

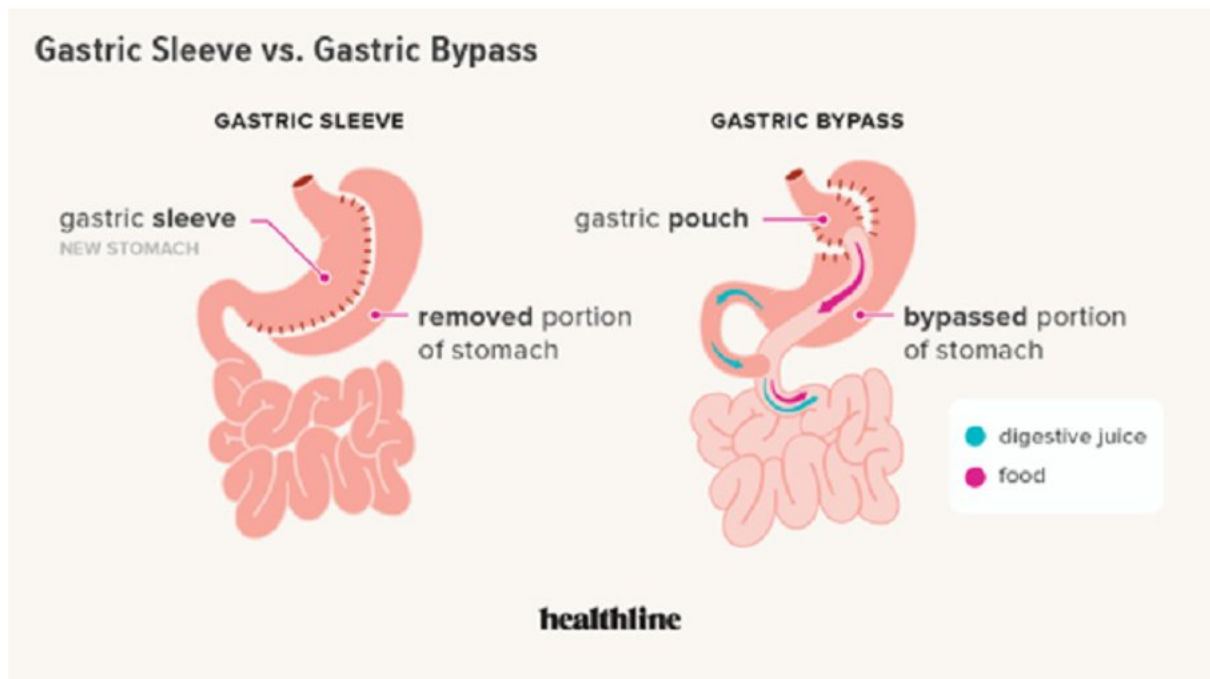
## ROBOTIC and LAPAROSCOPIC Roux-en-Y GASTRIC BYPASS at ANADOLU MEDICAL CENTER

The Roux-en-Y Gastric Bypass (RYGB) is characterized by a small (less than 30 mL) proximal gastric pouch that is divided and separated from the distal stomach and anastomosed to a Roux limb of small bowel that is 75 to 150 cm in length.

At the beginning, we divide upper part of the stomach (small gastric pouch) from the lower part.

Then we make an anastomoses between the upper part of stomach and small bowel.

Finally, we make another anastomoses in between proximal (biliopancreatic limb) and distal (alimentary limb) small bowel to maintain the continuity of stomach and the bowel.



### How is the procedure is performed?

Gastric Bypass is performed under general anesthesia and can be done both laparoscopic and robotic. Both procedures are safe and reliable.

### Duration of Surgery/Procedure

Although it depends on the BMI of patients and can be different from one patient to another, laparoscopic gastric by-pass procedure takes about 60-75 minutes and robotic gastric by-pass procedure takes about 75-90 minutes.

### Anticipated Risks

#### Gastric remnant distension:

Gastric remnant distension is a rare but potentially lethal complication following gastric bypass. Clinical features include pain, hiccups, left upper quadrant tympany, shoulder pain, abdominal distension, tachycardia, or shortness of breath. Radiographic assessment may demonstrate a large gastric air bubble. Immediate operative exploration and decompression are required if percutaneous drainage is not feasible or if perforation is suspected.

