

Bariatric Surgery: Understanding the Choices

By Dr. Patricia Choban, MD, ASMBS, BSCOE

The statistics in support of surgical treatment for morbid obesity are dramatic. Studies show that bariatric surgery reduces the risk of premature death by nearly 40% when surgical patients are compared to morbidly obese individuals not treated surgically (1-3). In addition to the mortality advantages, bariatric surgery also is an accomplice in resolving illnesses like diabetes and hypertension (4). And despite its relatively high-risk surgical population, bariatric surgery has a mortality rate no greater than total joint replacement. These facts alone seem to merit their consideration among patients with morbid obesity.

The procedures used to achieve these outcomes – namely Roux en Y gastric bypass and adjustable gastric banding – have evolved over time and both are offered through the Mount Carmel Bariatric Program.

Roux en Y gastric bypass has been used for over 30 years, and there are now large amounts of data that document the sustainability of the resulting weight loss. The procedure, which helps patients change their eating behavior by dramatically increasing satiety, can be accomplished through either an open or laparoscopic (minimally invasive) approach.

During the procedure a small proximal gastric pouch is created and GI continuity is re-established through a Roux en Y gastrojejunostomy. The distal stomach and duodenum are bypassed in the process, limiting the amount of food the stomach can hold and digest. The procedure results in some micronutrient malabsorption, especially iron, B12 and folate; however, multivitamin supplements give patients added nutrients.

Patients typically lose weight rapidly in the first 6 months. The average post-operative weight loss is approximately 65% of the patient's excess weight, which is generally achieved over 1 ½ to 2 years. Patients with Type II Diabetes who undergo gastric bypass have a high probability (~85%) of resolving their DMII. This happens very quickly, often over a period of weeks.

At hospital discharge patients are on a full liquid diet with a protein goal of about 1.2 gm/ kg of ideal body weight. Over the next 6-8 weeks that diet is advanced and most patients are eating food of normal consistency in about 2 months. Patients necessarily eat smaller amounts and generally consume 5-6 small meals per day to reach their protein goal.

Exercise is very important in achieving and maintaining weight loss, even with surgery. Mount Carmel bariatric patients typically begin walking four hours after surgery and are encouraged to get at least 30 minutes of exercise daily.

Radiology Department Makes Imaging Easier For Bariatric Patients

Thanks to the cooperative efforts of several Mount Carmel teams, Mount Carmel West is now the only hospital in Central Ohio to have a digital radiographic/fluoroscopy unit that can accommodate 600-pound patients.

The radiology department worked with the Mount Carmel Health Facilities Planning team to create an environment specifically focused to the needs of larger patients. The effort also resulted in more spacious and open restroom and changing areas.

The members of the radiology staff at MCW also have participated in bariatric education in order to meet the medical, social, and emotional needs of our bariatric population.

The department continues to work closely with Dr. Choban and Melissa Webb to provide schedules that accommodate the patients and physicians, including open slots on the ultrasound schedule for patients needing gallbladders imaging prior to surgery.



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Bariatric Surgery: Understanding the Choices, cont.

Adjustable gastric banding has been available worldwide for about 15 years and in the U.S. for six. It is a purely restrictive procedure, facilitating weight loss by reducing hunger when patients decrease food intake. It is almost always accomplished laparoscopically (>95%) and patients are able to return to normal activities within days to weeks. It usually is done as a “23 hour” hospitalization. Once the band is placed, the first adjustment or fill is done at 6-7 weeks after surgery. Patients are then evaluated every 6-8 weeks and adjusted based on the level of satiety, rate of weight loss and absence of obstructive symptoms.

In smaller patients – those with a Body Mass Index of 50 kg/m² and less – comparable weight reductions are seen at three years with gastric bypass and adjustable gastric band.

The adjustable band is a medical device and is thought to have an infinite life span (although there is no long-term data available to date) and therefore should never need to be replaced. Patients may, however, require a band revision at some point due to slippage or obstruction. Bands also can erode into the lumen of the GI tract, which requires removal of the band.

