

**MINIMALLY INVASIVE ROUX-EN-Y GASTRIC BYPASS
PINNACLE HEALTH SYSTEMS
HARRISBURG, PA
November 7, 2007**

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ANNOUNCER: Welcome to Pinnacle Health Systems in Harrisburg, Pennsylvania. Over the next hour, see a minimally invasive Roux-en-Y gastric bypass. During the procedure, surgeons access the abdomen through several small incisions, reducing the size of the stomach to a small pouch and bypassing a portion of the digestive system. This limits food intake, helping patients suffering from obesity to achieve significant weight loss and a healthier lifestyle. OR-Live makes it easy for you to learn more. Just click on the "request information" button on your Web cast screen and open the door to informed medical care. Now let's join the doctors.

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SCOT A. CURRIE, MD: Hi, welcome to Harrisburg, Pennsylvania, and we're at Pinnacle Health Hospitals here. Today we're going to be watching a laparoscopic gastric bypass, and it's going to be performed by my colleague, Dr. Luciano DiMarco, who is director of bariatric surgery here at Pinnacle Health. Pinnacle Health is a bariatric center of excellence accredited by the American Society of Metabolic and Bariatric Surgery, and the three bariatric surgeons here are accredited by the same organization. Those surgeons are Dr. Luciano DiMarco, who will be performing the surgery today, my other partner, Dr. Matthew Davidson, and myself, Dr. Scot Currie. Gastric bypass has been performed for approximately 20 years and has developed into the surgery it is today. It is now being performed minimally invasively through the laparoscope. Today the surgery will be performed on a female patient who has a BMI of approximately 42. The surgery itself will allow her to lose significant weight over the next 12 to 16 months and she will continue with long-term follow-up at our outpatient clinic, which is known as the Weight Loss Clinic, here in Harrisburg. Before we introduce Dr. Lou DiMarco and begin the surgery, I would like you to remember that you can access us with pushing the button on your screen and email us questions which we can go over with you during the procedure. Dr. DiMarco, could you introduce the patient to us and begin the surgery?

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LUCIANO DiMARCO, DO, FACOS: All right. Good morning. And once again, thank you, Scot, and thank you everyone for joining us today. This patient: female, BMI of 42. And what that means is that she'll be trying to lose about 100 pounds over the next year or so. And we're going to help her out today by doing a laparoscopic gastric bypass Roux-en-Y. And again, thank you all for joining us. And of course you know that as we do the procedure, we'll be talking to you guys through the whole process. Procedure's being done today with a telescope; we're laparoscopic. And we're going to make some very tiny incisions here at the very top. For those of you who are a little squeamish of surgery, don't worry, there's not going to be a whole lot of blood loss with this process, as you can see.

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SCOT A. CURRIE, MD: Lou, could you go over with us where you place your ports for the surgeons who are watching today?

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LUCIANO DiMARCO, DO, FACOS: Excellent. Okay, that's the left lobe of the liver right there. That's the stomach right below that area. That's an area called the falciform ligament right there. And the first trocar is a 5 mm trocar that goes in the left lateral portion. And the next trocar is 12 mm, and that's going to be just to the left of the falciform ligament right there. And here we are. 00:03:53

SCOT A. CURRIE, MD: So you have one 5 mm port up high on the patient's left subcostal area, and we now have a 12 mm in the falciform region. The remainder of your ports are going to be 12 mm?

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LUCIANO DiMARCO, DO, FACOS: Yep, these are all -- well, these are all 12 mm trocars going in right now. And this one is mid-rectus on the right side now. I usually add one tiny little port way over here on the side. This is going to act as my liver retractor. And this has a tiny little hole and it allows us to hold the liver out of the way as we're performing the procedure. And there we are. Again, all these instruments are very small. And my faithful assistant over here, Dr. Brashard, is going to put in the last trocar in the upper quadrant area. Straight in. Very good. Take the liver retractor, Bill. These instruments have been designed throughout the years to really help us considerably in performing these procedures. As you can see, some of these instruments have a very unique role in this whole process.

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SCOT A. CURRIE, MD: What exactly are you doing now during surgery?

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LUCIANO DiMARCO, DO, FACOS: We are now lifting up the left lobe of the liver, as you can see, and we're going to kind of keep it up out of the way there. And that allows us -- I'll give you a general view over here. This allows us -- that's the gall bladder way on the other side there. That's the liver right in front of us. And you can see the fat. Way, way up in there hidden from us right now is the spleen. We'll meet that organ a little later on.

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SCOT A. CURRIE, MD: We didn't get to see how you entered the abdomen, but some of the surgeons in the audience will probably like to know how you gain access for your surgery.

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LUCIANO DiMARCO, DO, FACOS: Yeah. I like to gain access through the standard [Lusan] technique. The incision is made about 2 cm or so above the umbilicus. And I think it's a very safe and effective way to enter the abdomen and it reduces complications as you gain access. All right. So here's a little anatomy lesson for you, Scott, because I know sometimes you forget things.

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SCOT A. CURRIE, MD: Right.

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LUCIANO DiMARCO, DO, FACOS: [Laughs.] That's my esteemed partner. Throughout this whole process I'll have all you guys know I truly love him to death, but sometimes I have to put him back in his place. And this is the caudate lobe of the liver right here. This is very, very important because below that is the vena cava, and we don't want to enter in that area at all. What we've done so far is we've opened up the lesser sac here. And this is the stomach right here. It's very large, as you can see. The stomach's normally is about the size of a football. And up there, way up there in that area, is the spleen. Very, very dangerous organ. It filters a lot of blood. We don't want to get too close to that because it would make for a messy day. Now, right here is the left gastric vessels coming in into this area right here. What we're going to do here is --

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SCOT A. CURRIE, MD: I don't mean to interrupt you while you're talking, but we do have a question from a patient in Ohio who was asking, "How do you like to make your pouch?

