Long-term success of any bariatric procedure depends on the ability of the patient to make and sustain changes in eating and exercise patterns. Research tends to show a slow drift back toward presurgery habits from 6 months to 2 years after surgery. Psychological factors, such as stress and depression, also may impact a patient’s ability to sustain lifestyle changes. This article discusses reasons weight regain may occur from a psychological perspective and offers practical suggestions for reducing the impact of these psychological challenges (Tables 1 and 2).1-3

Disordered Eating Patterns

Preoperatively, up to 30% of bariatric patients report engaging in binge eating, but reports widely vary.4-6 Binge eating is the act of consuming a much larger amount of food than other people in the same period of time, with the binge eater suffering from a loss of self-control. Bariatric surgery itself may limit the quantity of food consumed in any one sitting, and may limit hunger, but the compulsive eating aspect may still exist. Many patients hope the surgery will magically “cure” their preoccupation with food, but this is often not the case. Loss of control appears to reemerge approximately 6 months to 2 years after surgery. In such cases, the Diagnostic and Statistical Manual of

Bariatric surgery is the treatment of choice for the morbidly obese. With weight loss, many comorbid conditions are decreased or eliminated. Quality of life is generally increased and healthcare costs decrease. However, some patients regain more weight than would be expected, or even all of the lost weight within several years of surgery.
Mental Disorders Fourth Edition, Text Revision, diagnostic criteria for an eating disorder are not met, because the quantity of food eaten is not out of the norm, but the reemergence of loss of control is cause for concern in these patients. Hsu et al found that patients who exhibited preoperative disturbances in their eating pattern had worse outcomes following surgery. Although they experienced a short-term improvement, the eating improvement eroded after 2 years and there was subsequent weight regain. Hsu et al reported a connection between one's loss of control over eating and weight regain after gastric bypass. In their study, 46% of patients experienced a recurrent loss of control and regained significantly more weight. The researchers suggested that clinical intervention that addresses this loss of control would benefit these patients. Mitchell et al also reported a reemergence of the loss of control in a study of patients who underwent gastric bypass. These patients had gained significantly more weight than controls at 2 years. Larsen et al suggested that identifying and treating patients who exhibit postoperative binge eating may be crucial to long-term success after bariatric surgery.

Mitchell and de Zwann postulated that patients who were binge eaters before surgery were at higher risk of experiencing a loss of control after surgery, resulting in greater weight regain over time. The reasons for persistent loss of control are unclear at this time. It may be possible that patients are successful in losing weight in the short term because the drastic weight loss period after surgery is so reinforcing, both internally and externally, that they are able to overcome the binge-eating compulsion. Or perhaps the surgery is simply at its most restrictive during that initial phase. After 2 years, there is much less negative physical feedback (nausea, vomiting, dumping syndrome) and the capacity of the pouch left by the gastric bypass procedure has increased. Thus, the period of time directly following surgery when a patient does not yet feel that loss of control would be a useful target of future studies.

According to a report by the US Department of Health and Human Services, some patients regain weight after gastric bypass because they eat too many high-calorie soft foods that are able to easily pass through the narrowed gastric opening without causing discomfort, whereas others cannot alter their eating habits enough to lose a sufficient amount of weight. Saunders noted that some binge eaters often become “grazers” after surgery, a transition that often occurs approximately 6 months after surgery. Grazing may become a problem because of the ability to consume increased calories by filling the pouch more often than recommended. Brolin et al reported similar results. In another study, Saunders et al reported that a person with binge-eating disorder may begin to graze or snack after surgery, eventually leading to weight regain. To maintain weight loss,

### Table 1. General Suggestions For Psychology Management In Bariatric Practice

1. Ideally, every bariatric program should have an experienced psychologist on staff providing presurgery education and evaluations for surgery, and facilitating postoperative support groups. The psychologist should be accessible to patients via phone or e-mail. Groups may be conducted on a monthly, bimonthly, or weekly basis.

2. Presurgery education is very important. Patients should be prepared with information on problems they may experience after surgery, and should have knowledge regarding steps to take if they begin to notice symptoms or behaviors.

