

Vazzana A, Youn HA, Huang KY, Brotman LM, Hirsch G, Nadler EP, Ren CJ, Fielding GA. *Health and Mental Health Functioning in Adolescent Lap-Band Surgery Patients*. International Conference on Eating Disorders, May 2007.

The presentation described an ongoing study of 49 morbidly obese adolescents (mean weight of 297 pounds), ages 14 through 17, who were on average 166 pounds over their ideal weight. The 34 female and 15 male adolescents elected to undergo Lap Band surgery, a form of bariatric surgery in which an adjustable silicone band is laparoscopically placed around the upper portion of the stomach, thus restricting the quantity of food that can be consumed. Baseline psychological evaluations, including clinical interviews and adolescent self- and parent-report questionnaires, were completed on all patients prior to surgery. Fifty-seven percent of the adolescents had been diagnosed with a psychiatric disorder (most often a mood disorder, disruptive behavior disorder, or binge eating) over the course of their lives, and almost 40% had an active diagnosis at the time of the initial evaluation. Sixty percent experienced impairment in how well they functioned, interpersonally (with friends or family members) and/or academically. The majority of adolescents had been bullied, socially rejected, and otherwise stigmatized based on their size.

Subsequent to surgery, the adolescent's physical and emotional health was evaluated. After the initial recovery period, adolescent's physical health (including weight) was assessed every three months. Psychological evaluations were conducted at six months (if the patient had a history of psychiatric illness) or at one year post surgery.

For the 40 adolescents with six month physical health assessment data, their percentage of excess weight decreased by an average of 29%. Although males initially carried more excess weight than females (200 lbs versus 151 lbs over their ideal weight), males lost weight at a quicker pace than females, and by six months post surgery, their percentage of excess weight was statistically no different than the females' excess weight.

Twenty five patients completed the one-year post surgical psychological evaluation. Relative to their pre-surgical baseline levels, there were significant improvements in regard to eating habits, emotional well-being and physical health. The adolescents reported less hunger and disinhibition (e.g., eating in response to emotional or environmental cues) when eating, and greater restraint of eating. They felt better able to perform physical activities without health limitations; had fewer physical constraints when engaging in daily activities; experienced less pain or limitations due to pain; and perceived their general health as better than it was prior to surgery. One-year post surgery, the adolescents reported feeling more energetic, happy, and calm, and less nervous and depressed. They reported that their social functioning was improved, and this perception was supported by clinical interview which found that the patients' overall functioning was significantly better than it was prior to surgery.

One of the goals of the study was to determine which, if any, of the adolescents' initial characteristics predicted the amount of weight loss. Data pertaining to the 40 adolescents who had completed their six-month post-surgery physical were examined. Interestingly, demographic factors and eating habits prior to surgery did not predict the degree of weight loss at 6 months following surgery. This indicates that significant weight loss was possible for adolescents with a range of demographic characteristics and eating habits (for example, younger as well as older adolescent patients). In contrast, patients' mental health status at the time of their initial assessment did predict extent of weight lost six-months later. Whereas the total average of excess weight loss was 29%, adolescents with no psychiatric disorders lost an average of 33% of their excess weight; adolescents with one disorder lost an average of 25% of their excess weight; adolescents with two disorders lost 17% and adolescents with three or more psychiatric disorder lost only 9% respectively of their excessive weight. Thus, each psychiatric illness prior to surgery resulted in an 8% reduction in weight loss. Given the effect that a patient's psychological health can have on weight loss following surgery, it was recommended that patients with comorbid mental health problems receive additional support prior to or following Lap Band surgery. Future research goals include gaining a better understanding of ways in which mental health problems interfere with weight loss 6 months following surgery, and determining the role of factors such as type of diagnosis (for example, depression versus binge eating disorder), compliance, family support and medical comorbidities.