Band vs. Bypass

	Gastric Bypass	Adjustable Gastric Band
% Excess Weight Loss	60-80 (2 ys)	40-70 % (3 years)
Track Record US	30 ys	6 ys
Mortality	1:200	1:2000
Major Morbidity	1.5:100	.25:100
Hospital stay	2-3 days	1 day
Recovery	4-6 week	1-2 week
BMI limitations	Okay for all	Probably better BMI <50
DMII resolution	>85% rapid (months)	~ 60% (2-3 years)
Vitamin supplements	Multivitamin daily	
Price if self pay	~25K	~17K
Follow-up	Aprox quarterly then annual	Ever 6 week first year

As the statistics and outcomes show, both gastric bypass and adjustable gastric banding provide options to help morbidly obese patients achieve significant long-term weight loss. It's up to the primary care physician and surgeon to help their patients select the best procedure for them and utilize the “tool” that helps them achieve the healthy new life they desire.

References:

1. Adams, T.D., et al. (2007). Long-Term Mortality after Gastric Bypass Surgery. *New England Journal of Medicine*. 357:753-61.
2. Sjöström, L. (2007)., et al. (2007). Effects of Bariatric Surgery on Mortality in Swedish Obese Subjects. *New England Journal of Medicine*. 357:741-752.
3. MacDonald, K.G., et al. (1997). The Gastric Bypass Operation Reduces the Progression and Mortality of Non-Insulin-Dependent Diabetes Mellitus. *Journal of Gastrointestinal Surgery*. 1:213-220.
4. Buchwald, H., et al. (2004). Bariatric Surgery a Systematic Review and Meta-analysis. *JAMA*. 292:1724-1737.

New Specialty Equipment Available For Patient Transport

Mount Carmel Connection, Mount Carmel's full service medical transportation company has purchased specialty equipment to help transport our bariatric patients. The new system has a 1,200-pound capacity, a cot with a wider wheelbase and surface area, and low-to-the ground positioning. There's also a ramp and winch that allows patients to be gently pulled into the back of the ambulance rather than lifted. This system will help provide safer and more comfortable transportation for both our patients and staff.

Treating Obesity As A Disease

Approximately two-thirds of the U.S. population is overweight, and of those, about one half are obese (defined as a BMI>30kg/m²). That means more than 50 million people in the country are obese. Morbid obesity, defined as BMI>40kg/m² or a BMI>35mg/m² in the presence of high-risk co-morbid conditions, is estimated to afflict 20 % of the obese population, or over 8 million Americans.

Given those numbers and its serious health consequences, obesity should be considered a chronic disease. In fact, it's a complex multifactorial disease that develops from an interaction of genotype and the environment. The impact of obesity on longevity has been well documented. It is the first leading cause of preventable death in our nation, with an associated 400,000 excess deaths per year.

Bias and discrimination related to obesity, in particular morbid obesity, starts in the earliest social contacts of preschool children and progresses

through childhood and adolescence into adulthood. It is the last acceptable form of discrimination in our nation, and attributes to the gross neglect of its treatment.

In treating the disease the 1991 National Institutes of Health Consensus Panel recommended:

1. Patients seeking therapy for the first time should be considered for treatment in a nonsurgical program with integrated components of a dietary regimen, appropriate exercise, and behavioral modification and support.
2. Gastric restriction or bypass procedures should be considered for well-informed and motivated patients with acceptable operative risks.
3. Patients who are candidates for surgical procedures should be selected carefully after evaluation by a multidisciplinary team with medical, surgical, psychiatric and nutritional expertise.

4. The operation should be preformed by a surgeon substantially experienced with the appropriate procedures and working in a clinical setting with adequate support for all aspects of management and assessment.

5. Life-long medical surveillance after surgical therapy is necessary.

Most patients who present for bariatric surgery have already failed in multiple attempts to achieve a sustained weight loss by using non-surgical treatment options (with success defined as maintaining 50% of excess weight lost for 5 years). On average traditional diet fails this population 98% of the time. Bariatric surgery is the most effective therapy available for treating the disease of morbid obesity, with an average 73% success rate, and can result in the improvement or complete resolution of obesity co-morbidity.

