



# Short Gastric Pouch for Laparoscopic Conversion of Failed Band to Roux-en-Y Gastric Bypass

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## Abstract

**Background** Laparoscopic gastric banding (LGB) is associated with high rate of failure (Stenard and Iannelli. *World J Gastroenterol*; 21:10348-57 2015, Lazzati et al. *Ann Surg*. 2016). In case of failure, conversion to Roux-en-Y gastric bypass (RYGB) is preferred (Noel et al. *Surg Obes Relat Dis*;10:1116-22; 2014, Schneck et al. *Surg Obes Relat Dis*;12:840-8, 2016).

**Methods** We present the case of a 63-year-old woman with a BMI of 57 kg/m<sup>2</sup> who underwent LGB in 2011. In 2015, she consulted for intolerance of the banding and weight regain, with a BMI of 52. The gastric band was removed, and 6 months later conversion to RYGB was performed.

**Results** The main technical problem of conversion of LGB to RYGB is where to staple the stomach, either below or above the band-related scarring tissue. Stapling below the band in a fresh non-scarring area often results in the creation of a large pouch; furthermore, the vertical part of the pouch stapling is done on scarring tissue, with a risk of leak. Stapling above the band leaves a very small part of stomach and may be technically challenging. The present video shows the conversion of LGB to RYGB. The hiatal region is dissected, and a small pouch stapling above the band-related scarring tissue is fashioned. An RYGB with a 150-cm alimentary limb and a 50-cm biliopancreatic limb is confectioned.

**Conclusions** For conversion of LGB to RYGB, a small gastric pouch above the gastric band scar tissue is confectioned, after dissection of the hiatal region and abdominal esophagus. The small pouch ensures the restriction, and all the stapling and suturing are done on healthy, fresh tissue.

**Keywords** Surgical technique · Roux-en-Y gastric bypass · Gastric band · Conversion · Revisional bariatric surgery

## Introduction

Laparoscopic gastric banding (LGB) has encountered a large consensus until laparoscopic sleeve gastrectomy (LSG) has

been introduced [1]. However, with time it has been clear that LGB is associated with a high rate of failure [2]. Furthermore, the scarring tissue around the band and the gastric plication contribute to undermine the concept of reversibility. In case of

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failure, conversion to Roux-en-Y gastric bypass (RYGB) is preferred [3, 4]. The main technical problem is where to staple the stomach either below or above the band-related scarring tissue. While stapling below the band reduces the risk of anastomotic leak, this often results in the creation of a large pouch, and the staple line leak risk persists at the vertical part of the pouch stapling. Stapling above the band leaves a very small pouch and may be technically challenging. The present report describes our technique to divide the stomach above the gastric band-related scarring area for conversion to RYGB.

## Surgical Technique

After taking down the adhesions of the left liver from the stomach, the right pillar of the crura is identified. The gastric plication is completely taken down. The abdominal esophagus is dissected free. No scarring tissue exists in this area. Once the left part of the stomach above the scarring tissue has been mobilized, the stapler is placed for the first horizontal firing above the scarring tissue. The pouch is completed with the vertical stapling. This finally results in a small gastric pouch. A 150-cm-long alimentary limb is fashioned with a 50-cm biliopancreatic limb in a standard fashion. A gastro-jejunal anastomosis is fashioned.

## Discussion

Conversion from failed LGB to RYGB may be technically challenging due to the scarring tissue surrounding the band. The main problem is to avoid stapling of the thick buckle of tissue in the area around the band. Making the pouch below the band area often results in large pouch. Indeed, if the vertical stapling of the stomach is done around the scarring tissue, a consistent part of the fundus is left. This phenomenon is amplified when a hiatal hernia exists. Indeed, this may explain the persistence of reflux symptoms in patients undergoing conversion to RYGP. The main advantages of confectioning a short gastric pouch consist in the fact that the mobilization of

the abdominal esophagus allows for the fixation of the hiatal hernia when present, reduces the tension on the gastro-jejunosomy that is frequent when the pouch is not mobilized above the band because of adhesions especially on the posterior aspect of the pouch, the pouch is small ensuring the restriction, and above all the stapling and suturing are done in a fresh tissue. The latter is of particular interest in patients with a history of erosion as this may jeopardize the vascular supply of the gastric tissue.

## Conclusions

For conversion of LGB to RYGB, confectioning a short gastric pouch allows avoiding the stapling and suturing of the thick scarring tissue around the band.

## 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.

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