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Loss-of-Control Eating after Bariatric/Sleeve Gastrectomy Surgery: Similar to Binge-Eating Disorder Despite Differences in Quantities

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Abstract

Objective: To characterize loss-of-control eating following sleeve gastrectomy surgery by comparing relevant patient groups.

Method: Participants were 431 adults seeking treatment for eating/weight concerns categorized into one of four groups: 1) overweight/obesity (OW/OB), 2) binge-eating disorder (BED), 3) “Bariatric Binge-Eating Disorder” (Bar-BED) defined as meeting all criteria for *DSM-5* binge-eating disorder, except for the requirement of an unusually large amount of food, following sleeve gastrectomy surgery, and 4) “Bariatric Loss-of-Control Eating” (Bar-LOC Only), defined as experiencing at least once weekly loss-of-control eating episodes during the past month without the other associated clinical features and distress that characterize Bar-BED, following sleeve gastrectomy surgery.

Results: The Bar-BED and BED groups reported comparable levels of overall eating-disorder and depressive symptoms, and these levels were significantly higher than those levels reported by the OW/OB and Bar-LOC Only groups. Adjusting for age, body mass index, and race did not change the overall pattern of findings.

Conclusion: “Bariatric Binge-Eating Disorder” shares clinical features of *DSM-5* binge-eating disorder, regardless of the quantity of food consumed. Careful assessment of loss-of-control eating, associated behavioral features, and distress is warranted following surgery. More broadly, our findings highlight the importance of assessing loss-of-control eating across patient groups with obesity.

Keywords

Bariatric Surgery; Binge-Eating Disorder; Obesity; Overweight; Assessment

Introduction

Bariatric surgery is currently the most effective treatment for severe obesity resulting in remarkable levels of both short- and long-term weight loss, as well as improvements in and, in some cases, the resolution of medical and psychosocial comorbidities [1–3]. Currently,

laparoscopic Roux-en-Y gastric bypass and laparoscopic sleeve gastrectomy are the most commonly performed bariatric procedures in the US [4, 5]. Roux-en-Y gastric bypass usually results in > 50% excess weight loss [6], and improvements in or amelioration of medical comorbidities including diabetes, hypertension and dyslipidemias [2, 6, 7]. Sleeve gastrectomy rates have quickly surpassed Roux-en-Y gastric bypass rates [4], in part due to relatively comparable weight outcomes and fewer acute complications than Roux-en-Y gastric bypass [8]. The outcomes of both procedures far surpass weight outcomes achieved by the laparoscopic adjustable gastric banding procedure [8], which has been largely abandoned in the US [4]. Despite impressive *average* weight losses following the two most commonly performed bariatric surgery procedures, there has been significant variability in weight loss observed up to three and seven years post-operatively [3, 9].

A sizeable proportion of those undergoing bariatric surgery do not achieve expected weight loss and even amongst those that do achieve weight loss, weight regain following surgery [3, 9] is a common problem. To better understand and identify individuals at risk for suboptimal post-operative weight loss outcomes, several studies have examined the prognostic significance of various pre- and early post-operative psychosocial variables including the presence of loss-of-control eating and binge-eating disorder [10–15]. While pre-operative loss-of-control eating and binge-eating disorder are common in those seeking bariatric surgery, they appear to be much less common after surgery [14]. There is an emerging literature, however, suggesting that although pre-operative loss-of-control eating appears to have little predictive significance, post-operative loss-of-control eating is associated with less weight loss and poorer psychosocial functioning following bariatric surgery [14]. Accordingly, there is growing recognition of the need to better understand post-operative loss-of-control and binge-eating [16].

Despite the recent inclusion of binge-eating disorder as a formal diagnosis in the *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-5)* [15] and epidemiological research indicating it is the most prevalent eating disorder [17], limited attention in the literature has investigated the role of practitioners in identifying binge-eating disorder. Based on this emerging literature, practitioners are unlikely to assess the diagnostic criteria of binge-eating disorder [18, 19] and even when attempting to do so, they may be more likely to assess weight-related concerns as opposed to the clinical features of binge-eating disorder [20]. Lack of screening and assessment of loss-of-control eating or binge eating by general practitioners or by those in medical settings might be particularly problematic for post-operative bariatric surgery patients, who desire additional follow-up care, but report significant unmet needs following bariatric surgery [21, 22]. Although practitioners acknowledge the need for psychological services for some patients following bariatric surgery [21], there is little guidance on what problems after bariatric surgery practitioners should identify, as well as appropriate assessments, screening tools, or treatment recommendations. In addition, not all bariatric surgery centers provide post-operative mental health services, in part, due to barriers related to insurance coverage. An improved understanding of the different presentations of eating-disordered behaviors following surgery might help provide guidance to general practitioners and health care providers working with patients who have a history of bariatric surgery as well as help provide data to persuade insurance companies to cover these needs.

