

Short-term outcomes of bariatric surgery: A single center experience

강동경희대학교병원 내과

*서민아, 전흥기, 전지은, 안규정, 정호연, 황유철, 최성일, 정인경

Background/Aims: Bariatric surgery has become the preferred therapy for persons with severe obesity refractory to medical therapy, and it is also perceived to be an effective obesity treatment. This study aimed to evaluate the short-term outcomes and efficacy of bariatric surgery. **Methods:** This study retrospectively analyzed medical records of 22 patients who underwent Roux-en-Y gastric bypass (RYGB; $n=14$) and laparoscopic sleeve gastrectomy (LSG; $n=8$) between Jan 2019 and June 2019. Weight outcomes and metabolic marker data were abstracted at baseline, 1 week, and 1 month postoperatively. Excess body weight (EBW) loss (%) was calculated by dividing the amount of weight loss after surgery by the amount of presurgery excess body weight (calculated as that excess to yield a BMI of 23kg/m^2). **Results:** The mean age of the participants was 44.7 ± 11.6 years and 54.5% was women. Their mean body weight was $107.5 \pm 23.5\text{kg}$ and median BMI was 35.8kg/m^2 . Before surgery, prevalence of diabetes, hypertension, and dyslipidemia were 45.5%, 77.3%, and 68.2%, respectively. At the postoperative 1-week and 1-month follow-ups, the mean EBW loss were 14.1% and 30.7% respectively. No significant difference in weight loss was found according to BMI category, sex, and type of surgery. Compared to baseline, body weight, BMI, and waist circumference were also significantly reduced after 1 week and 1 month, while body fat proportion was not changed. Additionally, lipid profiles were significantly different at 1 months, with triglyceride levels improving by $38.8 \pm 54.7\text{mg/dL}$ and low-density lipoprotein levels improving by $16.4 \pm 16.6\text{mg/dL}$. Glycemic parameters of insulin resistance and secretion were not significantly changed, although all participants had dramatically reduced their use of antidiabetic, anti-hypertensive, and lipid-lowering medications. No one developed severe post-operative complications until 1 month. **Conclusions:** A substantial short-term reduction in weight and significant improvements in metabolic markers followed bariatric surgery, without any severe complications. The long term durability of weight and comorbidity control is further needed to be elucidated in these subjects with severe obesity.

Figure. Excess body weight loss at various times after bariatric surgery

