Concomitant Removal of Gastric Band and Sleeve Gastrectomy: Analysis of Outcomes and Complications from the ACS-NSQIP Database.

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Objectives:
To compare mortality and morbidity of Laparoscopic Sleeve Gastrectomy (LSG) versus LSG with concomitant Gastric Band Removal (LSG/GBR).

Background
Since the approval of adjustable gastric banding in the US, a significant number of patients have undergone this procedure with substantial long term failure rates. Conversion of band to SG is an option. However, multiple reports have indicated higher morbidity and mortality rates associated with this operation, especially when performed as a single staged procedure.

Methods:
Data from The American College of Surgeons’ National Surgical Quality Improvement Program (ACS-NSQIP) database (a prospective validated outcomes registry) was obtained for the time period of 2010 to 2012 using CPT codes for LRYGB and LGBR. Demographics, preoperative comorbidities and postoperative mortality and morbidity data were retrieved. Sepsis was the primary outcome measure with overall morbidity as a secondary outcome. Bivariate and multivariate analyses were carried out using SAS (Statistical Analysis System).

Results:
During the study period, 11,189 (96.9%) patients had LSG and 357 (3.1%) had LSG/GBR for a total of 11,546 patients analyzed. On bivariate analyses, mean operative time was lower for patients undergoing LSG rather than LSG/GBR (99.6 ± 49.6 vs 130.4 ± 56.1 min, p < 0.001). There was no statistically significant difference in the rate of postoperative mortality (0.08 % vs 0.28%, p = 0.269) or that of other outcomes such as return to the operating room, wound infection, or venous thromboembolism. However, the rate of sepsis was higher after LSG/GBR (0.58% vs 1.68% p = 0.022). After multivariate analysis, the odds of developing postoperative sepsis remained significantly higher for patients undergoing LSG/GBR rather than LSG alone (OR = 3.81; CI = [1.59-9.15]).

Conclusion:
Laparoscopic Gastric Band Removal with concomitant Sleeve Gastrectomy can be done safely with low morbidity and mortality. However, this procedure carries a higher rate of postoperative sepsis, albeit lower than that reported in the literature.