What size do you like to make it and how do you decide on how large to make the pouch?"

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LUCIANO DiMARCO, DO, FACOS: Good question. Actually the pouch size -- we try to make it as small as possible, but the pouch size ends up being determined really by the anatomy that we have to deal with here today. And what you're seeing me do here is we're going to dissect along the left gastric vessels and we're going to enter underneath the stomach right there. Now, the GE junction is right here, okay? So the pouch size ends up being about 2 cm or 3 cm below the GE junction. But it's very important to preserve this blood supply. This is critical in making sure that we have good blood supply to our pouch. So we really can't go much above that area. It becomes a little bit dangerous to do that, and we prefer not to have those complications. And then we basically maintain the anatomy so that we avoid the spleen, and our pouch really becomes just this little triangle right here. It's very, very small. Dr. Packer, could you remove the OG tube, please? Dr. Packer is our anesthesiologist today. We placed an OG tube initially inside the stomach to decompress it and get all the air out. And of course we're going to remove that to avoid transecting it here with this instrument. This instrument is very unique in that it fires staples, very tiny staples, three rows of them on each side and cuts in between. So we actually never open the bowel at all. And it provides for great hemostasis. You can see we're preserving the left gastric vessel and we're transecting to this area. Let it sit for a second to allow for some hemostasis. And as you can see, these surgeries and incisions are made actually with minimal or no blood loss at all. Staple, Bill. We -- there we go. Thank you, sir. We've been doing these procedures here at Pinnacle since 1998, and it has evolved pretty much to the process that we're working here today. Scot, between me, you, and Matt, do you think about 3,000 cases have been done so far, or about that?

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SCOT A. CURRIE, MD: I believe almost that. The last time I looked at the numbers, we were getting very close to 3,000 surgeries we've performed here at Pinnacle. And over the past year we've attained that center of excellence accreditation from the American Society of Metabolic and Bariatric Surgery.

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LUCIANO DiMARCO, DO, FACOS: That was a lot of fun, wasn't it, Scot, going through that process? We basically had to submit five years worth of logs and complications and make sure that everything was in order. They came in, reviewed the hospital, reviewed the doctors' qualifications, and reviewed the facility. Come in with the camera.

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SCOT A. CURRIE, MD: Patients should know that when a center of excellence is accredited, it means that those patients are going to receive comprehensive care while they're in the hospital and afterwards in regards to their bariatric surgery and their long-term follow-up.

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LUCIANO DiMARCO, DO, FACOS: To get that qualification we had to work hard, and we're quite proud of it actually. And I want to go on record in thanking our staff here as well in helping us through this whole process.

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SCOT A. CURRIE, MD: So as you're creating the pouch, what's important to you here during this part of the surgery? What are you looking for?

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LUCIANO DiMARCO, DO, FACOS: There's several things that are very important to us. Dr. Brashard, could you grab this part right here? Number one: the pouch has to be as small as we can possibly make it. Just grab it right there, sir. And because that is the critical part of the surgery is we want to -- over that way -- we want to make sure that the patient is allowed to eat only a minimal amount of food. The next thing we want to try to do, of course, is avoid the spleen at all cost and we avoid the short gastric branches from down below. So we're going to start our dissection right in this area here. Try to minimize and keep it away from the short gastrics as much as possible. Let's have you do this for me.

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SCOT A. CURRIE, MD: What kinds of things did this patient have to go through prior to her surgery to be here today with us to allow her to have the surgery? I mean, what kind of preoperative workup, what kinds of things do you do to get the patients ready for surgery?
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LUCIANO DiMARCO, DO, FACOS: Good question. Over the past six months, this patient has been training for today, if you will. It's taken about six months to get her set up to do this. And what has to happen is they meet with us in the office, they meet our bariatric physician, Dr. Wieger, they meet our dieticians, and they go through this whole training process on how to basically learn how to eat after a gastric bypass. It's very, very important that we train them before we do the procedure so that there's no regrets, number one. Number two: they know exactly what's going on, there's no surprises for them. And they're ready; they're ready to go through it. They've accepted the fact that they want to do this. But that doesn't come in one day. A patient comes in off the street and tells us they want to have a gastric bypass, we can't just take them to the operating room, as you're well aware. We have to make sure that they're dedicated to the whole process. Because once we do these surgeries, yes, they can be reversed. Yes, we can reverse them. But we certainly don't want to do the surgery with that intention.
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SCOT A. CURRIE, MD: And as you're dissecting the stomach out here, you're just creating a window to allow you to --
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LUCIANO DiMARCO, DO, FACOS: Yep. We're creating a window. This is the short gastric branches down here. Spleen is below us here. And we're basically creating a window above the spleen. GE junction is right here. Dr. Brashard, would you mind?
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SCOT A. CURRIE, MD: Looks like a nice dissection.
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LUCIANO DiMARCO, DO, FACOS: Well, thank you, sir. Straddle me across here. Great. Let me come above you.
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SCOT A. CURRIE, MD: Here's another question we had from a patient, and she was wondering what surgeries do we perform here at Pinnacle when it comes to bariatrics? Do we only do gastric bypass or do we do other surgeries?
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LUCIANO DiMARCO, DO, FACOS: Hold on a second. Remind me later, Scot, to yell at Brashard, okay?
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SCOT A. CURRIE, MD: I'll take care of it on our next case.
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LUCIANO DiMARCO, DO, FACOS: Yeah. Go ahead. Did you see how he was trying to grab the diaphragm up there? Yeah. All right. We'll let it go for now. What we do here at Pinnacle Health System is not just Roux-en-Y gastric bypasses. We perform laparoscopic banding as well, we have performed laparoscopic biliary pancreatic diversions, and each patient is chosen for the particular procedure that we feel is going to benefit them the most. Patients who come in wanting a lap band, and if they're not good candidates for a lap band, we certainly won't do that. But -- and the same thing goes for gastric bypasses, of course. If they come in just asking for a gastric bypass, they have to be good candidates for it, otherwise we'll ask them to consider a different process. So we do several different types of surgeries for obesity, depending on their co-morbid conditions, their BMIs and their ability to understand and go through the process.
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SCOT A. CURRIE, MD: So what are you showing us right here?
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LUCIANO DiMARCO, DO, FACOS: So right here, Scot, this is the pouch. This is the new stomach, if you will. As you can see, this is the GE junction right here. This is basically the pouch. This is a very good blood supply going up to it. We've dissected it all the way down.
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SCOT A. CURRIE, MD: When I'm seeing my patients in the office, they ask me a lot about the old stomach, what happens to it? Can you show them that and maybe go over it a little bit?

