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# Greatest Guru of all : LIFE

**"The will must be stronger than the skill."** - Muhammad Ali

As Actor and Director Sylvester Stallone has rightly said it in the movie 'Rocky Balboa': "The world ain't all sunshine and rainbows. It's a very rough, mean place. And no matter how tough you think you are, it will always bring you to your knees and keep you there permanently if you let it. You or nobody ain't gonna hit as hard as life. But it ain't about how hard you hit. It's about how hard you can get hit and keep moving forward. How much you can take and keep moving forward. If you know what you are worth, go out and get what you are worth. But you gotta be willing to take the hit."

The train started moving. It was packed with people of all ages, mostly with working-class men and women and young college-going boys and girls. An old man was sitting near the window with his 30 year old son. As the train moved by, the son was overwhelmed and thrilled by the scenic beauty outside. "See dad, the green trees moving away are so beautiful."

Others were surprised to see such a childish behavior from a 30-year-old man. Everyone on the train had something or the other to say about this man. "This guy seems to be mad," newly married Anup whispered to his wife. Suddenly it started raining. To the dismay of the passengers, the raindrops began to wet them as some of the windows were left open. Thirty year old son, opened his window further and yelled with joy "See dad, everything looks so pretty, the rain makes everything prettier, the rain is beautiful." Anup's wife got irritated with the raindrops spoiling her new dress. Anup shouted with anger, "Old man! Can't you see it's raining, shut that window and take your son to a mental asylum. I am sure he can enjoy the rain as much as he wants there. Your son is crazy!"

The old man hesitated at first and then in a low tone replied, "We are on the way back from the hospital and my son got discharged in the morning. He was born blind. He just got his vision back. The rain, the trees, everything is new to his eyes. Please forgive us for the inconvenience caused..." The things we see may be right from our perspective until we know the truth. But when we know the truth our reaction to that will hurt even us. So we should try to understand the problem better before taking a harsh action. Anup saw only a part of the reality and reacted in such a harsh way. Most of us behave in the same way. We don't look deep enough and respond to the surface of things.

A four year old boy was sitting next to his mother working in the kitchen. Fascinated by the 'Bright Red Light' emanting from the coke in the hearth, he started moving towards it. "Come back!" scolded the mother. He was feeling bad but still he could not resist touching and playing with the glowing coal. He was so mesmerized by its beauty that he again tried to reach for it. Now annoyed and scared, the mother slapped him to prevent him from touching it. She told him that even though the coal is bright and attractive, it is at the same time very hot. The mother only wanted to protect her son but now the boy had thoughts about how bad his mother is. He started thinking that she is stepmother and not the real one. He thought that God has been unkind to him. He started cursing his destiny. The son started crying and screaming "Mom, I hate you. You don't let me have the things I like." After some mewling, he was looking for an opportunity. As soon as the mother left the kitchen, he galloped towards the coal.

He held the coal in his hand and burnt his fingers. The mother came running in response to the loud shriek of the child. "I told you it was hot," screamed the mother while applying the ointment.

Similarly life is like a mother, having no enmity. It is we who are unable to judge from the circumstances what is right and what is wrong. Life always has something good in store for us. God knows that everything we want is not everything that is good for us. The mother or God (or Life) knows that at the end, everything will be for the best. The problems or obstacles on the way try to teach us. God makes us fall only to make us rise higher the next time around. But we are so ignorant that we don't understand it right away. It is only when we look back in time that we realize that everything happens for our own good. It may bring tears at the time it happens, but only leads to bigger smiles in the time to come.

**"You realize how right your parents were, only when you yourself are one and have a child who thinks that you are wrong."**

**I.S. Sondhi, Sanchit Bhatia, Shubham Bhatia**

**"Whosoever opts for revenge should dig two graves"**

# Laparoscopic Obesity Surgery

## Laparoscopic Roux-en-y Gastric Bypass-step by step

Rajinder Saggu, Parveen Bhatia, Mahender Narwaria

### INTRODUCTION:

The main operative steps in performing a gastric bypass are:

1. The creation of an isolated 25ml proximal gastric pouch.
2. The creation of a Roux-en-Y gastro-jejunostomy to the pouch. The length of bilio pancreatic limb usually measure 30-50cm. The length of alimentary limb ( Roux limb) ranges from 100-150cm.

