Considerations in Performing Plastic Surgical Procedures After Gastric Surgery for Obesity

At present, gastric surgery is the preferred treatment for the morbidly obese patient who is committed to achieving weight control to improve health and quality of life. The operative procedures offer safe, effective, and durable palliation of obesity with minimal complications.

Patients who have undergone successful surgery for obesity will often require additional subsequent elective surgical procedures after weight loss. These procedures include joint replacements, abdominal wall hernia repairs, and plastic surgical revision of redundant skin and subcutaneous tissue from the abdomen, as well as removal of similar tissues from the upper arm, thighs, and gluteal areas. In my experience, however, less than 10% of the patients in an obesity practice seek aesthetic improvement after weight loss in conjunction with gastric surgery for obesity.

Morbid or severe obesity is defined as a weight that exceeds 100 lb or twice the desirable body weight or a body mass index (the subject's weight in kilograms divided by the height in meters squared) equaling or exceeding 40. The Roux-en-Y gastric bypass and vertical banded gastroplasty are the most common operative procedures performed in the United States today for treatment of severe obesity.

The vertical banded gastroplasty is designed to restrict food intake by limiting gastric volume (Figure 1). A 15- to 30-mL gastric reservoir is created by surgical stapling techniques. The small gastric reservoir along the lesser curvature empties through a narrow channel into the remaining stomach. The channel is reinforced with prosthetic material to ensure a channel circumference of 4.5 to 5 cm. This operation is attractive because it preserves gastroduodenal continuity and avoids later micronutrient problems.

The gastric bypass also limits gastric volume capacity with the creation of a 15- to 30-mL stapled gastric reservoir (Figure 2). However, this gastric pouch empties through a 12-mm anastomosis into a Roux-en-Y jejunal limb, thus bypassing the distal stomach, duodenum, and very proximal jejunum. The Roux-en-Y limb can be made of varying lengths to increase or decrease the extent of malabsorption or malabsorption. This operation combines gastric restriction with the emptying of semisolids gastric contents directly into the jejunum, which results in some additional component of malabsorption or malabsorption.

Weight loss after these gastric operations occurs at the greatest rate during the first 12 months after surgery. After 12 to 18 months, weight tends to stabilize. In the overall experience with the Roux-en-Y gastric bypass, patients tend to lose between 60% to 70% of their excess weight with stabilization of weight during the second and third postoperative years. The postoperative weight reduction is more modest after vertical banded gastroplasty. After 12 months, weight tends to plateau at approximately 60% to 70% above the desirable weight, resulting in an average loss of about 40% to 50% of excess weight. Overall success rate after gastric operations is 90% for gastric bypass and 80% for vertical banded gastroplasty.

To avoid significant nutritional and metabolic sequelae of these operations, careful and regular postoperative nutritional care is essential. Surgery for obesity should be performed as part of a multidisciplinary treatment program to achieve safe and healthy weight loss. Rapid weight loss in unsupervised patients will increase the risk for major nutritional deficiencies. The Roux-en-Y gastric bypass does reduce the patient’s ability to absorb vitamin B12, iron, and possibly calcium. For these reasons patients are advised to take these micronutrients as daily supplements from the time of the operation. Without supplementation, deficiencies of iron or vitamin B12 can occur in up to 10% to 25% of patients. Regular supplementation and nutrition surveillance will minimize these nutritional risks. These micronutrient concerns are not significant issues in patients who have undergone vertical banded gastroplasty.
gastroplasty, however, because gastroduodenal continuity is maintained.

Elective plastic surgery should be deferred, whenever possible, until the period of maximal weight loss is completed during the first postoperative year. In addition, evaluation of iron, vitamin B₁₂, calcium, and protein nutrition, as well as correction of nutritional deficiencies is indicated as part of the preoperative workup.

Patients who have previously had obstructive sleep apnea, pulmonary dysfunction, or congestive heart failure in conjunction with their severe obesity should have these comorbidities reassessed to document improvement and reduced perioperative anesthesia risk. There are no other unique metabolic syndromes or other problems outside of the issues discussed above that would affect performing plastic surgical procedures subsequent to gastric surgery.

I am pleased to refer my patients to plastic surgeons for aesthetic improvement. This is a very important aspect of the major life change that occurs in most patients who have had gastric surgery for severe obesity and experienced major weight loss. I am certain that much of the long-term success after these procedures is related to the major improvement in body image, and this can be further enhanced by aesthetic plastic surgery.

References

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