

Long-term surgical outcomes in patients with BMI <50 undergoing Roux-en-Y gastric bypass versus vertical sleeve gastrectomy

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Vertical sleeve gastrectomy (VSG) is gaining popularity in the surgical treatment of morbid obesity compared to the standard Roux-en-Y gastric bypass (RYGB). Our study aims to evaluate the long-term outcomes of VSG versus RYGB in patients with BMI less than 50.

We conducted a retrospective population-based analysis using the Ontario Bariatric Registry of adults who underwent VSG or RYGB between May 2010 and June 2021 in Ontario, Canada. Percentage of total weight loss (%TWL) and percentage of excess weight loss (%EWL) were compared between those undergoing VSG versus those undergoing RYGB. Secondary outcomes, including improvement in comorbidities and surgical conversions were compared.

Of 17,267 patients undergoing bariatric surgical treatment, 1,956 (11.3%) underwent VSG and 15,311 (88.7%) had RYGB. %TWL was 20.5 and %EWL was 48.4 for those who underwent VSG versus 27.9 and 65.4 for those underwent RYGB at 5 years ($p < 0.001$). Higher improvement at 5 years postoperatively was observed in reflux, sleep apnea, dyslipidemia, and musculoskeletal pain in patients who underwent RYGB compared to those who underwent VSG. Additionally, 0.07% of patients after RYGB and 2.2% of patients after VSG underwent revisional surgery at 5 years ($p < 0.001$).

Overall, RYGB results in favourable weight loss, higher resolution of comorbidities, and less revisions compared to VSG.