

Psychological Assessment of the Patient Undergoing Bariatric Surgery

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ABSTRACT

The purpose of this article is to provide an overview of the critical domains assessed during the psychological evaluation of candidates for bariatric surgery. Although no formal standard exists in the literature, there is growing recognition of the important elements to be addressed and the appropriate means for collecting the necessary data to determine psychological readiness for these procedures. Information regarding the components of the clinical interview and the specific measures used for psychological testing are discussed. Given the limited data on predicting success after surgery, determining psychological contraindications for surgery is addressed. Additionally, the multiple functions served by the psychologist during this assessment procedure are highlighted along with the value of this procedure in the patients' preparation for surgery.

INTRODUCTION

As the rates of obesity increase, so do the medical problems caused and exacerbated by this physical state. For many, traditional methods of weight loss have proven ineffective for achieving and maintaining significant weight reduction. Bariatric surgery (ie, laparoscopic gastric banding, gastric bypass) offers these patients the opportunity to experience significant weight loss that can be maintained. The number of obese patients seeking bariatric surgery is steadily rising. But, unlike traditional diets for which risks are low and discontinuation can occur at any time, bariatric surgery has inherent risks and requires highly restrictive, long-term behavioral changes afterwards. Therefore, these patients typically are required to complete a thorough evaluation, including psychological assessment, to determine their appropri-

ateness for surgery. This requirement stems from the National Institutes of Health consensus statement (1991) that recommended that patients be "selected carefully after evaluation by a multidisciplinary team with medical, surgical, psychiatric, and nutritional expertise."¹ Although psychological evaluation has become standard for most surgery programs, no clear guidelines exist about what that assessment must involve. This article reviews the core areas of the psychological assessments conducted at Ochsner Medical Center as part of the screening of candidates for bariatric surgery.

Although no standard of best practice yet exists for psychological evaluation of the patient undergoing bariatric surgery, the data are growing with regard to the critical elements and domains for assessment and the various functions the assessment must serve.^{2–7} At Ochsner, the psychological assessment involves two parts: a clinical interview and psychological testing. Patients meet with a psychologist for a clinical interview that focuses on behavior, psychiatric symptoms, and understanding of the surgery; they then complete psychological testing, which provides an objective measure of their presentation style, psychological adjustment, and readiness for surgery. This approach matches the growing body of evidence regarding the important elements for inclusion in this assessment.

Although patients often are hesitant and uncomfortable with the notion of seeing a psychologist before surgery, the information discussed during the clinical interview is critical not only for assessing their appropriateness for surgery but also for enhancing their success during the postsurgery adjustment. Many patients report, after the interview, how valuable it was for them to examine the issues raised. The core parts of the clinical interview include reasons for seeking surgery, weight and diet history, current eating behaviors, understanding of the surgery and its associated lifestyle changes, social supports and history, and psychiatric symptoms (current and past). As each of these domains is addressed, the psychologist functions as an assessor collecting data, an educator providing information, and a therapist enhancing motivation and managing the emotions often encountered during the evaluation.

REASONS FOR SEEKING SURGERY

Patients are asked how they have come to this decision and their rationale for having bariatric

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surgery. Given the seriousness of this choice, it is critical that patients are seeking surgery for the appropriate reasons and have realistic expectations about what can be achieved. Most patients describe a desire to lose weight to improve current medical problems, enhance mobility and energy, and promote health and longevity. Further discussion of this issue is needed when patients report external pressure to have the surgery, an overemphasis on physical appearance, and unrealistic ideas regarding the changes that will come about in their lives following weight loss. If the reason for having the surgery is unrealistic and fails to match what the surgery can achieve, patients are at risk for possible mood issues and for noncompliance after surgery.^{3,7} Patients are also asked their goal weight and anticipated time frame for achieving that goal, which provides additional information about realistic expectations. Interestingly, studies have found that extremely obese patients often underestimate the weight loss that can be achieved with surgery, which may be in part due to difficulties conceptualizing such a significant reduction in weight.³

