

Advantages and Disadvantages of Various Bariatric Surgical Procedures

Laparoscopic Roux-en-Y Gastric Bypass (Offered procedure)

Advantages:

Rapid, predictable early weight loss (around 70% EBW in the first year)

Performed for over 40 years

Rapid and best improvement in diabetes

More rapid and predictable improvement in most co-morbidities

Stomach not removed

Lowest rate of weight loss failure

Decreased hunger on average 5 months

Low risk of technical failure (pouch or outlet stretch) in our hands

(“micro-pouch”).

Disadvantages:

Stomach and intestines cut, divided and re-routed, risk of leak/peritonitis

Risk of bowel obstruction/internal hernia

Highest potential bleeding rate

Longest operative times

2 day hospital stay

High rate of stricture requiring post-operative EGD with dilatation

Although relatively low risk, still highest risk operation we offer

“Dumping” a possibility (inability to tolerate certain foods)

Longest time to resumption of normal diet

Need to take protein shakes/supplements for several months

Cost of protein supplements and vitamins

High risk in smokers/NSAID users/H. pylori positive patients of getting serious pouch ulcers (our “micro-pouch” more susceptible than standard bypass pouch)

Need to avoid certain medications such NSAID’s and aspirin

Patients can NEVER smoke as very high risk of pouch ulceration

Inability to visualize the bypassed stomach by EGD or perform ERCP

Intestinal bypass with risks of protein, vitamin, mineral deficiencies, osteoporosis, and anemia.

Need for life-long vitamin and mineral supplementation

Need for life-long lab surveillance to assure appropriate vitamin/mineral levels

Risk for significant and possibly irreversible vitamin/mineral deficiencies and their consequences without appropriate follow-up

Potential for standard (not “micro”) bypass pouch and/or outlet to stretch and lead to failure (operation is done differently by different surgeons all making different sized pouches and outlets)

Not easily reversed

Need for frequent follow-up visits and labs, especially the first year

LapBand®/Adjustable Gastric Banding (AGB) (Offered procedure)

Advantages:

**Safest available operation, no cutting or dividing of the stomach or
bowel**

- Shortest operative times**
- Least chance of bleeding and peritonitis**
- Only adjustable bariatric procedure after surgery**
- Easily reversible**
- Ability to eat any foods**
- Ability to take any medications**
- Generally outpatient surgery**
- Least likely to cause any protein, vitamin or mineral deficiencies**
- No routine labs required in follow-up**
- Multivitamin with iron only supplement generally required**
- No need for protein supplements/shakes beyond a couple of weeks**
- “No bridges burned” – can always be removed or converted to
another bariatric procedure**

Disadvantages:

- Full absorption of all foods**
- Much slower weight loss (best average weight loss results 70% EBW
over 3 – 5 years, or 20 – 30% EBW in the first year)**
- No proven decrease in hunger, only fullness on less food**
- Weight loss more variable and not as predictable**
- Highest failure rate/easiest to “cheat”**
- Foreign body with potential for infection/slips/erosion requiring
further surgery and removal**
- Port complications**
- Requires needle sticks in the office**
- Must follow-up for “fills” – on average 4 – 6**
- Slower and less reliable improvement in co-morbidities including
diabetes**

Gastric Sleeve Procedure (Vertical Gastrectomy) (Offered procedure)

Advantages:

- Weight loss faster than LapBand®/AGB, slower than bypass (50% EBW in the first year)**
- More rapid improvement in diabetes than LapBand®/AGB, less than bypass**
- More rapid improvement in co-morbidities than LapBand®/AGB/less than bypass**
- Can perform upper endoscopy or ERCP**
- “No bridges burned” – can always be converted to another bariatric procedure**
- Less likely than bypass to result in vitamin, protein, or mineral deficiency, but more likely than LapBand®/AGB**
- Intermediate surgical risk between LapBand®/AGB (safest) and bypass**
- Intermediate operative times between LapBand®/AGB and bypass (longest)**
- No Dumping**
- May decrease hunger as removes most of Ghrelin-producing cells**
- Very effective as a first-stage procedure for high BMI patients**

Disadvantages:

- Stomach is cut, potential for leak/peritonitis, but usually not as severe as a bypass “leak”**
- Unlike the bypass or banding, a large portion of the stomach is permanently (irreversibly) removed. However, it can always be converted to almost any other weight loss procedure.**
- Requires 23 hr hospital stay**
- Long-term results unknown, potential to “stretch out” with loss of restriction and weight re-gain**
- May require a second-stage procedure, especially in the very high BMI patients**
- May require vitamin/mineral/protein supplementation**
- Considered investigational and usually not covered by insurance**
- Often difficult or impossible to get coverage for a two-stage procedure**

- Not offered by the majority of bariatric surgeons, including our practice**
- In the very large BMI, often a two-stage procedure is recommended**

Vertical Banded Gastroplasty (Not offered procedure)

Advantages:

Fairly good weight loss, especially early (approx 50% EBW)
Restrictive, no intestinal bypass

Disadvantages:

Not adjustable after surgery
Stomach stapled, risk of leak/peritonitis (less than bypass)
Hard to reverse or convert to another weight loss procedure
Recently dropped as an appropriate procedure by Medicare because of its high complication and failure rate
Very high risk reflux
Very high risk staple line breakdown, failure, and weight gain
Not offered anymore by the majority of bariatric surgeons, including our practice
Loss favor after initial high interest in the 1980's secondary to disadvantages described

Duodenal Switch/Biliopancreatic Diversion (Not offered procedure)

Advantages:

Most weight loss early, excellent maintenance of weight loss
Can eat larger portions of food
Excellent in improving diabetes and other co-morbidities

Disadvantages:

Highest operative complication, leak, and death rate
Higher rate of bowel obstructions, hernias, wound infections
Most difficult to perform laparoscopically
Longest operative times
Explosive, foul smelling diarrhea in all patients (the price of the procedure as it is truly a malabsorptive operation)
Highest and very significant risk severe protein, vitamin, and mineral deficiencies, even with supplementation. Multiple reports of brittle bones and fractures (secondary hyperparathyroidism), blindness (Vit A deficiency), thiamine and other B vitamin deficiencies, anemia, etc. Often only way to hopefully resolve is reversal (a significant operation) and weight gain.
Not offered by the majority of bariatric surgeons, including our practice
In the very large BMI, often a two-stage procedure is recommended

Intra-gastric balloon (Experimental, not offered)

Advantages:

Non-surgical, placed by endoscopy “scope”

Restrictive only, no intestinal or stomach bypass

Disadvantages:

Investigational, not available yet

Can only be used for 6 weeks at a time then requires another endoscopy and removal

Balloon migration may cause intestinal blockage and require major surgery

Temporary solution only