

# Lapband Surgery

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# 1

## HISTORY OF SURGICAL WEIGHT LOSS PROCEDURES

There are a great many reasons why both men and women, either as adults, teenagers and even senior citizens struggle with weight loss and weight maintenance. While many people simply eat incorrectly and don't exercise enough, there are other individuals that, through no fault or lack of desire on their own part, are simply not able to lose the weight needed to maintain health. For most of these individuals that are struggling to lose 50, 70, 80 or even more than 100 pounds the prospect of simply changing eating habits and increasing exercise levels is just not enough to help them in their weight loss goals.

With modern surgical procedures, now effectively tested and researched, weight loss for those considered morbidly obese is no longer just a dream or a wish; it is a reality. Morbidly obese individuals are those that weigh more than 100 pounds over healthy body weight for their age, height and size and have a Body Mass Index (BMI) of more than 40 or more than 35 if coupled with another concurrent health condition.

In addition even those that are not morbidly obese but are overweight by more than 40 pounds and/or have a concurrent medical condition can now elect to have lapband surgery. Although this surgery is not often covered by insurance, recent advances have made it much more reasonable even for private pay.

To understand the different types of weight loss surgery and how they differ it is important to take a look back into the not too distant beginnings of the procedure. Each individual surgery type has its own advantages and potential risks and prospective patients should definitely know as much as possible about each weight loss option.

### BARIATRIC SURGERY FROM THE 1950S

The first bariatric procedure to provide support in weight loss through surgical means was performed in the year 1954. This groundbreaking procedure, known as an intestinal bypass, was performed by Dr. A.J. Kremen. This surgery, which actually cut out the middle part of the intestine and attached the upper intestine directly to the lower intestine, was designed

to limit the absorption of calories from the intestine into the body. The patient's body simply was no longer able to absorb the calories, fats and carbohydrates since the greater part of the intestine was no longer present and working. There were other surgeons in different parts of the world, most notably in Sweden, that also attempted this intestinal modification type of surgery during this time period.

While the results with regards to weight loss were positive, the side effects of these intestinal modifications were very significant and were almost as unhealthy to the patients as the obesity would have been. Chronic diarrhea, electrolyte imbalances, nausea and dehydration were noted within these patients, which quickly led to the discontinuation of this type of procedure.

In the early 1960's a new trend and method in surgical weight loss began to become more commonly used. Most of these procedures are still in use today, although they have been advanced and modified as research and medical science has improved.

## GASTRIC RESTRICTIVE PROCEDURES – STOMACH STAPLING

It seemed that in the 1970s and even into the 1980s stomach stapling, more correctly known as Vertical Banded Gastroplasty (VBG), was the method of choice in weight loss surgery. Basically this surgical procedure includes the doctor stapling the lower part of the stomach closed, creating a much smaller stomach area up near the top. This smaller pouch fills up faster, giving patients a feeling of satisfaction and fullness after eating. In reality whole stomach is not completely shut off, rather a small band is placed into a two-inch opening left between the now upper and lower compartments to allow the food to continue to pass through the digestive system in a normal fashion.

This natural food movement means that calories, carbs, fats, nutrients and other necessary elements from the food are all digested as normal, just at a much smaller and slower rate. With this process all the negative digestive system problems associated with the early bariatric procedures were almost fully eliminated in the great majority of the patients.

### PROS

As with any type of surgery there are positives and risks associated with this procedure. The following are the positives or pros of stomach stapling or gastric restrictive procedures:

- In studies of up to 10 years post surgery, patients were able to keep off at least half of their weight consistently
- Normal digestion means that there is less likelihood of nutritional deficiencies and health issues associated with the procedure
- Relatively moderate recovery time

## CONS

Not all patients will experience all the risks or cons to this procedure, however the follow issues have been noted in some patients:

- Staples can pull or tear, resulting in food leakage, weight gain, potential infections and digestive disorders
- Not chewing food properly can result in blockages at the banded bottom opening that can require surgical procedures to correct the problem
- Patients may simply change eating habits to many, high caloric meals per day, resulting in no weight loss or even weight gain
- The smaller upper pouch created through the stapling will stretch over time, resulting in the patient needing to consume more food to fill full
- Approximately one third of patients lose less than half of the body weight they originally intended to lose despite having the surgery

## MALABSORPTIVE PROCEDURES – GASTRIC BY-PASS AND BEYOND

The medical term for changing the ability of the digestive system to absorb food is Biliopancreatic Diversion or BPD. There are actually several types of this procedure but basically they all are geared to decreasing the size of the stomach plus altering how the intestinal system functions to absorb nutrients below the stomach. Each process attempts to move the digestion of the food lower down to the middle or lower end of the intestines so there is less opportunity for absorption of carbs, fats and calories by the system. Since digestion only occurs in the presence of bile and pancreatic enzymes, changing where these components are introduced to the food in the system can limit the body's ability to absorb the fat causing substances.

In simple biliopancreatic diversion about three quarters of the stomach is removed, leaving only a small pouch. From this pouch all the food goes through a part of the small intestine that has been created by the surgeon. This part of the intestine does not have any connection to the pancreatic and bile system so no absorption of any food occurs. The surgeon then attaches the biliopancreatic tubes to the lower part of the intestine called the "common intestine" which limits the area that digestion and absorption can occur.

In an Extended (Distal) Roux-en-Y Gastric Bypass (RYGBP-E) the stomach is not removed, just stapled to about  $\frac{3}{4}$  of its normal size. A part of the small intestine is then used to divert all the digestive juices to the mid to lower part of the intestine where digestion occurs. The surgeon can limit or expand the area of absorption by where he or she ties in the digestive tube to the main intestine.

