Obesity is becoming a major health care issue in the United States and is one of the leading preventable causes of death. In addition, obesity and the associated co-morbid conditions cost our health care system billions of dollars each year. Bariatric surgery is the only proven and effective long-term treatment for the obesity epidemic. Each year surgeons perform more than 200,000 cases in the United States. The three most commonly performed bariatric procedures are laparoscopic gastric bypass, laparoscopic sleeve gastrectomy and laparoscopic gastric band placement. In addition, certain specialized and comprehensive weight loss centers like our own center at St. Luke’s perform more advanced weight loss procedures like endoscopic revisions, bilio-pancreatic diversions and many others that are only offered to certain patients.

Laparoscopic gastric bypass surgery remains the gold standard and is the most effective procedure currently available for bariatric patients. The procedure has a long track record of safety and long-term success. In experienced hands, complication rates following a gastric bypass surgery are less than 5% and long-term success exceeds 95%. However, laparoscopic sleeve gastrectomy is rapidly replacing laparoscopic adjustable gastric placement and is currently the most commonly performed procedure in the United States. The reason why laparoscopic sleeve gastrectomy is gaining polarity is multifactorial. First, the procedure has replaced the gastric band placement which currently has a bad reputation because of poor weight loss, long-term complications like slippage, chronic nausea and vomiting and erosion in addition to the high failure rate. Second, the procedure is less invasive than a gastric bypass and is purely a restrictive nature without any malabsorptive component. Third, there is a misconception that the procedure is safer than a gastric bypass.
Even though laparoscopic sleeve gastrectomy is a very safe and effective procedure and is routinely offered at St. Luke’s with a high success rate, patients and health care providers counseling patients on weight loss procedures need to be aware of few differences between sleeve gastrectomy and gastric bypass.

First, both procedures when performed in accredited centers by experienced surgeons are safe and effective. The claim that sleeve is safer than bypass, when the literature is carefully reviewed, does not stand. The overall complication rates for both procedures is less than 5% and the major complication rates like leak and bleeding is less than 1%. However, we have found that readmission rates are higher with bypass patients because of dehydration and early nausea and vomiting after the procedure.

Second, the weight loss achieved after a gastric bypass is on average 15-25% higher than the weight loss achieved following a sleeve. On average gastric bypass patients achieve 75-85% excess weight loss at 12 month compared to 60-65% with a sleeve gastrectomy. In addition, following the first 12 months sleeve patients have a higher incidence of weight regain. At St. Luke’s, we always emphasized that long-term success is patient driven and that compliance plays a major role in the overall success. However, our data and data from other centers have shown that recidivism or weight regain is slightly higher in sleeve patients compared to bypass patients. Reasons why patients gain weight following a sleeve is multifactorial and may be related to the dilatation of stomach over time or to the loss of appetite suppression patients usually enjoy initially after a sleeve gastrectomy. Saying that, patients whose BMI is less than 40 and undergo a sleeve gastrectomy do as well as bypass patients in terms of weight loss.

One of the questions that we always get from patients is the following: “Doctor, which procedure is better for me: bypass or sleeve?”

When patients are counseled in our center regarding which procedure is more appropriate for them many factors are taken into account. These factors include age, BMI, past surgical history, medical history and personal preference. For the purpose of illustration, the following is a quick and practical guide for both clinicians and patients to understand how the choice between bypass and sleeve is made (the examples included in that guide are not meant to be a comprehensive review of all the indications and contra-indications for bariatric surgery):
1. Age: Gastric bypass has a lower incidence of weight regain and a higher long term success rate and therefore young patients are better off with a bypass. Older patients with a poor social support system and who are at risk for readmission will benefit from a sleeve gastrectomy.

2. BMI: patients with relatively low BMI <40 do well with sleeve gastrectomy. In addition, superobese patients with extremely high BMI can benefit from sleeve gastrectomy as a first stage procedure to induce some weight loss prior to performing a definitive procedure like a bypass or a biliopancreatic diversion.

3. Surgical history: Patients with an extensive surgical history like dense adhesions do better with a sleeve gastrectomy because in cases like that sleeve is safer than bypass. On the other hand, patients who, for example, underwent anti-reflux procedures can only undergo bypass procedures.

4. Medical history: diabetics can undergo both procedures but the rate of resolution of diabetes is higher following a bypass. However, patients who suffer from Inflammatory bowel disease usually do better with a sleeve.

In conclusion, both procedures are safe and effective; the choice of the procedure should be individualized based on the patient condition and personal preference. Again, the key to success following bariatric surgery, in addition to the choice of the most appropriate and effective procedure, is compliance and long-term commitment.

Maher El Chaar, MD, FACS, FASMBS
Co-Medical Director Bariatric Surgery
St Luke’s University Health Network

References:


[5] Cunneen SA. Review of meta-analytic comparisons of bariatric surgery with a focus on laparoscopic adjustable gastric banding. Surgery for Obesity and

“Sleeve vs. Gastric Bypass: Doctor, Which Procedure Should I Have?”
By Maher El Chaar