

Analysis of Weight-Loss Outcomes Following Laparoscopic One Anastomosis Duodenal Switch

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Abstract

Background: Laparoscopic one anastomosis duodenal switch (OADS) is one of the most effective bariatric surgeries aimed at simplifying duodenal switch procedure and reducing malabsorption without compromising weight-loss efficacy. This study analyzed weight-loss outcomes following OADS surgery with a common channel ≥ 300 cm.

Methodology: Between June 2016 and November 2020, 150 patients who underwent OADS surgery with a common channel ≥ 300 cm were included in the study. The weight-loss outcomes of these patients at six months and one year after surgery were retrospectively studied with respect to various perioperative variables including biliopancreatic limb (BPL) and common channel lengths.

Results: At six months and one year after surgery, %TWL was 30%, 39.4%, and %EWL was 75%, 98.8%, respectively. The BMI loss, weight loss and %TWL were directly proportional to preoperative BMI and weight, while the %EWL was inversely proportional to these variables. Preoperative BMI was found to be an independent predictor of BMI loss and %EWL. The BMI loss, and weight loss were also directly proportional to BPL length. The %TWL was directly proportional to BPL length at one year after surgery. Age, gender and diabetes did not have significant effects on the weight-loss outcomes. The success rate (%TWL $\geq 25\%$) was 88.9% and 99.2% at six months and one year after surgery, respectively.

Conclusions: OADS surgery using a common channel ≥ 300 cm appears to be highly effective for weight loss. Preoperative BMI, weight and BPL length were found to be significant predictors of weight-loss outcomes following this surgery.

Key words: obesity, diabetes, weight loss, bariatric surgery, metabolic surgery