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Review Article

Screening And Treating Disordered Eating In Weight Loss Surgery: A Rapid Review Of Current Practices And Future Directions.

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Abstract

Some patients who have weight loss surgery (WLS) experience unsatisfactory weight loss and weight regain due to disordered eating, including binge-eating and loss of control eating (LOCE). Despite strong evidence that disordered eating is associated with poor Standardized screening and treatment procedures for WLS outcomes are not universally agreed upon. Our team used Ovid MEDLINE, Scopus, CINAHL, EMBASE, and Cochrane CENTRAL to examine the literature in order to fill this gap. We concentrated on studies that looked at the diagnosis and management of disordered eating in WLS populations.

Key findings were found in our review pertaining to (a) diagnostic and screening instruments, such as self-report measures and semistructured interviews, and (b) psychotherapeutic therapies, such as cognitive behavioral therapy (CBT) and other modalities. Although the results are not definitive, they do point to directions for further study that looks at the regular application of post-WLS screening and treatment procedures (including supplemental medication) for disordered eating.

Keywords: *disordered eating; weight loss surgery; screening; treatment; cognitive behavioral therapy; loss of control eating.*

INTRODUCTION

Adipose tissue (body fat) that is aberrant or excessive is a hallmark of obesity, a chronic illness that compromises health. 30% of adults in Canada are considered obese if their body mass index (BMI) is greater than 30 kg/m2. Over the past 20 years, prevalence has risen, and similar increases have been seen globally [1]. Numerous long-term health issues, such as type 2 diabetes, heart disease, and high blood pressure, are linked to obesity [2, 3]. Apart from its effects on physical health, obesity is associated with mental health conditions including increased anxiety and depression, which lower a person's overall quality of life [4]. All things considered, obesity is acknowledged as a severe medical illness that necessitates long-term, all-encompassing care as well as prevention measures.

Because it is successful in improving health outcomes, bariatric or weight loss surgery (WLS) is advised for those with a BMI of 35 kg/m2 or a BMI of 30 kg/m2 with metabolic disorders [5–11]. According to systematic reviews, WLS improves or resolves concomitant conditions like diabetes and hypertension and results in an average excess weight loss (EWL) of 61.2% [5]. A 2014 Health Canada study states that 6525 WLS procedures were carried out nationwide, which is a notable rise above 2006 figures [6]. Even with its possible advantages, a sizable fraction of WLS patients lose or gain weight in less than ideal ways. According to longitudinal studies, roughly 49% of patients recover weight following surgery, and 25% of patients do not maintain at least 20% weight loss during long-term follow-ups [7–9].

Furthermore, weight loss is associated by a rise in anxiety and sadness, a decrease in quality of life, a recurrence of diabetes and hypertension, and a decrease in weight [10,11].

Post-WLS weight outcomes are likely influenced by a number of factors due to the complex causes of obesity. Comorbid eating disorders and disordered eating (i.e., symptoms of co-occurring disorders) are among the factors that significantly contribute to poor weight loss outcomes [12,13]. A feeling of "losing control" during eating is a hallmark of disordered eating practices like binge-eating and loss of control eating

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(LOCE), wherein an excessively large quantity of food is consumed. These behaviors interfere with dietary adherence and weight reduction after WLS, as do others, such as picking and nibbling (P/N) or the competitive, impulsive consuming of little amounts of food [13]. Disordered eating is prevalent, affecting 25–39% of WLS patients, and is a reliable indicator of less than ideal weight outcomes [14,15]. In addition to being overweight, these habits have a detrimental effect on patients' health, resulting in decreased quality of life, low self-esteem, psychiatric comorbidities, and nutritional deficiencies [16].

Despite evidence linking disordered eating to poor WLS outcomes, there is no standard procedure for diagnosing and/or treating disordered eating in WLS patients. Furthermore, there is frequently conflict in the treatment of eating disorders and obesity. Low-calorie diets (800–1200 calories per day) are recommended for the treatment of eating disorders and can worsen binge eating and LOCE in patients who are at risk (i.e., by increasing cravings for high-calorie items in response to a semi-starvation state [17]). According to an environmental survey of WLS clinics in Canada, follow-up visits mostly concentrate on dietary recommendations and complementary exercise regimens to sustain weight reduction, with little attention paid to treating disordered eating. This emphasizes the need for more regular, evidence-based screening and treatment practices for eating disorders in WLS patients across the country. This paper aims to review the literature in order to identify current practices in the screening and treatment of disordered eating in WLS patients, given this gap in care. The screening and diagnostic methods for diagnosing disordered eating, the therapies used to treat disordered eating in WLS patients, and the suggestions -suggestions for further study.

