What are the indications for bariatric surgery?

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EVIDENCE-BASED ANSWER

No studies evaluate the commonly used indications for bariatric surgery. Consensus guidelines suggest that the surgical treatment of obesity should be reserved for patients with a body-mass index (BMI) >40 kg/m² or with BMI >35 kg/m² and 1 or more significant comorbid conditions, when less invasive methods of weight loss have failed and the patient is at high risk for obesity-associated morbidity and mortality (strength of recommendation: C, based on consensus guidelines).

CLINICAL COMMENTARY

Assessing perioperative risk and long-term complications is critical

National data indicate that more than 5 million Americans have a BMI >35. Thus the implications of recommending bariatric surgery are enormous. Patients who have undergone surgical treatment for obesity require lifelong monitoring and often nutritional supplementation, and the lifelong severe dietary restriction that follows bariatric surgery can be psychologically devastating. Psychological and behavioral factors must be carefully considered in presurgical evaluation. No standardized protocol exists for this assessment and few empiric data specify which factors predict successful surgical outcomes.

Great progress has been made in developing safer and more effective surgical procedures for promoting weight loss, yet the possibility of significant adverse effects remain. Assessing both perioperative risk and long-term complications is critical and requires a risk/benefit analysis in each case.

Evidence summary

Because of the nature of major surgery, there are practical and ethical barriers to true randomized controlled trials (RCTs) comparing bariatric surgery with placebo or to no intervention. However, multiple RCTs have compared the weight-reducing effects of different bariatric surgical techniques against each other. All studies included patients who had a BMI >40 kg/m², or a BMI >35 kg/m² with at least 1 comorbidity, such as cardiovascular disease, sleep apnea, uncontrolled type 2 diabetes, or weight-induced physical problems interfering with performance of daily life activities. It is these study inclusion criteria that, by default, have become widely accepted indications for bariatric surgery. Weight loss in all RCTs was substantial, ranging from 50 to 100 kg over 6 months to 1 year. Comorbid factors associated with obesity showed either resolution or improvement after surgery in 91% of patients.

Patients with a BMI >40 have substantially more serious health consequences and a reduced life expectancy. Obesity significantly impairs quality of life, and the risk of morbidity and mortality increases with the degree of obesity. Those who are extremely obese often do not have sustained benefit from more conservative treatment. The benefits of nonsurgical treatment are significantly limited by the failure to maintain reduced body weight.

A large literature of controlled and uncontrolled cohort studies show that surgery has produced the longest period of sustained weight loss. A recent meta-analysis proved bariatric surgery not only...
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The possibility of significant adverse effects remains. The postoperative mortality rate for bariatric surgery is approximately 0.2%. Reoperation is required for up to 2.5% of patients within 5 years. Other complications are wound infection, staple failure, vitamin deficiency, diarrhea, and hemorrhage. The long-term health effects of bariatric surgery are not well known.

Recommendations from others

The NIH statement “Gastrointestinal Surgery for Severe Obesity” concluded that the benefits outweigh the risks and that surgical treatment is reasonable in those who strongly desire substantial weight loss and have life-threatening comorbid conditions.

Clinical guidelines developed by the National Heart, Lung, and Blood Institute Expert Panel on the identification, evaluation, and treatment of obesity for adults recommend that bariatric surgery be an option for carefully selected patients with clinically severe obesity (BMI >40 or >35 with comorbid conditions) when less invasive methods of weight loss have failed and the patient is at high risk for obesity-associated morbidity and mortality.

The American Gastroenterological Association (AGA) medical position statement on obesity finds surgical therapy to be the most effective approach for achieving long-term weight loss. The AGA recommends surgery for patients with a BMI >40, or those with BMI >35 and 1 or more severe obesity-related medical complication (eg, hypertension, heart failure, or sleep apnea) if they have been unable to achieve or maintain weight loss with conventional therapy, have acceptable operative risks, and are able to comply with long-term treatment and follow-up.

The American College of Preventive Medicine, in its policy statement on weight management counseling, recommends limiting surgical therapy for obesity to severely obese patients, defined as BMI >40.

REFERENCES


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