WEIGHT AND DIET HISTORY

A second element of the clinical interview is a review of the patient's weight and diet history by using a time line to highlight associated life events (eg, marriages, pregnancies, job changes). Information is obtained regarding when weight first became problematic, types of diets tried, outcomes with previous efforts, factors that contributed to regaining weight (if lost), and family history of obesity. Most patients have an extensive history of diet attempts with minimal long-term success.⁸ If patients have not yet attempted the more traditional approaches (eg, Weight Watchers), they often are encouraged to follow a presurgical diet and exercise plan to see what they can achieve before proceeding with surgery. This issue can be particularly challenging when assessing younger patients who may be experiencing the early onset of health problems but have yet to maximize their efforts with traditional diet and exercise. This discussion often reveals the enduring beliefs about food that people have acquired over the years. For example, as patients talk about their family history with weight and eating habits, they may reveal that they were taught to "always clear the plate" or that leaving food is "wasting" food. This presents an opportunity for the psychologist to discuss the importance of modifying these unhealthy beliefs so that they do not undermine the patients' efforts in the future. It is also a time to address the shame that often accompanies so many failed attempts at weight loss and reinforce the

patients' current efforts as a sign of their determination to improve their health.

CURRENT EATING BEHAVIORS

Although the nutritionist completes a thorough assessment of eating habits, it also is critical for the psychologist to review these behaviors, as they contain information about motivation, need for behavior modification, and possible eating disorders. Motivation and attitude about a lifestyle change are evident in a patient's eating and exercise behaviors before surgery. As most have met with the nutritionist and many have been asked to follow modified diets in preparation for surgery, adherence with these recommendations provides clues to likelihood for compliance after surgery. This discussion provides an opportunity to reinforce the adaptive change taking place and the information provided by the nutritionist. Some individuals, despite having had a nutritional consultation, demonstrate a lack of understanding about how their current eating behavior contributes to their weight issues and what the healthier alternatives are. These patients are referred back to the nutritionist for additional counseling.

Among these patients, eating disorders are not uncommon. Specifically, it is estimated that 10% to 25% meet criteria for binge-eating disorder,⁹ which involves the consumption of a large quantity of food in a brief period (<2 hours) during which the person feels a subjective loss of control.^{10,11} Unlike bulimia nervosa, binge-eating disorder does not involve purging after eating. Additionally, some patients report night eating syndrome, which is defined by an individual's consuming more than 35% of daily calories after dinner and by disruption of sleep by episodes of nocturnal eating.¹¹ Of the mentioned eating disorders, bulimia nervosa is the only clear contraindication to surgery, as the purging poses serious health risks. When identified, patients with bulimia nervosa are referred for cognitive behavioral treatment to address the bingeing and purging before proceeding with surgery. Mixed data exist about the impact of binge eating disorder on outcome, with some studies finding no negative effects as the bingeing resolves and others suggesting the increased potential for "grazing" after the initial weight loss.⁴ These patients are encouraged to consider supportive counseling when they binge frequently or are concerned with being able to control the binges after surgery.

In terms of exercise, many morbidly obese patients are unable to engage in much physical activity because of pain, shortness of breath, and joint issues. Patients are questioned about their attitudes and knowledge about, feelings toward, and

plans for future exercise, with emphasis placed on the essential role of exercise in their daily routine for successful weight maintenance in the long term. In a study of noncompliance after bariatric surgery,¹² lack of exercise was found to be the most likely area of noncompliance (41%). Given the high rates of noncompliance and the critical nature of exercise with long-term success, the psychologist has an opportunity to address this problem proactively during the assessment.

UNDERSTANDING OF THE SURGERY AND ITS ASSOCIATED LIFESTYLE CHANGES

In light of the decision that patients undergoing bariatric surgery are making when they consent to surgery, a thorough understanding of what they are agreeing to is essential.^{3,4} As part of the psychological assessment, patients are asked to describe what the surgery entails, the risks and potential outcomes associated with it, and the lifestyle changes that are required for success. The patients' specific procedure (laparoscopic gastric banding or gastric bypass) determines the details of this discussion. If patients are unable to demonstrate a basic and clear understanding of these factors, they are referred back to the surgeon and/or nutritionist for additional counseling. Very infrequently, the need for intellectual testing has been apparent to determine basic competence for informed consent. Many patients have attended seminars and talked with people who have had the surgery; this enhances their understanding of what they are undertaking. During this discussion, the role of the surgery as a tool, and not as a magical cure, is emphasized. The idea that the surgery "stops" them from overeating is challenged. Instead, they are reminded that the surgery allows them to feel satisfied with a small amount of food but that they are responsible for stopping when that point has been reached. If they fail to stop, they will face consequences such as "dumping" soon after the surgery and possible weight gain at a later time after surgery. This point undermines the notion that the surgery absolves patients of responsibility for their eating choices. Rather, patients are encouraged to view the surgery as a tool that they can use to improve their health if they make the appropriate choices.

