

Is Laparoscopic Sleeve Gastrectomy for Asian Super Obese a Safe and Effective Procedure?

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Abstract

Introduction: Outcomes of bariatric surgery for super obese Asians are not well reported. We aimed to compare short-term outcomes of laparoscopic sleeve gastrectomy (LSG) in Asian patients with body mass index (BMI) <47.5 kg/m² to those with BMI ≥47.5 kg/m². **Materials and Methods:** A total of 272 patients from a Singapore university hospital who underwent LSG from 2008 to 2015 with a follow-up of at least 6 months were included in the study. Primary endpoint was weight loss at 1-year and 3-years. Morbid obesity (Group 1, G1) was defined as BMI <47.5 kg/m² and super obesity (Group 2, G2) was defined as BMI ≥47.5 kg/m². **Results:** There were 215 patients in G1 and 57 patients in G2 (mean preoperative weight: 107.3 kg and 146.8 kg; mean follow-up: 27.9 and 26.8 months, respectively). Mean total weight loss at 3-years of 41.9 kg for G2 was significantly higher ($P = 0.003$) than 27.2 kg for G1. Mean percentage excess weight loss (EWL) did not differ at 3-years. There was no difference in operating time, blood loss, length of stay, 30-day morbidity and readmission. There were no conversions and mortality in both groups. Remission of hypertension ($P = 0.001$) and dyslipidaemia ($P = 0.038$) were significantly associated with achieving EWL percentage (%EWL) >50 in G1. **Conclusion:** LSG is an equally safe and effective operation in Asians with BMI ≥47.5 kg/m² when compared to patients with BMI <47.5 kg/m² in achieving significant weight loss and improvement in comorbidities. Super obese lose more weight but have lower %EWL.

Ann Acad Med Singapore 2018;47:177-84

Key words: Short-term outcomes

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