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LUCIANO DiMARCO, DO, FACOS: Yeah, good question. The old stomach, basically as you can see, remains intact. It still has very, very good, strong blood supply. We haven't disrupted it at all. The old stomach still functions. It still produces acid. Come back down here. It still produces acid for us. You can see it's still all there and very viable.

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SCOT A. CURRIE, MD: And we see a really good comparison there from pouch size to stomach size, so there we see the old stomach and how big it used to be.

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LUCIANO DiMARCO, DO, FACOS: The old stomach goes from here all the way across, all the way out to here, and lateral as well. And then we have the new stomach, the little guy way up top. So as you can see, the difference is quite dramatic. Now we're going to leave this area for a second. We're going to go down here. We're going to raise this part. This is called the omentum. This is the big drape of fat that we have covering all of the bowel. We like to refer as the policeman of the abdomen. Dr. Brashard, put an instrument right there.

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SCOT A. CURRIE, MD: As he retracts that for you, I also have another question from a patient in Indiana who was saying, what kind of -- as we were talking earlier that patients needed long-term follow-up after this surgery, what kind of support mechanisms does Pinnacle and the Weight Loss Clinic have to continue with patient care after the surgery?

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LUCIANO DiMARCO, DO, FACOS: Identify there, first of all, is the ligament of Treitz. And we're going to measure about 60 cm beyond that. All right, to answer your question, I tell all my patients the surgery is the easiest part of this whole process because you're asleep and I'm performing it. And then the rest of it really becomes a very difficult process. The surgery is considered a tool that we use to help lose the weight. Brashard, are you counting? I'm going to count about 60 cm from the ligament of Treitz. Was that it?

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BRASHARD: Yeah.

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LUCIANO DiMARCO, DO, FACOS: And that's 60 right there, right? The surgery is a tool that we use to help lose weight. And to give the patient the most benefit, obviously we want the surgery to go perfectly smooth and very well. But it's very important for Pinnacle to help us provide the support structure, and what that means is that after surgery in the hospital there's a designated, dedicated bariatric center here in the hospital where the nurses, the staff, everybody has been trained and they're really devoted to these patients and making sure they do well. The dieticians here at Pinnacle Health System help us reinforce some of the rules of the game, if you will, that they've been taught over the past six months. And we review all that with the patient one last time before they go home. They're instructed on the diet. And then follow-up is critical in our office -- scissors, Bill -- where of course we see them postoperatively at one week and one month. But then we see them again for their weight-loss process at three months, six months, one year, and then yearly thereafter. At each phase of the game they're reviewed, the diet is reviewed, we check their metabolic status, make sure that they're losing the right amount of weight and not having any malnutrition problems. There we go. We're transecting. This is crucial part right here, Scot, because we're transecting the small bowel. And this stitch that I put in right here marks the

Roux limb, all right? It's very important for those surgeons out there watching, you don't want to lose track of this limb. It's very important. Otherwise you create a very embarrassing Roux-en-O process. So we mark that very carefully and we'll get back to that later on.

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SCOT A. CURRIE, MD: So just to pick up where you are in the surgery, so you found where the small bowel starts in the belly, called the ligament of Treitz, and we measured down 60 cm and you transected it there with the stapler. And you have your distal segment marked to basically identify it.

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LUCIANO DiMARCO, DO, FACOS: I promised you guys no bleeding, right? There you go. All right. Sorry about that, folks.

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SCOT A. CURRIE, MD: One thing I wanted to add to what you were talking about with the support after the surgery is that long-term follow-up is important, but a lot of times patients want to talk to other patients who have had the surgery maybe before they have it or maybe after they have it just to talk about issues they have with eating or with excess skin and things of that nature. Is there any means of that here?

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LUCIANO DiMARCO, DO, FACOS: Very good. Yes, we provide a support group. Our support group runs every month. And during the support group, most of us surgeons are there. Our nutritionist is there. And the support group is divided into two sections, one where we provide them with either a plastic surgeon or a psychologist or somebody comes in to give an expert opinion about the topic, and then we break people up into splinter groups where patients can talk to each other or new patients can talk to old patients and see what it's like, what have they experienced. Support groups are a phenomenal way, if you're thinking about the surgery and you want to talk to other patients who've had it done, a phenomenal way to gain that experience. And we provide that at Pinnacle every month religiously. And...

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SCOT A. CURRIE, MD: Could you go over with us where we are now in the surgery? What are you doing to this omental sheet of fat?

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LUCIANO DiMARCO, DO, FACOS: Right now we are dividing the omentum. And what we're doing is dividing it in a fashion so that -- this is the transverse colon right here, and obviously we don't want to touch that. And we're getting down to the area where the transverse colon and the omentum meet and we're opening a door in the omentum that allows the small intestine that we've divided to ride on top of the transverse colon. We do all of our procedures anti-colic, anti-gastric, and what that means is that everything has to ride on top of all this stuff. To allow for the small bowel to reach up there, we have to make this little opening in the omentum.

