Outcomes of Transoral Outlet Reduction with Neoadjuvant and Adjuvant Anti-Obesity Medications in Patients with Weight Regain after Roux-en-Y Gastric Bypass: A Single-Institution Case Series

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INTRODUCTION

- The Roux-en-Y gastric bypass (RYGB) has a reported incidence of weight regain reported in up to 20% of patients (Meguid 2008), which is typically observed when the gastrojejunal anastomosis (GJA) enlarges beyond 2 cm in size (Abu Dayyeh 2011).
- Endoluminal revision of a dilated GJA with a Transoral Outlet Reduction (TORe) procedure has been previously reported. Concomitantly, use of anti-obesity medications (AOM) has become widespread (Sher 2024).
- We present a case series from a single institution demonstrating outcomes for TORe in conjunction with AOM.

METHODS

- We retrospectively analyzed 22 patients who underwent TORe between 05/2022 and 12/2023, using a purse-string suturing approach.
- 19 of these patients were on AOM from one year before TORe to up to one year after the procedure and were included in the case series.
- Weights from pre-bypass to up to two years following TORe (where available) were obtained.
- The primary endpoints were total weight loss (TWL) and excess weight loss (EWL).

LIMITATIONS

- Some patients were lost to follow-up, so the power of the study decreased over time.
- Patient compliance with AOM is presumed based on the information provided during follow-up visits.

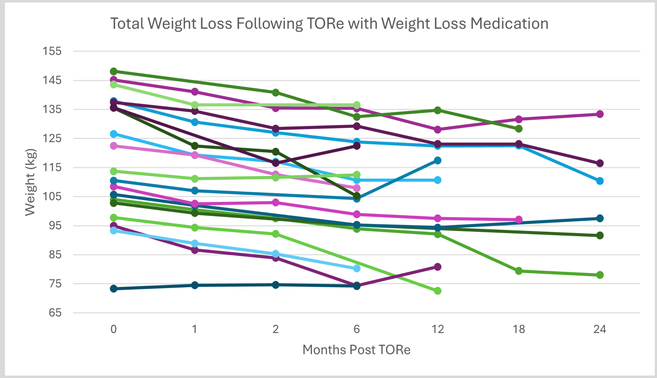


FIGURE 1: Weights trended over time for patients who underwent TORe revision while on AOM

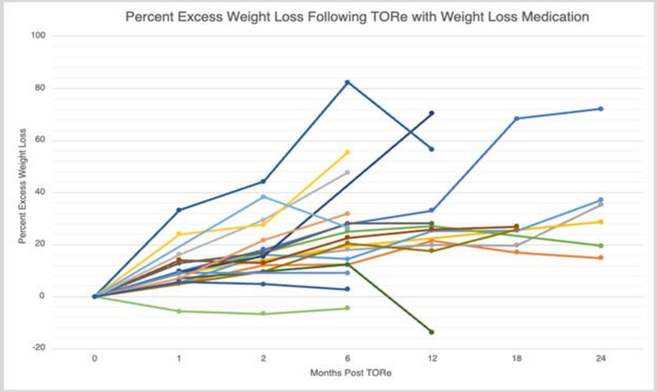


FIGURE 2: %EWL in patients who underwent TORe revision while on AOM

RESULTS

- The average patient age at the time of revision was 54 years.
- Three patients were male, and sixteen were female.
- The mean BMI at the time of RYGB was 51.97, and at the time of revision, it was 43.06.
- The postprocedural average BMIs were 39.06 at six months (18 patients), 39.65 at one year (11 patients), and 38.89 at two years (6 patients).
- The corresponding TWL intervals (**Figure 1**) were 9.54%, 11.06%, and 14.48%. The EWL intervals (**Figure 2**) were 25%, 28%, and 35%, respectively.

DISCUSSION

- Historically, TORe has produced TWL of 8.5%, 6.9%, and 8.8% at 1, 3, and 5 years, respectively (Jirapinyo 2020).
- In comparison, patients in our study who received both surgical revision and weight loss pharmacotherapy achieved greater TWL at one year (11.06%).

CONCLUSION

Given that our patients not only lost weight but also appeared to benefit from the addition of neoadjuvant and adjuvant AOM, TORe combined with neoadjuvant and adjuvant AOM merits further investigation in comparison to TORe alone.

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KEY POINT: Combination therapy with TORe and AOM may result in more weight loss compared to either intervention alone and is worth further investigation.