It is not surprising that rates of binge-eating disorder are quite low following bariatric surgery [11]. A diagnosis of binge-eating disorder requires at least weekly objective binge-eating episodes, defined as eating an *unusually large* quantity of food in a discrete period while experiencing a subjective sense of loss-of-control [15]. In addition, a diagnosis requires experiencing three of five associated symptoms (e.g., eating until feeling uncomfortably full, eating alone due to embarrassment), marked levels of distress, and the absence of regular compensatory behaviors that characterize bulimia nervosa [15]. The precise definition of the requirement that a binge episode be unusually large has been a matter of debate both within and outside of the bariatric field [16, 23–25]. Eating objectively large quantities following surgery is quite difficult due to the physical restrictions imposed by bariatric surgery and there has been no accepted definition of objectively large amounts of food following bariatric surgery [16]. It is worth noting that outside of the field of bariatric surgery, researchers have found that loss-of-control eating in itself, regardless of the quantity eaten during the episode, is associated with greater eating-disorder psychopathology [24–26]. These findings of the potential importance of loss-of-control eating, regardless of the quantity eaten, from both the bariatric field and the wider eating disorder literature merit further attention.

Ivezaj and colleagues [13] investigated the frequency and associated features of a form of post-operative binge-eating disorder in those who met all criteria for binge-eating disorder *except for* the unusually large quantity of food criterion. The authors referred to this group as “Bariatric Binge-Eating Disorder,” and compared treatment-seeking individuals with and without “Bariatric Binge-Eating Disorder” who presented with at least once weekly loss-of-control eating episodes following sleeve gastrectomy surgery. By six-months post-surgery the “Bariatric Binge-Eating Disorder” group had significantly greater eating-disorder behaviors and psychopathology, as well as lower total percent weight loss, compared to the group without “Bariatric Binge-Eating Disorder” (Bar-LOC Only). Although this study supported the notion that “Bariatric Binge-Eating Disorder” was associated with greater impairment relative to subthreshold levels, it remains unclear how closely the phenomenon of “Bariatric Binge-Eating Disorder” resembles *DSM-5* binge-eating disorder, which requires that the episodes of binge-eating be unusually large. While treatment-seeking individuals with and without binge-eating disorder [27–29] have been compared, it is not known whether “Bariatric Binge-eating Disorder” is best regarded as a form/variant of binge-eating disorder or whether those with this symptom constellation more closely resemble those with other forms of loss-of-control eating after surgery or indeed those with obesity (without binge-eating disorder) who seek weight loss treatment. A better understanding of these groups might have important clinical implications for the identification, assessment, and treatment of post-bariatric patients struggling with loss-of-control eating.

Thus, the purpose of this study was to compare four groups seeking treatment for both weight loss and eating concerns: 1) individuals with overweight/obesity who did not meet binge-eating disorder criteria, 2) individuals with overweight/obesity and binge-eating disorder, 3) post-bariatric surgery patients who met criteria for “Bariatric Binge-eating Disorder,” and 4) post-bariatric surgery patients with loss-of-control eating only who did not meet criteria for “Bariatric Binge-eating Disorder.” We hypothesized that the “Bariatric

Binge-Eating Disorder” group would most closely resemble the group with a *DSM-5* diagnosis of binge-eating disorder (despite not meeting the criterion of binge-eating size), and that these two groups would report greater psychopathology than those post bariatric surgery patients without “Bariatric Binge-Eating Disorder” (i.e., the Bar-LOC Only group) and the non-surgical group with overweight/obesity without binge-eating disorder.

Materials and Methods

Participants were 431 treatment-seeking adults (78.7% female; $n=321$) recruited from Yale medical centers for four separate clinical trials of treatments for eating and weight concerns. Overall, mean age was 45.68 ($SD=11.14$) years and body mass index (BMI) was 37.19 ($SD=6.46$) kg/m².

