

## Roux-En-Y By-Pass Resection Due to Intestinal Ischemia

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### Abstract

Obesity surgery is one of the most commonly performed surgical procedures today and laparoscopy has become the preferred technique for Roux-en-Y gastric bypass. A patient transferred to the surgery service for an abdominal pain had an abdominal tomography performed which demonstrated an aspect suggestive of internal hernia. Underwent emergency laparotomy. Resection of the ischemic area was performed. Reconstruct intestinal transit was madded 4 days after primary surgery. In this case, the complete ischemia of the Bypass segment has become a challenge to reconstruct the transit.

**Keywords:** Roux-Em-Y Bypass, Internal Hernia, Mesenteric Ischemia

### Introduction

Obesity surgery is one of the most commonly performed surgical procedures today and laparoscopy has become the preferred technique for Roux-en-Y gastric bypass. The laparoscopic approach has multiple variations in the anastomotic technique and in the closure of mesenteric defects, one of the main disadvantages being the increased incidence of internal hernia [1, 2]. This is due to the inability to properly identify and close the defects of the mesentery. Thus, it is possible to establish the appearance of an acute abdominal condition with diagnostic difficulty and possible serious complications. Next, we will report a case in a young patient with mesenteric ischemia in the entire By-pass segment extension after bariatric surgery.

### Case Report

Female, 36 years old, transferred to the surgery service for having started with abdominal pain 30 days ago and worsening

in the last 2 days, from moderate to severe intensity, evolving to hemodynamic instability. History of performing a By-pass in Y-de-Roux 4 years ago. Laboratory overview at arrival: lactate 6.8 mmol/L; hemoglobin: 10.1g/dL; arterial blood gases - pH 7.08, pCO<sub>2</sub> 40.8mmHg, pO<sub>2</sub> 193mmHg, HCO<sub>3</sub> 11.7mEq/L, Base Excess -17.2. Abdominal tomography performed demonstrated distended loops on the left flank, with the presence of free fluid in between, in addition to signs of torsion of the vascular pedicle with an aspect suggestive of internal hernia and moderate amount of free fluid in the abdominal cavity.

Underwent emergency exploratory laparotomy with evidence of extensive ischemia of the intestinal segment. Resection of the ischemic area was performed, from gastroenteroanastomosis to the treitz angle, including enteroanastomosis (figure 1). Stumps remained buried, a gastrostomy was installed for gastric decompression and a nasogastric tube on the gastric pouch.



**Figure 1:** Aspect of ischemic bypass after surgical excision.

Patient referred to the intensive care unit and opted to reconstruct intestinal transit 4 days after primary surgery. Gastro-gastric anastomosis was performed between the pouch and the gastric fundus of the excluded stomach, an interposition of the jejunum buried through the treitz angle and an anastomosis between the jejunum and the third portion of the duodenum.

### Discussion

According to the literature, internal hernia after laparoscopic Roux-en Y bypass usually occurs about one year after the gastric bypass is made and can lead to perforation due to intestinal

ischemia in 9.1% and death in 1.6% of cases [3-5]. In this case, complete ischemia of the Bypass segment has become a challenge to reconstruct the transit, in view of the difficulty of anatomical and physiological restoration of the gastrointestinal tract. Therefore, it is established the importance of attention to the early diagnosis of a condition in which the symptoms in most cases evolve gradually with unspecific abdominal symptoms that can last for a relatively long period with sudden evolution to obstruction, ischemia and sepsis.

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