The final option is a biliopancreatic diversion with a duodenal switch, which basically removes the outer areas of the stomach, leaving a long, narrow pouch. The upper intestine, the duodenum, is then divided to divert the digestive juices and prevent digestion until further down the intestines as described in the above procedures.

## PROS

- Very high success rate with most patients achieving approximately 60-90% of their weight loss goals within five years
- High levels of malabsorption of food mean weight loss does occur
- Patients report feeling full and satisfied even on small portion diets since the stomach size is greatly reduced

## CONS

- Changes in the digestive systems and the pancreatic processes can result in the formation of gallstones and subsequent gallbladder surgery
- Patients will be required to continue a life-long supplement of vitamins and minerals. Bone density, deficiencies, anemia and nutritional deficiencies can occur if the proper supplements are not routinely taken
- Any surgical procedures poses the risk for infections or surgical complications

- Some patients may develop chronic diarrhea, ulcers and gastric irritations

## COMBINATION PROCEDURES

The most common type of invasive medical procedure for weight loss in the United States is the Roux-en-Y Gastric Bypass. In this procedure both the malabsorptive as well as the stomach stapling technique is used. The stomach is made significantly smaller and the larger pouch stapled off from the smaller new stomach pouch. The small intestine is split into a Y-shape, giving the procedure its name, with one end receiving the food and one arm of the Y carrying the digestive juices. Since the food and the digestive juices are separate in the intestine, no digestion and therefore no absorption occurs until the two arms meet. The surgeon can adjust how short or how long this division will be based on the individual patient and their health and weight loss goals.

### PROS

- Most patients report a high level of satisfaction with the surgery
- Patients report that concurrent health conditions such as back pain, diabetes, depression and sleep apnea are improved with the surgery
- Many patients are able to maintain up to 60% weight loss for over 10 years

### CONS

- Iron absorption can be almost completely stopped in this procedure because of the bypass so those with anemia and iron deficiencies need to be carefully monitored on an ongoing basis after surgery
- Bone loss, osteoporosis, and metabolic bone disease can become problematic if patients do not continue on the prescribed diet and nutritional supplements and exercise post procedure
- Some patients may not be able to eat any sweet foods after the procedure as it results in rapid emptying, known as "dumping syndrome", of the stomach and feelings of nausea, dizziness and fainting can all occur



- The stomach can stretch or the new pouch created is too large, limiting the actual weight loss potential

## LAPAROSCOPIC ADJUSTABLE GASTRIC BANDING – THE NEW GENERATION OF WEIGHT LOSS OPTIONS

The laparoscopic adjustable gastric branding process, more simply known as the Lapband, works to restrict the size of the stomach in a non-permanent process. It does not change the absorption of the food through the digestive system, so basically the whole digestive systems works normally, just with much smaller volumes or amounts of food.

The Lapband is a small, plastic band that is placed around the stomach to make a small upper pouch and a lower, larger pouch. The food initially goes into the small pouch, creating a moderate to high feeling of fullness and satisfaction. It then empties into the larger part of the stomach and moves through the system. The lapband can be tightened by adding saline solution to the band, which can be done in a doctor's office as necessary. The procedure can also be completely reversed by simply disconnecting the band and removing it from the body.

### PROS

- Can be minimally invasive and therefore less post-surgery issues with infections and incision healing
- The most commonly performed weight loss surgery in the last 10 years so well researched and tested
- Most patients will meet the criteria for lapband surgery
- Restricts the amount of food consumed rather than the absorption by the body

### CONS

- Can twist or slip and require surgery to correct the problem
- Outlet can become blocked requiring surgery to correct
- Upper stomach portion can stretch which will minimize weight loss or promote weight gain

- Nausea and vomiting may be problematic after surgery for some patients
- Patients must be careful about their diet and avoid specific problematic foods
- Some patients report feeling unsatisfied after eating only small portions which can lead to overeating and poor eating habits

Each different type of weight loss surgery has its positives and negatives, as do almost all medical procedures. Lapband procedures are considered the lowest risk, especially since they are completely and easily reversed if there are any complications.

Learning all you can about Lapband surgery and the reality of this type of weight loss procedure can help you determine if this is the best option for you. There are many different online groups, forums and discussions that provide personal views on the process, but keep in mind that any surgery for weight loss is not going to be effective if you don't follow a nutritionally sound diet, follow doctors orders pre and post surgery and continue to work on a daily exercise plan to help in weight loss.

Weight loss surgery, especially the Lapband, can and will work if patients follow the guidelines and the advice of their weight loss counselors, physicians and support staff.

## 2

# LAPBAND PRE-SURGERY

Perhaps you have tried all the diets, all the fads and have spend hours at the gym and still no marked results in your weight loss routine. Some patients have seen their weight drop only to have a rebound occur where they actually end up weighing more after the diet than they did prior to starting their weight loss program.

## POSSIBLE REASONS WHY YOU CAN'T LOSE WEIGHT

There are many different reasons why people can't lose the weight they want, despite how hard and how diligently they try. Some of the reasons why weight loss isn't as easy as just watching what you eat and working out include:

- **Genetic Factors**  
If your parents were heavy or obese you are much more likely to become obese than an adoptive member of the family or a non-related person that lived in the same house and ate the same foods as you did. There is also ongoing research in cultures where obesity is either a major concern, such as in the United States, or in cultures where obesity is rarely a concern, such as in some of the Asian countries.
- **Metabolism**  
Everyone has a "set point" or a natural weight where the body's metabolic system feels in balance. This is not always your ideal body weight, but your body will shut down, slow down or change to maintain that level, even when you try to diet.
- **Medical Conditions**  
Thyroid imbalances, tumors, neurological issues and eating conditions can all lead to weight gain problems. These occur despite what the patients try to do to get the weight off or maintain their weight after weight loss. These conditions will have to be treated separately and in accordance with weight loss for success to happen.
- **Environmental Factors**  
Many different factors in our environment can affect weight loss including lifestyle, food choices, our family, depression and even a fast

paced life that includes eating out or eating on the run all the time. These factors have often become such a part of our lives that we don't see any other way to eat or function. Changing the environment is often a big part of the pre and post Lapband weight loss plan.

