

# Self-Induced Stomal Obstruction Post-LAGB – A Case Report

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## Abstract

Laparoscopic adjustable gastric banding (LAGB) is an effective surgical tool for the management of morbid obesity. Many complications are associated with this operation. This case report presents a rarely encountered complication following LAGB wherein a patient self-induced stomal obstruction. The patient was managed on outpatient basis by band deflation. This case stresses on the importance of proper information sharing with the patients who undergo surgical operations.

**Keywords:** Case Report, Laparoscopic adjustable gastric banding, Lap band, Morbid obesity, Stomal obstruction

## 1. Introduction

Over the past three decades, laparoscopic adjustable gastric band (LAGB) has got established as an effective bariatric surgical operation to induce sustained weight loss. It involves placement of an inflatable silicone device around the proximal portion of the stomach with an aim of decreasing the food consumption. For many years, LAGB had retained the first choice procedure status in the management of morbid obesity<sup>1</sup>. However, more recently, the popularity of the LAGB has been on a decline due to a variety of complications<sup>1-3</sup>, and hence, the procedure has been gradually replaced by other procedures such as the Roux-En-Y gastric bypass and sleeve gastrectomy. This case report presents a rare complication of self-induced stomal obstruction after LAGB.

## 2. Case Presentation

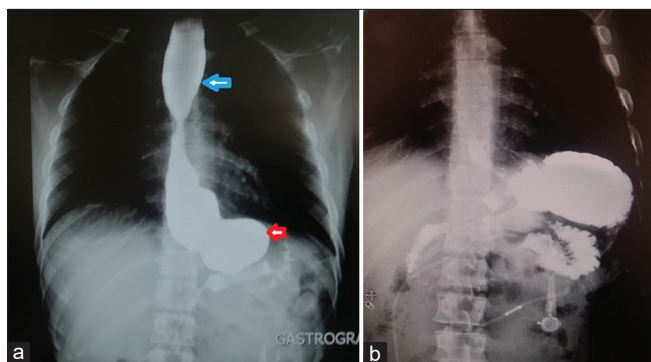
A 29-year-old male patient was seen on an outpatient basis, 14 months post-LAGB. LAGB had been undertaken elsewhere for the management of morbid obesity (BMI 41.7). At 1-month post-LAGB, the band had been filled by the operating surgeon by 2 cc normal saline injection

into the palpable subcutaneous port, after he had tolerated solids followed by another 2 cc and 1 cc at monthly intervals.

The patient had lost about 7% of his weight over 1 year but he had not attained personal satisfaction and hence had stopped attending the follow-up clinics. He had then, on the basis of information gathered on internet, self-filled the band twice with unspecified volume, without seeking any medical advice. The patient had started losing weight to his satisfaction but had also experienced chest discomfort, difficulty in swallowing, and episodes of vomiting. The symptoms had increased in intensity over the preceding 2 weeks. There was no other medical, surgical, or psychosocial history of significance. On examination, the patient was conscious, cooperative, and well oriented. Vitals signs revealed tachycardia and features of moderate dehydration. Weight was 79 kg and BMI was 27.6. Abdomen was soft and non-tender with no clinical evidence of port infection. The patient was resuscitated and upper gastrointestinal contrast study was conducted. The contrast film (Figure 1a) revealed gastric stomal obstruction with dilated pouch and esophagus.

Under all aseptic precautions, the gastric band was deflated by aspiration of 9.5 ml at the port site. The patient

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**Figure 1.** (a) Pre-deflation: Stomal obstruction with dilated gastric pouch (red arrow) and dilated esophagus (blue arrow); (b) Post-deflation: Free out flow of contrast from the stomach.

attained symptomatic relief and at 3-week follow-up, contrast study was repeated which demonstrated reversal of changes in the previous study and free outflow of contrast from the stomach (Figure 1b).

The patient was counseled and informed about the working of gastric bands. He was apprised about the other options of obesity management and attached to the services of board-certified bariatric surgeon where the option of removal of band with subsequent laparoscopic sleeve gastrectomy was offered to the patient.

### 3. Discussion

The laparoscopic implantation of an adjustable gastric banding (LAGB) was first described in 1993 by Belachew *et al.* at the Centre Hospitalier Hutois, Belgium<sup>4</sup>, and in the first decade of the 2000s, it underwent a lot of modifications, innovations, and improvements to emerge as one of the most common bariatric surgical operations in the world.

However, in recent years, LAGB has gradually decline in popularity due to the reports of a wide range of complications which include gastric band slippage, port or tubing malfunction, stomal obstruction, band erosion, pseudo-achalasia, megaesophagus, pouch dilation, gastric wall necrosis, and port infection<sup>2,5</sup> Approximately half of the cases may require reoperation post-LAGB<sup>6</sup> for early or late major complications.

Stomal obstruction is the obstruction to the flow of food from the gastric pouch proximal to the gastric band to the rest of the stomach. This is a rare complication

and is reported in patients who fail to adhere to diet modification or else who swallow unchewed food<sup>7</sup> This complication can occur at any time although there is higher probability in the early postoperative period. Patients report with dysphagia, gastroesophageal reflux, postprandial vomiting, difficulty to swallow, and abdominal pain/discomfort. Deflation of the band by fluid withdrawal followed with behavioral/diet modification is the first line of management as was adopted in our case<sup>3,4</sup>. In case of failure, endoscopic removal of food if that is causing the obstruction or else the surgical removal of gastric band corrects this complication.

Upper gastrointestinal tract contrast imaging studies are often required to evaluate the complications of LAGB. Lanthaler *et al.* conducted a study on weight loss and the quality of life post removal/deflation of gastric band and concluded that up to 73% of patients would not prefer to choose to have this modality of weight control again<sup>8</sup> Brown and O'Brien, however, on the basis of the data related to the long-term efficacy and complications, derived from multiple high-volume bariatric surgical centers, stressed that LAGB must not be abandoned<sup>9</sup>.

The presented case also points toward an important fact that the proper education and counseling of patients is vital when adopting sophisticated surgical procedures, particularly in the present era of access to internet, when the patient may self-study and potentially misinterpret the available information.

#### 3.1. Patient perspective

The patient expressed satisfaction about the manner his complication was diagnosed and promptly managed. He also appreciated that self-intervention in health-related matters could lead to dangerous outcomes and hence never resorted to. He also accepted our request to allow the usage of his case history for academic purposes.

### 4. Conclusion

Laparoscopic adjustable gastric banding is an effective bariatric surgical operation. Self-induced stomal obstruction is a rare complication of this procedure. Proper perioperative counseling of the patients is very important to avoid such complications.

## 5. Acknowledgment

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## 6. Conflicts of Interest

There are no conflicts of interest.

## 7. References

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