

MASTERS COURSE IN BEHAVIORAL HEALTH ABSTRACTS

BH-101

DEPRESSION AND INFERTILITY IN WOMEN SEEKING BARIATRIC SURGERY

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Background: Obesity has been associated with abnormalities in reproductive functioning and fertility in women. Potential mechanisms include neuroendocrine functioning, adipose tissue and regulation of sex hormones, leptin and ghrelin levels, and Polycystic Ovarian Syndrome (PCOS). The association between infertility, emotional distress, depression and anxiety have been demonstrated in non-obese populations; however, the association between depression and infertility in women undergoing bariatric surgery has not been examined.

Methods: Data were analyzed from female patients of child-bearing age (n=88; 70.5% Caucasian; Mean Age 36.2; Mean Education 14.3 years; Mean Body Mass Index 47.9 kg/m²) psychologically evaluated for bariatric surgery. Participants were dichotomized as Infertility+ (n=43) or Infertility- (n=45) based upon a medical history self-report questionnaire. Medical records were reviewed for demographics, BMI, history of physical and/or sexual abuse, psychiatric medication usage, outpatient behavioral health treatment, and psychiatric diagnoses.

Results: Women identified as Infertility+ were more likely to have been diagnosed with depressive disorder not otherwise specified or a major depressive disorder (X²=3.71, p<.05, X²=4.33, p<.05) than Infertility- women. However, Infertility+ women were less likely to be involved in outpatient behavioral health treatment (X²=5.65, p<.05) or to have a history of psychotropic medication usage (X²=4.61, p<.05).

Conclusion: Women struggling with infertility may be more psychiatrically vulnerable than other bariatric surgery candidates and less likely to have received treatment. Additional research on the association between fertility, depression, behavioral health treatment, and obesity is warranted. Future research should consider whether this potential relationship changes following bariatric surgery.

BH-102

EMOTIONAL DISTRESS IN BARIATRIC SURGERY PATIENTS WITH POLYCYSTIC OVARIAN SYNDROME

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Background: Polycystic Ovarian Syndrome (PCOS) is the most common endocrine disorder in reproductive-aged women and manifests in physical symptoms such as weight gain, insulin resistance, and infertility. Research indicates an association between PCOS and increased rates of depression, anxiety, and body dissatisfaction; however, this relationship has not been examined in bariatric surgery patients. The present study aimed to expand upon the current research by exploring emotional distress in women with and without PCOS seeking bariatric surgery.

Methods: Of 161 female preoperative patients, (65.8 % Caucasian; Mean Age = 36.07; Mean BMI = 48.87 kg/m²; Mean Education = 14.59 years) 45 were diagnosed with PCOS (PCOS+). PCOS+ women were compared to women without PCOS (PCOS-) on the MMPI-2-RF and Binge Eating Scale. Medical records were reviewed for demographics, BMI, suicide history, outpatient behavioral health treatment, psychiatric medication usage, and psychiatric diagnoses.

Results: PCOS+ women reported significantly more distress than PCOS- women on the MMPI-2-RF, including scales measuring Emotional/Internalizing Dysfunction (p < .01), Dysfunctional Negative Emotions (p < .05), Cynicism (p < .01), Self-Doubt (p < .01) and Stress/Worry (p < .01). There were also trends toward more binge eating symptoms (p = .065) and depressive symptoms on the MMPI-2-RF (p = .074) for PCOS+ women. No differences were noted on psychiatric history.

Conclusion: In a bariatric surgery population, women with PCOS may experience greater psychological distress. Future research should examine if these group differences change after bariatric surgery, potential differential weight loss outcomes between PCOS groups and the impact of

treatment addressing potential PCOS-related psychological vulnerabilities.

BH-103

CHANGES IN REPRODUCTIVE AND PSYCHOSOCIAL IN OBESE WOMEN FOLLOWING BARIATRIC SURGERY OR LIFESTYLE MODIFICATION

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Background: Obesity can have detrimental effects on reproductive hormones as well as menstrual regularity, ovulation, and fertility. A number of studies have suggested that modest weight loss is associated with improvements in these domains. The current study examined the impact of both modest (induced through lifestyle modification) and larger weight losses (induced by bariatric surgery) on markers of reproductive, metabolic and psychosocial functioning.

