



Comparative analysis of weight loss and metabolic outcomes following primary versus revisional Roux-en-Y gastric bypass in a military treatment facility

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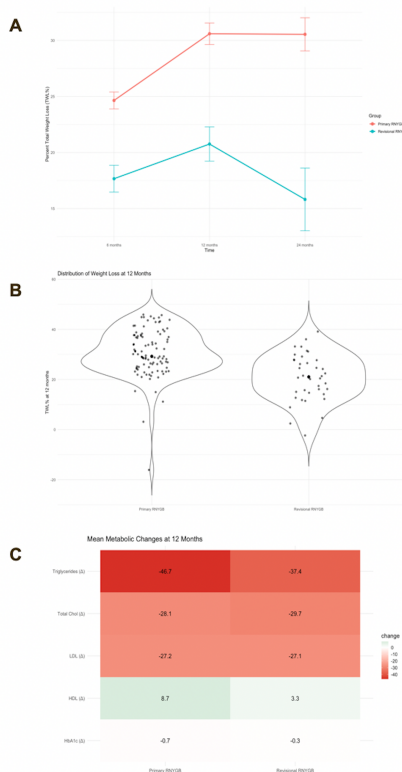
Introduction

- **Background:** Revisional bariatric surgery is increasingly performed for weight recidivism or complications following prior bariatric procedures
- **Knowledge gap:** Comparative data describing weight loss and metabolic outcomes following primary versus revisional RNYGB
- **Rationale:** Understanding differences in weight loss durability and metabolic improvements may guide patient counseling and operative decisions
- **Aims:** Compare weight loss trajectories, metabolic changes, and therapy de-escalation for key preoperative comorbidities 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:** Patients undergoing other bariatric procedures or lacking postoperative follow-up data
- **Outcomes:** Primary was percent total weight loss (%TWL) at 6, 12, and 24 months; secondary included changes in HbA1c and lipid profiles and de-escalation of antihypertensives, statins, and CPAP therapy for OSA
- **Statistical analysis:** Continuous data compared with Welch two-sample t-tests and Wilcoxon rank-sum; categorical data compared with χ^2 test

Figures



Results

Cohort: n=157 patients who met inclusion criteria

- Primary (n=111, 70.7%); revisional (n=46, 29.3%)

Baseline comorbidities

- Revisional patients were older (52 vs 48 years; $p=0.05$) with lower preoperative BMI (37 vs 41 kg/m^2 ; $p<0.001$)

Comorbidities

- Primary RNYGB more frequently had diabetes (27% vs 8.7%; $p=0.011$) and OSA (71% vs 52%; $p=0.023$), while revisional had more GERD (96% vs 81%; $p=0.019$)

Weight loss

- Primary RNYGB achieved greater %TWL at 6 months, 12 months, and 24 months (all $p<0.001$) (**Figure A-B**)

Metabolic changes

- HbA1c improved modestly more after primary RNYGB (-0.7 vs -0.3; $p=0.02$) (**Figure C**)
- No significant differences in lipid changes between cohorts; both experienced considerable improvements

Therapy de-escalation

- Rates of antihypertensive reduction (63% vs 55%), statin reduction (67% vs 73%), and CPAP discontinuation (50% vs 78%) were similar between groups (all $p>0.2$)

Conclusions

- Primary RNYGB achieved greater %TWL at all postoperative time points, likely reflecting higher baseline BMI and metabolic disease burden.
- Revisional RNYGB still produced meaningful metabolic improvements and therapy reductions.

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.