Procedures

Data were obtained from the baseline assessment of each of the four clinical treatment trials. Study assessments were completed by the same research team utilizing similar training standards and experience as well as similar recruitment methods from primary care and the institution’s bariatric surgery centers. The four trials included the following primary inclusion criteria: Studies 1 and 2 included individuals with overweight or obesity, with and without binge-eating disorder, recruited from primary care (see Barnes et al. [30, 31] for detailed information about these two trials), Study 3 included individuals with comorbid obesity and binge-eating disorder recruited from primary care (see Grilo et al. [32, 33] for detailed information about the trial), and Study 4 included individuals with regular loss-of-control eating (at least once weekly during the past month) approximately six months following laparoscopic sleeve gastrectomy surgery recruited from the institution’s bariatric surgery center of excellence [13].

All four trials had minimal exclusion criteria that were designed to enhance the generalizability of the findings. Studies 1 through 4 had similar exclusion criteria (with Studies 1 and 2 having identical exclusion criteria) such as age over 65 years old, severe psychiatric disorders (e.g., psychotic disorders), severe medical problems (e.g., cardiac disease), *uncontrolled* liver, thyroid disease, hypertension, or diabetes, and pregnancy/breastfeeding. Studies 1 through 3 also excluded a recent history of bariatric surgery. Study 3 had an additional exclusion of current antidepressant use, which was a contraindication to a study medication used in that specific trial.

Individuals from all four trials were classified into one of four groups described below: OW/OB, BED, Bar-BED, or Bar-LOC Only. All participants were in the overweight or obesity BMI ranges.

Creation of study groups

OW/OB Group.: Participants classified as the “OW/OB” group consisted of individuals who did not meet binge-eating disorder criteria but who had overweight or obesity. Participants in this group were recruited from two weight loss trials and consisted of 96 individuals who were primarily female (81.3%; $n=78$) [30, 31].

BED Group.: Participants classified as the “BED” group consisted of individuals who met *DSM-5* binge-eating disorder criteria. Participants in this group were recruited from three trials and consisted of 235 individuals who were primarily female (75.0%; $n=159$) [30–33].

Bar-BED.: Participants classified as the “Bar-BED” group consisted of individuals who met all criteria for full *DSM-5* binge-eating disorder, except for the objectively large amount of food criterion, following laparoscopic sleeve gastrectomy surgery. Refer to Ivezaj et al [18] for detailed information regarding “Bar-BED” categorization. Participants in this group were recruited from one trial and consisted of 46 individuals who were primarily female (84.8%; $n=39$) [13].

Bar-LOC Only.: Participants classified as the “Bar-LOC Only” group consisted of individuals who met criteria for at least weekly loss-of-control eating during the prior month, but did not meet full criteria for Bar-BED (described above), following laparoscopic sleeve gastrectomy surgery. In other words, participants in this category may have had subthreshold levels of loss-of-control eating frequency (< 1 /week during the prior *three* months), distress (no to minimal distress), or associated symptoms (< 3 symptoms). Participants in this group were recruited for the same trial as the Bar-BED participants and consisted of 54 individuals who were primarily female (83.3%; $n=45$) [13].

It is worth noting that for the bariatric groups, time since surgery was 6.4 (± 1.5) months, which did not differ significantly by study group (Bar-BED versus Bar-LOC Only, $p=.398$). Mean percent total weight loss was 20.2 (± 7.0) and percent excess weight loss was 45.1 (± 17.3), which did not differ significantly by study group (Bar-BED versus Bar-LOC Only, $p=.567$ and $p=.961$, respectively).

Measures

BMI.: Measured height and weight were used to calculate BMI.