Methods: Forty four women (mean age 32.41 ± 7.45 yrs, mean BMI 38.62 ± 7.49 kg/m²) were treated with lifestyle modification designed to produce a 10% weight loss. Twenty four women (mean age 34.6 ± 4.70 yrs., mean BMI 49.65 ± 9.0 kg/m²) underwent bariatric surgery and were expected to experience a larger percent weight loss. Prior to surgery or the onset of treatment and then 6 and 12 months later, we assessed reproductive hormones (sex hormone binding globulin, testosterone, thyroid stimulating hormone, progesterone, prolactin, anti-Mullerian hormone), enterokines and adipokines (including TNF alpha, ghrelin, adiponectin, leptin, and soluble leptin receptor). We also assessed changes in mood, eating behavior, marital and sexual behavior.

Results: Preliminary inspection of the data suggests that women who lost weight experienced positive changes in the physical and psychosocial variables of interest. The magnitude of these changes appeared to be associated with the degree of weight loss.

Conclusion: The results of this study provide important information on the changes in reproductive hormones and relevant psychosocial variables in women of reproductive age who undergo weight loss.

BH-104

CHARACTERISTICS OF CHILDHOOD FEEDING PRACTICES BEFORE AND AFTER BARIATRIC SURGERY

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Background: There is a noteworthy lack of information on the effect of bariatric surgery on the home food environment and the impact one individual changing eating behavior influencing the behavior of others, particularly children. This study was designed to assess family feeding practices before and after a mother underwent bariatric surgery.

Methods: Prior to surgery, 41 mothers (mean age 38 ± 8.9 years) of at least one child between the ages of 2 and 16 completed the revised Child Feeding Questionnaire, the Comprehensive Feeding Practices Questionnaire, the Eating Inventory, the Fat Preference Questionnaire, and a shelf inventory which assessed foods currently in the home. Twenty one of these women also completed these measures postoperatively. A second group of 23 mothers (mean age 44 ± 7.8 years) who had undergone bariatric surgery within the past 6 to 12 months also completed the measures.

Results: Women who had undergone surgery reported greater cognitive restraint and lower disinhibition as compared to those assessed prior to surgery. There were few differences in child feeding practices between women awaiting surgery and those who had undergone surgery. Women who had undergone surgery endorsed more frequent grocery shopping as well as more frequent purchases of poultry and seafood and less frequent purchases of baked goods, crackers and chips. Women who had undergone surgery also reported more frequent modeling of healthy eating behaviors

Conclusion: This preliminary study suggests that women who have undergone bariatric surgery make some positive changes to the food they bring into the home, their own eating behavior, and child feeding practices. The behavioral changes required of

bariatric surgery may represent a ‘teachable moment’ for mothers who then can make positive changes to family eating behavior.

BH-105

PHYSICAL ACTIVITY AS A PREDICTOR OF WEIGHT LOSS AFTER BARIATRIC SURGERY

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Background: Bariatric surgery is an effective method for producing long-term weight loss. However, it is not successful for everyone since significant weight regain can occur. Adherence to recommended diet and physical activity are paramount to successful weight loss after surgery. This study assessed whether reported physical activity using the International Physical Activity Questionnaire (IPAQ) correlates with weight loss after surgery.

Methods: Patients post bariatric surgery (RYGB, SG, BPD-DS) completed the IPAQ questionnaire 12 months after surgery. Weights were recorded at 12 months and compared to recorded preoperative weight. The IPAQ questionnaire is a validated tool assessing self-reported physical activity. It provides an estimate of total activity reported and a breakdown of the number of minutes engaged in sitting, walking, moderate, and vigorous physical activity.

Results: Questionnaires were completed and collected for 60 subjects. Subjects were divided into two cohorts: GWL, those who lost more than 50% of excess body weight (50%EWL) or LWL, those who lost less than 50% EWL. There was no significant difference amongst the groups in terms of baseline characteristics. In the GWL cohort (n=49) the weight loss observed was 67.9% EWL versus 41.3% in the LWL (n=11) (p<0.001). GWL subjects also reported higher minutes of activity in all categories when compared to the LWL cohort. This trend was substantial but did not reach statistical significance due to power analysis limitations. Data collection is ongoing.