**This procedure results in a combination of 2 – weight-loss mechanisms:**

The primary mechanism is mechanical restriction, by virtue of the creation of the 25ml upper gastric pouch.

The secondary mechanism is malabsorption, the Roux limb delays the mixing of the nutrients with the biliary and pancreatic juices while preserving the enterohepatic cycle of bile salts.

### STEPS:

1. Port placement
2. Creation of Roux limb and mesenteric division
3. Creation jejuno-jejunostomy
4. Route of Roux limb
5. Liver retraction
6. Dissection of angle of his
7. Access to lesser sac
8. Creation of gastric pouch
9. Gastro jejunostomy with linear stapler
10. Testing of GJ anastomosis

### 1. Port placement (Fig:1):

6 ports are placed as shown in Fig.1

| No. | Instruments | Place |
|---|---|---|
| 1. | Camera | Supraumbilical, 12mm |
| 2. | Camera / Rt. hand working port | Rt. Mid clavicular, 12mm |
| 3. | Lt. hand working port | Rt. Ant. Axillary, 5mm |
| 4. | Stomach retracting port | Lt. mid clavicular line, 5mm |
| 5. | Retracting port | Lt. ant. Axillary line, 5mm |
| 6. | Liver retrating port | Rt. mid Axillary line, 5mm |

**Fig.1:** Port placement for laparoscopic gastric bypass
- Surgeon stands on the right side of patient.
- Assistant surgeon stands on the left side.

### 2. Creation of Roux limb and mesenteric dissection (Fig:2):

The omentum is displaced into the upper abdomen to expose the ligament of Treitz. The duodenojejunal junction is identified, jejunum traced distally for 50cm and transected with linear stapler (white 60mm; 2.5mm). Care is taken to avoid devascularization of the jejunal ends by dividing the mesentery equidistant from the mesenteric border of each limb.

**Fig.2:** The Roux limb is measured 150cm distally starting from jejunal division

### 3. Creation of jejuno-jejunostomy (Fig:3):

A side to side jejunojejunosotomy is formed next. The Roux limb is approximated to the bilio pancreatic limb. Enterotomies are made on the antimesentric borders of the jejunum with harmonic scalpel. The Endo GIA stapler (white 60mm; 2.5mm staples) is inserted into each enterotomy and side to side anastomosis is formed. The enterotomy wound is sutured by a single layer extramucosal vicryl suture.

**Fig.3:** Jejuno jejunostomy done at 150cm of alimentary limb (60mm; 2.5mm staples)

### 4. Route of Roux limb (Fig:4):

The Roux limb is brought in an ante colic fashion. The omentum is divided from its free border upto the attachment of the transverse colon with harmonic scalpel, to reduce the tension on the Roux limb as it passes over the colon.

**Fig.4:** Greater omentum divided and alimentary limb passed ante-colic

### 5. Liver retraction:

During the maneuvers in upper part of abdomen the left lobe of liver is retracted cephalad and laterally to visualise the hiatus. This must be performed carefully, the contact area with the liver must be large in order to avoid hepatic capsular tears.

### 6. Dissection of angle of His and access to lesser sac(Fig:5):

The stomach is stretched using the babcock's from left anterior axillary port. The dissection begins on the right edge of the stomach. The lesser omentum is incised, and the posterior gastric surface is dissected over 3-4cm, perpendicular to the axis of oesophagus. The retro gastric space is created using Gold finger. The lesser sac is entered.The dissection is pursued cephalad, towards angle of His. The left margin of the left crus is exposed.

**Fig.5:** Lesser omentum incised and retrogastric space created with Gold finger

### 7. Creation of gastric pouch(Fig:6):

Following adequate hiatal exposure, the future gastric pouch is calibrated at 25ml to determine the first line of transection. This line usually begins between the first and second vascular arcades on the lesser curvature.

a) the first line is perpendicular to the axis of oesophagus
b) the second line is parallel

An additional application may be necessary to completely divide the remainder of the stomach.