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SCOT A. CURRIE, MD: Well, Lou, as you continue to do that, let's hear from one of your patients. We spoke with Sherrie Stevens earlier this week about her issues of losing weight.

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SHERRIE STEVENS: Weight Watchers, Diet Workshop, the Atkins diet, but they were all deprivation type situations, and all deprivation sets you up for is another binge as soon as you've had enough of it. You know, I can sit here and watch "normal" people eat the things I was eating with no problem whatsoever, but as soon as I would eat what normal people were eating, I would start to gain weight again. I guess from losing weight over and over, I had essentially destroyed my metabolism and just nothing was working anymore. I had done it too many times with some success, but then failure. But you know, success is getting up one more time than you've fallen down. So I was determined to get up.

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LUCIANO DiMARCO, DO, FACOS: Sherrie's a phenomenal individual. I met her, and basically she told me how she had pretty much given up on weight loss. She had done just about every weight loss program known to mankind, and she had lost weight, gained weight, lost weight, gained weight. And she came in and she goes, "I don't know if this is going to work for me? What do you think?" And we talked about the procedure. And Sherrie had given up on the whole process. And then we went through the whole surgery with her and how it was going to work and how this was going to be a little different than her usual routine weight loss program. She went through it, and Sherrie has subsequently done extremely well. So I'm very proud of her that she didn't give up, and she's been a support of this procedure the whole time. She now understands what it's like. When I told her, "You try this. This is a tool. It'll work for you." And sure enough, she's really made it work for herself. I'm very proud of her. She's doing great.

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SCOT A. CURRIE, MD: So by splitting the omentum, you basically brought your bowel up so that you can make your connection between the bowel and the pouch?

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LUCIANO DiMARCO, DO, FACOS: Right. So now, as you can see, getting back to the surgery, the -- this is going to be the Roux limb, this is the one with the stitch on it, and this is -- the whole process comes anticolitic, antigastric. Let's get back up here, Nate. And we're going to once again grab our little friend here. This is our pouch. And now we're going to ask Dr. Packer, our anesthesia colleague, to attach the OG tube attached to an anvil. And he's going to insert it in the mouth. We're going to pass it on down here. Before we do that -- hold on, Dr. Packer -- can you clean the camera for a second, Nate? Just take it out and clean it. It's not clean. The camera's like the windshield of a car. Sometimes I wish you had a windshield wiper in this thing. There we go. That's better. Look at that. All right, come on up in here. And there he is. You can see him coming down. Put a little pressure on there, Dr. Packer, just a tiny bit. Okay, that's it. Perfect.

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SCOT A. CURRIE, MD: So explain to us what Dr. Packer just did and what you're looking for here.

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LUCIANO DiMARCO, DO, FACOS: All right. Dr. Packer inserted -- can you just clean the camera again? This is Nate's first day on the job.

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SCOT A. CURRIE, MD: Oh, these cameras can get frustrating.

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LUCIANO DiMARCO, DO, FACOS: They can get frustrating. Dr. Packer inserted an OG tube in there, and what we're going to try to do is make a little, tiny opening into our pouch over here at the most dependent portion of the process.

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SCOT A. CURRIE, MD: So when you're talking about OG, maybe explain that for people that don't really understand our technology.

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LUCIANO DiMARCO, DO, FACOS: Oral gastric tube. It goes in the mouth and it ends up inside the stomach. And attached to our oral gastric tube, as you'll see in a minute, is going to be an instrument that we're going to use to reanastomose the two ends of the bowel together. Hold that, Bill. Let me have that back, Bill. This process can be either extremely easy, or as you can see, sometimes can get a little frustrating, but we'll get it in there.

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SCOT A. CURRIE, MD: See, that's what you get when you were trying to bust on me earlier.

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LUCIANO DiMARCO, DO, FACOS: Yeah, thanks, pal.

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SCOT A. CURRIE, MD: That's how things come around.

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LUCIANO DiMARCO, DO, FACOS: Yeah, yeah. [Laughs.] Yeah, I've seen you do this.

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SCOT A. CURRIE, MD: Yeah, they usually pop right out.

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LUCIANO DiMARCO, DO, FACOS: They usually pop right out for you, right? Yeah.

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SCOT A. CURRIE, MD: So now that's the OG tube we see.

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LUCIANO DiMARCO, DO, FACOS: For all of you out there watching, that's my friend, Dr. Currie.

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MALE VOICE: Dr. Currie's do always pop out.

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LUCIANO DiMARCO, DO, FACOS: Yeah. Anyway, this is the little instrument that we're trying to get to come down here. And this is a very important part of the process. We're going to try to make this later on connect back -- Bill? Thank you. -- connect back to the bowel.

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SCOT A. CURRIE, MD: Just to explain this piece of metal that we see, on the back side, what's in the pouch there is a flat plate. And basically what we're going to do is bring a stapler in and connect to that piece of metal, and that metal plate is going to allow your staples to form and make your connection.

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LUCIANO DiMARCO, DO, FACOS: Now, this will easily pop right out of there, and then we take it and we eliminate this from the body.

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SCOT A. CURRIE, MD: While we're taking that tube out, here's another one of our patients, Alice Musser, and we're going to speak to her with her decision to undergo gastric bypass.

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ALICE MUSSER: I read a lot about it, I researched it on the Internet, I read every article I could put my fingers on regarding it. And after about three years, then I went to the doctor's office and said, "I think this is for me, but I still had some questions I wanted answered." Because I was looking at it as this is not a miracle cure. I really get mad when people say, "Oh, you took the easy way out." Hello! Easy? Not easy. I was ready to make a change to my life, but I was 365 pounds. You're not going to tell a 365-pound woman to walk on a treadmill more. I couldn't walk! I was out of breath due to my own fault, but I was. And so I needed that tool that would enable me to lose the weight, and then I also made the life change to keep it off.