Conclusion: Our study shows a trend towards greater physical activity correlating with greater weight loss after bariatric surgery.

	GWL (n=49)	LWL (n=11)	p-value
Age (years)	50.4	55.8	0.15
Pre-op Weight (kg)	119.8	126.8	0.22
1 year Post-op Weight (kg)	78.4	97.4	<0.001
Total Activity (min)	1016.5	324.1	0.07
Vigorous Activity (min)	217.7	143.2	0.28
Moderate Activity (min)	424.8	78.1	0.12
Walking (min)	522.5	143.1	0.08
Sitting (min)	336.5	336.2	0.99

BH-106

WHICH BARIATRIC PATIENTS RESPOND POSITIVELY TO BINGE EATING INTERVENTION?

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Background: Responders to a cognitive behavioral binge eating intervention for bariatric patients have been shown to have greater postsurgical weight loss. The present study sought to identify which patient characteristics are associated with intervention response. Specifically, patients with lower levels of internalizing and externalizing pathology, higher adherence and mental health ratings, and lower eating disorder pathology were expected to have better response to the intervention.

Methods: Chart review was conducted on 252 patients who completed a presurgical binge eating treatment (94 responders [BES < 18 and 0 binge eating episodes postgroup] and 158 nonresponders). Responders versus nonresponders were compared on pre-intervention self-reported binge eating episodes, pre-intervention Binge Eating Scale scores, MMPI-2-RF scale scores, and Cleveland Clinic Behavioral Rating Scale (CCBR) scores.

Results: Nonresponders had a significantly higher number of binges (3.2 vs. 2.6 BEE/week; $t = -2.06$, $p < .05$) and binge eating cognitions (BES = 23 vs. 21; $t = -3.08$, $p < .01$) pre-intervention. Responders scored significantly lower than nonresponders on MMPI-2-RF measures of Behavioral-Externalizing Dysfunction ($t = -3.06$, $p < .01$), Antisocial Behavior ($t = -2.55$, $p < .01$), Juvenile Conduct Problems ($t = -2.53$, $p < .01$), Aggression ($t = -2.45$, $p < .05$), and Disconstraint ($t = -2.02$, $p < .05$). Responders were also rated significantly higher on Adherence ($t = 2.13$, $p < .05$) using the CCBRS.

Conclusion: The results suggest that patients with higher externalizing and impulsive behaviors, those judged as less adherent, and those with more severe binge eating behaviors may have more difficulty responding to a brief cognitive behavioral binge eating intervention.

BH-107

Stop Weight Regain: A 6 Week Intervention for Post-Bariatric Patients Experiencing Weight Regain

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Background: A subset of post-bariatric surgery patients will fail to maintain successful weight loss. The potential benefit of behavioral techniques at preventing weight regain post bariatric surgery is unknown. The primary aim of this study was to develop a six week psychological and behavioral intervention utilizing techniques of cognitive (CBT) and dialectical (DBT) behavior therapy to stop and reverse early weight regain in a single-arm pilot study

Methods: (NCT01453517) 33 patients (91% female, 100% Caucasian) with a mean age of 54 and a mean BMI of 36 had regained an average of 17 kg or 40% of total weight lost after Roux-en-Y gastric bypass (RYGB) surgery. All patients completed SCID I modules assessing mood and substance dependence, and completed a series of questionnaires (Beck Depression Inventory-II, Distress Tolerance Scale, Eating Disorder Diagnostic Scale, Eating Disorder Examination-Questionnaire). Results were analyzed utilizing repeated measures ANOVAs.

Results: Weight decreased during the intervention by an average of 2 kg. ($p \leq 0.008$). Level of depressive symptoms (BDI score) improved for patients ($p \leq .012$). Self-reported and food record indicators of graze eating practices decreased ($p \leq 0.001$).

