

Second-stage duodenal switch for weight loss failure after sleeve gastrectomy

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Introduction: Laparoscopic sleeve gastrectomy (SG) has become the most frequently performed bariatric surgery in North America. However, long-term follow-up results include weight loss failure. The surgical management for this issue is still debated.

Objective: To assess the medium term benefits and risks of adding a biliopancreatic diversion with duodenal switch (BPD-DS) for the management of SG weight loss failure.

Methods: All patients who underwent a BPD-DS for insufficient weight loss or weigh regain following SG were included in this study. Data were extracted from a prospective electronic database.

Results: One hundred eighteen (n=118) SG were converted to BPD-DS at our hospital between December 2006 and January 2017. Mean initial BMI and age were respectively 55.0 ± 12.0 kg/m² and 44.1 ± 10.2 years and sex-ratio is 75F/43H. A majority of patients (92,4%) were available for follow-up at a mean 57.7 ± 22.1 months from the initial surgery. Patients underwent the BPD-DS after a mean 30.7 ± 14.7 months. There was no short-term mortality and one non-related long-term mortality. Major 30-days complications occurred in 6.8% of cases (n=8) after second-stage BPD-DS.

At the time of conversion, the Excess Weight Loss (EWL) was $31.6 \pm 13.7\%$ and total body weight loss (TBWL) was $18.0 \pm 8.3\%$. Following BPD-DS, the EWL and TBWL were respectively $52.4 \pm 21.1\%$ and $38.0 \pm 9.9\%$ at 1 year (n= 69), $57.6 \pm 23.9\%$ and $40.0 \pm 10.8\%$ at 2 years (n= 38) and $68.4 \pm 27.9\%$ and $46.5 \pm 9.4\%$ at 3 years (n=21).

Conclusion: Second-stage DS is a valuable option for the management of failed SG, with an additional 36% EWL and 28% TBWL.