No matter what the factors that have lead to weight gain, the Lapband process can be successful if you are willing to honestly look at your life and your situation and make the necessary changes.

## OBESITY AND HEALTH

There are different terms used in reporting weight and it is important to understand the difference. In most cases obesity is measured by both actual physical weight as well as your Body Mass Index or BMI. To calculate your BMI use the following formula:

$$\text{BMI} = \text{weight in pounds} / \text{height in inches squared} \times 703$$

So, for example, if you weighed 155 pounds and were 5 foot 6 inches (66 inches) tall you would calculate your BMI by:

$$155 \text{ divided by } (66 \times 66) \text{ times } 703 \text{ equaling a BMI of approximately } 25$$

A BMI under 18.5 is considered to thin for your ideal weight, 18.6- 24.9 is in the ideal weight range, 25 – 29.9 is overweight and anything over 30 is considered to be obese.

Morbidly obese is a serious condition where the individual is more than 100 pounds over the ideal weight range or has a BMI of over 40. If there are other medical conditions the weight and BMI may actually be lower than 40 to still be considered morbidly obese.

Some of the more concerning statistics with regards to obesity and health include the following:

- Of the total population of Americans between the ages of 20 to 74, one in three is overweight. This is a staggering number of almost 58 million individuals.
- Almost 40% of all women and 24% of all men report dieting and trying to lose weight with little or no success

- Just about 80% of all people diagnosed with non-insulin dependent diabetes are overweight
- Gallstone and gallbladder problems increase dramatically with a BMI over 29
- People that are overweight, obese or morbidly obese have twice the chance of developing high blood pressure and heart disease than non-overweight people in the same age range
- In the twenty years between 1980 and 2000 obesity rates doubled for American adults
- 61% of all obese children under the age of 10 already have at least one indicator of heart disease
- Approximately \$75 billion in total health costs in the United States in 2003 were directly related to obesity and related health conditions

The United States is not alone in these numbers and trends; it is estimated that there are over 1 billion overweight people in the world today, with at least one third of them obese or morbidly obese.

Overweight or obese individuals are more likely to develop high blood pressure, heart disease, digestive problems, specific forms of cancers, diabetes, circulatory problems and depression.

Taking the first step and planning your weight loss program in consultation with a bariatric surgeon or Lapband medical health counselor is a major part of getting back on the path to good health.

## COST OF LAPBAND SURGERY

Depending on your weight loss requirements and if you are morbidly obese, obese or overweight you may be able to have some or all of the cost of the procedure covered by your insurance. In cases where the patient is morbidly obese and has another health condition that would be treated through weight loss, some insurance policies will provide substantial if not full coverage of the procedure.

For those that don't qualify for the surgery as a medical necessity, there are many different Lapband clinics and centers that offer different prices, payment plans and financing options for patients. Since each one of the facilities will set their own price, there is a fairly substantial range. In most

cases the procedure, plus all pre and post procedure care will cost between \$15,000 and \$30,000, depending on several factors.

In some clinics the procedure is done right within the clinic in a day patient setting, which decreases the cost since there is no overnight stay. Often for people with no other health conditions and those that may not have as much weight to lose the day treatment option can save money, however most doctors will require an overnight stay to ensure there are no health concerns. For those patients that have heart problems, diabetes, high blood pressure or other health conditions or who are morbidly obese there may be a significantly longer stay of three days to a week so the doctor can check the procedure and immediately respond if there are any complications.

It is important to shop around and find out what you are getting for the price. Some clinics don't include all follow up visits, counseling sessions or other appointments in the quoted cost of the procedure. Be sure take the time to read all the fine print and ask any questions if you don't see the information in the brochure or on the website.

## GOOD CANDIDATES FOR LAPBAND SURGERY

There are a great number of people that are obese and morbidly obese that are good candidates for a Lapband procedure. Not all people that need to lose weight will be considered for the program, however there are options for those that Lapband may not right for. In general anyone with a BMI of over 40 or those that have a lower BMI of 35 but also have serious health concerns that are weight related are often considered to be good candidates.

There are other factors that the surgeon, specialist or weight loss expert will also consider in determining if the procedure is right for you. They include the following factors:

- Age  
In general Lapband surgery can be performed on anyone between the ages of 18 and 60
- Weight  
If you weigh double your ideal body weight, regardless of your BMI you may be a candidate for the procedure
- Medical  
There is no medical condition that is causing the weight gain such as hormonal imbalances, tumors or other diseases or those diseases have been treated or are currently being treated

- **Commitment**  
You are committed to changing your own habits including eating, lifestyle, diet and exercise not only immediately but also into the future.
- **History** You have a history of trying to lose weight and gaining it back or you have been overweight for at least five years with no success at traditional weight loss methods
- **Addictions**  
You have no known or diagnosed addictions to alcohol, drugs or other substances

Doctors take a close look at the whole person when determining if the person is a good candidate for this procedure. If the patient is not willing to do the pre-surgery diet and work the doctor may not elect to move forward with the procedure. Part of the pre process requirements are to challenge the patient and get them started on a new lifestyle change that will have a positive, long term impact on the ongoing weight loss results and weight target maintenance.