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LUCIANO DiMARCO, DO, FACOS: All right. Alice struggled with wanting to do this procedure and not. She -- I think she came into the Weight Loss Clinic, again, having failed a lot of bariatric diets and attempts at weight loss, but she really didn't want a surgery. So she struggled a lot. We talked to her on several occasions and trying to talk her into what we felt was the right choice for her. And Alice has done tremendously well with the whole process. I think she now stands at our support group meetings and tells people how wonderful a decision it was that she made. So again, very proud of Alice to have made the choice.

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SCOT A. CURRIE, MD: I think one of Alice's comments was important in what she said about this not really being the easy way out, although a lot of people say that bariatric surgery is an easy way to lose weight. And I think you spoke to that earlier, and I know that really gets to Alice when people say that.

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LUCIANO DiMARCO, DO, FACOS: Oh my God, no, it's certainly not easy, and Alice is the first person to tell you that. This is not the easy way out, folks. But for those individuals who have been trying to lose weight for a while, this is a solution to the problem for sure. All right. Dr. Brashard is -- just for the technical aspect here just a little bit, Dr. Brashard is making that hole over there a little bit wider. By the way, for all you folks out there who had the surgery done already, this is why the left upper quadrant hurts a little bit more than usual because we had to pass this instrument in through this area. All right. Excellent.

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SCOT A. CURRIE, MD: So just to catch up with you, you have your anvil in the pouch, which is being held by one of your graspers, you've opened up the small bowel where you had marked with your stitch, and now you're bringing the stapling device in through the left port.

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LUCIANO DiMARCO, DO, FACOS: Correct. And the stapling device -- nice gentle, smooth motion there, Dr. Brashard. That was definitely worth showing that on TV. Put that in there.

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SCOT A. CURRIE, MD: I noticed Brashard got a haircut for today's performance.

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LUCIANO DiMARCO, DO, FACOS: Yeah.

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SCOT A. CURRIE, MD: It's nice in the back here. It's nice and trim, tight.

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LUCIANO DiMARCO, DO, FACOS: Put it in there a little bit. All right, open that up a little bit. Hold on, hold on. Bring that up this way. Yeah. Open that up real carefully. This is a critical part. As you can see, that thing coming out is quite sharp. Hold on a second here.

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SCOT A. CURRIE, MD: And that is the piece of metal you're going to connect into the pouch.

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LUCIANO DiMARCO, DO, FACOS: Yep. Back up a little bit. Camera. And this little guy has to marry this little guy here. Hold on. Everybody stay still for a second. All right. Perfect. All right. Come back, Nate, a little bit. I just want to see the whole thing. So will you just put a little pressure right there? Thank you.

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SCOT A. CURRIE, MD: Mated the stapler with its anvil.

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LUCIANO DiMARCO, DO, FACOS: Yes. I'm sorry, go ahead. Go ahead.

00:36:46

SCOT A. CURRIE, MD: I was just picking up because I knew you were busy putting those two together, but if you'd like to take it from here, that's fine.

00:36:54

LUCIANO DiMARCO, DO, FACOS: What we've done is now we've -- that's the little pouch, and that's the small bowel. And those two instruments have come together until the designated part here. And before you fire, I just want to take one quick look to make sure there's nothing caught in between anywhere. And the instrument has a little marking point, so we know that -- that's perfect, go ahead -- that it's perfectly closed and made it together.

00:36:23

SCOT A. CURRIE, MD: Describe what happens when Dr. Brashard fires the instrument, what's going on in the inside that we can't see.

00:37:29

LUCIANO DiMARCO, DO, FACOS: Right. The instrument is a circular device, and it fires a circular knife and in between two rows of staples so that it makes a lumen. And through that lumen is where the patient will be able to eat from. Okay. There we go. Perfect.

00:37:58

SCOT A. CURRIE, MD: As you removed the stapler, I was going to go around the room and introduce our staff and our team that's working here in the operating room with us here today.

00:38:06

LUCIANO DiMARCO, DO, FACOS: Yeah, thanks for doing that, Scott. I am a little busy at this point, so I appreciate you doing that.

00:38:13

SCOT A. CURRIE, MD: Well, as you already met, we have Dr. Lou DiMarco performing the surgery. His two assistants on his right side and on the patient's left at the top is Dr. Anouj Bashard, and he's our bariatric fellow here at Pinnacle Health, and we've had that fellowship in place for approximately five years now. And we usually have fellows with us each year, one fellow per year. And below him is Dr. Nathan Braught, who is one of our surgery residents here at Pinnacle Health. Do you want to raise your hand, Nate, so people know who you are? Okay, great. Bill Leig is our scrub tech and has been doing these surgeries with us since we started to do them about eight years ago. And he's been one of our team members and he's very versed in instrumentation for the surgery.

00:39:12

LUCIANO DiMARCO, DO, FACOS: Bill also thinks he can ride a motorcycle, but I've seen him ride.

00:39:17

SCOT A. CURRIE, MD: At the top of the table is our anesthesiologist, Dr. Leslie Packer, who has been doing these surgeries with us and probably does the majority of the bariatric surgical anesthesia here at Pinnacle. We also have Jenny Mackeninnny who is our circulating nurse and is taking care of phone duties and running to get things we need through the surgery today. And I believe that's our whole surgical team. I didn't miss anybody, did I? And myself. Of course, I'm usually not here because I'm usually in my own operating room, but today I'm moderating the surgery and having a day off. It's kind of nice.

00:39:55

LUCIANO DiMARCO, DO, FACOS: Yeah, nice. I see you in the background there.