3. The support group is perhaps one of the most important aspects of postoperative care of the bariatric patient. Marcus and Elkins found that patients regularly attending support groups tended to lose more weight. They recommended incorporating relapse prevention and self-responsibility in sessions, and suggested that groups adapt to the needs of the patients as the group changes. Marcus further suggested that patients must alter their eating and exercise habits and undergo lifetime monitoring. Saunders suggested that specialized bariatric groups are essential to address psychological difficulties routinely experienced after bariatric surgery. The postoperative group is also the first line of defense for identifying more serious problems that may require individualized treatment.

**INDEPENDENTLY DEVELOPED BY McMAHON PUBLISHING**
patients must continue to eat smaller meals even if the size of their pouch enables them to consume larger amounts, and they must limit grazing. Saunders suggested that treatment for binge eating should be a mandatory part of the gastric bypass care regimen.12

It is strongly recommended that an experienced bariatric psychologist conduct presurgery clinical interviews, and that patients meeting criteria for binge eating be referred for psychotherapy. It is important to address the problem before surgery rather than waiting until after, when the outcome of the procedure is at risk. It may be helpful to conceptualize the first 6 to 24 months after surgery as a dormant period for the disorder. Many patients have reported that they hope the initial period of forced compliance will enable them to learn to control themselves, or they insist they would not risk surgery if they intended to revert to their old habits. This type of thinking is overly optimistic and unrealistic. Although some patients may be able to change on their own, most would benefit greatly from targeted individual therapy to change this behavior pattern. Long-term success will depend on a consistent program of healthy eating and regular exercise.11

Psychiatric Comorbidities

An important aspect of the presurgery psychological interview is to uncover potential psychiatric comorbidities that may influence long-term surgical outcome. The presence of such comorbidities is not necessarily a roadblock to bariatric surgery, but it should be revealed and addressed before the surgery.

It is well established that depression generally decreases with weight loss in this population15 because the weight itself is often the cause of depression.16 Wadden et al reported that patients considering bariatric surgery who have untreated major depressive disorder should receive psychiatric or psychological care before undergoing surgery.17 Depression presents extra challenges for patients trying to sustain the lifestyle changes needed after surgery and coping with the additional stress associated with the first few months after surgery. Patients with depression should receive therapy to decrease symptoms while they await surgery and monitoring postoperatively for any increase in symptoms.

Additionally, patients with a cluster B personality disorder that may include erratic, emotional, and dramatic traits may be at higher risk for binge eating, and this presentation constellation may be a risk factor for weight regain after bariatric surgery.5 It would be beneficial for these patients to receive therapy as well as education about the influence of personality traits on sustaining lifestyle changes.

A history of psychiatric hospitalizations has been linked to an increase in medical complications after surgery.18,19 Given the connection between psychiatric disorders and negative surgical outcome, preoperative psychotherapy to reduce symptoms is warranted in these patients.

Table 2. Specific Psychology Management Guidelines for Postoperative Bariatric Patients

Because of the large numbers of patients seen in any bariatric practice, it is impractical for the psychologist to see all patients for individual therapy. Patients often are referred to an outside psychologist. It is strongly recommended that patients be referred for individual therapy before surgery if they have one or more of the problems listed below and these problems are identified early in the process. Otherwise, the long-term outcome of the surgery, and the patient’s physical or mental health may be at risk.

1. Feelings of overwhelming stress. These patients may benefit from individualized stress management education, as well as assistance in resolving some of the stressors.

2. Eating disturbances such as a feeling of loss of self-control when eating, self-induced vomiting, or grazing.

3. Noncompliance with a consistent exercise routine, the bariatric diet, or the vitamin regimen.

4. Alcohol or drug abuse or smoking.

5. Emotional eating that impacts weight, or compulsive eating.

6. A psychiatric crisis, including mania, volatile mood swings, psychosis, severe withdrawal or inability to function in daily life, depression, and suicidal ideation. The trained psychologist may do an assessment of dangerousness, crisis intervention, and facilitate inpatient or outpatient treatment. Other treating professionals, such as outside therapists or psychiatrists, may be contacted for continuity of care.
Self-Induced Vomiting