## WHEN LAPBAND ISN'T AN OPTION

As mentioned above there are some issues and factors that make the Lapband procedure a less than ideal option for many people. Often these patients can still proceed with one of the other gastric bypass or malabsorption techniques described in Chapter 1, but in some cases patients may not be suitable for any surgical procedure if the doctor decides it would be too risky or unsafe for the patient. Some of the reasons a patient may not be eligible for a Lapband procedure include:

- Unwillingness to change unhealthy lifestyle
- Alcohol or drug addictions
- Gastrointestinal conditions such as Crohn's Disease or ulcers
- Blood disorders such as hemophilia or immune system conditions such as AIDS or HIV
- Abnormalities in the digestive system structure
- If you are pregnant or want to become pregnant
- You do not choose to follow the pre-surgical diet or nutritional guidelines
- You are currently seeking treatment for an emotional or mental health related issue and your treating psychologist, psychiatrist, counselor or therapist is not in agreement with the procedure

## QUESTIONS YOU SHOULD ASK YOUR DOCTOR OR WEIGHT LOSS COUNSELOR

If you have thought about the Lapband procedure and have done some research, the next step is to schedule an appointment with the clinic or with a few clinics in your area. In most cases you will first meet with a counselor that will provide you information on the program, pre surgery, meetings you need to attend, provide basic information about the procedure as well as answer any general questions that you may have.

Private practices may also provide you with the opportunity to speak directly with the doctor during an individual consultation and meeting. Since this is a stressful time for many people, a good idea is to either make a written list of questions to ask the counselor or doctor and keep notes on their answers. Remember that not all practices, clinics and surgeons are the same so is a good idea to talk to at least three different agencies to find out all the information you can before making your choice.

Some of the questions you may wish to ask include:

1. How much experience have you had in Lapband surgery?
2. What specific training or certification does the doctor, clinic or treatment center have?
3. How does the facility work with insurance companies and what plans or groups are they covered by?
4. If there are complications or difficulties in the surgery, what hospital or treatment center do they use?
5. What is the full cost of the procedure including all follow-ups and pre Lapband meetings or sessions?
6. What options for weight loss the doctor would recommend given your weight loss goals, health and other factors?
7. What is a realistic expectation for my weight loss after the Lapband procedure and how will you support that?

There may be other specific questions that you have either about the process or the clinic or surgeon. It is always important to research as much as you can about the process so you know what questions to ask at the first meeting. The other thing to keep in mind is that you will have other opportunities to speak with the professionals working with you through the



clinic or doctor's office, if you miss a question or think of one later you do have options to get them answered.

## PRE-SURGERY PREPARATION

All facilities will have some type of pre-procedure preparation that the patient will be required to complete. This can vary based on your weight loss goals, other health factors and even your age. Typically most clinics will also require that potential Lapband candidates come to several classes or group meetings to help prepare yourself for the procedure. During these classes the prospective candidates will:

- Learn about the process
- Clarify your weight loss goals and why they are important to you
- Understand the challenges and changes that you are committing to that will ensure the Lapband procedure results in the weight loss you want
- Hear from prior patients about their successes and challenges post surgery
- Use a liquid diet or special eating plan provided by the clinic or doctor to start your healthy eating habits and prepare your system
- Establish a support network of friends and family that understand your weight loss goals and are prepared to help you succeed
- Network with other patients to provide support

There may be other requirements by each clinic; most will also include medical tests that have to be completed before your surgery can be scheduled. Typically these tests are completed by your family physician or a referral through the family physician, not through the weight loss clinic or treatment center. This information will all be provided at either general meetings or in the consultation sessions, depending on the method preferred by the clinic.

### 3

## CHOOSING PROFESSIONALS YOU CAN TRUST

It is absolutely essential to find a clinic, physician and facility that you feel confident and comfortable with. It is never a good idea to proceed with a Lapband or weight loss procedure if you are not 100% sure that the professionals you are working with are skilled, experienced, training and truly caring about your health, emotional well being as well as your long term success.

### WHAT TO LOOK FOR IN A LAPBAND CLINIC

Looking for a Lapband or surgical weight loss clinic shouldn't be difficult in any major metropolitan area. In smaller cities, towns and in rural areas there may not be a specific facility, however there may be private physicians that offer the service. If you aren't in an area where there is a weight loss surgery center or a clinic that offers Lapband procedures you may want to consider traveling to a center rather than using a private physician.

Weight loss centers or Lapband clinics should be able to provide a multi-disciplinary approach to both pre and post surgery treatment. They should also have professionals on staff to help you deal with any concerns about the treatment and typically a team approach will be used with each patient in the pre and post surgical phases. A private doctor cannot provide all this specialized professional support, plus he or she will typically not have preformed the numbers of procedures that can be expected through a weight loss clinic or center.

When you first get to the clinic or facility your first impression should be one of a professional, well-run organization. Most clinics will require an appointment to speak with a counselor, so call ahead. He or she should be professional able to answer your questions as well as make you feel comfortable and at ease. In many clinics counselors are prior clients that can provide insight into the procedure from a personal perspective.

Although you will not typically see the complete facility, it is important that the areas that you do tour appear to be well maintained and designed to accommodate the patients. In some facilities there are private consulting rooms, doctors' rooms and surgical rooms, some which you may be able to view on your first visit. If you are giving the opportunity take the tour and

don't be afraid to ask questions and get to know about the facility and the services offered.

Many clinics and weight loss centers have a lot of features for patients that are free as long as you are a client of the center. You may want to enquire about support services post procedure including group meetings, working with a nutritionalist or dietician, consultation with a nurse or medical professional or even routine weigh-ins and check-ups. In addition you will also need to return to the clinic to have your Lapband filled or adjusted over time, so be sure to select a clinic that has been in the community and will likely continue to provide service. Working with the same group of professionals will ensure that you feel comfortable all through your weight loss program, plus they are more likely to pick up on any changes or abnormal test results than going to a different doctor or clinic each time.

