

Review of gastroesophageal reflux disease after gastric bypass

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Abstract

Obesity is one of the main factors implicated in gastroesophageal reflux disease (GERD). More than 36% of patients undergoing bariatric surgery present preoperative symptoms. Gastric bypass is one of the most effective techniques to simultaneously treat GERD and obesity, significantly improving GERD symptoms. Laparoscopic sleeve gastrectomy (SG) worsens GERD symptoms with a progressive trend over the years of follow-up. A review has been carried out whose objective has been to analyze the improvement or not of the symptoms of gastroesophageal reflux disease in patients diagnosed with this disease prior to undergoing gastric bypass surgery (RYGB). A total of 23 patients have undergone gastric bypass surgery in our center between

2019 and 2022, of which 5 cases have been diagnosed with GERD preoperatively. 100% of the patients have referred improvement of the reflux symptoms after the BGY. The mean time elapsed from the operation to the disappearance of symptoms was 3 months.

Keywords:

- Gastric bypass
- GERD
- Gastroesophageal reflux
- Bariatric surgery

Introduction

Gastric bypass is one of the most effective techniques to treat obesity and GERD simultaneously⁽¹⁾. A large percentage of patients who are going to undergo bariatric surgery present symptoms of GERD. Furthermore, one of the most frequent causes of reintervention due to sequelae is gastroesophageal reflux (GER) after a sleeve gastrectomy⁽²⁾. The aim of this review is to analyze the impact gastric bypass has had on patients diagnosed with GERD preoperatively. We also analyzed the mean time elapsed from the intervention to the disappearance of symptoms.

condition that develops when the reflux of stomach contents causes bothersome symptoms and/or complications (2). Five patients (60% women and 40% men) had been diagnosed with GERD preoperatively.

Results

Five cases (3 women and 2 men) of the twenty-three patients had been diagnosed with GERD prior to undergoing gastric bypass surgery. This represents an incidence of preoperative GERD of 21.74% in our study. 100% of the cases reported improvement of the reflux symptoms after RYGB, remaining asymptomatic to date. Previously, two patients had undergone SG surgery. Both started with gastroesophageal reflux symptoms after gastrectomy, opting for revision surgery after failure of conservative management. Complete improvement of symptoms was achieved in both cases. The mean time elapsed from the operation to the disappearance of symptoms was 3 months.

Material and methods

A retrospective observational study was carried out including 23 patients who underwent gastric bypass surgery between January 1, 2019 and December 31, 2022 were included in our center. According to the Montreal classification, GERD is a

PACIENTS	SEX	REVISION SURGERY	PREOPERATIVE GERD	TIME UNTIL THE DISAPPEARANCE OF SYMPTOMS
1	Women	No	Yes	3 months
2	Women	Yes	Yes	4 months
3	Man	No	Yes	4 months
4	Women	No	Yes	3 months
5	Man	Yes	Yes	1 month

Discussion

According to the literature, more than 36% of patients who undergo bariatric surgery present preoperative symptoms⁽¹⁾. In our series, the incidence of preoperative symptomatic GERD was 21.74%. These results could be explained for two reasons. Firstly, because in our study only patients who underwent gastric bypass surgery were taken into account, and secondly, because of the sample size of our work.

There are studies where an increase in gastroesophageal reflux has been observed in the follow-up of patients operated on for SG. It seems to be mainly due to anatomical changes added to the increase in intragastric pressure and possible alterations in gastric emptying⁽³⁾. Two patients in our study underwent revision surgery, performing a gastric bypass in both cases. The two cases had previously undergone surgery for GS developing GERD symptoms, this disease being one of the main indications for revision surgery.

According to Borbély Y et al, OS leads to a considerable rate of postoperative GERD⁽⁴⁾. However, in our study, there was no close follow-up to check whether patients undergoing SG surgery developed GERD in the years after surgery. Other studies describe a significant decrease in GERD symptomatology up to 2 years after surgery independent of the type of technique performed⁽⁵⁾.

Conclusions

GERD is a disease directly related to obesity. SG is one of the most popular procedures, being safe and efficient. However, despite all its favorable features, there is growing evidence in the literature that it increases the long-term incidence of gastroesophageal reflux disease^(3,4). Gastric bypass has proven to be an efficient technique for the improvement of GERD-related symptoms⁽¹⁾.

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