

Outcomes in Super Obese Patients Undergoing Laparoscopic Sleeve Gastrectomy

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Abstract

Background: Super obese patients remain a challenge for management because of large liver size resulting in decreased work space and associated comorbidities.

Objectives: To study outcomes in super obese patients undergoing Laparoscopic sleeve gastrectomy (LSG).

Methods: Retrospective data of 123 patients undergoing LSG from January 2008 to March 2015 were analyzed prospectively.

Results: Mean age and body mass index (BMI) of 123 patients (± 2 standard deviation [SD]) were 39.9 ± 23.3 years and 55.6 ± 10.54 kg/m², respectively. Mean percentage excess weight loss (%EWL) (± 2 SD) at 1, 3, 5, and 7 years was $63\% \pm 36.7\%$, $62.3\% \pm 29.0\%$, $56.5\% \pm 35.8\%$, and $58.6\% \pm 40.3\%$, respectively. The preoperative BMI correlated with %EWL at 1 year ($r^2 = 0.0397$, $P = .044$). Staple line leak, bleeding, deep venous thrombosis, and 30-day mortality occurred in 1.6%, 0%, 0.8%, and 0% of the patients, respectively. Stricture formation and new onset gastroesophageal reflux disease (GERD) occurred in 0.8% patients each. Of the diabetic patients, 72.2% had remission and the rest required decreased dosage of oral hypoglycemic medications. Hypertension, obstructive sleep apnea, and GERD improved in 68.2%, 100%, and 25% of the patients, respectively. However, 25% of patients had worsening in GERD symptoms.

Conclusions: Super obese patients undergoing LSG as the primary procedure have reasonable weight loss of 62% and 56% at 3 and 5 years, respectively, with significant resolution of comorbidities.

Keywords: super obese, sleeve, laparoscopic, impact, outcomes

Introduction

LAPAROSCOPIC SLEEVE GASTRECTOMY (LSG) has been in recent times the most preferred bariatric surgical option due to its ease and low morbidity with consistent midterm results.¹⁻³ Super obese patients remain a challenge for management because of large liver size resulting in decreased work space and associated comorbidities.⁴ There have been only a few studies regarding the impact of LSG in super obese patients with no such study in Indian population.

Materials and Methods

Data of all the super obese patients undergoing LSG from January 2008 to March 2015 and completed their at least 1 year of follow-up were collected. The analysis was done prospectively on retrospectively collected data. All patients undergoing LSG had body mass index (BMI) of more than 50. All the procedures were performed by a single surgeon

according to a standardized protocol. The patients were kept on a liquid diet (very low-calorie diet) before the surgery to reduce the liver size.

Surgical procedure

Cefuroxime was used as a prophylactic antibiotic. Pneumatic compression devices were used to prevent deep venous thrombosis (DVT) preoperatively, as well as 2 weeks post-operatively. Two 12 mm and two 5 mm were used for the procedure. Greater omentum was divided at a point 4 cm from the pylorus to the angle of His. The sleeve was created over 36 French gastric tube using a stapler (tri cartridge Medtronic). A leak test was done using methylene blue to check for the suture line of the newly created sleeve.

Weight loss

Weight was recorded in the outpatient department and at admission after liquid diet. Percentage excess weight loss

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