SOCIAL SUPPORTS AND HISTORY

The dramatic lifestyle changes experienced by patients who undergo bariatric surgery occur not in a vacuum but within the framework of the social network that surrounds them. Immediate family members living with the patient, the extended family and friends with whom he/she socializes, and colleagues and associates at work or in community

organizations can all impact the patient's experience.^{4,7} Patients are asked to describe who lives in the home with them and how they have reacted to the decision for surgery, what the eating habits and/or weight issues of these persons are, and who will be available to help them immediately after surgery. Also addressed are the potential social consequences of having the surgery, such as others expressing negative opinions (eg, "it's cheating"), jealousy and sabotage, discomfort on the part of a spouse or significant other when the patient is losing weight, and the inability to eat and drink in similar fashion to others when on an outing or during holidays. Depending on the patient's network and history, particular examples in this domain will be explored to assess how the patient will handle the challenge. Often, this is an area that patients have not considered and the psychologist has the opportunity to educate them so that they can be proactive rather than reactive when situations unfold.

PSYCHIATRIC HISTORY

Clearly, a primary function of the psychological evaluation is to determine the presence of any psychiatric conditions that would impair the patient's ability to handle the surgery. Patients are assessed with regard to symptoms of depression, anxiety, mania, psychosis, suicidal ideation, substance abuse, history of abuse, family history of mental health issues, and any treatment experiences. In addition, a Mini-Mental Status Examination is completed. This domain is critical given the high prevalence of psychiatric and behavioral complications observed in this patient population.^{2,13,14} Recent studies have found that among people with extreme obesity, depression is common. One study¹⁵ found that people with a body mass index greater than 40 kg/m² were five times more likely to have had an episode of depression in the past year than those of average weight. Studies have found that, at the time of presurgical psychological assessment, 23% to 47% of patients report using psychotropic medication.⁴ Although the prevalence of depression may be high in this patient population, it alone is not a contraindication for surgery. Rather, the severity of depression is a critical factor, as many patients with mild depression are likely to see it resolve after surgery, when quality of life measures consistently demonstrate improvement in mood and functioning.¹⁶ Intervention is needed when the depression is severe enough to undermine the patient's ability to adhere with recommendations, when suicidal ideation is present, and if bipolar disorder or psychosis is suspected. When any mood issues are identified, patients are provided with information regarding appropriate treatment resources.

In addition to depression, anxiety can be a factor that affects a patient's coping through the surgery experience.^{6,16} The nature of anxiety disorders may increase a patient's risk for difficulties in controlling apprehension before or immediately after surgery, when unexpected medical news is presented or changes are made to the treatment plan, and in regard to somatic sensations to which they may be oversensitive and interpret as problematic. History of substance abuse raises concerns, as there is some anecdotal evidence that when patients can no longer "abuse" food, they shift addictions.⁶ Further study is needed to clarify this potential association. Obviously, current abuse of drugs and/or alcohol and any nicotine use are contraindications for surgery and must be addressed fully before proceeding. When patients disclose a history of sexual abuse, the psychologist discusses the emotional reactions that may arise related to significant weight loss. For some patients, the dramatic change in weight and increased attention from others on their body results in discomfort, and the experience of a smaller body size is interpreted as heightened vulnerability. These reactions can result in self-sabotage and the regaining of weight after surgery. Patients are informed of these issues and encouraged to seek assistance should they encounter such difficulties. Patients who are currently in treatment and/or taking psychotropic medication are asked if they have discussed this decision with their care provider(s) and what response(s) they have received. There is great value in the opinion of a care provider who has an ongoing relationship with the patient. In light of the stress associated with a lifestyle change, patients are encouraged to maintain their treatment plan throughout the process and not to abruptly discontinue either therapy or medication just because they feel better after losing weight.

Once these domains have been assessed, the psychologist reviews the information and highlights any areas needing special attention. For example, the psychologist would summarize the details provided by the patient about eating behaviors and depression and then review recommendations concerning behavioral shifts, cognitive reframing, or treatment interventions that could be helpful. At this time, patients are asked if they have any remaining questions or concerns. When all their questions have been answered, the focus shifts to the second phase of the assessment, the psychological testing.