Bariatric Surgery Educational Forum

If you have patients who are interested in pursuing bariatric surgery as a weight-loss solution, they can take the first step by attending this free and informative educational forum. They'll learn more about obesity, nutrition, the surgical treatments available at Mount Carmel and working with their insurance carrier to make it happen. They'll also be able to talk with our surgeons and members of our specialized bariatric program team to see if surgery is the right solution for them. Encourage your patients to register by calling 614-234-LIFE.

July 9	6:00pm - 8:00pm	MCW, MSB Auditorium
August 5	2:00pm - 4:00pm	MCW, MSB Auditorium
September 3	6:00pm - 8:00pm	MCE, Siegel Center
September 17	6:00pm - 8:00pm	MCW, MSB Auditorium
October 7	2:00pm - 4:00pm	MCW, MSB Auditorium
October 29	6:00pm - 8:00pm	MCE, Siegel Center
November 12	6:00pm - 8:00pm	MCW, MSB Auditorium
December 16	2:00pm - 4:00pm	MCW, MSB Auditorium

Many Advantages To Minimally Invasive Bariatric Surgery

By Dr. Phillip Price, MD, ASMBS, FACS

The minimally invasive revolution that has taken place in general surgery over the last two decades has extended to bariatric surgery as well. Laparoscopy has allowed many different surgeries to be performed with a decreased risk to the patient as well as less pain and a quicker recovery.

Laparoscopy is surgery with the use of instruments placed through small incisions while the surgeon views the procedure through a TV monitor. This approach – rather than operating through a large incision with conventional instruments – allows for less pain and trauma for the patient.

Complex operations such as a gastric bypass and adjustable gastric band

are now routinely performed laparoscopically and open. Gastric bypass has decades of follow up showing it to be both an effective and safe operation to produce weight loss. The outcomes for the operation when performed laparoscopically show it to be just as effective as the “open” procedure when patients are selected properly. The benefits of doing the operation laparoscopically are decreased pain and hospital stay as well as a decrease in certain complications such as postoperative pulmonary problems.

Laparoscopic adjustable gastric banding will almost certainly pass gastric bypass as the most commonly performed bariatric operation in the

United States – a position it already holds in many other countries. The advantages of the procedure include an outpatient or overnight hospital stay as well as a lower rate of serious complications and death than typically seen with gastric bypass.

Gastric banding is not as effective as gastric bypass in the super morbidly obese (BMI>50), but in properly selected patients it is an excellent operation for obesity.

Regardless of the operation performed, the use of laparoscopy is a significant advantage to patients undergoing bariatric surgery.

West Surgery Program Earns Two Distinctions

The Bariatric Surgery Program at Mount Carmel West has received two recent distinctions recognizing the program’s strength, quality and leadership.

With the first distinction, the program was designated as a Center of Excellence by the American Society of Metabolic and Bariatric Surgery (ASMBS). To be recognized as a Center of Excellence, the program must have a multi-disciplinary team of physicians, nurses, medical consultants and nutritionists, and perform 125 bariatric surgeries per year. In addition, physicians must have performed at least 125 bariatric surgeries, with 50 of those in the most recent year. Mount Carmel surgeons Dr. Pat Choban, Medical Director of the Bariatric Surgery Program at Mount Carmel, Dr. Phil Price and Dr. Marcus Miller all are at the top of their field in bariatric surgery.

The Bariatric Surgery Program also has been recognized by the Blue Cross and Blue Shield Association of America as a Blue Distinction Center, recognizing the program for clinical excellence in the region. The program scored 99 out of a possible 100 on its most recent application and was ranked in the top seven of 37 programs applying for the Blue Distinction Center honor.

“These distinctions are a reflection of the leadership of our physicians and staff, including Dr. Pat Choban, Dodie Fankhauser, Gina Matthias and, most importantly, Melissa Webb,” said Alan Papa, President & COO, Mount Carmel West. “Melissa is the program coordinator for the Bariatrics Program at Mount Carmel West and has been instrumental in its growth, quality and success. We are very proud of the program and congratulate our physicians and staff on these two outstanding achievements in their field.”