Sleeve Gastrectomy, Conversion Rate in a Community Hospital: When and Why

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INTRODUCTION

In the United States, over 2 in 5 adults are obese, contributing to nearly $173 billion in medical expenses in 2019. Bariatric surgeries, such as laparoscopic sleeve gastrectomy (SG) and Roux-en-Y gastric bypass (RYGB), help patients lose weight and manage obesity-related conditions. Some patients experience suboptimal weight loss after SG, necessitating conversion to RYGB. Additionally, complications like leaks, stenosis, torsion, hiatal hernia, and symptomatic gastroesophageal reflux (GERD) can be addressed with conversion.[1-2] Li et al. reported a 10.4% conversion rate to RYGB, increasing to 22.6% with extended follow-up.[3] Dirnberger et al. reported 33.8% of patients were converted for GERD. This study presents our experience with sleeve conversions to RYGB, focusing on risk factors and outcomes.[2]

METHODS

A retrospective review of patients who underwent SG conversion to RYGB from January 2015 to August 2024 was conducted using EPIC at a Bariatric Center of Excellence community hospital in NY. Data collected included demographics, comorbidities, time elapsed between sleeve and bypass, and reasons for conversion (e.g., suboptimal weight loss, GERD, leaks, hiatal hernia, stenosis). BMI was recorded at four key points: at time of SG, RYGB, and 6 months to 1 year post- RYGB. Other factors, including endoscopy (EGD) findings prior to the RYGB, the presence of H. pylori, symptomatic reflux, and the number of follow-up visits, were also recorded.

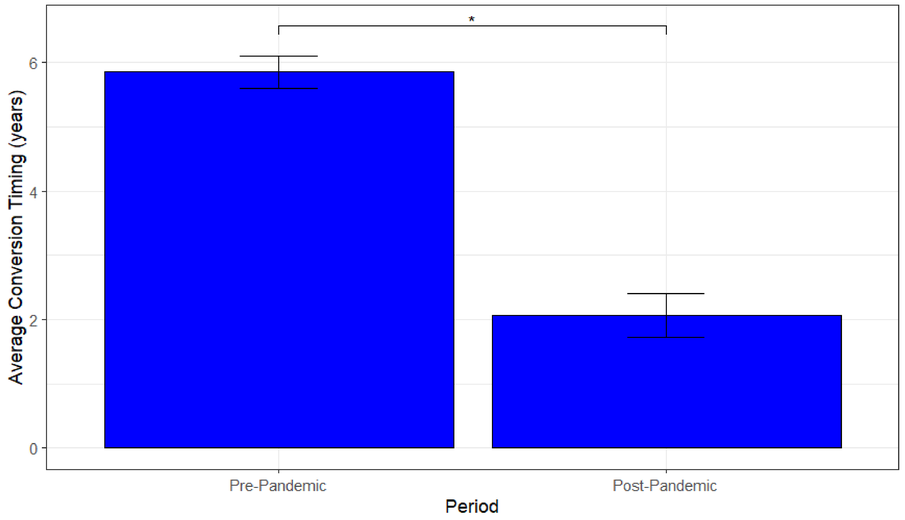


Figure 1: Average Roux-en-Y Bypass Conversion Timing Before vs After 2020

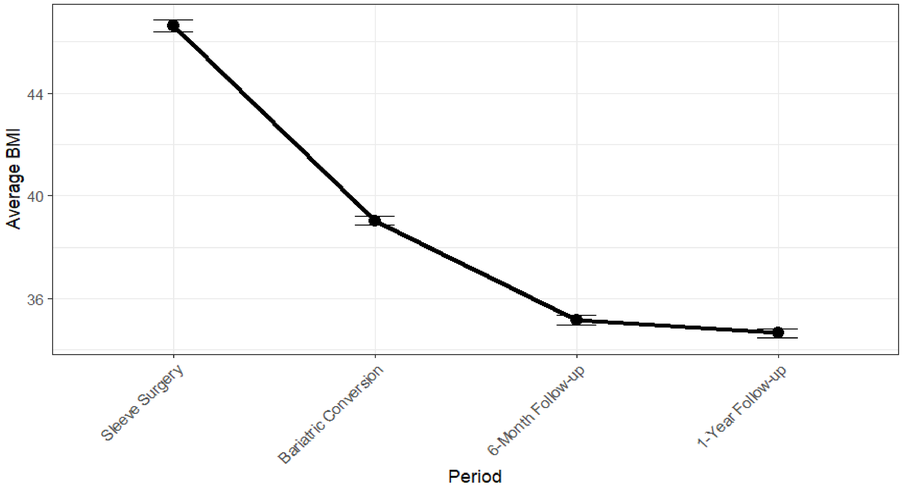


Figure 2: Average BMI across time

RESULTS

- A total of 1,232 SG were performed between January 2015 and August 2024, with 37 conversions to RYGB, resulting in a 3% conversion rate. Of note, 13 additional conversions were done on SG performed at outside institutions, for a total of 50 RYGB conversions.
- Prior to 2020, the average time, in years, of conversion from SG to RYGB was longer (M=5.85, SD = 1.46) compared to after 2020 (M= 2.06, SD=1.34), $p<0.001$ (Figure 1)
- 92% (n=46) of the conversions occurred after 2020
- The primary indications were suboptimal weight loss in 90% (n=45) (Figure 2) and symptomatic reflux in 10% of patients.
- The conversion rate was 8% (n=4) in males and 92% (n=46) in females.
- 72% (n=36) of patients undergoing conversion were $\leq$50 years old
- The average number of nutritionist visits increased significantly after 2020 (M= 3.25 vs 5.07, p=0.02)

CONCLUSION

Conversion from SG to RYGB significantly decreased in timing post-pandemic. The primary indication for conversion was weight loss, perhaps highlighting the lasting effects of COVID on mental/ physical health in patients.

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