



# A Step-by-Step Surgical Technique Video of Revision of Roux-en-Y Gastric Bypass with Limb Distalization

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## Abstract

The Roux-en-Y gastric bypass (RYGB) is the second most common bariatric procedure in the USA. Although the RYGB is an effective procedure, some patients will not achieve optimal weight loss or will experience significant weight regain. In this video report, we present a step-by-step surgical technique of RYGB limb distalization in a 49-year-old female patient for inadequate weight loss.

**Keywords** Revision Roux-en-Y gastric bypass · RYGB · Limb distalization · Inadequate weight loss · Surgical technique

## Introduction

Around 25–30% of the patients with Roux-en-Y gastric bypass (RYGB) will eventually fail the surgery [1, 2]. Failure may be caused by complications related to or unrelated to anastomoses or inadequate weight loss or significant weight regain [1–3]. The reported incidence of anastomotic complications after RYGB ranges from .1 to 23% [4]. The patients that fail the RYGB procedure can be reversed or converted to other bariatric procedures like the traditional Roux-en-Y duodenal switch (DS), single anastomosis duodenal-ileal bypass with sleeve gastrectomy (SADI-S), or distal bypass depending on the cause of failure [2, 5–9]. However, 350 cm of total absorptive bowel length needs to be maintained to avoid malnutrition [9].

## Purpose

The study aimed to present our surgical technique of RYGB limb distalization for inadequate weight loss.

## Materials and Methods

This is a case of a 49-year-old female patient with a body mass index (BMI) of 43.3 kg/m<sup>2</sup>. The patient had undergone RYGB procedure in the past and presented to us with inadequate weight loss.

## Surgical Technique

A step-by-step surgical technique of RYGB limb distalization is shown in the video. The patient had a Roux limb of 100 cm and a common channel of 1000 cm (Table 1). The length of the biliopancreatic limb (BP) limb was unknown. During the RYGB distalization procedure, the length of the common channel was reduced to 250 cm (Table 1). This length was chosen with the input of the patient after a long discussion about complications and bowel limb lengths. The final total length of the BP limb was approximately 800 cm (Table 1). The hand-drawn sketch of the surgical technique is shown in Fig. 1.

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**Electronic supplementary material** The online version of this article (<https://doi.org/10.1007/s11695-020-04964-9>) contains supplementary material, which is available to authorized users.

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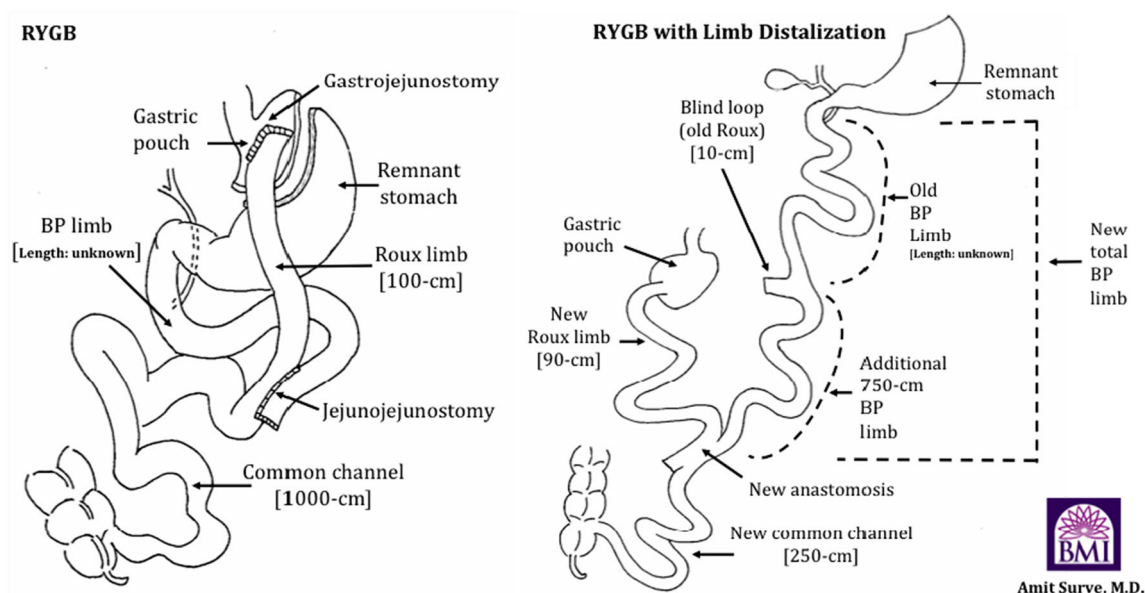
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**Table 1** Summary of the case

Limb	RYGB (preoperative)	Aim	RYGB with limb distalization (postoperative)
Roux limb	100 cm	No change	Approximately 90 cm
Blind loop	Not applicable	–	10 cm
Common channel	1000 cm	↓	250 cm
BP limb	Unknown	↑	Approximately 800 cm

*RYGB* Roux-en-Y gastric bypass; *BP limb* biliopancreatic limb



**Fig. 1** Hand-drawn sketch of the surgical technique

## Results

The blood loss, in this case, was 5 cc. The operative time was 40 min. No intraoperative complication was noted. The length of stay was 1 day. At 6 months postoperatively, the patient had a BMI of 38 kg/m<sup>2</sup> with no complaints.

## Conclusion

Laparoscopic revision of RYGB with limb distalization is a safe and feasible option for the patients with inadequate weight loss or weight regain following RYGB.

## Compliance with Ethical Standards

**Conflict of Interest** Amit Surve has no conflict of interest to disclose with respect to this video report. Daniel Cottam the corresponding author of this report is part of the speaker bureau for Medtronic and has been awarded a research grant by Medtronic for the study of Duodenal Switch.

**Ethical Approval** For this type of study, formal consent is not required.

**Informed Consent** Does not apply.

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