00:39:57

SCOT A. CURRIE, MD: It's really helping my productivity numbers.

00:40:07

LUCIANO DiMARCO, DO, FACOS: All right. Well, just so we all know what's going on here, we pretty much are done with the upper anastomosis. This is the more technically difficult aspect of the whole process, and as you can see, for this young lady, this procedure has gone so far very well. And we have to make the lower anastomosis yet, but I'll explain that as we go through here.

00:40:39

SCOT A. CURRIE, MD: I have a call from one of -- or not a call but an email from a patient here in Harrisburg who was wondering, how do you decide how long to make your bypass? What lengths do you use and why?

00:40:51

LUCIANO DiMARCO, DO, FACOS: Hold on. Jenny's trying to trip me back here. The bypass limb comes standardized through the American Society of Bariatric Surgery. In the past, there was a lot of variations on this whole process. When we first started doing these -- the first gastric bypass has been done, as you know, in the mid-60s, so we've had a lot of experience with these procedures. And they used to make the limb and lengths about 60, 70 centimeters, and we learned with that that it would be not as effective. So now -- and if we made them too long, they would have a lot of malnutrition issues. So pretty much you standardize throughout the community of bariatric surgeons now to make the limb length 150 cm, and that's what we try to accomplish. The roux limb, 150 cm; the biliary limb, about 50 or 60 cm, and that's pretty standard procedure and that's what we do here at Pinnacle. We did not invent the wheel, but we modified it so that it works very well. As you

can see, I'm just really investigating the anastomosis, making sure that everything is perfect and it looks really nice, there's no problems anywhere. What we're going to do at this point --

00:42:12

SCOT A. CURRIE, MD: Before you move on, maybe you could show -- we didn't talk about what you did there with the linear stapler, but that you closed the opening where the circular stapler had been. We didn't really talk about that, but maybe for some of the surgeons watching we can go over that real quick before you move on.

00:42:25

LUCIANO DiMARCO, DO, FACOS: Sure. This is the actual anastomosis right here in this area. And this opening was used to enter with the EEA device, and of course we have to close that to maintain the integrity of the bowel. So we basically did an end-to-side anastomosis and closed the one end. Very important to close this as close as possible so that you don't leave a large blind limb or a blind pouch. And as you can see, this is a nice and straight. And now this is the pouch. They're going to be eating through here, emptying the pouch into the small bowel, and going downstream. I'm going to put some stitches here. I like to call these sleeping stitches, if you will. These -- I'm getting to be an old man in my career, so these help me sleep at night. What that means is that the anastomosis looks great, it's intact, and there are no problems. But we try to reinforce it so that there's no tension, there's no bleeding, there's no chance that this thing is going to fall apart -- or minimize the chance that it's going to fall apart. And we try to do these by putting these laparoscopic sutures here.

00:43:38

SCOT A. CURRIE, MD: Well, as you're reinforcing your anastomosis, let's hear from Douglas Coke and how he's doing after his gastric bypass.

00:43:44

LUCIANO DiMARCO, DO, FACOS: Oh, my buddy Doug. Yeah.

00:43:47

DOUGLAS COKE: I feel super. I mean, it's -- my confidence level is through the roof, my energy level is through the roof. I run circles around other people and at work. I do most of the housework now. Why? I feel great and I need to be doing something, and I find I can do two, three, four things at one time. I'm ecstatic about my appearance. It's nice to be able, instead of shopping at Big and Tall and Short and Fat, I go shop at Wal-Mart. I can actually buy clothing at Wal-Mart. One of the things that I always wanted to do that I stressed even to Dr. DiMarco, I wanted to sit in a restaurant booth. I can do that now and not even touch the table at my stomach. This past summer I rode a roller coaster. I couldn't even get in a roller coaster before. So I've accomplished a lot of things that I wanted to do with this surgery, and every one has been a success.

00:44:51

LUCIANO DiMARCO, DO, FACOS: Doug has done extremely well with this whole process. You know, it's pretty amazing. After I talked to Doug after the procedure, I see him at support group meetings. He comes there a lot. He tells me about the time that he now can go to Hershey Park and ride the roller coaster after he lost the tremendous amount of weight that he has. It's pretty amazing to us that we don't always think of that social aspect of these surgeries. You know, patients come in, they don't have -- the 400 or 500-pound patient does not have the ability to enjoy themselves in the same manner that we do. And what I mean by that is if their family members go to Hershey Park and ride, they don't fit in those roller coasters. They go to restaurants, they can't fit in a booth. And some of the things that we take for granted, these patients just can't do. And for me, this is a very fulfilling surgery because it allows us to not only give back the medical health but the psychological health to an individual and really allows them to enjoy life. Yeah, you and I can sit here and talk about how we can treat diabetes in 90 percent of our patients or so are no longer diabetic and sleep apnea and all of those things go away, but to the patient what

really is important is what they do in daily life, and it makes a huge difference. Doug kind of brought that to home for us. He's not afraid to share his personal feelings.

00:46:42

SCOT A. CURRIE, MD: Lou, can you tell us where we are in the surgery right now for those that are just catching up?

00:46:47

LUCIANO DiMARCO, DO, FACOS: I'm still reinforcing the anastomosis. This is my second suture going in. I like to put about three or four of these all the way around, make sure that everything is sealed and intact. We're going to test the anastomosis here momentarily, and I'll show you guys that in a minute. There you go, Bill. You gave me a suture that the scissors don't cut. Yeah. Thanks, buddy. One more suture back here. It'll help us.

00:47:34

SCOT A. CURRIE, MD: I think if we hadn't had the mikes on, Bill would have told you that that was probably the surgeon and not the tool.

