

## **DOES PREOPERATIVE WEIGHT LOSS PREDICT SUCCESS FOLLOWING SURGERY FOR MORBID OBESITY?**

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**Background:** Our clinical experience suggests that pre-operative weight loss may be a reasonable surrogate for compliance in patients considering surgery for morbid obesity. In this study we analyze preoperative weight loss as a predictor of post operative success in patients following surgery for morbid obesity.

**Methods:** Data was obtained from a retrospective chart review of 562 patients that presented for assessment at a multidisciplinary obesity clinic (February 1, 2003 to February 1, 2007). The primary outcome is the correlation of pre-operative weight change with post-operative weight loss at 1 and 2 years. Data analysis was performed using a mixed procedure for repeated measures.

**Results:** 146 patients met the inclusion criteria (23 Male and 123 Females). Mean age is 39.5 years (18-63yrs) and mean BMI 52.6 kg/m<sup>2</sup> (34.4-95.3). Co-morbid disease included diabetes 15.7%, hypertension 30.8%, mental illness 38.4%, and musculoskeletal disease 56.8%. Procedures performed include 16 VBG, 43 open RYGB, 52 laparoscopic RYGB and 35 LAGB. The duration of pre-operative assessment ranged from 100 to 737 days (mean 275.5 days). Pre-operative weight change (defined as a 2% or greater change from initial body weight) was observed in 31 patients (21.2%) who gained weight and 56 patients (38.3%) who lost weight while 59 patients (40.4%) maintained their weight. In a longitudinal assessment of weight of all patients over time, post-operative weight loss was not influenced by pre-operative weight change among females. However, among males (23 subjects) the relationship was significant. Males who gained weight pre-operatively had the worst outcomes.

**Conclusions:** Patients may achieve satisfactory early post-operative outcomes despite inconsistent or marginal pre-operative weight change. Pre-operative weight change may not fully reflect compliance with lifestyle recommendations. Patients should not be considered poor candidates for surgery based on pre-operative weight change alone.