Propensity Score Matched Analysis of Laparoscopic Revisional and Conversional Sleeve Gastrectomy and Concomitant Paraesophageal Hernia Repair

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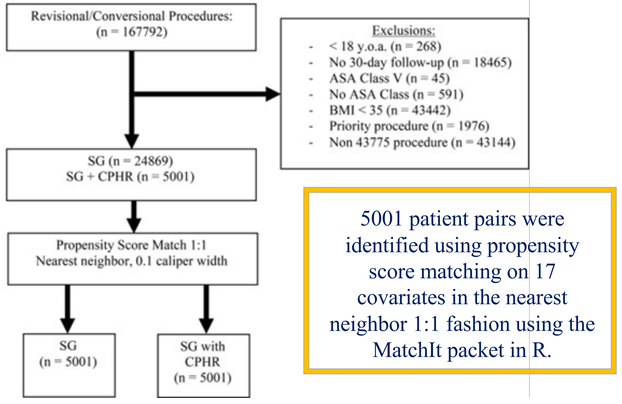
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Introduction

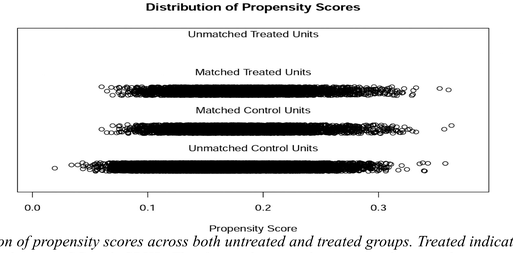
- Bariatric surgery remains the most effective sustained weight loss option for patients with severe obesity. [1]
- Annually, **580,000** bariatric operations in the US [1]
- **40%** of bariatric patients suffer from a hiatal hernias. [2]
- Patients undergoing revisional/conversional sleeve gastrectomy (SG) often present with greater numbers of comorbidities than primary SG. [3-5]
- Is concurrent paraesophageal hernia repair (CPHR) safe in patients undergoing revisional/conversional laparoscopic sleeve gastrectomy (SG)?

Methods

MBSAQIP database analysis from 2015-2020.

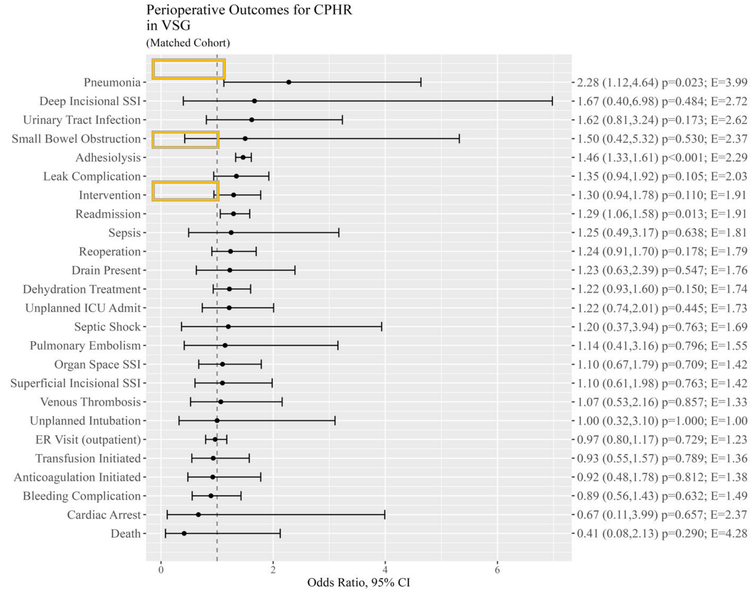


5001 patient pairs were identified using propensity score matching on 17 covariates in the nearest neighbor 1:1 fashion using the MatchIt packet in R.



Distribution of propensity scores across both untreated and treated groups. Treated indicates patients undergoing SG with CPHR. This figure shows each patient in the treated group received a matched patient from the control group.

Results



Forest plot showing odds ratios with 95% confidence intervals (horizontal bars). Odds ratios with P-values and E-values are shown on the right. Dashed line indicates odds ratio of one.

Increased Risk	No Difference
Pneumonia	Leak
Readmission	Infection
Adhesiolysis	Bleeding

Conclusions

- Patients undergoing revisional/conversional SG often present with greater numbers of comorbidities than primary SG. [3-5]
- The rate of complications in patients undergoing laparoscopic revisional/conversional SG and CPHR are low.

Revisional/Conversional Sleeve Gastrectomy

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Concomitant Paraesophageal hernia repair

CPHR is a safe option when combined with the laparoscopic revisional/conversional SG procedure in the early postoperative period.

References

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