



# Laparoscopic Removal of Eroded Non-Adjustable Gastric Band and Conversion to Roux-en-Y Gastric Bypass

Agustin Duro<sup>1</sup> · Virginia M. Cano Busnelli<sup>1</sup> · Fernando G. Wright<sup>1</sup> · Axel F. Beskow<sup>1</sup>

Published online: 28 April 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

## Abstract

This video shows the case of a 64-year-old morbidly obese woman, with a non-adjustable gastric band, who consulted for weight regain and gastroesophageal reflux disease (GERD) symptoms and was converted to Roux-en-Y gastric bypass (RYGB). The operative technique included extensive lysis of adhesions, complete band dissection, partial gastrectomy of the fundus and body due to band erosion and conversion to RYGB.

**Keywords** Bariatric surgery · Gastric band · Non-adjustable gastric band · Gastric bypass · Roux-en-Y gastric bypass · Revisional bariatric surgery · Gastric band erosion

## Introduction

Non-adjustable gastric banding, first introduced in the early 1980s, involved the placement of a silicone ring around the upper part of the stomach to restrict food intake and achieve weight loss [1]. Despite initial promising results, complications and weight regain appeared in long-term follow-up, necessitating reoperation for band correction or removal, and conversion to another bariatric procedure [2, 3].

**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11695-020-04631-z>) contains supplementary material, which is available to authorized users.

✉ Agustin Duro  
agustin.duro@hospitalitaliano.org.ar

Virginia M. Cano Busnelli  
virginia.cano@hospitalitaliano.org.ar

Fernando G. Wright  
fernando.wright@hospitalitaliano.org.ar

Axel F. Beskow  
axel.beskow@hospitalitaliano.org.ar

<sup>1</sup> Department of General Surgery, Hospital Italiano de Buenos Aires, Juan D. Perón 4190, C1199ABD Buenos Aires, Argentina

## Methods

This video shows a 64-year-old woman with a BMI of 40 kg/m<sup>2</sup> and a history of hypertension, hypothyroidism, and asthma, with a non-adjustable gastric band placed in the year 2000 in another hospital, who consulted for weight regain and gastroesophageal reflux disease (GERD) symptoms. A CT scan and a barium swallow revealed a dilated pouch and the band constricting the middle part of the gastric body. Esophagogastroduodenoscopy did not show band penetration.

## Results

Operative technique included extensive lysis of adhesions, complete band dissection until a segment was found eroded into the gastric wall, partial gastrectomy, and conversion to Roux-en-Y gastric bypass (RYGB). An antecolic, hand-sewn gastrojejunostomy and a stapled jejunajejunostomy were created. Petersen's space was left open, and mesenteric defect was closed using non-absorbable sutures. She had no postoperative complications. At 12 months, she has lost 78.54% of her excess body weight and remains asymptomatic for GERD.

## Conclusion

Like other revisional procedures, conversion from a non-adjustable gastric band to RYGB can be technically demanding, with increased morbidity, especially in cases when an erosion is present. In experienced groups, however, it seems to be safe and effective in terms of weight loss and resolution of GERD.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

**Statement of Informed Consent** Informed consent was obtained from all individual participants included in the study.

**Statement of Human and Animal Rights** All procedures performed were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

## References

1. Oria HE. Gastric segmentation: nonadjustable banding by minilaparotomy: historical review. *Surg Obes Relat Dis.* 2009;5(3):365–70.
2. Näslund E, Granström L, Stockeld D, et al. Marlex mesh gastric banding: a 7-12 year follow-up. *Obes Surg.* 1994 Aug;4(3):269–73.
3. Balogh J, Vizhul A, Dunkin BJ, et al. Clinical management of patients presenting with non-adjustable gastric band (NAGB) complications. *Yale J Biol Med.* 2014;87(2):159–66.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.