***Eating Disorder Examination (EDE)* [34].:** The EDE is a semi-structured investigator-based interview that assesses eating-disorder behavior and psychopathology. The EDE generates four subscale scores, Restraint, Eating Concern, Weight Concern, and Shape Concern, and a combined global severity score. The EDE is a widely-used method for assessing the full range of eating-disorder psychopathology and has demonstrated good inter-rater and test-retest reliability in binge-eating disorder [35–37]. The EDE-Bariatric Surgery Version [38–40] was used for the bariatric surgery trial study group in this study; the original EDE items were used to calculate the subscale and global scores in the usual way. BED and Bar-BED status were determined based on the EDE and additional items were created to examine associated symptoms and distress specifically in response to loss-of-control eating [13]. In addition to examining the original EDE subscales (i.e., to facilitate comparison to the existing literature), we also examined the brief alternative 3-factor, seven-item version that has exhibited superior psychometric properties among bariatric surgery candidates [41], as well as non-clinical and clinical samples [42, 43]. This version yields three subscales: Restraint, Overvaluation of Weight/Shape, and Dissatisfaction with Weight/Shape.

***Beck Depression Inventory (BDI)* [44, 45].:** The BDI is a 21-item self-report measure of depressive symptoms that also measures negative affect and distress. Research has shown that the BDI serves as a strong signal for severity among binge-eating disorder [37] and bariatric surgery [46] patients including greater levels of psychopathology. Three of four trials used the BDI-II, while one trial used the original BDI. Both scales consist of 21 items with total scores ranging from 0–63.

Statistical Analyses

A series of general linear model analysis of variance (ANOVA) were used to compare the four study groups (OW/OB, BED, Bar-BED, Bar-LOC Only) on demographic and clinical variables (BMI, EDE subscales, BDI). Partial eta-squared (η^2), an effect-size measure, was calculated. When ANOVAs indicated significant overall group differences, Scheffe post-hoc tests were performed to determine which specific groups differed significantly. Analyses of covariance (ANCOVAs) were performed adjusting for significant demographic differences between the four study groups.

Results

Table 1 summarizes the demographic and clinical variables (including effect sizes) for participants based on the four groups: OW/OB, BED, Bar-BED, and Bar-LOC Only. The four groups did not differ significantly in sex, but there were significant differences in age, race, and BMI. The OW/OB group was significantly older with a greater proportion of White participants than the BED group. As might be expected, BMI for the OW/OB group was significantly lower than the other three groups, which did not differ significantly from each other.

EDE Subscales and Global Severity

With respect to the clinical variables, the four groups differed significantly on all the original EDE subscales and the Global severity scale (Table 1). Post-hoc analyses revealed a consistent pattern for EDE Shape Concern, Weight Concern, and Global severity scale scores, with the Bar-BED group scores similar to the BED group scores and both the Bar-BED and BED group scores significantly greater than the OW/OB and Bar-LOC Only groups, which did not differ significantly from each other. For EDE Eating Concern, post-hoc analyses revealed that all four groups differed significantly from each other with the Bar-BED group having higher scores than the BED group, which in turn were higher than the Bar-LOC Only group which itself had higher scores than the OW/OB group. In the case of the EDE Restraint scale, the Bar-BED group had higher scores than all three other groups, while the BED and Bar-LOC Only groups had significantly greater scores than the OW/OB group.

When adjusting for age, BMI, and race, the same pattern of findings emerged without any attenuation of effect sizes for EDE Eating Concern, Shape Concern, and Weight Concern. For EDE Global scores, however, the Bar-BED group had significantly higher scores than all groups, including the BED group, which in turn had significantly higher scores than both the

OW/OB and Bar-LOC Only groups and there were no significant differences between these latter two groups.

EDE Alternative Three Factor

When examining the brief alternative 3-factor EDE Restraint scale, post-hoc analyses revealed that the Bar-BED group had significantly greater Restraint than all other groups, and that the BED group had significantly greater Restraint than the OW/OB group; the OW/OB and Bar-LOC Only groups did not differ significantly from each other on the alternative Restraint subscale. For the alternative EDE Overvaluation subscale, post-hoc analyses revealed that the Bar-BED and BED groups had significantly greater Overvaluation than both the OW/OB and Bar-LOC Only groups, which did not differ significantly from each other. For the alternative EDE Dissatisfaction subscale, the BED group had significantly greater scores than all groups, while the Bar-LOC Only group had significantly lower scores than the Bar-BED and OW/OB groups, which did not differ significantly from each other. Adjusting for age, BMI, and race, revealed a similar pattern of findings.