#### Stomal stenosis:

Stomal (anastomotic) stenosis has been described in 6 to 20 percent of patients who have undergone RYGB. Patients typically present several weeks after surgery with nausea, vomiting, dysphagia, gastroesophageal reflux, and eventually an inability to tolerate oral intake, including liquids. The diagnosis is usually established by endoscopy or with an upper gastrointestinal series. Endoscopic balloon dilation is usually successful.

**Marginal ulcers:**

Marginal ulcers have been reported in 0.6 to 16 percent of patients. Marginal ulcers occur near the gastrojejunostomy and result from acid injuring the jejunum, or they can be associated with a gastrogastic or, rarely, gastrocolic fistula. Patients with marginal ulcers can present with nausea, abdominal pain, gastrointestinal bleeding, stomal stenosis, or perforation. The diagnosis of a marginal ulcer is established by upper endoscopy. The mainstay of medical therapy for marginal ulcers is high-dose proton-pump inhibitors (PPIs).

**Cholelithiasis:**

Cholelithiasis develops in as many as 38 percent of patients within six months of surgery, and up to 41 percent of such patients become symptomatic.

**Ventral incisional hernia:**

Ventral incisional hernias occur with a frequency of 0 to 1.8 percent in laparoscopic series and as high as 24 percent in open series, underscoring a clear advantage of the laparoscopic approach in this regard.

**Internal hernias:**

Internal hernias have been described in 0 to 5 percent of patients after laparoscopic gastric bypass. To reduce the incidence of internal hernias, all mesenteric defects should be closed with nonabsorbable sutures.

**Small bowel obstruction:**

Small bowel obstruction (SBO) can occur at any time after an RYGB, with a lifetime incidence of 3 to 5 percent.

**Dumping syndrome:**

Dumping syndrome can occur in up to 50 percent of post-gastric bypass patients when high levels of simple carbohydrates are ingested. Patients should avoid foods that are high in simple sugar content and replace them with a diet consisting of high-fiber, complex carbohydrate, and protein-rich foods. Behavioral modification, such as small, frequent meals and separating solids from liquid intake by 30 minutes, is also advocated. Usually, early dumping is self-limiting and resolves within 7 to 12 weeks.

**Metabolic and nutritional derangements:**

Metabolic and nutritional derangements are common in patients with severe obesity and can be exacerbated following after bariatric surgery, making postoperative life-long compliance with appropriate dietary choices and vitamin supplementation imperative. Decreased oral intake as well as altered absorption of food from the stomach and small bowel reduces absorption of various micronutrients, particularly iron, calcium, vitamin B12, thiamine, and folate.

**Nephrolithiasis and renal failure:**

RYGB has been linked to metabolic changes that could alter urine chemistry profiles, resulting in both higher calcium oxalate supersaturation and urine oxalate, lower citrate, and lower volume. Consequently, patients have a higher risk of developing nephrolithiasis after RYGB (pooled relative risk 1.79, 95% CI 1.54-2.10).

**Change in bowel habits**

Loose stool and diarrhea are more common after RYGB. Steatorrhea and more frequent stools can occur with excessive fat intake. In addition, these symptoms can be due to subclinical lactose intolerance, which is only recognized when dairy products are used in an effort to achieve adequate protein intake after bariatric surgery.

**Failure to lose weight and weight regain:**

Failure to lose weight following Roux-en-Y gastric bypass is rare and is often due to maladaptive eating patterns during the early postoperative period. By contrast, significant late weight regain occurs in up to 20 percent of patients, especially those with super-obesity (BMI >50 kg/m<sup>2</sup>) at the time of the initial operation. It is often due to progressive noncompliant eating and other behavioral habits, development of a functional GG fistula, gradual enlargement of the gastric pouch, or dilatation of the gastrojejunal anastomosis.

**Success Rates**

My personal success rate is high.

I have not had any serious complication (leak, bleeding, stenosis etc.) yet.

**Recovery Process / Period:** About two weeks

**Days of Admission:** 2-3 days.

**Days of Stay in the Country:** About 7-10 days.



## Expected After Care

We recommend dietitian and psychologist follow up to our patients for at least 2 years after surgery.

## Doctor experience with the Procedure

My personal experience for gastric by-pass is about 75 cases.

## Scientific References

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