Conclusion: Psychological and behavioral factors contribute to early weight regain for a subset of post-bariatric surgery patients. A six week CBT-DBT intervention can reverse trajectories of weight regain. Although modest, results indicate that weight decreased, mood improved, and graze eating patterns decreased with the intervention. Early application of the Stop Weight Regain intervention may be a useful post-bariatric surgery treatment to enhance long-term weight and health outcomes.

BH-108

SELF-ESTEEM BEFORE AND AFTER BARIATRIC SURGERY

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Background: In the present study, we have: 1) examined quality of life (QoL) for self-esteem in relation to other QoL issues and psychosocial status, and 2) studied the effects of surgery (1 year) on self-esteem.

Methods: The population included 104 bariatric patients, i.e. BMI=47+8, age=46+16 years, and a matched group of lean controls (LC). Self-esteem and other quality of life measures (health, social/interpersonal, work, mobility, sex, activities of daily living, eating) were assessed by the Impact of Weight on Quality of Life (IWQOL) questionnaire. Psychosocial status was examined using the Millon Behavioral Medicine Diagnostic (MBMD) questionnaire.

Results: We found that patients scored poorly on the self-esteem IWQOL scale when compared to LC ($p < 0.0001$), and that female patients had significantly ($p < 0.003$) lower self-esteem than did their male counterparts (51.1 vs. 62.4). Self-esteem was not associated with BMI nor with age ($p > 0.05$). However, low IWQOL for self-esteem was strongly ($p < 0.01$) correlated to low IWQOL for social/interpersonal relations ($r = 0.75$, $p < 0.00010$). As regards psychological status, individuals with low IWQOL self-esteem had significantly ($p < 0.05$) higher scores on the MBMD Depression, Anxiety, Introversion, Inhibition, Dejection, Denigrated, and Social Isolation scales. One year post-surgery, IWQOL scores for self-esteem increased by 52%,

approaching those of the LC. Changes in IWQOL self-esteem were independent of weight loss but strongly related ($r=0.77$, $p<0.0001$) to improvement of IWQOL social/interpersonal relations.

Conclusion: Low self-esteem among morbidly obese surgical candidates is associated with poor social/interpersonal relations and a number of psychosocial issues. Bariatric surgery results in highly significant improvement in self-esteem, independent of weight reduction.

BH-109

THE EFFECTS OF AGE ON QUALITY OF LIFE BEFORE AND AFTER BARIATRIC SURGERY

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Background: Increasing age, independent of body size, has a negative effect on many aspects of life quality. The purpose of this study was to examine the effects of age on quality of life of morbidly obese patients before and one year after bariatric surgery.

Methods: Participants included 104 bariatric surgical candidates whose quality of life was assessed before and one year after surgery using the Impact of Weight on Quality of Life Questionnaire (IWQOL). Associations between age and IWQOL were studied for all participants and for individuals in the upper and lower quartiles of age, i.e. patients >60 and those <37 years.

Results: IWQOL for all participants was impaired ($p<0.01$) with increasing age for health, mobility, sex, and eating; and, these same variables were significantly lower ($p<0.01$) for patients >65 years as compared to their younger cohort. Age was not associated with work, self-esteem, activities of daily living and was positively correlated ($p=0.004$) to social/interpersonal relations. Bariatric surgery led to a 28% total reduction in BMI with no significant differences in weight loss between the older and younger subsets (% change BMI= 24.1 ± 2.6 and 27.9 ± 2.2 , respectively). Surgery resulted in highly significant improvement in all of the IWQOL subscales, and such improvements were similar between patients in the upper vs. lower quartiles of age. Increasing age remained an inverse correlate ($r=0.31$, $p=0.01$) of IWQOL mobility ($p<0.05$) but no longer had a negative influence on any of other IWQOL domains.

Conclusion: Surgery leads to highly significant improvement in IWQOL for all patients, regardless of age.

BH-110

COMPARATIVE EFFECTS OF ROUX-EN-Y GASTRIC BYPASS, SLEEVE GASTRECTOMY, AND THE ADJUSTABLE GASTRIC BAND ON QUALITY OF LIFE

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Background: Comparative studies of the effects of Roux-en-Y gastric bypass (RYGB), sleeve gastrectomy (SG), and the adjustable gastric band (AGB) on quality of life (QoL) are lacking. In the present study, we report on the first year findings of a 2-year study designed to compare the effects of surgical procedures on QoL.

