Recent Advances in Weight Loss Surgery

Surgical weight loss, what are the latest advances and does it work? You are listening to ReachMD XM 160, The Channel for Medical Professionals. Welcome to The Clinician’s Roundtable. I am Dr. Mary Leuchars, your host and joining me today from New York is Dr. Christine Ren. Dr. Ren is Associate Professor of Surgery at NYU School of Medicine and she is considered by many to be the leading lap band surgeon in US. She is a board-certified general surgeon. Today we are discussing recent advances in weight loss surgery and the results that our patients can expect from this procedure.

Dr. MARY LEUCHARS:
Welcome Dr. Ren and thanks for joining us today.

Dr. CHRISTINE REN:
Thank you for having me, it’s a pleasure.

**Dr. MARY LEUCHARS:**

Now just to start with, how did you get involved and interested in weight reduction surgery?

**Dr. CHRISTINE REN:**

Well it’s interesting because during my surgical residency which was about 15 years ago, I did not think that it had any value in the medical community. In fact, I just thought these hopeless severely obese patients were just having some crazy operation where they stapled the stomach and they went onto suffer from vomiting and not eating, but in fact, when I did my laparoscopic fellowship, I did a fellowship for 1 year that really specialized in minimally invasive surgery and there at that place which was Mount Sinai Hospital over in New York City, there was a lot of bariatric surgery being performed and I had no choice, but to be exposed to it. What was fascinating was not the operation itself, but seeing these patients in the clinic 3 months later, 6 months later. Not only did they lose a significant amount of weight, 50 or 100 pounds, but all of a sudden their diabetes was better, their medications were drastically reduced and they were so happy, they were more self-confident, they had better quality of life, they were getting jobs that they previously were discriminated against. They were getting pregnant because these women’s fertility was improving and each was like a lightning bolt that said to me these people are actually getting a new life and this is what I felt I could really be involved with as far as achieving personal satisfaction in my career.

**Dr. MARY LEUCHARS:**

And where was the first type of weight loss surgery developed?
Dr. CHRISTINE REN:

Well it really was here in the states in the 1960s, really the intestinal bypass was very popular and then it went into stomach stapling also known as a vertical banded gastroplasty, but these really have evolved and the gastric bypass started in the late 60s and again has evolved into not only having a smaller stomach being involved, but also the surgery being performed laparoscopically and the laparoscopic introduction to weight loss surgery really was in the mid 90s. This is what really made bariatric surgery much more popular and received in the public and in the medical profession because it has cut down the complication rate.

Dr. MARY LEUCHARS:

So when we talk about bariatric surgery, how do you divide the types of surgery out for those doctors who might be listening, not familiar with the procedures?

Dr. CHRISTINE REN:

Not all bariatric surgery is equal. You really have to understand that because it does play into #1 the surgical risk, #2 nutritional risk, and then managing these patients long term for any of the primary care physicians or endocrinologists that see these patients. So there are 2 categories of operations. The first category is what is called restrictive operations and the second category is malabsorptive operations. Restrictive operations, the first category really focuses on the stomach and diminishing the capacity of the stomach, diminishing appetite and increasing satiety. So the most common operations are the gastric bypass where the stomach is completely bypassed or the gastric banding also known as lap banding where a device is placed around the stomach. The second category of surgeries is the malabsorptive operations. Those operations focus mostly not only on the stomach, but on the intestine. It is more of an intestinal bypass where patients are eating almost the same as they used to, but they are not absorbing, not digesting as much food and they are actually passing it through their intestines, sort of like the orlistat or the Xenical and those operations are called biliopancreatic diversion or duodenal switch procedure.
Dr. MARY LEUCHARS:
What are the most common procedures that you personally perform on your patients?

Dr. CHRISTINE REN:
I personally have performed and continue to perform the gastric banding much more frequently and to think of your background, I have performed all 3 operations because in my training, we did a lot of malabsorptive operations, a lot of gastric bypasses and the banding wasn’t even available in the United States, but as I saw the surgical and the nutritional complications that occurred, I was drawn to the safety of the gastric banding operation and so I have really become much more of a fan of the gastric banding operation.

Dr. MARY LEUCHARS:
Do you know how many patients you have performed this on?

Dr. CHRISTINE REN:
Oh yeah, close to 2000.

Dr. MARY LEUCHARS:
And what are the numbers like nationally for the procedure?
Dr. CHRISTINE REN:

Nationally, it is probably about 30,000 banding operations being performed in the United States and that is increasing each year, but because of public interest in it, because of the safety factor.

Dr. MARY LEUCHARS:

If you are just joining us, you are listening to The Clinician’s Roundtable. I am Dr. Mary Leuchars and today I am speaking with Dr. Christine Ren. We are discussing surgical weight loss and what our patients can expect from the procedures that there are to offer.

Dr. Ren we talked about your personal interest in lap banding surgery and the numbers of people you have performed this on. What are the particular considerations you give to every patient when deciding which procedure is relevant to them.