METHODS

Our team did a literature assessment of the OvidMEDLINE, Scopus, CINAHL, EMBASE, and Cochrane Central databases for publications published between 2010 and 2024 in order to assess the existing evidence on screening and treatment procedures for disordered eating in WLS patients. "Eating disorders, anorexia nervosa, restrictive eating, bulimia nervosa, binge eating disorder, weight loss surgery, bariatric surgery, gastric bypass, vertical gastrectomy, sleeve gastrectomy, screening, preoperativecare, postoperativecare, and treatment" were among the search terms we used in a number of combinations.

The identified articles were screened for relevance by two independent reviewers (CP and KF), and disagreements were settled by a third reviewer (AK). A PRISMA diagram of the study selection procedure is shown in Figure 1. Key discoveries on the screening and treatment of disordered eating in WLS patients were highlighted by synthesizing pertinent findings into a narrative summary. This review also identifies gaps in the current literature and suggests future paths of inquiry.

FINDINGS

CurrentEvidenceforScreeningandDiagnosis

The most widely used interview-based test for assessing disordered eating behaviors and psychopathology is the Eating Disorder Examination (EDE; [18]). An adapted version of the Eating Disorder Examination—Bariatric Surgery Version (EDE-BSV;[19]) was developed to specifically measure eating behaviors in WLS populations in order to meet the unique context of WLS. The psychometric qualities of the EDE-BSV have been examined in two investigations thus far. Comparing the EDE-BSV to the original EDE subscales, the first study looked at the interrater reliability for evaluating post-WLS binge-eating and LOCE episodes [20]. At pre- and post-surgery timepoints, the second study assessed the EDE-BSV in comparison to the original EDE subscales in WLS populations [21]. Good interrater reliability but varying consistency across EDE-BSV subscale items in WLS patients were reported by both investigations [20,21]. The psychometric qualities of the EDE-BSV should be further examined in future studies, and a factor structure for the evaluation of WLS-specific traits should be established.

Even though the EDE-BSV is useful, the lengthy interview process makes it unsuitable for routine screening in slanted environments. Self-report assessments are a more practical way to screen for eating disorders in WLS patients. The most researched tool in the pre-WLS phase is the Binge Eating Scale (BES; [22]). The BES has been shown to be useful in screening for BED and binge-eating behaviors in patients seeking WLS, with good validity, consistency, and conformity with diagnostic criteria in our studies [23–26]. Table 1 provides a summary of other pre-WLS screening and diagnostic techniques.

A summary of the research indicates that screening after WLS, especially after the initial "honeymoon phase" (6–12 months post-WLS), is more clinically helpful than pre-WLS screening, even though there is evidence in favor of pre-WLS screening measures (such as the BES) [13]. This recommendation has two justifications. According to [13–15], disordered eating often manifests 4–24 months following WLS and affects 25–39% of patients. Second, those with eating disorders prior to WLS frequently lose weight in a manner similar to that of people without eating disorders and may also have a decrease in eating psychopathology after WLS [27, 28]. When combined, these results imply that diagnosing disordered eating before WLS is (a) frequently not predictive of post-surgery disordered eating and (b) not a reliable indicator of poor weight outcomes after WLS.

Sadly, not much research has looked at the psychometrics of screening measures in post-WLS patients. The Eating Disorder

After Bariatric Surgery—Questionnaire (EDABS-Q), a self-report variant of the EDE-BSV, may be promising [29]. One study demonstrated good construct concordance between the EDE-BSV and EDABS-Q, which led the authors to propose that the self-report measure is a suitable replacement for the longer, semi-structured interview.

LOCE is another possible target for post-WLS screening. LOCCE is the best indicator of unsatisfactory weight loss, weight rebound, and enhanced eating disorder psychopathology after WLS among disordered eating symptoms [13]. There is neurological evidence to support this construct as a heritable feature [31], and LOCE has been identified as a transdiagnostic symptom underlying other disordered eating behaviors like P/N and objective binge-eating [30]. These results imply that screening instruments measuring LOCE may be an ecologically sound way to detect disordered eating in post-WLS populations. Research on screening for LOCE post-WLS is still scarce, though. One study looked at post-WLS patients' factor structure on the Eating Loss of Control Scale (ELOCS; [32]). Exploratory factor analysis supported an alternative two-factor model that included both behavioral and cognitive/emotional aspects of LOC, while confirmatory factor analysis showed poor fit to a one-factor structure [33]. Although they need to be validated in post-WLS populations, other screening instruments that measure LOCE, like the LossofControlEatingScale (LOCES; [34]), may show potential for therapeutic application.

CurrentEvidenceforTreatment

The data on treatment for eating disorders in WLS patients indicates that psychotherapy after WLS produces better and more long-lasting results than therapies before WLS, much like screening techniques [47]. Although pre-WLS treatments may temporarily lower weight and eating disorders, these gains are frequently not sustained after surgery. No significant differences in weight or disordered eating outcomes are often reported between pre-WLS intervention and therapy as usual at 1- and 2-year follow-ups [48–50]. Due to the relatively low long-term effectiveness of pre-WLS therapies, we have chosen to solely summarize study.