## WHAT TO CONSIDER WHEN SELECTING A SURGEON

Although the Lapband procedure is considered to be minimally invasive compared to other types of bariatric surgery you want to select a physician and surgeon that makes you feel comfortable but also has the experience, training and education necessary to perform the procedure.

Perhaps the biggest issues that prospective Lapband patients need to look at is the experience that the doctor has had in performing this type of surgery, as well as how much overall bariatric surgical experience he or she has. Although new doctors can do a terrific job, those with more experience are likely to be able to respond better to abnormalities once the surgery begins. Hopefully this would not be an issue, however it is always better to have experience than a non-experienced surgeon.

A doctor that has a lot of experience will have a lot of past patients that are more than willing to sit down and chat with a prospective patient or talk over the phone. In most clinics this is provided and even encouraged, just as you may be asked to consult or talk to a prospective patient after you complete your procedure. Doctors that seem unable or unwilling to provide information on past patients may not have a lot of satisfied clients. Another key factor is to ask what specific training the doctor has had on bariatric surgery and more specifically on Lapband procedures. There are different techniques used and it is important to know that the technique that your doctor is planning is also one in which she or he is fully trained and certified in.

Don't be afraid to ask the doctor about the procedure or type of Lapband surgery he or she performs. There are slightly different models of surgery, some which may be more suited to your needs than others. If the doctor

seems unable or unwilling to discuss the procedure or doesn't seem to be matching the research you have done, talk to another surgeon.

## INSURANCE COVERAGE AND LAPBAND SURGERY

As mentioned in Chapter 2, some Lapband surgery may be covered by your insurance plan, particularly if you meet the criteria for morbidly obese or have a BMI of over 35 plus a concurrent health condition that is adversely affected by weight. In addition, many states in the United States use the standards of obesity as defined by the National Institutes of Health (NIH) to determine if the insurance company must cover the cost of the procedure.

In general patients will need to be pre-approved for weight loss surgery to be covered by insurance. This may mean waiting one or two months to allow your Lapband surgeon and your other healthcare professionals to complete the necessary tests and submit the required paperwork to your insurance company.

It is important to avoid getting stressed out and frustrated at this point, just keep focused on your long term weight loss goal and don't give up. All paperwork needs to be kept organized and in order, starting with your doctor's visits from obesity related problems up to your referral and initial consultation with the Lapband or bariatric surgeon. Most clinics will have a staff member that can help you in coordinating, completing and submitting the insurance paperwork.

When you receive notice from the insurance company of coverage for the procedure you will then need to contact your weight loss clinic or professional and schedule the pre-surgery meetings, appointments or sessions and then the actual procedure. In some cases the insurance will not cover the full cost, so you will then need to work with the clinic on a payment plan or lump sum payment.

If you are denied coverage by your insurance company there is the option to appeal their decision. They must list why you were denied coverage for the Lapband procedure, and you now have time to respond and find data to support your claim based on their reasons for denial. This may mean getting additional documentation from your physician, completing additional medical tests or tracing additional supporting documentation. For many individuals an insurance attorney can be helpful in pursuing these appeals in a timely and efficient manner.

## GROUPS AND MEETINGS PRE-SURGERY

If your weight loss clinic or Lapband weight loss center offers groups or pre-procedure meetings, it is important to plan to attend these sessions. While you may think that you understand the whole procedure, these group meetings and working with a counselor will help you prepare mentally and emotionally for the changes that will occur in your life after surgery. Although most people will have very little change in their lives other than certain food restrictions and changes in eating habits, others will have to deal with more serious issues.

One of the important aspects of these meetings is to help patients learn how to explain the changes in their lives, diet and eating habits to family and friends. It is also a way to develop a support network for those times you are feeling challenged or frustrated over some aspect of your weight loss program. No surgical procedure ensures that you will be successful in your weight loss; it is still ultimately up to you and the choices that you make.

These group sessions and meetings will help you identify the strengths and supports you have in your life as well as any thinking that you may have to change to allow your success. In addition these meetings and groups allow you to speak with prior patients of the clinic, facility or surgeon. The people that have been successful in keeping off weight with the procedure can talk about how they handled the difficult times, how they over came challenges with weight loss as well as how they have benefited from the treatment.

One of the key issues at these sessions is helping potential Lapband patients to get rid of any myths or misconceptions they may have about the surgery and the results. In many cases people think that Lapband surgery is a quick way to lose weight, when in reality many people lose only a pound or two per week after surgery, which is considered to be a healthy, normal weight loss. Past clients can talk about exercise programs, especially for those that have not routinely exercised before, healthy lifestyle choices and even how to choose friends and support people that will help you achieve your goals.

## 4

# THE PROCEDURE

Once you have researched the procedure, been approved by insurance or settled on a payment plan, selected your clinic and doctor the next step is to actually undergo the Lapband procedure. This is always a somewhat unnerving time, no matter how much you have read, studied and questioned. If at all possible plan to take a day or two off work so you can cleanse your system as prescribed by the clinic prior to your procedure day.

### THE DAY OF THE PROCEDURE – WHAT TO EXPECT

Prior to the day of your procedure the doctor will have provided you information on a diet that you are to follow. It is very important to stay on this diet for the time period, usually 24 hours or less, prior to the morning of your surgery. Typically this is a clear liquids diet with broth and specially formulated nutritionally supplements provided. In addition if you are a smoker you need to have abstained from any tobacco products for 30 days before the surgery.

Most patients are required to admit themselves to the clinic, hospital or facility the morning of their procedure, however some will come in the night before. Be sure to bring reading material or something to keep you occupied, plus enough clothing for one or two nights stay after the procedure. Your doctor will tell you in advance how long you will need to stay after the Lapband has been implanted.

### THE LAPBAND PROCEDURE

The procedure is done under general anesthesia, which means you will not be awake for the surgery. The whole process is often completed in just over a half hour, with many surgeries not lasting more than one hour.

