

Patient Selection and Surgical Management of High-Risk Patients with Morbid Obesity



A. Daniel Guerron, MD, Dana D. Portenier, MD*

KEYWORDS

• Risk factors • High risk • End organ failure

KEY POINTS

- Bariatric surgery is the most effective way to improve comorbidities related to obesity.
- Since the introduction of minimally invasive laparoscopic surgery in the bariatric surgery techniques, the number of procedures has increased substantially; advances in techniques and the transition from open to minimally invasive procedures have decreased morbidity and mortality.
- Improvement in techniques and training programs have made it possible for patients who were previously at unacceptable high risk to now be candidates for bariatric surgery.
- Knowledge of the preoperative factors that predict for greater mortality could aid surgeons in surgical decision-making and help inform patients of their risks with bariatric surgery.
- Multidisciplinary teams in charge of the operative planning, surgical act, and postoperative recovery are determinant in the success of the management of high-risk bariatric patients; careful identification and preoperative management of these higher-risk patients is crucial in decreasing complications after weight loss surgery.

INTRODUCTION

The prevalence of obesity as of 2011 to 2012 was reported at 36.5% among US adults.¹ Bariatric surgery is the most effective way to improve comorbidities related to obesity.²⁻⁴ The surgical treatment of the morbidly obese with significant medical conditions remains a challenge. Since the introduction of minimally invasive laparoscopic surgery in the bariatric surgery techniques, the number of procedures has increased substantially. Advances in techniques and transition from open to minimally invasive procedures have decreased the morbidity and mortality. Improvement in techniques and training programs has made it possible for patients who were

Department of General Surgery, Duke University Health System, 407 Crutchfield Street, Durham, NC 27704, USA

* Corresponding author.

E-mail address: dana.portenier@duke.edu

Surg Clin N Am 96 (2016) 743–762

<http://dx.doi.org/10.1016/j.suc.2016.03.009>

surgical.theclinics.com

0039-6109/16/\$ – see front matter © 2016 Elsevier Inc. All rights reserved.

previously at unacceptably high risk to now be candidates for bariatric surgery. These advancements have made it possible for bariatric surgery to expand into even higher-risk patients, such as the increasing subset of patients with end-organ failure. Access to organ transplantation and other complex surgical procedures is affected by obesity and the high-risk profile. Knowledge of the preoperative factors that predict for greater mortality could aid surgeons in surgical decision-making and help inform patients of their risks with bariatric surgery. Multidisciplinary teams in charge of the operative planning, surgical act, and postoperative recovery are determinant in the success of the management of high-risk bariatric patients. Careful identification and preoperative management of these higher-risk patients is crucial in decreasing complications after weight loss surgery.

High volume and near ubiquitous utilization of a minimally invasive approach, combined with advancement in perioperative care, have further mitigated postoperative morbidity in such high-risk patients. Bariatric surgery candidates usually have an extensive range of potential medical, surgical, and psychological comorbidities. These individuals should be carefully selected, extensively evaluated, and optimized so as to achieve best outcomes following an elective surgery. Therefore, a comprehensive multidisciplinary preoperative assessment is of great importance, especially in high-risk patients.

IDENTIFICATION OF HIGH-RISK FACTORS

Age

In the United States, 42.5% of women and 38.1% of men are obese in the range of 60 to 69 years, whereas among those 70 and 79 years, 31.9% of women and 28.9% of men are in this condition.⁵⁻⁷ Both overweight and obesity in the elderly are linked to physical disability.^{5,8} The increased life expectancy and higher prevalence of obesity have forced the number of elderly patients who need bariatric surgery to increase.⁶ Aside from the extensively reported comorbidity amelioration, the aim of the operation in the elderly is to increase disability-free survival and improve quality of life.⁶ In the elderly, age-related changes in body composition include a progressive increase in fat mass and a decline in lean mass and bone. Body fat redistribution occurs with an increment in visceral abdominal fat and a decrease in subcutaneous abdominal fat.⁹

Advanced age increases postoperative morbidity and mortality for any surgery. Patients older than 50 have higher rates of morbidity and mortality.^{10,11} Adverse event rates progressively increased with age, exhibiting a sharp increase at older than 60 years. Beyond the age of 65 years, the adverse event rate exceeded 20% and mortality was 3.2%.¹² Livingston and Langert¹² in 2006 demonstrated that advanced age (≥ 65 years) was an independent risk factor for adverse outcomes, as defined as length of hospital stay greater than 95th percentile, being discharged to a long-term care facility, or having died during the hospital admission for weight loss surgery. Nguyen and colleagues¹³ found that age older than 60 was a significant factor for in-hospital mortality. Because of lower physiological reserve and tolerance for complications, in this group of patients a rigorous verification of health status is implemented.

This increased risk profile has led some institutions to implement age restrictions. At Duke, no such restrictions exist, patients are evaluated on a case-by-case basis. Increased time is spent educating elderly patients of the relative unproven possibility that they may have aged out of lengthened survival. However, elderly patients seem to be interested in maintaining their lifestyle and independence (functional status), which worsening obesity tends to erode as people age.

Download English Version:

<https://daneshyari.com/en/article/4310542>

Download Persian Version:

<https://daneshyari.com/article/4310542>

[Daneshyari.com](https://daneshyari.com)