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Original article

Bariatric surgery in patients with bipolar spectrum disorders: Selection factors, postoperative visit attendance, and weight outcomes

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Abstract

Background: As many as 3% of bariatric surgery candidates are diagnosed with a bipolar spectrum disorder.

Objectives: 1) To describe differences between patients with bipolar spectrum disorders who are approved and not approved for surgery by the mental health evaluator and 2) to examine surgical outcomes of patients with bipolar spectrum disorders.

Setting: Academic medical center, United States.

Methods: A retrospective record review was conducted of consecutive patients who applied for bariatric surgery between 2004 and 2009. Patients diagnosed with bipolar spectrum disorders who were approved for surgery (n = 42) were compared with patients with a bipolar spectrum disorder who were not approved (n = 31) and to matched control surgical patients without a bipolar spectrum diagnosis (n = 29) on a variety of characteristics and surgical outcomes.

Results: Of bariatric surgery candidates diagnosed with a bipolar spectrum disorder who applied for surgery, 57% were approved by the psychologist and 48% ultimately had surgery. Patients with a bipolar spectrum disorder who were approved for surgery were less likely to have had a previous psychiatric hospitalization than those who were not approved for surgery. Bariatric surgery patients diagnosed with a bipolar spectrum disorder were less likely to attend follow-up care appointments 2 or more years postsurgery compared to matched patients without bipolar disorder. Among patients with available data, those with a bipolar spectrum disorder and matched patients had similar weight loss at 12 months (n = 21 for bipolar; n = 24 for matched controls) and at 2 or more years (mean = 51 mo; n = 11 for bipolar; n = 20 for matched controls).

Conclusion: Patients diagnosed with a bipolar spectrum disorder have a high rate of delay/denial for bariatric surgery based on the psychosocial evaluation and are less likely to attend medical follow-up care 2 or more years postsurgery. Carefully screened patients with bipolar disorder who engage in long-term follow-up care may benefit from bariatric surgery. (Surg Obes Relat Dis 2016;▮:00–00.) Published by Elsevier Inc. on behalf of American Society for Metabolic and Bariatric Surgery.

Keywords: Bipolar disorder; Bariatric surgery; Adherence; Weight loss

Approximately 1.5%–3.4% of bariatric surgery candidates have a diagnosis on the bipolar spectrum (e.g., Bipolar I, II, cyclothymia) [1–4], and patients with bipolar disorder are significantly more likely to be obese compared with the general population [5]. Bipolar spectrum disorders have a lifelong trajectory and are cyclical in nature. Depressive

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episodes that are common for most individuals with bipolar disorder are well known to be associated with weight gain [6], possibly due to increased emotionally motivated eating, decreased self-care behaviors, and decreased motivation for behavior change [7]. Another contributing factor to obesity in patients with bipolar disorder is the use of certain psychotropic medications, as many of these medications have been linked to weight gain [8]. Furthermore, depressive or manic episodes may contribute to behaviors that increase the risk for postsurgical complications [5].

Although bipolar spectrum disorders are not considered an absolute contraindication for bariatric surgery, little is known about the specific outcomes for patients with a bipolar spectrum disorder. Current guidelines for bariatric surgery recommend that patients with known or suspected psychiatric illness should undergo a psychosocial evaluation [9], and most bariatric surgery programs and third-party payors in the United States require this evaluation. A formal psychosocial evaluation by a mental health provider with expertise in bariatric surgery likely is particularly important for patients with bipolar spectrum disorders for a variety of reasons, including the potential severity of symptomatology, impulsivity, knowledge about bariatric surgery and potential psychotropic medication absorption issues, and potential disability associated with this disorder. Furthermore, mental health professionals seem to vary widely on their recommendations regarding bariatric surgery for patients with a bipolar spectrum disorder. A 2005 study found that active bipolar symptoms were considered a definite contraindication to surgery by 62% of bariatric center representatives and a possible contraindication by 32%; controlled symptoms of bipolar disorder were reported to be a definite contraindication by 3% and a possible contraindication by 82% [10]. There are not any well-defined guidelines to identify patients diagnosed with a bipolar spectrum disorder who are and are not appropriate for bariatric surgery. Indeed, such guidelines may not be practical, given the complexity of individual patients' situations. However, an underlying goal in evaluating all patients for bariatric surgery is to assess if they will be able to manage postoperative challenges [11]. Little empirical data are available on the results of the psychological evaluation for patients with bipolar spectrum disorders. There seems to be even less information about what characteristics distinguish patients with a bipolar spectrum disorder who are approved for surgery by mental health providers from those who are not approved.

Among individuals with a bipolar spectrum disorder who are approved for and obtain bariatric surgery, surgical outcome data are limited. We are aware of only 2 studies that have examined the surgical outcomes of bariatric surgery patients with a bipolar spectrum disorder separately from other mental health disorders. Both studies found weight loss at 12 months was similar for patients with and without bipolar spectrum disorders [1,2]. Furthermore, Steinmann et al. [2] reported similar follow up attendance for patients with bipolar disorder at 12 months compared to those without bipolar disorder. A few other studies have examined surgical outcomes among bariatric patients with bipolar spectrum disorders, but these studies have combined bipolar spectrum disorders with other mental health diagnoses (e.g., schizophrenia) [12,13] and have also included relatively short follow-up periods (12 months) [13], limiting their value for revealing any impact of bipolar disorder symptoms on weight loss outcome in the longer term.

In the present study, we had 2 primary objectives: 1) to describe the outcomes of the psychosocial evaluation for bariatric surgery patients diagnosed with a bipolar spectrum disorder, and differences between patients who were approved and not approved for surgery by mental health evaluators; and 2) to compare individuals with a bipolar spectrum disorder who had bariatric surgery with matched patients without a bipolar spectrum disorder on postsurgical weight change and follow-up care attendance, including longer-term weight outcomes. This research was conducted in a clinically derived sample of patients at a high volume, academic bariatric surgery center.

Methods

Participants

This is a retrospective database study of patients who applied for bariatric surgery at the (insert center name here) Q4 between January 2004 and December 2009, with surgeries occurring between November 2004 and June 2012. We included in the present study all patients seen within this time frame who were determined to have a bipolar spectrum disorder or related diagnosis characterized by presence of suspected manic/hypomanic episodes, which included patients diagnosed with bipolar disorder I or II, most recent episode depressed; bipolar disorder I or II, most recent episode manic; bipolar disorder I or II, most recent episode mixed; bipolar disorder, not otherwise specified; and cyclothymia. Matched control patients were selected from the database of all surgical patients without a bipolar spectrum disorder diagnosis. One-to-one matching was used, with criteria including gender, surgical procedure, age (within 3 yr), date of surgery (within 3 yr), body mass index ([BMI] within 3 kg/m^2), and OS-MRS scale score (a clinical Q5 scoring system to stratify mortality risk for patients undergoing bariatric surgery) [14]. Patients with a bipolar spectrum disorder for whom an appropriate match could not be identified were removed from the analyses comparing surgical patients and matched patients (n = 6). The study protocol was approved by the institutional review board and complies with ethical standards with regards to research and the use of human participants.