Bariatric Surgery: Comprehensive Strategies for Management in Primary Care

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ABSTRACT

Bariatric surgery is an alternative for long-term weight loss that improves quality of life and decreases mortality by reducing or eliminating obesity and the associated chronic diseases. The nurse practitioner's role is vital in promoting positive long-term outcomes in view of the increased prevalence of patients with bariatric surgery and their need for management in the primary care setting. The obesity epidemic, weight-loss surgery options, and strategies to manage risks, benefits, and complications need to be considered in providing primary care. As primary care providers, we must address the gap between the psychological benefits of weight-loss surgery and strategies to prevent weight regain and chemical dependency.

Keywords: bariatric surgery, primary care, weight loss surgery

Overweight and obese patients are seen by nurse practitioners (NPs) on an increasing basis. In Canada and the United States, 101,645 bariatric operations were performed in 2011.[1] As obesity rates increase globally, long-term management of patients following bariatric surgery is becoming prevalent in primary care practice. The role of the primary care provider is to manage chronic disease and monitor for long-term surgical, metabolic, and psychological complications that may arise. In this article we review the types of bariatric surgery, pre- and postoperative processes involved, and associated long-term implications. For NPs, a comprehensive understanding of the obesity epidemic, weight-loss surgery (WLS) and inclusion criteria, risks and benefits, and complications of WLS are essential to assist clients in making informed decisions. In what follows we address management of bariatric patients in the primary care setting so NPs can make informed decisions regarding this unique patient population.

RISE IN OBESITY EPIDEMIC

As obesity rates increase, NPs will more frequently need to evaluate, refer, and support potential candidates for bariatric surgery. Obesity is a significant health-care problem around the world with over 1 billion overweight adults and 300 million people with a body mass index (BMI) between 30 and 39.9.[2] Currently, 34.9% of US adults are obese with a BMI greater than 30, with African American males having the highest rate of obesity at 49.5%.[3] Data collected from 1990 to 2008 from the Behavioral Risk Factor Surveillance System projects that obesity rates will reach 51% by 2030.[4] Obesity rates are increasing the fastest (75%) among the morbidly obese, those with a BMI greater than 50. Overall, rates have risen among men and women of all ethnic groups, regardless of education and socioeconomic status. The highest prevalence was found within low socioeconomic status African American and Hispanic females.[5] Primary care NPs play a vital role in the management of obesity and disease prevention.

IMPACT OF OBESITY

Obesity and conditions associated with obesity impact health-care costs, quality of life, and mortality rates. Increased health-care visits create a financial strain with annual costs of $139 billion in the US, comprising 5% of the national health expenditure resources in 2009.[6] Projected obesity growth rates

suggest health-care costs will climb from $861 to $957 billion by 2030.[3,4] Annual health-care costs for obese individuals averages $1,429 (42%) higher than normal-weight people.[4] Direct health-care costs are impacted by the increased need of medications, hospitalizations, utilization of services, and an indirect cost from work absenteeism, disability, and premature mortality.[6] Obese individuals accrue 46% higher hospitalization costs, require 27% more outpatient doctor visits, and spend 80% more on prescription medications than normal-weight patients.[7] Cost saving can be achieved with effective primary care of obesity.

Obesity is now recognized as a chronic disease, causing an increased likelihood of developing comorbidities, such as diabetes, hypertension, and cardiovascular syndromes.[2] The condition is associated with diminished energy, limited physical functioning, poor self-esteem, and body dissatisfaction, leading to higher rates of depression and decreased quality of life (QOL). Deterioration of health and decreased QOL contribute to progression of weight gain and an overall reduced lifespan.[2,8] Counseling patients with regard to chronic disease, QOL, and long-term outcomes for obesity are essential components of primary care.

Bariatric surgery is the only treatment modality shown to provide consistent, sustained, long-term weight loss and for decreasing or reversing obesity-related comorbidities, such as type 2 diabetes (80%), dyslipidemia (70%), hypertension (75%), and obstructive sleep apnea (80%) in the morbidly obese population.[2] Despite these findings, primary care providers continue to underdiagnose or provide suboptimal management of obesity.[9] Given that WLS is the treatment of choice, primary care NPs must diagnose their patients adequately, provide information on obesity treatment options, and assist them in achieving long-term success. Overall, effective care strategies can help decrease health-care costs and improve health outcomes in obesity-related comorbidities.

BARRIERS TO OBESITY TREATMENT

Barriers to obesity treatment should be reviewed with patients considering bariatric surgery. Evaluation of potential barriers, such as socioeconomic status, cultural beliefs, time constraints, lack of a support network, and professional obligations, need to be assessed. Cognitive impairment, sleep disturbances, pain, chronic fatigue, immobility, cardiovascular disease, pulmonary function, and endocrine disorders may all limit a person's ability to understand and implement the lifestyle changes necessary to achieve long-term weight loss.[10] Perceived barriers should be identified within primary care practice to ensure that strategies can be developed to prevent noncompliance and poor weight-loss outcomes.

Only 50% of primary care practitioners counsel patients on obesity management. The barriers to counseling patients in weight loss include lack of time, patient noncompliance, inadequate reimbursement, limited teaching materials, and low confidence in surgery as a treatment option for obesity.[9] These counseling barriers may explain the lack of necessary documentation and referrals being done for patients. Providers need to shift beliefs of obesity from being a symptom to that of a chronic disease.[2,10] Educating primary care providers on obesity may decrease barriers to treatment and improve the care of this patient population.

CRITERIA FOR BARIATRIC SURGERY

Obesity classifications are currently based on BMI, which is determined by weight (in kilograms) divided by height (in square meters). Categories of BMI and classes of obesity are presented in Table 1. There is a direct correlation between an increase in BMI and an increased risk to develop others comorbidities, such as diabetes, hypertension, debilitating arthritis, obstructive sleep apnea, cardiovascular disease, dyslipidemia, gastroesophageal reflux, or

Table 1. Class of Obesity Using Body Mass Index (BMI)

	BMI (kg/m^2)	Obesity Class
Underweight	< 18.5	
Normal	18.5–24.9	
Overweight	25.0–29.9	
Obesity	30.0–34.9	I
	35.0–39.9	II
Extreme obesity	≥ 40	III