Methods: The population included 104 bariatric patients (37 RYGB, 30 SG, 37 AGB), along with an age-matched group of lean controls (LC). QoL was assessed by the Impact of Weight on Quality of Life (IWQOL) questionnaire before and one year post-surgery.

Results: Preoperatively, there were no significant differences between surgical procedures for IWQOL, BMI, age, or gender. IWQOL for all domains was significantly ($p<0.001$) lower for bariatric patients than for LC. Postoperatively, total % BMI significantly declined (RYGB = 32.3 ± 1.5 , SG = 31.6 ± 1.7 , AGB, 16.5 ± 1.9) and, for each of the surgical procedures, IWQOL significantly ($p<0.0001$) improved. Between the surgical procedures, there were no postoperative differences in IWQOL for social/interpersonal relations, work, self-esteem, sex and eating. However, IWQOL for health, mobility, and activities of daily living was significantly ($p<0.05$) greater for the RNY and SG than for the AGB, and these IWQOL measures were significantly correlated ($p<0.0001$) to reductions in BMI.

Conclusion: At postoperative year 1, all 3 surgical procedures significantly improved QoL. RNY and SG improved QoL for mobility, health and activities of daily living to a significantly greater extent than did the AGB due, in part, to the greater weight loss of these procedures.

BH-111

MOOD AND ANXIETY RELATE TO BEHAVIORAL ADHERENCE 3 MONTHS AFTER WEIGHT LOSS SURGERY

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Background: Severe depression has been considered a contraindication for bariatric surgery with less severe presurgical depression associated with poorer weight loss after sleeve gastrectomy and Roux-en-Y gastric bypass. However, the link between postoperative mood and behavioral adherence has not been well examined. Thus, this study examined the relationship between self-reported post-surgical depression and anxiety and 3-month postoperative behavioral adherence.

Methods: Data were analyzed from patients (n=99; 74.2% Female; 67.3% Caucasian; Mean Age= 48.06, Mean presurgical BMI=52.24 kg/m²) who completed a 3 month postoperative shared psychological appointment and behavioral questionnaire. Patients who indicated postsurgery depression and/or anxiety were compared to patients not endorsing these symptoms on behavioral adherence.

Results: Patients endorsing postsurgical depression reported greater use of tobacco (t =2.48; p < .001), carbonated beverages (t =3.71; p < .001), caffeine (t =2.09; p < .05), and alcohol (t =.978; p < .05), and indicated more graze eating (t =2.22; p < .001). Patients endorsing anxiety reported less exercise (t =-1.19; p < .05), and greater tobacco use (t =3.28; p < .001), and graze eating (t =2.33; p < .001). Post-surgical anxiety was also associated with dehydration and a trend for rehospitalization (X²=7.01, p<.05; X²=5.03, p<.057 respectively).

Conclusion: Mood and anxiety relate to behavioral adherence at 3-months postsurgery and postsurgical anxiety is linked to serious medical complications including dehydration and rehospitalization. Psychiatric symptoms should be closely monitored postoperatively for optimal intervention. Future research should focus on the long-term impact of postoperative depression and anxiety on behavioral adherence.

BH-112

PAST SUICIDE HISTORY AND POSTOPERATIVE BARIATRIC SURGERY OUTCOMES AND ADHERENCE

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Background: Research has examined vulnerability to suicide in bariatric patients pre- and post-operatively. As a result, active/recent suicide behavior is often considered a contra-indication for bariatric surgery. However, limited work has examined the association between past suicide attempts and postoperative outcome.

Methods: This study examined the relationship between self-reported past suicide attempts and pre-operative objective personality/psychopathology correlates, 1 month post-bariatric surgery complications and 1-month behavioral adherence.

