An official website of the United States government
Here's how you know

FULL TEXT LINKS

Review Cureus. 2022 Nov 9;14(11):e31309. doi: 10.7759/cureus.31309. eCollection 2022 Nov.

A Comparison Between the Postoperative Complications of Laparoscopic Sleeve Gastrectomy (LSG) and Laparoscopic Roux-en-Y Gastric Bypass (RNYGB) in Patients With Morbid Obesity: A Meta-Analysis

Reda H Mithany [1], M Hasaan Shahid [2], Farukh Ahmed [3], Saryia Javed [4], Sidra Javed [5], Anwar Zeb Khan [6], Adeel Kaiser [6]

Affiliations

PMID: 36398039 PMCID: PMC9647859 DOI: 10.7759/cureus.31309

Free PMC article

Abstract

The most successful method for treating obesity is bariatric surgery. The two most common surgeries for treating morbid obesity are the laparoscopic Roux-en-Y gastric bypass (RNYGB) and the laparoscopic sleeve gastrectomy (LSG). However, there has not been a thorough analysis of the differences in their adverse effects. The aim of this study was to analyze if RNYGB and LSG had comparable postoperative complications and mortality. To that end, results from trials comparing those who underwent RNYGB and those who underwent LSG were combined. We explored the Cochrane Library, PubMed, EMBASE, and Web of Science databases for collecting pertinent data, and 10 RCTs were included in the study. Standard deviations were used to determine the risk ratio (RR) and the 95% confidence interval (CI). No substantial difference in mortality was observed between the two procedures. However, our pooled analysis showed that patients who underwent RNYGB needed some reoperation at a higher rate compared to those who had LSG, with a pooled RR of 0.64 (95% CI: 0.42-0.98; p=0.04). Patients who had LSG suffered from fewer postoperative sequelae. While the risk of other complications was higher in RNYGB, our analysis showed that the frequency of gastroesophageal reflux disease (GERD) after LSG was greater than after RNYGB, with a pooled RR of 4.00 (95% CI: 2.55-6.28; p<0.001). Based on the above-mentioned findings, RNYGB and LSG had comparable mortality rates; however, patients who underwent LSG had a reduced risk of complications and reoperations after surgery compared to those who had RNYGB.

Keywords: bariatric surgery; laparoscopic roux-en-y gastric bypass; laparoscopic sleeve gastrectomy; lsg; morbid obesity; rnygb.

Copyright © 2022, Mithany et al.

Figures



Figure 1. PRISMA flow diagram depicting the...

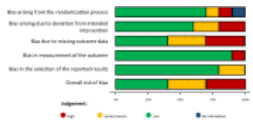


Figure 2. Assessment of the overall risk...

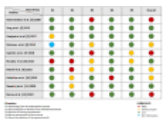


Figure 3. Risk of bias summary

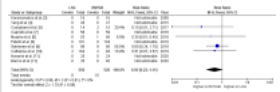


Figure 4. Comparison of hemorrhage incidence between...

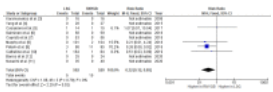


Figure 5. Comparison of intra-abdominal abscess incidence...

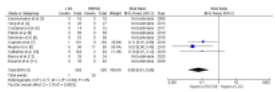


Figure 6. Comparison of internal hernia formation...

All figures (12)

Related information

MedGen

LinkOut - more resources

Full Text Sources

Europe PubMed Central
PubMed Central

Research Materials

NCI CPTC Antibody Characterization Program