Depression

Post-hoc analyses revealed that the Bar-BED and BED groups had significantly greater BDI scores than both the OW/OB and Bar-LOC Only groups, which did not differ significantly from each other. The BDI scores for the Bar-BED and BED groups were within the “borderline clinical depression” and the “mild mood disturbance” ranges, respectively, while BDI scores for the OW/OB and Bar-LOC Only groups were in the “normal” range. Adjusting for age, BMI, and race revealed a similar pattern of findings, although the Bar-BED group had marginally higher scores than even the BED group ($p=.056$).

Discussion

Our results suggest that patients with “Bariatric Binge-Eating Disorder” (i.e., those who fulfill all *DSM-5* criteria for binge-eating disorder, except for the “unusually large” criterion requirement for binge-eating episodes) resemble individuals who meet standard diagnostic criteria for binge-eating disorder. Amongst our treatment-seeking participants, both the Bar-BED and BED groups reported comparable levels of overall eating-disorder psychopathology and depressive symptoms, and their symptoms were higher than the levels reported by those with OW/OB and loss-of-control eating. Importantly, despite very similar BMI levels for both groups who had undergone bariatric surgery and subsequently experienced loss of control eating, it was only the Bar-BED group who reported higher levels of psychopathology consistent with that observed among individuals with *DSM-5* binge-eating disorder.

Relative to all other overweight/obesity comparison groups (including those with BED), the Bar-BED group reported greater eating concerns and greater overall eating-disorder psychopathology when adjusting for age, race, and BMI. Finally, there was no difference between the Bar-BED and BED groups in the overvaluation of both weight and/or shape, a core diagnostic feature of eating disorders [15]. Collectively, these findings provide further

support for the presence of an eating disorder very much like binge-eating disorder among a significant subgroup of patients following bariatric surgery.

Given the severity of the associated psychopathology in this group and its association with poorer weight losses and psychosocial outcomes, these findings suggest the importance of identifying post-bariatric surgery patients with binge-eating disorder, regardless of the quantity of food consumed during binge episodes, and possibly offering targeted interventions for the loss-of-control eating beyond the usual standard of care. The similarities between Bar-BED and BED suggest that evidence-based cognitive behavioral therapy (CBT) [47] may be helpful for these patients. Overall, findings suggest that clinicians should assess loss-of-control eating *regardless* of the food quantities and, if present, obtain more information on which to base clinical decision-making. More specifically, clinicians working with post-operative patients should assess for 1) loss-of-control eating without requiring “unusually large” quantities of food and associated levels of distress and 2) behavioral indicators (i.e., eating more rapidly than normal, eating until feeling uncomfortably full, eating alone due to embarrassment, eating when not physically hungry, and feeling very depressed, disgusted, or guilty about the loss-of-control eating). These latter “behavioral” questions, which have been found to perform well for identifying binge eating across eating disorders [48] appear to have good clinical value for asking patients about their eating behaviors.

More generally, the present results provide further evidence to question the importance of the requirement that episodes of binge-eating be unusually or objectively large, reinforcing findings that loss-of-control eating and associated binge-eating disorder features, regardless of the quantity eaten during the episode, is associated with greater eating-disorder psychopathology [24–26, 49] and predicts poorer bariatric outcomes [14].

When interpreting the results of this study, strengths and limitations should be considered. Importantly, our study made use of relevant patient comparison groups; that is, this study compared participant groups all of whom had excess weight and were: seeking treatment for eating/weight concerns; interested and enrolled in treatment trials for eating/weight at one medical center; and recruited and assessed in a similar manner using rigorous assessment protocols administered by highly trained and monitored research-clinicians. All studies used the same well-established semi-structured interview to assess eating-disorder psychopathology and binge-eating disorder and both the original and alternative subscales for the interview yielded similar findings. While somewhat differing BMI levels and inclusion/exclusion criteria were used across studies, all analyses were adjusted for group differences in BMI, as well as race and sex. Our findings for the bariatric group are limited to those undergoing sleeve gastrectomy, although this has recently become the most common bariatric surgery performed in the United States [4]. Thus, our findings may not generalize to other bariatric procedures or to persons with eating/weight concerns who do not seek treatment or who are unwilling to participate in research. In addition, our findings involve a cross-sectional comparison between the characteristics of various groups seeking treatment for weight loss and eating concerns, and we did not examine differences in course and outcome between the groups. Future research with larger samples followed over time are needed to better understand the long-term prognostic significance and treatment needs of

those with “Bariatric Binge-Eating Disorder”. Finally, it is worth noting that we are not intending to propose a new diagnostic category for bariatric surgery patients; rather we are highlighting the difficulties of the current classification system and identifying and describing the presence of potentially important eating behaviors that appear problematic for some patients following surgery.