Results: Of 691 patients evaluated, the majority were middle-aged (M=46 years), female (73%), and Caucasian (68%) with a mean BMI=47.7 kg/m². Past suicide attempt(s) (SH+) were reported by 12%. Compared to patients with no suicide attempt history (SH-), SH+ patients were more likely to be female (13.7% vs. 7.9%; $\chi^2(1, 676) = 4.12, p < .04$) and receiving disability (20.6% vs. 8.2% employed vs. 10.6% not employed; $\chi^2(2, 665) = 17.27, p < .001$). Patients with emotional dysfunction (particularly demoralization), somatization, and family problems as indicated on the MMPI-2-RF, were at increased risk for SH+. At 1-month, SH+ patients were more likely to endorse a prolonged hospital stay (p < .01) and grief over the loss of food compared to SH-counterparts (p < .02), after controlling for covariates. No significant differences were found on self-reported adherence with obtaining sufficient protein, hydration, and exercise at one month post-op.

Conclusion: Past suicide history is an important risk factor for prolonged hospital stay and grieving the loss of food. However, it does not appear to impede behavioral adherence. Future research should further clarify the relationship between SH+ and post-operative outcomes and adherence.

BH-113

THE RELATIONSHIP OF PAST TOBACCO USE, BARIATRIC SURGERY OUTCOME, AND BEHAVIORAL ADHERENCE

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Background: Tobacco use has been shown to increase the risk of postoperative complications following Roux-en-Y gastric bypass (RYGB) surgery.

Methods: This study extended current research by exploring the relationship between past tobacco use and 1-month outcome following RYGB. Specifically, patients with past tobacco use (TH+) were expected to endorse higher rates of prolonged hospitalization and re-hospitalization, greater self-reported perioperative anxiety, and lower postoperative weight loss and behavioral adherence following RYGB.

Results: Of 414 patients evaluated, the majority were middle-aged (M=47 years), female (75%), and Caucasian (74%) with ~14 years education and a mean Body Mass Index = 47.4 kg/m². Past tobacco use was reported by 43%. Compared to patients with no tobacco history (TH-), TH+ patients were significantly older (M=48.3 years, SD=11.7 vs. M=45.6 years, SD=11.1) and less educated (M=13.3 years, SD=2.3 vs. M=14.2 years, SD=2.5). Once these covariates were controlled, TH+ patients were more likely to endorse a prolonged hospital stay (p<.046). TH+ patients also demonstrated poorer 1-month post-operative adherence with caffeine abstinence compared to TH- counterparts (p<.022). No significant differences at one month were found between groups on excess weight loss, rates of re-hospitalization, perioperative anxiety, fear of failure/weight regain, or postoperative adherence with obtaining sufficient protein and hydration.

Conclusion: Past tobacco use may be an indicator for additional education and intervention to facilitate pre-surgical preparation and optimize postoperative adherence. Further research should examine additional peri- and post-operative outcomes as well as adherence to other behavioral recommendations for optimizing surgery outcome.

BH-114

AN EXAMINATION OF PSYCHIATRIC MEDICATION USAGE AND ONE-YEAR BARIATRIC SURGERY OUTCOMES

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Background: Among bariatric surgery candidates, presence of at least one psychiatric diagnosis and use of psychotropic medication are common. However, associations between these risk factors and surgical outcomes are largely unexplored.

Methods: The current study examined psychiatric medication use in 666 patients who underwent bariatric surgery between 2008 and 2009. Those who were on psychotropic medications (PM+; n=169, 25%) were compared to those who were not (PM-; n=497, 75%) on peri- and post-operative outcomes, including inpatient length of stay, readmissions for nausea, vomiting or pain, attendance at follow-up visits, and weight loss at 6 and 12 months.

Results: PM+ patients were significantly older and were more likely to be female, Caucasian and to have undergone SG or RYGB versus AGB. However, the groups did not differ on preoperative BMI, nor were there significant differences between PM+ and PM- on any of the outcome variables examined.

Exploratory analyses of the PM+ group revealed that those on > 2 psychotropic medications (n=64, 38%) lost a significantly greater percentage of initial body weight at 6 months than those on one medication, even after adjusting for surgical procedure (p<.05). This difference was no longer present at 12 months, nor did there appear to be an association between use of a greater number of psychiatric medications and any of the other demographic, clinical or outcome variables included in this study

Conclusion: Psychiatric medication use does not appear to be associated with poorer perioperative or 1-year follow-up outcomes. Research including longer-term follow-up is needed.