PSYCHOLOGICAL TESTING

Objective psychological testing is a valuable tool that provides critical information to complement the subjective data collected during the clinical interview.

In a recent survey of practitioners completing psychological evaluations of patients undergoing bariatric surgery,² most clinicians reported using objective personality tests (63.4%) in conjunction with clinical interviews (98.5%). Interestingly, no assessors reported relying solely on the clinical interview for their evaluations. The likely explanation for this finding is that the patient feels tremendous pressure to appear psychologically fit so as to proceed with the surgery. This pressure can lead to the intentional and unintentional distortion of information presented by the patient. The value of objective psychological testing is that the commonly used measures have validity scales that detect when patients present information that is overly favorable.¹⁷ At Ochsner, the objective testing includes the Minnesota Multiphasic Personality Inventory-2, the most common test used in this field, and the Millon Behavioral Medicine Diagnostic, that, with its bariatric norms, allows for comparison with other patients that have undergone bariatric surgery. Although many other tests and inventories are available, these two have been selected for use given their utility and practicality within this setting.

Before completing the tests, patients are encouraged to answer the items in an honest and straightforward manner. In an attempt to reduce some of their apprehension, patients are informed that this is not a "pass/fail" test or one that by itself would stop them from having the surgery. Getting valid results is the challenge with this patient group, as is true whenever mental health evaluations are used for decision making (eg, job application, custody evaluation). Given the potential for delay or denial of surgery, patients clearly are motivated to minimize any emotional difficulties they might be experiencing. A recent study¹⁷ found that addressing this defensiveness when invalid Minnesota Multiphasic Personality Inventory-2 profiles are obtained can result in valid profiles upon retesting. The results of the objective testing not only provides information about the patients' presentation style, but it also reflects the presence of psychopathology, personality disorders, psychosocial stressors, and areas of potential difficulty with adherence and compliance. The information obtained is highly useful for clarifying and further illuminating the realities of a patient's state of psychological adjustment as well as for highlighting any potential challenges for the surgical team in the management of the patient.

REPORT OF PSYCHOLOGICAL EVALUATION

When all this information has been obtained and scored, it is summarized in a brief report for the surgeon. Contained in this report are summaries of

the patient's background and history, current and past psychiatric issues, testing results, and conclusions and recommendations. A variety of outcomes are possible with the psychological assessment. Some patients are cleared for surgery when no overt psychological contraindications are evident in the evaluation. In light of the tremendous medical and psychosocial benefits that can be achieved with bariatric surgery, evaluators must be cautious with recommendations that restrict patient access to surgery but should balance this caution with vigilance for overt signs that suggest the potential for difficulties. As such, when issues arise in the evaluation, patients are often cleared for surgery but with concerns outlined for the surgeon. The surgeon can then make a final determination regarding appropriateness for surgery by weighing the medical, nutritional, and psychological issues. When more serious and pressing issues are apparent in the assessment, specific recommendations for intervention before and after surgery may be suggested. For example, if a patient has a history of depression, presents with symptoms of clinical depression, and is currently not undergoing treatment, it would be recommended that the mood disorder be addressed before proceeding with surgery. Rarely, patients have serious contraindications for surgery such as active suicidal ideation, hallucinations and/or delusions, or severe cognitive impairment. Their impaired functioning would inhibit their ability to appreciate what they are agreeing to and to comply with the necessary behavioral demands.

CONCLUSIONS

Psychological evaluation of patients before bariatric surgery is a critical step, not only to identify contraindications for surgery, but also — and more so — to better understand their motivation, readiness, behavioral challenges, and emotional factors that may impact their coping and adjustment through surgery and the associated lifestyle changes.

The psychologist's challenge is to collect a vast amount of data while simultaneously educating and motivating the patients in their pursuit of improved health. For some patients, that initial experience is enough. However, for many, it is simply the beginning, as they will need psychological support to maintain the lifestyle changes essential for long-term success. A positive experience during this assessment often sets the stage for patients to seek assistance when faced with later struggles. As such, the psychological evaluation of the patient undergoing bariatric surgery

is an invaluable piece of the larger presurgical assessment, both in the short and long term.

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