

Can Gastric Specimen Measurements Defines the Laparoscopic Sleeve Gastrectomy Outcome?

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ABSTRACT

Background: It is a matter of search that resected gastric specimen measurements (RGSM) has an effect on weight loss following LSG. The aim of this study was to investigate the influence of RGSM on weight loss at 3-6-12 months after LSG.

Methods: 64 Patients who underwent LSG between 2014-2018 at Marmara University Hospital were enrolled. The LSG procedure and RGSMs were performed using standardized techniques. Patients were followed-up every 3 months in the first year. Correlations between the percentages of excess weight losses (EWL) at 3rd, 6th, 12th months and RGSMs were evaluated.

Results: No major complication was seen. Mean body mass index (BMI) at 1 year after LSG was significantly lower than the baseline BMI 50.4 ± 8.4 kg/m² versus 31 ± 6.1 kg/m²; $P=0.001$). Mean % EWLs -3rd, -6th, -12th months were 39%, 59%, 75%, respectively. Resected gastric volume (RGV) was 803.28 ± 37.2 mL. Expansibility on resection line (LRL-e) was 17.2 ± 1.3 %. There was no correlation between RGV and % EWL at 3-6-12 mo. However, the % EWL-12 mo. was correlated with LRL-e ($r=0,514$, $p=0,014$).

Conclusion: There is a positive correlation between 12th mo EWL% and LRL-e of resected specimen. This may be a harbinger of good weight loss during the theatre.

Key words: laparoscopic sleeve gastrectomy, excess weight loss, gastric expansibility, diamensions