During the actual minimally invasive surgery the surgeon makes a series of very small 1 cm incisions around the stomach, through which he or she is able to place the band in the correct position. Into one of the incisions a

small optical camera is inserted which allows the surgeon to see what he or she is doing without having to open up the abdominal area. This technique is where the laparoscopy term comes from in the name Lapband. With the camera and very thin, flexible instruments the surgeon positions the band, which literally loops around the stomach very similar to a band on a watch or a radiator clamp. Within the silicone ring of the Lapband is a balloon that is attached to a thin silicone tube and a port.

Once the Lapband is in place and tightened to form a smaller pouch on the top of the stomach the surgeon then uses the port, which will be located on the abdomen just under the skin, to inject a simple saline solution in the balloon on the inside of the ring. This creates the pressure that decreases the opening between the new smaller stomach pouch and the larger, bottom stomach area.

The doctor will adjust the size of the stomach outlet, also called the stoma, to allow more or less food to pass. Typically the surgeon will inject a preset amount on the day of the surgery, and then adjust in the upcoming weeks as a weight loss pattern is determined.

## POSSIBLE COMPLICATIONS AND RISKS

In any type of surgical procedure there are always complications and risks. Lapband surgery has far less risks than open bariatric surgery where the abdomen is cut open in surgery or where there is any type of by-pass surgery required. Since the Lapband is very minimally invasive issues with infections and poor healing of the surgical incision are very, very rare.

In many countries, particularly in Australia, Lapband surgeries have been used for many years with no fatalities directly reported as related to the Lapband procedure itself. In the United States it is estimated that 1% of all Lapband patients will have some type of health related issue to the surgery, but this is typically related to their obesity, high blood pressure, diabetes complications or some abnormality that already existed within the stomach or the surgical area. In rare situations damage to the spleen may occur during the process that will then require open abdominal surgery to stop any bleeding and repair any damaged tissue.

With patients with breathing problems anesthesia is always a concern and there are risks that need to be discussed if you are a very heavy patient that has sleep apnea or other respiratory conditions before considering any type of surgical procedure. In addition people that are morbidly obese may have a greater likelihood of tearing or pulling the incisions, which can lead to infections if not treated. In addition infections can occur either in the stomach where the band is located or at the surface of the skin where the

port is positioned. These infections can be treated by antibiotics and are typically not serious.

Approximately one in seven patients of the Lapband procedure will have the band slip at some point in time that will require a surgical procedure to reposition the device. There is also the rare possibility that the balloon lining in the Lapband will leak, requiring surgery to replace or correct the problem.

In addition there are several different physiological issues that can arise from the use of the Lapband. Typically these changes occur immediately after the implant of the band, however some may take a few days to a week to occur. Some may also be present initially and then become less problematic as the patient learns to eat slowly and adjust their food choices.

The following are possible side effects that may or may not occur for patients shortly after the placement of the band:

- Vomiting
- Difficulty swallowing
- Constipation
- Gastritis
- Acid reflux
- Dehydration
- Ulceration
- Blockage of the stoma
- Bloating and gas

Patients need to keep a journal of any of these symptoms and discuss any and all concerns with the doctor as soon as possible. Be sure to attend all after procedure appointments and follow all instructions including your recovery time after the Lapband procedure. Many people try to rush back to work or not take time to allow themselves to adjust to the band both mentally and physically.

## ADJUSTMENTS TO THE LAPBAND

Adjusting the Lapband is a simple procedure that your doctor can do right in his or her office. They simply inject a sterile saline solution into the port under the skin of your abdomen, thereby inflating the balloon and making the stoma smaller. In cases where your weight loss is too sudden or you have reached your weight goal, the doctor can use the same port to withdraw some of the saline solution and allow more food through the opening.



In cases where the stoma or stomach opening becomes blocked with food, patients need to immediately contact their doctor. This is a serious condition that can cause complications and trouble eating and will be present in approximately 10% of all patients that undergo the procedure. Typically it happens when the food is not properly ground up by chewing and it literally sticks in the stoma and lodges there causing anything from mild discomfort to severe abdominal pain.

In most cases this will trigger a vomiting reflex and the larger chunk of food will be expelled. In cases where this doesn't happen or the pain is more than just discomfort immediately contact your surgeon and follow all recommendations. In cases where the blockage doesn't go away, the doctor will empty the band, change your diet to clear liquids for a couple of days and then re-fill the band. In some severe situations surgery may be required to completely clear the food from the stoma.

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## YOUR NEW DIGESTIVE SYSTEM

Although Lapband surgery does provide the necessary physiological changes to ensure that you can lose the weight, it is still ultimately up to the individual to make the necessary changes in their lifestyle to allow the Lapband to work. It is, after all, only a part of the total program that each individual will need to follow.

As mentioned earlier, most patients will spend two to five days in some type of hospital or treatment facility to monitor any possible complications or issues with the positioning or filling of the Lapband, as well as working with dietitians, nurses and counselors to get on the right diet. They will also include learning how to eat and how much to eat with the Lapband in place. After that, ongoing care including health checks, fills and adjustments as well as setting up a routine for exercise and setting weight loss goals or maintenance goals will all be part of moving forward.

### POST SURGERY CARE

Depending on the weight loss facility and the after care program, there may be slight differences in your post surgical care regime. There will also be differences if there are any complications during the procedure or if you have other health conditions that are being treated at the same time.

For most patients the two to seven days after surgery is the biggest adjustment period. There is likely to be some slight pressured feeling or even a bit of irritation or discomfort in the abdominal area. This is perfectly normal and is part of the body's natural reaction to any type of invasive procedure, no matter how minimal it may be. Typically in the first 24 hours you will not feel your usual perky self and will be tired and need a lot of rest to help with initial recovery.

