The first Canadian academic endobariatric program: Initial six month experience with endoscopic transoral outlet reduction for management of weight regain following Roux-en-Y gastric bypass

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**Introduction:** Up to 37% of patients experience weight regain after Roux-en-Y gastric bypass (RYGB) with wide gastrojejunal (GJ) anastomosis diameter proposed to be a risk factor. With Health Canada's approval of the OverStitch<sup>TM</sup> endoscopic suturing system, endoscopic transoral outlet reduction (TORe) is now an option to reduce GJ anastomosis size to manage weight regain.

**Methods:** This is a prospective case series review of TORe, on patients who experienced weight regain and found to have dilated GJ anastomosis after RYGB at UHN's Academic Endobariatric Program between July and December 2024, the first of its kind in Canada. Perioperative variables, outcomes and complications were assessed.

**Results:** Nine patients (mean age 45.8years, 9 female) underwent TORe. Mean preoperative weight regain was 19.3kg, time between RYGB and TORe 5.6years, and GJ anastomosis 3.8cm. The GJ anastomosis was reduced to 0.8cm using a purse-string and perianastomotic gastroplasty suture pattern. Mean operative time was 69.8 minutes. One intraoperative complication, a superficial esophageal tear from the overtube was clipped with no postoperative sequelae. Mean length of stay was 1.1days with no 30-day complications. Mean postoperative weight loss was 6.5kg (6.1% TBWL) after 1 month and 6.8kg (6.7% TBWL) after 3 months, in keeping with previous literature.

**Conclusion:** Our initial institutional experience with TORe for weight regain after RYGB has been successful with strong patient interest due to its minimally invasive safe nature and opportunity to relearn "back to basics" habits from the multidisciplinary bariatrics team.

(No external financial supports were provided for this study)