

Bariatric surgery between encouragement and inhibition, Sohag experience of first 30 cases with encouraging results (A single center case series study)



By

Dr. Alaa A. Redwan M.D, Ph.D.
Prof. of G.I.T. Surgery & Laparo endoscopy
Sohag university hospitals, Sohag, Egypt

► Obesity is a major public health burden of pandemic proportions. Overall, 13% of the world's adult population were categorized as obese in 2014.

(Angrisani L, et al, 2015)

► Bariatric surgery is the most effective treatment modality for morbid obesity when compared with non-surgical interventions. The main benefits of this procedure include prolonged weight loss and improved obesity associated comorbidities and quality of life.



(Angrisani L, et al, 2015)

► Laparoscopic bariatric surgery has been performed since the 1990s and has quickly surpassed open surgery in popularity due to its substantially lower risk of wound infection, incisional hernia, venous thromboembolism, and pulmonary complications.



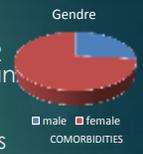
(Reoch J, et al, 2011)

► A systematic review and meta-analysis targeting common associated conditions (type II diabetes, hypertension & hyperlipidemia) has shown that effective weight loss and resolution or improvement of comorbidities is achieved in morbidly obese patients after bariatric surgery.

(Vest AR, et al, 2012)

Our early experience

► In period between November 2015 to March 2017 ,30 patients (8 male /22 female), with a mean age of 32 ±12 years, were operated with mean weight 144.4 ± 34.4 ,BMI 52.4 ± 12.2 associated comorbidities observed as hypertension in 8 cases, diabetes in 9 cases & hyperlipidemia in 12 cases



Criteria of inclusion:

- ▶ Age from 18 to 65 years.
- ▶ Both genders with or without history of failed weight loss attempts in the past and good motivation for surgery.
- ▶ Patients with a BMI 40 kg/m² or more with or without coexisting medical problems.
- ▶ Patients with a BMI 30 kg/m² or more with one or more obesity-related co-morbidities.

Criteria of exclusion:

- ▶ Age less than 18 and more than 65.
- ▶ BMI less than 30 kg/m².
- ▶ Previous major gastrointestinal surgery.
- ▶ females during pregnancy
- ▶ Known malignant diseases.
- ▶ Renal insufficiency.
- ▶ Chronic liver disease.

Preoperative Check list for Bariatric patients

- ▶ All patients will be subjected for detailed history and clinical examination
- ▶ Routine labs
- ▶ Nutrient screening (iron studies, serum calcium level)

- ▶ Cardiopulmonary evaluation with plain X ray chest, abdominal ultrasound, echocardiography,
- ▶ Gastro-intestinal evaluation (upper GI series or upper endoscopy if clinically indicated)
- ▶ Endocrine evaluation (HbA1c - TSH – 24- hour serum cortisone level)

Ethical considerations:

- ▶ All patients had been informed that they were participating in a research.
- ▶ Operative steps, expected results, side effects and operative complications have been explained to all participants.
- ▶ All information taken from the patient are secret.
- ▶ A written consent taken from all patients.

Operative modalities:

- ▶ -Surgical options in our center : Laparoscopic sleeve gastrectomy done in 22 cases & laparoscopic mini gastric bypass (single anastomosis) in 8 cases



Postoperative management:

- ▶ Average operative time 90±20min for LSG - 100±25min for mini gastric bypass
- ▶ average hospital stay following a bariatric surgical procedure is 2 ±1 days with follow up of pulse and temperature of the patients ,24 hrs post surgery initiation of enteral feeding in form of fluids for one week then 2weeks soft diet then start solid diet.

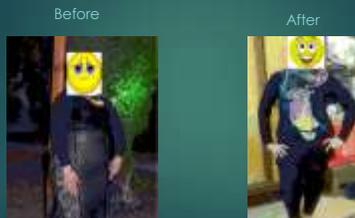
Results

- ▶ One year follow up of Weight (kg) ,BMI & associated comorbidities various measures of success (decrease in medication usage, weight loss, change in blood pressure and other laboratory data) were observed as shown in the following table:



	Sample size	Initial follow-up(3-month)	Follow-up(one year)	Change	P value
Weight (kg)	29	144.4±34.4	91.5±28.8	-52.9±24.7	<0.0001
BMI	29	52.4±12.2	32.3±8.6	-20.1±6.1	<0.0001
Hypertension	8	55%	21%	-33%	<0.0001
Diabetes	9	25%	7%	-19%	<0.001
hyperlipidemia	12	27%	11%	-16%	<0.01

Sample of our cases



complications

- ▶ **Early (within 30 days postoperative)** : 2 patients observed complications in form of bleeding & deep venous thrombosis in L.L. Both treated by only conservative follow up.
- ▶ **Late (more than 30 days post-operative)** : One case mortality by pulmonary embolism.