The doctor and nurses will be in to check on you regularly, provide as much information as you can as to your overall health and how you are feeling, plus be sure to report any discomfort you may have. It is always better to ask questions and be assured that what is going on is normal and expected rather than to wait for a long period of time to realize that there is some type of possible issue or problem.

In most cases the doctor will not inflate the balloon inside of the lapband immediately after the surgery. This is because the stoma, the opening, will have some swelling as the tissue heals and recovers. This means that shortly after the stoma has started to reduce in swelling or edema, the doctor will then inflate the balloon part of the band with the sterile saline solution. For the first few weeks after the surgery the patient will be on a liquid diet.

Typically this diet will consist of clear broths, fruit juices and clear foods such as Jello. The quantities are going to seem impossibly small until you adjust, most of the time 1/3 of a cup of liquid is about all that that you will be able to consume at this time. The first few days after the surgery are a real adjustment period and overeating, or more correctly overdrinking, is going to result in vomiting and discomfort since your mind has not adjusted to the portion sizes. In addition patients will also have to learn how to drink and eat the Jello and broth very slowly since they will have a full feeling much, much faster than before.

This change in how much you can eat is perhaps the biggest mental adjustment that patients have to make. Since you are only consuming liquids for the first few days, there is little irritation to the stoma and the smaller stomach pouch, even if you do over consume. Even the issues with vomiting to rid the stomach pouch of too much liquid are typically only seen the first week, after this time most patients have learned to control their portion sizes of liquids as well as listen more closely to their bodies signaling they are full.

As soon as possible, after the procedure some very soft semi-solid foods are introduced into the diet when patients are responding well. This is typically after the patient is released from the hospital or facility and is usually before the five to six week mark. Gradual introduction of gentle foods such as hot breakfast cereals, soft poached eggs and even milk is the first step in returning to a normal diet.

Since the body needs to have proteins, minerals and even carbohydrates to provide energy for healing, doctors recommend that patients try to eat at least 25 to 30 grams of protein per day as soon as possible after surgery. Since you can't sit down to a steak for this amount of protein, other soft foods such as cheese, milk and eggs are going to figure prominently in the initial recovery diet. For most patients even meat can be added to the diet, simply use a blender or food processor to puree meats and vegetables to make easily digestible soft casseroles or soups. In most cases a specific protein shake taken twice a day will also be required to ensure that patients are getting the nutrients they need for full healing and recovery.

The weight loss counselor, dietician, nutritionalist or health care provider will usually direct you to a list of approved recipes, food preparation methods and even ingredients that you can use during the first few weeks post procedure. It is important to avoid using a lot of spices or eating hot or acidic foods that may cause any digestive problems, at least initially during the recovery

phase. For some patients this may be something that they need to focus on for the rest of their lives, while others may be able to gradually build up to adding spices, acidic foods and hot foods back into their diet.

## ONGOING DIET AND NUTRITION

After the first five to six weeks after surgery you are ready to start eating "regular" foods again. This means no more pureed meals but rather an adjustment back to whole foods, just with a few important changes and considerations.

Since the doctor will have adjusted the stoma at this point, the body will only be able to allow a small portion of the food from the upper pouch in to the lower pouch of the stomach at one time. This slow movement will help you feel fuller longer. However, liquids will pass through the stoma quickly, so relying on liquids to help you feel full is no longer a weight loss trick that will work. Many patients forget how high in sugar fruit juices can be and add unnecessary calories to their diet through constant and high levels of consumption. After the initial recovery period any type of sugary beverage should be fully eliminated or highly restricted in your ongoing diet.

Since you are eating much smaller portions it is absolutely essential to eat a balanced diet and take all prescribed supplements and vitamins. There are actually 10 key factors that people need to consider from the six week period forward in their weight loss and nutrition goals. The following are the 10 most important considerations:

### 1. AVOID ALL CARBONATED BEVERAGES – FOREVER

Carbonated beverages will cause gas, bloating and discomfort. They can also lead to the band slipping or in vomiting after consumption.

### 2. CHEW FOOD SLOWLY AND METHODICALLY

Besides having much smaller portions you will also need to chew each piece of food into a paste consistency. This is best done by cutting all food into very small pieces then eating one piece at a time. Doctors also recommend chewing each tiny piece of food 20-30 times to fully break up any chunks that may be present. Chunks of food can cause blockages of the stoma that can require surgery to correct.

### 3. EAT THREE SMALL MEALS A DAY AND DON'T SKIP MEALS

Since you are eating much less at each meal, all three are important throughout the day. Don't snack a great deal between meals as this adds unnecessary calories. If you do need to snack, consider a very small amount of steamed vegetables as an option.

#### 4. EAT SLOWLY

You simply cannot gulp your meals or eat on the run after this type of procedure. Even by chewing rapidly and swallowing you can cause discomfort and blockages, or you can end up stretching the upper pouch, which is counterproductive to your weight loss goals.

#### 5. DO NOT DRINK BEFORE OR DURING MEALS

Drinking with meals will actually artificially make you feel full; limiting the nutrients you are receiving at each meal. In addition it can also cause the food to swell in the upper pouch of the stomach, increasing discomfort and possibly leading to blockages in the stoma. It can also wash food through the stoma and out of the stomach pouch, making you feel hungry again!

#### 6. AVOID HIGH FIBER FOODS

Fiber is no longer the most important thing in your diet, despite what you may have worked on in the past. Fibrous foods are more likely to cause blockages plus they will fill you up quickly and are not typically high in the proteins and essential nutrients that you need.

#### 7. EAT ENOUGH PROTEIN

After the initial recovery phase a Lapband patient should try to consume approximately 50 grams of protein per day for women and up to 60 grams per day for men. This will help with building muscle and allowing your body to adjust to your weight loss without any serious side effects.

