



# AB010. OP-10 Gastroesophageal reflux disease after sleeve gastrectomy—incidence and effectiveness of technical modifications

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**Background:** Laparoscopic sleeve gastrectomy (LSG) is the most common bariatric surgical procedure in the world, but gastroesophageal reflux disease (GERD), which is observed up to a ratio of 30% following the LSG is an important problem. The aim of this study was to share the incidence of preoperative and postoperative GERD in our LSG series, and a novel LSG technique designed to prevent GERD formation during the follow-up period in selected patients with preoperative reflux.

**Methods:** Patients who underwent LSG for morbid obesity and completed one-year follow-up duration were included. Each patient underwent preoperative endoscopy. Postoperatively, all patients received routine PPI treatment for 6 months. After six months following the procedure, PPI was discontinued, and patients were evaluated for reflux symptoms. Patient data were recorded prospectively and evaluated retrospectively.

**Results:** LSG was performed on 750 patients with a mean age of 38.1 (56.4% female) with a mean BMI of 43.6 kg/m<sup>2</sup> between 2013 and 2018. The mean follow-up was 3.4 years (1–6 years). Preoperative endoscopy revealed La-a/b esophagitis in 260 patients (35%). Seventy (27%) of the patients with esophagitis had preoperative reflux complaints. Hiatal hernia was detected in 109 patients (12%). De-novo GERD incidence after LSG was determined as 10% in our series. Symptomatic GERD developed in 50 out of 260 patients with preoperative

esophagitis and continued to use PPI in the follow-up (7%). Seventy (70%) of the patients with preoperative reflux complaints and esophagitis on endoscopy did not report any signs of GERD at the follow-up.

**Conclusions:** GERD after LSG is an important problem in long-term follow-up. Obesity alone is an independent risk factor for GERD formation. A significant proportion of patients with preoperative symptomatic reflux can recover after the weight loss. Modified LSG techniques to reduce the incidence of GERD may be effective in selected cases.

**Keywords:** Obesity; laparoscopic sleeve gastrectomy (LSG); gastroesophageal reflux disease

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