00:47:41

LUCIANO DiMARCO, DO, FACOS: Yeah, he might have said that. He might have said that. For all you surgeons out there watching me do this, basically I use extracorporeal knots. I feel that you can get a nice feel of the knots and the suture as its going in. It allows us to use pretty much normal sutures and normal needles, give yourself a real edge over making sure that you get a nice bite in the anastomosis, as you can see, and cinch the suture down very nicely. It's just a personal favorite of mine. And we think that it provides really good support to the anastomosis. There it is. All right. Well, I think I pretty much reinforced this one as much as I want to. Now, we're going to have Dr. Packer again play a role in all this. He's going to once again reinsert a tube down the mouth, into the pouch, into the stomach.

00:48:56

SCOT A. CURRIE, MD: I have another question from a patient who was asking, how long do the surgeries usually take and how long are patients usually in the hospital?

00:49:03

LUCIANO DiMARCO, DO, FACOS: Right. As you can see, these surgeries take about an hour, an hour and fifteen minutes, an hour and a half at the very most. So that's very important to us. We try to minimize the length of time the patient's in the operating room because as you know, the longer the patient is in the operating room, the more complications can occur. So an hour, an hour and fifteen minutes an hour and a half at the most. And beyond that, two to three days. There you go, doctor. Thank you. The second or third day, if the patient is doing well, there are no problems, there is no bleeding, there's no pain, there's no infections, nothing has occurred that is out of the ordinary, we basically tell them that they can go home if they want to. If they tolerate their diet and they're not having any problems, they can leave. And because we're doing these surgeries, as you can see, with minimal manipulation of the bowel and through very tiny incisions, post-op, I mean, the next day the patient is walking the halls, really not having a whole lot of pain issues at all.

00:50:15

SCOT A. CURRIE, MD: What are you doing right now?

00:50:17

LUCIANO DiMARCO, DO, FACOS: Going back through this whole process, what we've done is we've asked Dr. Packer to insert methylene blue, which is a very strong blue dye, and you may have seen this thing blow up like a little tiny water balloon. And what we do is basically we're testing it, we're putting it under stress. There's no way the patient can possibly drink what we've just given him. We give them about 120 cc's of fluid, of methylene blue material, and we basically blow up the entire area, blow up the pouch, and we make sure there's no methylene blue that's escaped anywhere inside the abdomen. And as you can see, there's nothing here. Everything looks great. Dr. Packer, go ahead and remove it. So now we feel very confident that this is really going to be fine. We've reinforced the anastomosis, it's got a good blood supply, there's no tension on here whatsoever, everything is nice and pink,

we've tested it, there's no leaks anywhere. And we're going to reinforce the anastomosis again one more time by putting in a suture down here that takes some of the tension off of it completely. Again, these are sleeper stitches just to make sure that everything is going to function well. And what we do with this stitch right here is essentially take the tension off the anastomosis completely. And we attach it to the old stomach, which is a fixed organ. And the two things -- as you know, Scott, the two things that make the anastomosis break down is lack of blood supply and tension. Those are the two main most important things that we worry about as we do these surgeries. So here during the surgery we've taken care of those processes. It has a good blood supply, we've removed all the tension from it that we can. Again, all to stack the deck in our favor to reinsure that this person is going to do great post-op. And that's really what we're all about here and trying to make sure the patient goes home -- here we go -- goes home in the next couple days and doing well. All right, so we're done up there. We're just going to let the liver go back where it normally wants to live. And as you can see, everything gets covered up very nicely. We'll take this nasty-looking thing out of here, give it back to Sir Bill, and we will continue on with the second half of the surgery. The second half is a lot easier. Brashard, I want you to count. What we're doing here is measuring the roux limb. The instruments are designed so that the end of the white mark there is about 5 cm, so we're measuring away. It's kind of like a ruler that we have inside there. Brashard, if you have to take your shoes off to count, go ahead. Sixty? This is what I was talking about, the roux limb being 150 cm. There we go. Whoa. The one thing you don't want to do is lose it. Then you have to start all over again. And it's very important for all our surgery colleagues out there, you don't want to cross these; you want to make sure it lies in the right direction. You don't want to cross these over. Otherwise, the patient wakes up with a bowel obstruction before they even start. So this is a critical portion. Make sure that everything, as you can see, lies flat, nice and even, and very important to put the bowels back exactly as you found them.

00:55:01

Right there. One more, and that's 150 in that spot right there. Now, this part right here is a very unique way of doing the lower anastomosis. This was actually -- this was actually invented, thought of, and perfected by yours truly, and I'm very proud of that. We've been able to maintain our complication rate extremely low with the lower anastomosis. As you know, most standard lower anastomosis, nationally we're talking about a 3 to 4 percent complication rate with this area down here. Ours, as we look through our statistics, is actually less than 1 percent. And we're very proud of that. I think I can attribute that all to the fact that we've modified this little -- hold that, please -- this little anastomosis. And I'll show you the difference here as we go on between what I do and what most people tend to do. All right.

00:56:34

SCOT A. CURRIE, MD: So basically, so far you've just opened up each piece of bowel we're going to put together.

00:56:37

LUCIANO DiMARCO, DO, FACOS: Correct. Now we have to open up the bowel because we have to make those two things fit together. GIA. As you can see, the trocars have been placed obviously in a very unique area so that everything kind of fits properly, and then -- hold that, please.

00:57:01

SCOT A. CURRIE, MD: Yeah, that's -- whenever I'm teaching the residents this surgery, the trocar placement is strategic and vitally important to success in getting this surgery accomplished.