Crucially, post-WLS treatments show better weight outcomes and more long-lasting decreases in disordered eating behaviors. This may be due to the fact that eating habits and feelings of hunger and fullness are likely to vary significantly between before and after WLS. It may be possible to use treatment ideas and skills more appropriately if one learns to manage LOCE or other disordered eating behaviors in that new post-WLS setting. Furthermore, LOCEpre-WLS is not a reliable indicator of LOCEpost-WLS, which means that pre-WLS interventions could not be focusing on the population that would benefit from them the most [51].

Cognitive behavioral therapy (CBT) offers the strongest evidence of treating disordered eating, associated psychopathology, and weight outcomes in post-WLS patients among the available therapies for pre- and post-WLS. This includes tele-CBT; however, research to date has not demonstrated significant gains in weight management for tele-CBT, therefore the success of long-term weight outcomes for tele-CBT is still underway [52–55]. Newer approaches including dialectical behavior therapy (DBT) and acceptance and commitment therapy (ACT) also show promise in enhancing disordered eating and weight results after WLS. In conclusion, there is initial evidence that psychological therapies can reduce disordered eating, associated psychopathology, and weight outcomes. Some interventions have been shown to have long-term benefits at long-term follow-ups [52–61]. The following is a complete list of therapies for disordered eating in pre- and post-WLS populations.

FutureDirectionsforResearch

Despite the strong evidence linking disordered eating to poor WLS results, our findings highlight the infrequent, inconsistent, and under-researched screening and treatment strategies for disordered eating in WLS populations. We suggest the following based on our evaluation of the literature because there isn't a well-established, evidence-based method for detecting and treating disordered eating in WLS patients. Establishing efficient screening for LOCE in the 6–24 months following surgery is necessary because LOCE is a transdiagnostic symptom that underpins the majority of disordered eating patterns and post-WLS LOCE is the best predictor of poor WLS outcomes. The EDE-BSV could be utilized for a more thorough diagnostic assessment of disordered eating in persons who screen positive for LOCE. Treatments such as CBT, ACT, and DBT are worthy of consideration for clinical and research use once they have been diagnosed. To improve accessibility, proposed protocols should ideally be made available in virtual and/or group-based modalities. They should also be appropriate for both diagnosing and subdiagnostic disorder deating.

The role of adjunctive pharmacotherapy in enhancing health-related outcomes for post-WLS patients is another encouraging avenue for future research. A recent analysis found three studies that looked at the relationship between weight outcomes in post-WLS patients and the impact of glucagon-likepeptide-1 receptoragonists (GLP-1RAs). GLP-1RAs were linked to significant BMI reductions and a larger overall weight decrease for up to six months, according to a pooled analysis [80]. Although this may be a promising strategy, caution should be exercised when using GLP-1RAs in people who have eating disorders [81]. Additionally, when taken in conjunction with psychotherapy therapies, other drugs, such as topiramate and LDX, which have been used to treat BED, may be able to reduce disordered eating

behaviors in post-WLS patients [82]. As compared to CBT-alone and LDX-alone groups, a recent randomized controlled trial demonstrated that a combination treatment integrating CBT with LDX significantly decreased binge-frequency, eating disorder psychopathology, and weight [83]. These results are corroborated by a double-blind, placebo-controlled study where treatment gains persisted at long-term follow-up [84]. Overall, there may be potential for improving treatment results in WLS populations with disordered eating if a combination strategy combining psychotherapy and medication—such as GLP-1RAs or stimulant medications—is implemented. However, in the context of WLS, this combination treatment method has not yet been thoroughly investigated. Future studies should examine how well these drugs work to reduce disordered eating behaviors, weight gain, and related psychopathology in individuals who have had WLS.

Lastly, in order for individuals with disordered eating to be eligible for WLS, some WLS facilities need pre-WLS eating disorder treatment. The present state of the literature is no longer reflected in this criteria [28, 29]. Clinics that still adhere to this strategy have to think about changing it to better take into account fresh data and put more of an emphasis on post-WLS treatment.

CONCLUSIONS

Even though disordered eating has a major effect on WLS outcomes, there is still inconsistency in standardized screening and treatment procedures. Targeted therapies including CBT, DBT, and ACT should be given priority, as well as routine post-operative assessment, given the correlation between LOC and unsatisfactory weight results. Newer pharmaceutical alternatives, such as lisdexamfetamine and GLP-1 receptor agonists, might provide further assistance, although more study is required to evaluate their long-term safety and effectiveness. Integrating multidisciplinary, evidence-based care models that incorporate medicine, psychotherapy, and dietary support is crucial for enhancing psychological well-being and weight management in order to maximize patient outcomes.

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