

Bariatric Surgery: Drastic Measures for Drastic Measurements

Bariatric surgery is remarkably effective, but it is not a silver bullet.

BY CAROLINE J. CEDERQUIST, MD

It used to be that “stomach stapling” was a rare and extreme response to dangerous cases of obesity. But as more long-term data become available about the generally positive outcomes for bariatric surgeries, more patients are opting for these procedures than for any other noncosmetic elective surgery.

With most patients normally so reluctant to go under the knife, what’s driving the popularity of bariatric procedures? Quite simply, as an investment in health, they offer a very high return. Follow-up research on patients of earlier bariatric surgeries is showing that the prospects for long-term weight loss are better than with any other mode of treatment for those who are morbidly obese.

The data also show that postoperative health outcomes for patients of bariatric surgery are remarkably good, with major improvements in diabetes, cardiovascular health, musculoskeletal conditions and sleep disorders.

LASTING HEALTH IMPROVEMENTS

But perhaps the most important outcome shown is that these health improvements are lasting, specifically because patients of bariatric surgery have excellent chances of maintaining a much lower, much healthier weight for years to come.

According to the *Journal of the American Medical Association*, “bariatric surgery offers the best treatment to produce sustained weight loss in patients who are morbidly obese.”

That assessment has been borne out by the statistics. The maximum weight loss is usually reached between 18 and 24 months after their surgery. The amount of weight lost tends to vary a little between the various procedures, but on an average, a loss of 60% of the excess weight was still maintained at five years after the surgery.

One study of more than 600 patients reported that an average of 50% of the excess weight lost was still maintained

at 14 years after the surgery. The numbers for weight loss maintenance in other treatment approaches come nowhere near these rates.

Roughly speaking, the morbidly obese are those defined as being 100 lbs overweight, or with a body mass index (BMI) of ≥ 39 . A BMI of ≥ 35 is used for those who already have associated health problems, such as diabetes or heart disease.

Also referred to as “clinically severe obesity,” it is a condition that affects about 6 million Americans. And for these people, the risks associated with remaining overweight are simply much greater than the risks of going under the knife.

THERE ARE CONTRAINDICATIONS

People at lower BMIs typically are not considered as candidates for bariatric surgery without extenuating circumstances. And sometimes people who have a BMI >40 are not considered because of other factors. Certain psychological conditions might preclude an individual’s candidacy, or an inability to commit to lifestyle changes necessary for weight maintenance.

For instance, people who consume lots of sweets and high-fat junk foods and who do not really plan to give them up, will not get the lasting improvements they want from the surgery. And there are some patients who have delicate health complications such that they may have to lose weight in a supervised program before undergoing the surgery.

With rates for complications $<2\%$ and mortality of $<0.5\%$, bariatric surgeries have proven, safety-wise, to be comparable to other elective procedures, and far less risky than the coronary artery bypass graft operations that are common today. That is a remarkably low incidence of postoperative complications, particularly considering that the general health in this patient population is highly compromised by their excess weight to begin with.

Yet even as new techniques are developed that

improve the safety and efficacy of bariatric procedures — and minimize some of their unpleasant side effects — experts worry that the public will get the idea that these are routine surgeries that offer a silver bullet solution to the problems of the gravely obese.

Surgery is a complex and demanding procedure for both the doctor and the patient, and like any surgery, it should not be taken lightly. Most bariatric surgery specialists will not agree to perform a bariatric procedure on a patient who hasn't already demonstrated a concerted effort to get rid of some of their excess through more conventional weight-loss methods.

Surgical preparation usually includes weight loss and conditioning for the patient immediately before the operation, and then lot of lifestyle and maintenance work afterward.

That is the investment. The return? Early death related to weight decreases markedly, and aside from the other specific medical improvements, studies also show that bariatric surgery patients get improved mobility and stamina, better mood and self-esteem, improvements in social interactivity and interpersonal effectiveness. And for overall quality of life, that means a real long-term gain. ■

Caroline J. Cederquist, MD, is a board certified bariatric physician. Dr. Cederquist is the founder of Diet To Your Door, a home diet delivery program that specializes in low calorie gourmet food that is delivered to your home or office. She can be reached at kate@drcederquist.com.

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ELDERLY MAY BE AT HIGHER RISK FOR POOR BARIATRIC SURGERY OUTCOMES

Limiting bariatric surgical procedures to those aged <65 years is warranted because of the high morbidity and mortality associated with these operations in older patients.

REVIEWED BY EDWARD H. LIVINGSTON, MD

Age, being male, electrolyte disorders and congestive heart failure were independent risk factors for mortality associated with bariatric surgery.

According to a report in the *Archives of Surgery*,¹ limiting bariatric surgical procedures to those aged <65 years is warranted because of the high morbidity and mortality associated with these operations in older patients.

Edward H. Livingston, MD, and Joshua Langert, BA, from the Veterans Affairs North Texas Health Care System and Southwestern Medical School, University of Texas Southwestern Medical Center, Dallas, wrote: "Medicare assembled a medical care advisory committee to review the available literature supporting application of bariatric surgery to the Medicare population. The committee concluded that there were insufficient data to arrive at recommendations relevant to the Medicare patients. The major issues needing clarification are the perioperative safety for weight loss operations and long-term weight loss and comorbidity control for older and other Medicare-eligible patients."

The investigators used a national sample of hospitalized patients in the United States and identified 25,428 bariatric procedures performed in adult patients in 2001 and 2002. When a logistic regression was performed, the authors found that independent risk factors for bariatric surgery mortality were age (odds ratio [OR], 1.04; 95% confidence interval [CI], 1.02-1.07), male sex (OR, 2.45; 95% CI, 1.48-4.03), electrolyte disorders (OR, 13.91; 95% CI, 8.29-23.33) and congestive heart failure (OR, 4.96; 95% CI, 2.52-9.77).

Adverse outcomes increased as a function of age, in a nearly

linear fashion, Dr. Livingston wrote, with a steep increase after the age of 65 years. "Most Medicare patients undergoing these operations were [aged <65 years] and had a much greater disease burden than non-Medicare patients."

The authors said that study limitations include accepting older patients for surgery only if they were optimal candidates, imprecise disease and procedure coding, and lack of detailed patient-specific information.

Clifford W. Deveney, MD, from Oregon Health & Science University in Portland, wrote in an accompanying invited critique that there were additional limitations inherent in retrospective data acquisition from large databases.²

"While the study is quite helpful in assessing operative risk stratification, it does not provide any long-term follow-up to assess benefits or to determine how much risk is appropriate. We need to look at benefits in the vast majority of patients who survive their bariatric procedure to determine what is an appropriate risk for a given patient. These data will only come from prospective studies designed to assess long-term outcomes following bariatric procedures. ■

Edward H. Livingston, MD, and Joshua Langert, BA, are from the Veterans Affairs North Texas Health Care System and Southwestern Medical School, University of Texas Southwestern Medical Center, Dallas. Dr. Livingston may be reached at Edward.livingston@utsouthwestern.edu.

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2. Deveney CW. The impact of age and Medicare status on bariatric surgical outcomes—invited critique. *Arch Surg*. 2006;141:1121.