

Preliminary analysis of weight loss and weight regain after sleeve gastrectomy

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Abstract:

Our objective is to assess weight loss and weight regain in patients undergoing sleeve gastrectomy surgery in our center. Weight changes were analyzed in 80 patients undergoing gastric sleeve surgery between 2010 and 2018, with a follow-up of not less than 2 years. A percentage of excess weight lost greater than 50 in 78.7% of patients, more than 70 in 45% and above 90 in 13.7% is objective. We observed a weight gain of 10 kg or more over the lowest weight achieved in 8 patients (5 women/3 men). An increase in BMI above 35 after adequate weight loss appears in 3.1% of patients. The results found are within the optimal ranges of weight loss after sleeve gastrectomy according to the published works. Most patients with weight regain had not achieved adequate weight loss after surgery.

Keywords:

- Sleeve gastrectomy
- Weight loss
- Weight regain

Introduction

Sleeve gastrectomy is one of the most frequently performed bariatric surgeries worldwide along with gastric bypass. Its main advantage is to be a purely restrictive technique that does not require anastomosis which theoretically reduces the risk of postoperative complications. With this technique, an adequate weight loss has been objective in the short and

medium term in patients with BMI less than 45 although in patients with BMI above 55 it seems insufficient requiring the implementation of a second time [1]. Our goal is to assess the weight modifications in the patients of our center after this intervention.

Material and Methods

retrospective observational study analyzing the weight changes of 80 patients (62W/18M) operated between 2010 and 2018, with a follow-up of not less than 2 years (between 2-10 years). Initial and current BMI, weight in kilos gained and lost during follow-up and percentage of excess weight lost are collected. As a definition of weight regain, the increase in BMI above 35 after adequate weight loss and the increase in more than 10 kg of the nadir weight are used. medium term in patients with BMI less than 45 although in

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Results

A percentage of excess weight lost (%EWL) greater than 50 was found in 78.7% of patients (47W/16M), more than 70% in 45% (28W/8M) and above 90 in 13.7% (10W/1M). An adequate weight loss was not achieved by 21.3% of the patients after the intervention, of which 9 patients had a %EWL between 40 and 49 (11.2%), 2 patients between 30 and 39 (2.5%), 5 patients between 20 and 29 (6.25%) and only one patient below 10 (1.25%).

Weight gain by more than 10 kg over the nadir weight is observed in 8 patients (5W/3M) of the total number of patients (10%). In three of these patients the increase of 10 kg did not mean an increase in BMI above 35. The rest (5 patients) had not achieved adequate weight loss at the outset.

An increase in BMI above 35 after adequate weight loss appears in 3.1% of patients (2W). We observed a mean baseline BMI or maximum BMI of 43.51 in the range [34.7-62]. The mean minimum BMI is 25.9 in a range of [20-48]. The mean current BMI is 25.94 in a range of [20-51]. In 71.25% of patients we observed that the minimum BMI achieved coincides with that which the patient has maintained during follow-up.

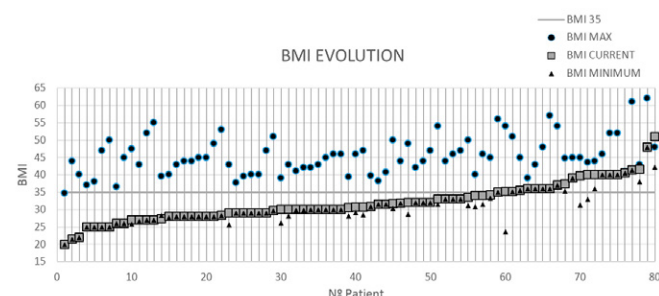


Figure 1. BMI Evolution of each patient

Discussion

In the literature there are up to six definitions of weight regain: recovery of 25% of the weight after the nadir weight after 2 years of surgery, gain of more than or equal to 15% of the maximum initial weight loss, recover a BMI above or equal to 35, gain of more than 10 kilos of the nadir weight, any weight gain after remission of type 2 DM and increase in BMI of 5 kg/m² or more over nadir weight [2]. This variety makes it difficult to analyze the results, and compare the different published studies.

Conclusions

The results found are within the optimal ranges of weight loss after sleeve gastrectomy according to published work [2,3,4,5]. Most patients with weight regain had not achieved adequate weight loss after surgery. The lack of standardized definitions of weight gain makes it difficult to assess the results and complicates decision-making when indicating revision surgery for this reason.

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