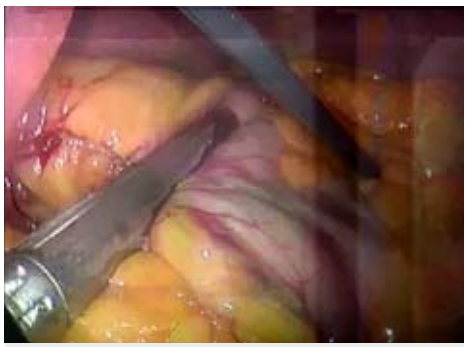

**Fig.6:** Creation of 25ml proximal gastric pouch with linear stapler (blue 60mm; 3.5mm staple)

### 8. Gastro jejunostomy with linear stapler (Fig:7, 8)

The Roux limb is advanced upto the gastric pouch without twisting. The antimesentric borders of the Roux limb is approximated to the posterior wall of the gastric pouch with polyester 2-0 suture. The gastrotomy and enterotomy are made in a similar fashion to create a side to side gastrojejunostomy using endo GIA stapler. The enterotomy wound is closed with suture. A second layer of polyester 2-0 suture is applied to cover the anterior anastomotic line, This completes the gastro jejunostomy.

**Fig.7:** Creation of Roux-en-Y gastro jejunostomy with linear stapler (blue 60mm; 3.5mm staple)

**Fig.8:** Anterior serosal anastomosis done with polyester 2-0 running suture

### 9. Testing of GJ anastomosis (Fig:9)

Confirmation of a water tight anastomosis is performed with the help of anaesthesiologist who inserts a 30 -degree flexible endoscope and stoma checked.

The anastomotic integrity is further checked by submerging the staple in saline solution.

**Fig.9:** Confirmatory water tight anastomosis, Endoscopic light seen

## CASE REPORT:

Our patient was a 53yrs old male, Morbidly obese, height 180cm, weight 159kg with a BMI of 49.01, who had started gaining excessive weight from last 2 yrs. He had failed several diet treatments for losing weight. He had Type 2 diabetes, hypertension and obstructive sleep apnea syndrome.

After completing pre-operative workup for bariatric surgery, including nutritional and psychological evaluation, blood test, chest radiograph, ECG, stress ECHO and pulmonary function tests the patient provided informed consent and was taken to operative room for laparoscopic Roux-en-Y gastric bypass.

The patient placed in a supine with reverse trendelenburg position and is strapped below the waist. After induction of general anaesthesia, a bladder catheter and orogastric tubes are inserted. Pneumatic compression devices are placed around the lower extremities to prevent venous thrombosis. Surgeon stands on the right side of patient and the procedure was performed as explained above.

At the end of procedure, lavage of the upper area of abdomen was performed. A drain was left adjacent to the gastrojejunostomy anastomosis. All fascial

defects more than 10mm were closed after removal of trocars.

A water soluble contrast examination is performed on POD1 and confirmed the absence of anastomotic leakage. The patient was allowed to drink water and drain was removed on POD1 The patient was discharged in a satisfactiory condition on POD2.

Patient was put on clear liquid diet for 1 week, liquid diet for subsequent 2 weeks and soft diet after 3 weeks.

Follow up is performed 1 week after discharge, when clips are removed.

## CONCLUSION

Obesity is rapidly increasing in this country and represents one of the greatest health concerns today. In its severe form, the only consistently successful treatment for obesity is surgery. Roux-en-Y gastric bypass is the most commonly performed weight loss procedure performed in the United States. Patients lose, on average, one third of their preoperative weight. As a result, many/most of the obesity-related comorbidities are improved or cured. Until the root cause of obesity is consistently addressed or effective nonsurgical therapies developed, surgery will remain a common treatment for patients with severe morbid obesity.

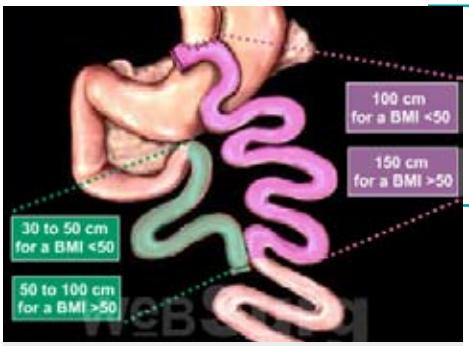


**Fig.10:** Photograph taken from websurg.com

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**"One does not discover new lands without consenting to lose sight of the shore for a very long time."** - Andre Gide

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