Healthcare utilization following primary versus revisional Roux-en-Y gastric bypass in a military treatment facility

Capt Michael T. Olson MD; CPT Yun Beom Lee MD; Lt Col Brian D. Layton DO; LTC Pamela Masella DO
Department of General Surgery, Brooke Army Medical Center, Fort Sam Houston, Texas, USA

Introduction

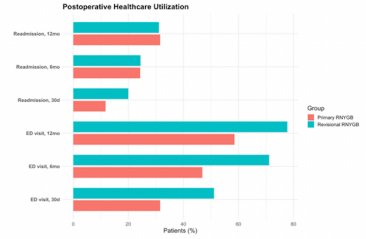
- **Background:** Revisional Roux-en-Y gastric bypass (RNYGB) is commonly performed for weight recidivism or complications from prior bariatric surgery, particularly GERD.
- **Knowledge gap:** Contemporary data comparing postoperative healthcare utilization after primary versus revisional RNYGB remain limited.
- **Rationale:** Defining differences in complications, readmissions, and ED utilization may improve postoperative counseling.
- **Aims:** Compare complications, readmissions, and ED visits following primary versus revisional RNYGB.

Methods

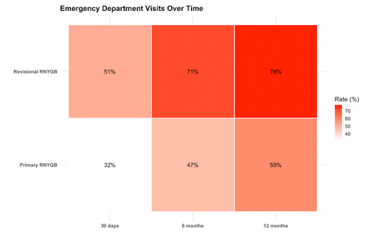
- **Study design:** Retrospective single-center cohort at a military treatment facility (01/2022–12/2024)
- **Population:** Adults undergoing primary or revisional minimally invasive RNYGB
- **Exclusions:** Non-RNYGB bariatric procedures
- **Outcomes:** Perioperative complications, 12-month complications, 30-day, 6-month, and 12-month readmissions, and all-cause ED visits at same timepoints
- **Statistical analysis:**
- Firth penalized logistic regression assessed revisional surgery as a predictor of complications and ED utilization.
- Wilcoxon rank sum or Chi-square tests as appropriate

Figures

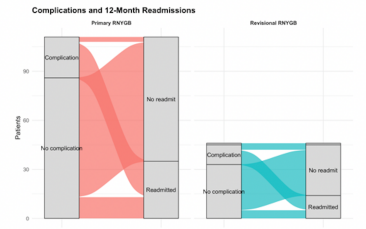
A



B



C



Disclosures: The authors declare no relevant financial relationships or conflicts of interest. The views expressed herein are those of the authors and do not necessarily reflect the official policy or position of the Defense Health Agency, Brooke Army Medical Center, the Department of Defense, or any agency of the United States Government.

Results

Cohort: n=157 patients undergoing RNYGB

- Primary (n=111); revisional (n=46)

Revisional patients

- Older (52 vs 48 years, p=0.050)
- Lower preoperative BMI (37 vs 41 kg/m^2; p<0.001)
- Higher rates of GERD (96% vs 81%; p=0.019)

Complications

- Early postoperative complications were rare in each group (3.6% vs 2.2%); 12-month also similar

Readmissions

- Similar at 30-days, 6- and 12-months (**Figure A; C**)

ED utilization

- Revisional had higher ED visits at all time points (**Figure B**)

Adjusted analysis

- Revisional surgery predicted 6-month ED visits (OR 2.50; 95% CI 1.16–5.64; p=0.019)
- Preoperative GERD was also associated with 12-month complications and ED visits

Conclusions

- Revisional RNYGB was not associated with higher complications or readmissions rates, but was associated with greater ED utilization through 12-months postoperatively; these findings support closer postoperative follow-up and anticipatory counseling for revisional RNYGB patients.