Dr. CHRISTINE REN:

Well certainly, I want to know if the patient understands what the behavioral changes that they are going to have to make after the surgery are. If they understand what is happening in the operation itself and what the nutritional consequences are going to be. Because if they don’t understand these things, then they won’t be able to followthrough and be compliant with the changes that are required. The patients usually come very well educated. Most patients do not want to have surgery. So they have done a lot of consideration of the operation. They have done a lot of research, particularly with the internet now and they will come to you already knowing which operation they want and my job is to make sure they have the correct information and they are choosing an operation for the correct reason.

Dr. MARY LEUCHARS:

What's the cost of the procedure for the patient?
Dr. CHRISTINE REN:

Well right now, the majority of health insurance companies in this country will cover weight loss surgery, gastric bypass, and gastric banding. Many of them will also cover the malabsorptive operations. However, its state by state. So say I am in New York City. So in New York 95% of the insurance companies will cover some form of bariatric surgery unless there is some policy that’s in exclusion for bariatric surgery. There are certain states for example in Florida where none of the insurance companies cover it. So if the insurance company doesn’t cover bariatric surgery, it can run the patient anywhere between $10,000 and $35,000.

Dr. MARY LEUCHARS:

And in terms of the benefits postsurgically, do the costs justify themselves as time progresses in terms of less complications from the obesity that would have otherwise been still present.

Dr. CHRISTINE REN:

Absolutely. When you look at the morbidly obese population very few of them have no medical problems and so the cost of treating a morbidly obese, diabetic, osteoarthritic, refluxing, hypertensive, depressed person is going to be about $1000 per month in medications and that’s not including doctor’s visit and loss in work. So the return on investment probably breaks even at about 2 years after surgery and there have been a couple of economic models that have been put together that show this.

Dr. MARY LEUCHARS:

In terms of defining your patient as obese or morbidly obese, what are the 2 definitions.
Dr. CHRISTINE REN:

The severity of obesity is actually defined by body mass index, otherwise known as BMIs which is kilograms per meter squared and so you can calculate the BMI, you can go on the internet and find a BMI calculator or often times you will have like a table and morbid obesity starts at 40, severe obesity starts at 30 to 40. To give you an example, lean body mass index is between 18 and 25. So 25 to 30 is overweight, 30 to 40 is severely obese and 40 or greater is morbidly obese.

Dr. MARY LEUCHARS:

What is the most common question asked by your patients when they come to see you for this surgery?

Dr. CHRISTINE REN:

When can I have the surgery and its amazing because we have a very long process and not always intentionally, but from the time the patients decide on surgery to the time they come and see me, it is usually about 6 months, 6 months to 12 months, because it is a very big decision to have general anesthesia and to be cut by someone as well as changing all their behaviors afterwards and giving up food for a variety of reasons. So they come to a public seminar that we give. They have to see our psychologist, they have to see our nutritionist for evaluation and counseling. They will meet with our nurse practitioner. They will see their medical doctor and then go through a battery of testing to make sure that they don’t have any complications such as stress tests or sleep study as necessary for their medical condition and then they finally see me. And it is a very long process most of the time and they are ready to have surgery. Often times they will have to talk to their support systems to make sure that they are behind them as well.

Dr. MARY LEUCHARS:
How long does a lap banding procedure take on average?

Dr. CHRISTINE REN:

It would take approximately 45 to 60 minutes in our institution.

Dr. MARY LEUCHARS:

And we can run through in more detail the morbidity and mortality associated with that particular operation?

Dr. CHRISTINE REN:

Sure, in gastric banding, the mortality is 1 in 1000, 0.1%. Some studies it is 0.05%, so its in 1 in 2000, but it is extremely low from the operation itself.

Dr. MARY LEUCHARS:

And in terms of complications, I imagine respiratory complications, probably the most common, is that correct?

Dr. CHRISTINE REN:

Respiratory complications are not that common because the anesthesia time is very short and we are doing it laparoscopically. They have little pain, so they are ambulating immediately. Probably the more common complication would be pulmonary embolism and again that’s extremely low. Our surgical
complication is very low, but in the literature, PE and myocardial infarction would be some of the more common causes of mortality after the gastric band.

**Dr. MARY LEUCHARS:**

What's the average age of your patient population?

**Dr. CHRISTINE REN:**

It is a 47-year-old woman, 75% of our patients are female, the average age is 47 and the average BMI happens to be about 48.

**Dr. MARY LEUCHARS:**

And how does the level of obesity in patients in the New York area compare nationally?

**Dr. CHRISTINE REN:**

I believe in New York State it is 18%. In other states it is up to 21% to 25%.

**Dr. MARY LEUCHARS:**

Do you think that celebrities who talk in the media about these type of surgery are beneficial to the patients that you treat?
Dr. CHRISTINE REN:

I think it is beneficial when celebrities or people in the public speak about weight loss surgery, specifically lap band because it makes #1 real people and #2 it validates not only the operation, but it validates obesity as a disease. Because these people, celebrities are hardworking successful people.

Dr. MARY LEUCHARS:

My thanks to you Dr. Ren for being our guest today. We have been discussing surgical advances for weight loss. I am Dr. Mary Leuchars and you have been listening to The Clinician’s Roundtable on ReachMD XM160, the Channel for Medical Professionals. We welcome your comments and questions through our web site at ReachMD.com which now features our entire medical show library in on-demand podcasts.

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