5 ± 26.8 |
| Weight at intervention, kg                              | 98.2 ± 22.6  |
| Baseline Sigstad score                                  | 17.02 ± 6.1  |

Values are mean ± standard deviation unless otherwise defined.

**TABLE 3. Postintervention results**


| Variable      | At 3 months | Mean difference | P value |
|---------------|-------------|-----------------|---------|
| Sigstad score | 2.55 ± 1.87 | -14.5 ± 5.5     | <.0001  |
| Weight, kg    | 89.4 ± 1.96 | -9.3 ± 3.8      | <.0001  |

Values are mean ± standard deviation.

**TBWL: 8.96%**

## TAKE HOME

- **IS REPRODUCIBLE (PERSONAL EXPERIENCE 38%)**
- **IS AN ENDOLUMINAL MINIMAL INVASIVE ACCESS.** => best suture patterns must be defined
- **LEADS TO SIGNIFICANT WEIGHT LOSS => 8.5 -12.1% TBWL**
- **PRESERVES BARIATRIC ANATOMY**
- **IS SAFE, EFFECTIVE, AND MULTI-REPEATABLE**



*I look through a half opened door into the future, full  
of interest, intriguing beyond my power to describe."*

*William J. Mayo, M.D.  
1931*

**SOMEDAY WE WILL FIND WHAT WE ARE LOOKING FOR,  
OR MAYBE NOT.**

**MAYBE WE`LL FIND SOMETHING MUCH GREATER  
THAN THAT**

**THANK YOU VERY MUCH  
FOR YOUR KIND INTEREST**