Conclusions

Two potentially important findings emerged from the present study. First, the clinical features of those with “Bariatric Binge-eating Disorder” closely resemble those who fulfill all *DSM-5* criteria for binge-eating disorder, except for the “unusually large” criterion requirement for binge eating episodes. Careful assessment of loss-of-control eating, associated behavioral binge-eating disorder features, and distress is warranted following surgery as those with “Bariatric Binge-Eating Disorder” after surgery have less than optimal weight loss and clinical outcomes [8]. Second, these findings contribute to the growing literature that loss-of-control is a more important feature of disordered eating than quantity eaten. Similar findings have been obtained with a variety of different forms of eating disorders. Future prospective longitudinal research is needed to better understand the characteristics and treatment needs of post-operative binge eating and loss-of-control eating.

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Table 1.

Means and standard deviations of eating-disorder and depression levels by group

	NON-BARIATRIC SURGERY				BARIATRIC SURGERY				ANOVA	Effect Size	Age, BMI, and Race	ANCOVA Effect Size
	OW/OB n=96		BED n=235		Bar-LOC Only n=54		Bar-BED n=46					
	M	SD	M	SD	M	SD	M	SD	F	Post-hoc Tests		
Demographics												
Age	49.00	10.14	44.01	11.41	46.43	10.87	45.54	10.87	4.63**	OW/OB>BED	.033	--
Sex (Female) ^a	78	81.3%	159	75.0%	45	83.3%	39	84.8%	3.81	NS	.097	--
Race (White) ^a	61	63.5%	98	46.2%	26	48.1%	27	58.7%	9.10*	OW/OB>BED	.149	--
BMI	34.33	6.07	37.99	5.62	38.10	8.33	38.10	7.13	8.55***	All>OW/OB	.058	--
EDE Original												
Restraint	1.25	0.98	1.71	1.30	1.76	1.14	2.49	1.29	10.91***	Bar-BED>All; BED, Bar-LOC Only>OW/OB	.072	.072
Eating Concern	0.50	0.85	1.80	1.25	1.08	0.94	2.45	1.19	43.99***	Bar-BED>BED>Bar-LOC Only>OW/OB	.239	.219
Shape Concern	2.24	1.28	3.45	1.24	1.05	1.32	3.40	1.39	32.29***	Bar-BED, BED>OW/OB, Bar-LOC Only	.187	.166
Weight Concern	2.16	1.09	3.10	1.10	2.24	1.08	3.17	1.13	22.76***	Bar-BED, BED>OW/OB, Bar-LOC Only	.140	.113
Global	1.54	0.80	2.51	0.91	1.78	0.84	2.88	0.95	40.26***	Bar-BED, BED>OW/OB, Bar-LOC Only	.223	.201 ^b
EDE 3-Factor												
Restraint	1.46	1.22	1.87	1.38	1.83	1.37	2.54	1.44	6.63***	BAR-BED>All; BED>OW/OB	.045	.044
Overvaluation	2.09	1.91	3.43	1.93	1.94	1.82	3.39	2.01	17.05***	Bar-BED, BED>OW/OB, Bar-LOC Only	.109	.098
Dissatisfaction	3.56	1.34	4.40	1.21	2.70	1.56	3.74	1.37	28.46***	BED>All; Bar-BED, OW/OB> Bar-LOC Only	.169	.159
BDI	6.77	5.63	14.91	9.55	7.94	7.22	17.44	10.65	28.78***	Bar-BED, BED>OW/OB, Bar-LOC Only	.179	.162 ^c

Note. OW/OB = Overweight or obesity; BED = Binge eating disorder; Bar-LOC Only: Sleeve gastrectomy surgery with loss-of-control eating behavior, but did not meet criteria for BED or bariatric BED; Bar-BED: Sleeve gastrectomy surgery plus binge eating disorder except for the large quantity of food criterion.

* $p < .05$,

** $p < .01$,

*** $p < .001$

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^aReported as n (%), chi-square statistic, and phi
^bBar-BED>BED>OW/OB, LOC-Only
^cBar-BED>BED: *p-value*=.056