#### 8. AVOID THE FOLLOWING FOODS

Not all Lapband patients will have the same intolerance for these foods, however in general they are not recommended for anyone with the Lapband in place:

- Citrus fruits – especially seeds and membranes
- Fried foods

- Spicy foods
- Cinnamon, pepper, lemon pepper, onion salt, garlic salt (in small or large amounts)
- Dense meats or tough cuts of meat
- Popcorn
- Starchy foods, breads or dough
- Any medications in pill or capsule form if not ground up or broken into pieces
- Sugary foods such as candies, jams, honey, drink mixes, chocolate

## 9. EAT HIGH QUALITY FOODS

Since you have a limited amount of food you can consume, it is important to make it the best food possible. Avoid eating anything that is highly processed or pre-packaged and try to cook fresh and healthy using boiling, broiling, steaming and baking methods.

## 10. 10. AVOID AN EATING RUT

Eat a variety of lean meats, dairy products, vegetables and even a few treats. If you get into an eating rut you are less likely to enjoy your food, leading to nutritional problems over time.

## REASONABLE EXPECTATIONS FOR WEIGHT LOSS GOALS

With correct diet and exercise, most Lapband patients can expect to lose between one and three pounds per week. This is a normal, measured weight loss that will allow your body to adjust and will prevent the health problems associated with rapid weight loss.

For many Lapband patients there is a misconception that the weight will simply melt off, when in fact the patient has to make a conscious, determined effort to both stay on the diet as well as keep up exercise requirements. Often the biggest weight loss will be within the first 8 months after the Lapband is first implanted, then the loss will be slightly less but should still continue to be consistent. Adjustments and filling will help control the rate of food digestion so routine and scheduled appointments with your weight loss doctor will be important to achieving your goals.

Losing weight at a slower rate may have some advantages over the long run. If you are losing weight more slowly your body will adjust more effectively

and efficiently and you may find that there are fewer physical side effects. With very rapid weight loss there is always a problem with excessive loose skin, sagging of the skin as well as other health problems.

For any patient that is trying to lose a significant amount of weight, excess skin is likely to become a problem or at least a cosmetic issue. Although it is possible to have the skin removed during your weight loss process, it is often advised by plastic surgeons and cosmetic surgeons to wait until you have reached your goal weight to avoid having to go through multiple surgeries. Typically this surgery is not covered by insurance, however in some cases it may be if the loose skin is a health risk or there are other possible health related complications. Talk with your plastic surgeon and your weight loss clinic to see what options you may have available.

## ACHIEVING YOUR GOALS

Weight loss is going to be an ongoing process for most Lapband recipients, at least until they reach their goal weight. Even after that ongoing changes in diet and exercise will be required to maintain your ideal, healthy body weight for the rest of your life.

Perhaps the most important part of achieving your weight loss goals post procedure is to become more physically active on a routine basis. For most Lapband patients this is a new component in their life, so setting out with realistic expectations and starting slow is important. Most doctors recommend that a brisk 30 minute walk once a day, swimming or even a water aerobics class is a great start. These exercises are gentle on the joints of the body plus they are relatively inexpensive and available in most areas.

Once you can easily do the initial exercise program, gradually increase both intensity and length of the routine. Weight lifting, even light weights, is great for building muscle, increasing metabolism and helping keep bones and your skeletal system healthy and strong. Your weight loss program may have classes or trainers they recommend that can design a personal program based on your own individual fitness goals.

Another important consideration in achieving your goals is to have support from friends and family. You need to involve others to support you, recognize your progress and get you through those challenging times. Friends that have had Lapband surgery or even support groups through the weight loss facility are all ideal options for that extra push you may need. Don't be afraid to ask for help at this time, it is going to be hard but very worth the effort.

## REVERSING THE PROCESS

At any time the Lapband can be adjusted or deflated or it can even be completely removed. In some cases people that simply cannot adjust their eating or stick to the post procedure diet may choose to have the Lapband removed, as may women that become pregnant. In most cases the Lapband can simply be emptied during pregnancy and the period that the mother is breastfeeding, then filled again when the extra nutrition is not required by the body. Either is an option that can be discussed with your doctor.

The biggest reason most people give for having the Lapband removed is problems with chronic blockages and discomfort. Even when people follow the diets, eat slowly and do all the right things, there is the chance that the Lapband may not work for the individual. Often these people try multiple adjustments, changes in diet and even very restrictive food choices before deciding that the Lapband is simply not right for them.

Some patients decide to get the Lapband removed when they have reached their weight loss goal and have maintained their weight for a period of time. Removal is actually very similar to the implant procedure with the same small incisions, release of the band from the stomach and removal of the device and the port. In most cases patients are fully recovered within three to seven days and are able to return to normal activity within that period of time.

There is also a normal adjustment period for the digestive system to get used to the far greater load it will now carry. Staying on very specific diets that gradually return to larger portions and previously restricted foods will prevent digestive and gastric upsets and problems. For many people there will initially be some weight gain after Lapband removal, even when sticking to a weight loss diet. This typically evens out over the first few months and with exercise, control and correct eating it will be reversed.

Removal of the Lapband does mean that patients will need to re-learn how to eat the right foods, portion control and also healthy lifestyle management. Like any medical decision it needs to be made after talking to your doctor and doing the research. The great news is that if, even after removal, you can always change your mind and have the band replaced at a later date. Some patients also choose to move into the malabsorptive and combination type surgical procedures discussed in Chapter 1 after Lapband removal.

Weight loss surgery with the Lapband has literally made a world of difference to overweight patients around the world. Each year more and more procedure are performed with fewer and fewer complications. If you are considering a Lapband, take the time to read, review and research the current practices and methods, then make the decision if this is right for you.