BH-115

ALCOHOL USE FOLLOWING BARIATRIC WEIGHT LOSS SURGERY: LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS VS. LAPAROSCOPIC GASTRIC BANDING

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Background: There is a paucity of research investigating changes in substance use following weight loss surgery (WLS). The current study investigated changes in alcohol use following WLS.

Methods: Participants (N=155) were recruited pre-operatively from a major urban hospital. All participants underwent either laparoscopic gastric banding (Lap-Band) (n=55) or laparoscopic Roux-en-Y gastric bypass (Bypass) (n=100) surgery. Participants were administered measures on substance use (including alcohol use) prior to undergoing surgery (T0) and 1 month (T1), 3 months (T3), 6 months (T6), 12 months (T12), and 24 months (T24) post-surgery.

Results: Data was analyzed using Mixed Model Repeated Measures (MMRM) ANOVA. Results indicate that there was a significant effect of type of surgery on alcohol use over time (F [5, 300.6] = 2.93, p=.013). Participants in the bypass group experienced an initial decrease in alcohol use from T0 (1.86 ± .50 SEM) to T1 (0.39 ± .52 SEM, p=6.97E-7) and from T0 to T3 (0.64 ± .55 SEM, p=.002). In addition, participants in the bypass group experienced a significant increase in alcohol use from T0 to T24 (3.08 ± .58 SEM, p=.011). The lap-band group did not experience any significant changes in alcohol use over time. There were no significant changes in participants' classifying their alcohol use as problematic or other people complaining about participants' alcohol use for either the bypass or the lap-band group.

Conclusion: Findings suggest that patients who undergo gastric bypass surgery exhibit increased alcohol use post-surgery, while patients who undergo lap-band surgery do not exhibit any changes in alcohol use. This increase in alcohol use seems to occur most dramatically between 1 and 2 years post-surgery.

BH-116

ALCOHOL PROBLEMS BEFORE AND IN THE FIRST TWO YEARS FOLLOWING BARIATRIC SURGERY

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Background: Clinical reports have highlighted the onset or recurrence of alcohol problems after bariatric surgery, but prospective data are lacking.

Methods: The Longitudinal Assessment of Bariatric Surgery-2 is a 10-center cohort study of adults who underwent bariatric surgery. Past year alcohol use was measured with the Alcohol Use Disorders Identification Test (AUDIT). Of 2458 participants, 1945 completed the AUDIT pre-surgery and 1 yr and/or 2 yrs post-surgery. Generalized linear mixed models tested for differences in alcohol problems (i.e., AUDIT score ≥8, indication of 'alcohol-related harm' or 'alcohol dependence') over time and determined predictors of post-surgery alcohol problems.

Results: The percentage of participants (78.8% female, 87.0% white, median age=47 yrs, body mass index=45.8 kg/m²) with a past year alcohol problem was significantly higher at 2 yrs (9.6%; p<.01) compared to pre-surgery (7.6%) and 1 yr (7.2%). One in eight (12.0%) participants had alcohol problems within 2 yrs post-surgery, 39.5% of whom had problems pre-surgery. Alcohol problems (OR=18.6; p<.01), illegal drug use (OR=2.4; p<.01), lower Interpersonal Support Evaluation List 'belonging' score (OR=.92; p<.01), household income ≥\$100,000 (OR=1.9; ref.=<\$25,000; p=.03), male sex (OR=2.0; p<.01), and younger age (OR=.63 per 10 years; p<.01) at pre-op, and having a Roux-en-Y gastric bypass (OR=2.0; ref.=adjustable gastric band; p<.01), were independently related to increased odds of alcohol problems at 1 yr and 2 yrs. The odds of an alcohol problem at 2 yrs compared to 1 yr was 1.6 (p<.01).

Conclusion: More participants reported alcohol problems in the 2nd year after surgery compared to before surgery. Pre-surgery alcohol problems increased the odds of post-surgery problems. However, over half of participants with post-surgery alcohol problems did not have pre-surgery problems.