Self-induced vomiting is a symptom that has obvious repercussions for health in the aftermath of bariatric surgery. In Saunnder’s 2004 study, 15% of patients reported purging (vomiting) to avoid regaining weight, with this behavior beginning to emerge 6 months or more after surgery.21 Many bariatric patients become proficient at vomiting and will know when the next bite will lead to vomiting. It is considered an eating disorder when the patient purposely takes the next bite knowing that it will lead to vomiting. Mitchell and de Zwaan found that 6.3% of their sample admitted to self-induced vomiting behavior to control weight postoperatively, and each of these patients met criteria for an eating disorder prior to surgery.5 Thus, every patient should be educated before surgery on the dangers of this behavior, and steps should be taken if they start to exhibit symptoms. Those with a preexisting eating disorder should be treated before surgery to prevent the catastrophic health ramifications that may occur after surgery.

Alcohol Abuse

Abuse of alcohol following the Roux-en-Y procedure is a new phenomenon being examined. Patient reports and focus in the media have brought this to light. Klockoff et al found a possible explanation. They found an approximately 50% higher blood alcohol level and a faster peak time in females who had undergone gastric bypass than in controls.20 Buffington found 90% of patients reported being more sensitive to alcohol after surgery than before, and she cited several examples of postoperative patients being arrested for driving under the influence of alcohol after only 1 or 2 drinks.21 Buffington formulated several guidelines to address this problem: Patients should not drink during the rapid weight-loss period, they should eat prior to having a drink, and they should be aware of the potential for intoxication with a decreased amount of alcohol.21

Patients need to be educated before surgery about the changes in the digestive system and how these changes may affect alcohol absorption. Developing a problem with alcohol is not a side effect of the surgery, but there does appear to be a vulnerability that must be addressed. It is important for patients to recognize early warning signs and to seek help before the problem develops or progresses to the point that it endangers their health or safety, or the safety of others. Many people who have already had bariatric surgery did not receive this education, thus it is important that these issues be discussed at support groups on a regular basis.22

Stress

The months prior to surgery, the surgery itself, and the first few months following the surgery are very stressful periods. Lifestyle changes are difficult to sustain during stressful times, and for many bariatric patients eating had always been a significant stress-management technique. How an individual deals with stress will either improve his or her ability to adhere to lifestyle changes after surgery, or make it more difficult to achieve the weight goal. The presurgery evaluation should address both the amount of stress a person is under and the person’s means of coping with that stress. A patient overwhelmed with stress before surgery would benefit from stress management education.5 It may be helpful to illustrate this point to patients by having them examine their own diet/exercise history. It is quite common to see that positive behavioral changes ended when stressors were increased. For example, stressors such as a job change, birth of a new baby, moving, change of schedule, financial problems, marital issues, or even a vacation may have signaled the end of the sustained diet or exercise routine. The strategy is to plan for this stress and learn healthy coping strategies to avoid relapse after surgery.

Dichotomous Thinking

An “all-or-nothing” thinking pattern has been linked with weight regain in dieters.23,24 Patients also experience this thought pattern after bariatric surgery. Training in presurgery classes to avoid the unrealistic expectation of 100% perfection with diet is important because such expectations can set the patient up for failure. Relapse prevention is a very important component of education before surgery. It is important to advise patients to strive to do 95% of what is expected to avoid the black-and-white thinking that often leads to relapse. They should be advised that “falling off the wagon” is human nature, and they will need to monitor that for the rest of their lives. The problem is in the length of time it takes to get back on track. There is a vast difference between taking a couple of days rather than 6 months to resume healthy habits.

Role of Psychologists

Psychologists play an integral role in a comprehensive, multidisciplinary bariatric program. They can provide guidance in the overall psychology management of the program and can provide strategies to address specific problems that may arise.

Conclusion

Bariatric surgery can be a life-altering event and can offer many patients an increased quality of life. The long-term success of the surgery depends on the patient’s ability and willingness to indefinitely sustain the behavioral changes. Stress, depression, disordered eating patterns, and dichotomous thinking can impact a patient’s ability to sustain lifestyle changes and may lead to weight regain after surgery. Psychologists are an integral part of the management team because they are qualified to identify and treat these issues, assisting the patient in achieving long-term weight maintenance.
References


Dr. Alexander has no relevant financial information to disclose.