

Virtual Mentor

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PERSONAL NARRATIVE

Through the Physician's Eyes: Effects of Gastric Bypass Surgery on Comorbid Conditions

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Media coverage of singer Carnie Wilson's gastric bypass surgery has brought the topic to the attention of many and probably will prompt a surge of requests for the procedure. It is reasonable to assume that not all who respond to ads offering the surgery or request it from a surgeon will be suitable candidates. We asked 2 physicians who specialize in treating patients with obesity to discuss the topic, addressing specifically how they determine patient eligibility for the surgery and what its risks and benefits are.

Gastric bypass surgery is an effective weight loss modality for carefully selected individuals, but the benefits should be cautiously weighed against the risks, given the 10 to 20 percent morbidity and 1-2 percent mortality rates in the best surgical hands. We reserve gastric bypass for those individuals with a body mass index (BMI) 35 with 2 or more obesity-related complications or a body mass index 34 who have failed conservative therapy.

The options of medical, pharmacologic, and surgical therapies for weight management are discussed with every patient in our weight management program. A 5 to 10 percent weight reduction that's been shown to reduce disease risks and complications is the definition of a successful outcome. Dietary interventions are designed to meet the needs and lifestyles of the person seeking realistic interventions for lasting changes. We use food logs, daily exercise, modest caloric restriction and goal setting as the foundation for our program. Indirect calorimetry is also obtained and used to identify those persons with a low resting energy metabolism that increases the necessity of using pharmacologic or surgical interventions. The evolving doctor-patient and dietitian-patient relationships allow for assessment of the psychological readiness for weight reduction efforts and for the identification of psychological problems such as uncontrolled depression, borderline personality, and so on that are contraindications to gastric bypass surgery.

I'll share a case with you. "Mrs. Sanchez" came for assistance with weight reduction when she was 52. She had been thin as a child and maintained a usual adult weight of 127 pounds at a height of 5'2" tall (62 inches, 2.46-meters squared) until her fourth pregnancy at age 32 years. After the birth of her fourth child, she weighed 159 pounds, which she was able to maintain until her fifth pregnancy at age 36

years. Due to depression, she gained weight, reaching her then maximum weight of 270 pounds. At age 46 years, she participated in Weight Watchers, achieving an 80-pound weight loss in 1 year. She was able to hold her weight at 190 pounds for 3 years in the maintenance phase program.

She began to eat out of frustration when she developed early menopausal symptoms at 51. She became unable to exercise due to bilateral arthritis of the knees and was found to have obstructive sleep apnea. Despite exercise, monitoring her caloric intake, and a trial of Orlistat, Mrs. Sanchez failed to lose significant weight. When referred to our weight management program, she weighed 280 pounds (127.2 kg).

Her past medical history included childhood asthma, arthritis, and obstructive sleep apnea. She had a history of twenty-pack-per-year tobacco use. She is an only child, and neither parent is obese. Twenty-four hour dietary recall revealed that Mrs. Sanchez had eaten a small yogurt with fruit for breakfast. For lunch, she had a small salad with regular dressing and a four-ounce baked chicken breast. For dinner, she had 6 ounces of pork roast, green beans, and corn. She participated in a water aerobics class 3 nights a week and was taking the herbal supplement, glucosamine chondroitin. Her review of systems was essentially negative.

On physical exam, Mrs. Sanchez' blood pressure was 120/70; her pulse was 82; she had a respiratory rate of 18; her temperature was 35.9. Her BMI was 51.7. Mrs. Sanchez had central obesity, acanthosis nigricans, and a neck circumference >17 inches but had an otherwise normal examination. Her lab results were normal.

Mrs. Sanchez experienced a very slow weight loss at a rate of less than 1 pound per week despite dietary compliance and exercise. Under reporting of calories may have contributed to her poor response. Indirect calorimetry confirmed the presence of a very low resting energy metabolism. Mrs. Sanchez was evaluated for surgery, completed the evaluation process, and was approved for the Roux-en-Y gastric bypass procedure. An anastomotic leak, intra-abdominal abscess, and renal insufficiency complicated her initial post operative course. Although Mrs. Sanchez recovered without sequella, she is 18 months into recovery and 20 pounds from her ideal body weight.

In summary, bariatric teams should closely and extensively evaluate candidates for gastric bypass surgery. The ideal team includes, at a minimum, a dietitian, psychologist, nurse, and experienced bariatric surgeon. To optimize results, candidates are carefully selected based on objective risk factors and predictors of outcomes. Keys to long-term success are patient education and compliance to programs in the pre-operative phase as well as during postoperative follow-up. The more clearly the goals of the intervention are defined, the greater the likelihood of the patient's compliance. For the well-informed, carefully chosen, and compliant patient, gastric bypass surgery can be life changing and sustaining.

Resources

A major criterion of eligibility for gastric bypass surgery is Body-Weight Index (BMI). You can compute your BMI: $\text{Weight [in kilograms]} / (\text{Height [in meters]})^2$ at the National Institutes of Health (<http://nhlbisupport.com/bmi/bmicalc.htm>).

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