00:57:10

LUCIANO DiMARCO, DO, FACOS: One of your trocars in the wrong area, and it just makes your whole life miserable for this whole process. Anyway, antimesenteric border and fire those together. Now, most people at this point stop and they close that hole. The problem

with that is there's a stricture that occurs right about here. And it's very difficult to get around that problem unless you do what I'm going to show you next. And what we do basically is open the lower part and just pretend there's a stricture there already and we open the lower part and we allow for that stricture to automatically go away. And as you can see, we actually mate the lower part back to itself, and what that does, it allows for a large lower anastomosis. This is not that critical if it's small or not, but it allows us to close it really very nicely -- Brashard, hold that right there. Hold on one more second here. We're going to be switching camera ports. Up here. Hold that. And the reason we switch camera ports is because it allows me a straight shot right into that area. But as you can see, this allows me to close it, seal it, and pretty much be done. Hold that. Nate, go back to where you were. One last fire here, Bill. I'm going to be almost done, folks.

00:59:13

SCOT A. CURRIE, MD: A surgeon wrote in with a question on with doing this technique, have you ever had a problem with ischemia in the mid-segment of the bowel there with your anastomosis?

00:59:23

LUCIANO DiMARCO, DO, FACOS: You know what, good question. No. You would think that there's a -- I'll take another bag, Bill -- you would think that there's an area here that's lacking blood supply, but it's not because the blood supply comes from down below itself. And we've never had a problem. We've done, again, a couple thousands of these cases so far or more. We've never had a problem with ischemia anywhere near that area. We've never had a stricture. And we're very -- take everything out -- we're very fortunate in that regard. Okay, Bill, I'll just help myself. I know you can't keep up. All right, so there you go. Everything's wide open. This is the limb, the enteric limb. This is the biliary limb coming in from here. This carries the bile and the acid and all the juices coming from the liver. And the old stomach. And that mixes and the food travels down this area here from the little pouch, comes into here, mixes everything together, and then travels on down onto its merry way, where it gets absorbed. So this is the mixing point, if you will. As you can see, you want these areas to be nice and open, and they are. We put a couple of stitches here to kind of help us, again, reinforce these to make sure there's no twists anywhere. And there we go. Just to make sure that nothing twists around and just like you were doing an open procedure, you want to reinforce that angle.

01:01:22

SCOT A. CURRIE, MD: While you were suturing, a surgeon from Philadelphia was asking whether or not you close your potential places for herniation internally.

01:01:34

LUCIANO DiMARCO, DO, FACOS: Yes. Yep, we'll be doing that momentarily. I think it's important to close at least the mesenteric defect right here, and I'll show you that in just a second. I tend not to close Peterson's space. If I can, I do, but in most cases that's a very difficult area to get to. And studies have shown that it really doesn't make a whole lot of difference one way or the other, so we tend not to do that. But this defect here you want to close, otherwise, as you can see, the hernia can come right through there. So we want to close that area, and so this is very important. If you don't close this, it's kind of a setup for a problem. So we'll be closing this. And I usually use a -- the first stitch I usually put down in here is a purse string type suture. And obviously there's blood supply in this area, so you don't want to cause a lot of bleeding here. Very gentle suturing. There we go. And I'll take one more of these stitches, Bill.

01:03:03

SCOT A. CURRIE, MD: Another patient from Harrisburg wrote in and said that at the end of the case if you could show her the incisions so she can see where they are and how big they are, she was wondering how big her incisions would be if she was considering a gastric bypass surgery.

01:03:21

LUCIANO DiMARCO, DO, FACOS: The incisions are real tiny. The trocars we're using are basically the size of a standard pen, so the incisions we make, you'd have to be able to put a pen into it. So as you can see, that would be very small. Okay, Bill. All right. There we go. I'm going to put a figure of eight suture up here. And close this off completely so that nothing can come by through there. And then with that suture, folks, we are almost done. I want to thank my team here today. They've done a great job as usual. And Scott, thanks for taking time out of your busy schedule to help us out today. I appreciate it.

01:04:40

SCOT A. CURRIE, MD: Sure, it's been fun working with you. We don't get to do that very often anymore.

01:04:43

LUCIANO DiMARCO, DO, FACOS: I know, we don't. It's amazing. The partners that you have in your practice, we basically don't see each other a whole lot, do you?

01:04:54

SCOT A. CURRIE, MD: No. You're in the hospital when I'm in the office, and vice versa, so we don't get to work together like we used to.

01:05:00

LUCIANO DiMARCO, DO, FACOS: So everything here is done. This is the omentum that we separated before. We cover all that up just like it was from the very beginning. Get rid of that little guy. And just to recap, this is basically the way we found it when we came in. Look up here. And we lift this up. This is her anastomosis again. Very nice. This is her old stomach. And that's it. That's all there is to this. We're going to put a drain in here, Dr. Brashard. We're going to put a drain in here to catch any extra fluid that might be in this area, and we also use the drain as a spy, if you will, inside the abdomen. I'm sorry. The endostitch burst. Thanks, Brashard. Look at that, he's thinking. That's dangerous.

01:05:57

SCOT A. CURRIE, MD: He has come a long way in the last few months with us.

01:05:58

LUCIANO DiMARCO, DO, FACOS: Yeah, I know. It's amazing. We have to close these larger holes because they're obviously hernia sites, and we don't want any hernias, so we close these larger holes. Hold on, Brashard. I'm getting too anxious here. I know you want to go have your coffee.

01:06:41

SCOT A. CURRIE, MD: Lou, remember that one patient was asking about port placement and size. Before you close, just reminding you.

01:06:49

LUCIANO DiMARCO, DO, FACOS: Right. Yep, yep. I just need to put the drain in. Scissors. All right. We put this guy right up here and we make sure that anything that may leak in and out of there gets caught by that. Now, that's it. We're done, folks. And we're going to take these trocars out and make sure that as we take them out there's no bleeding anywhere. And I just want to show you guys -- sponge, please. Gas off, please. No, hold on a second. I just want to show you guys the holes that we're talking about here. They're really quite tiny, as you can see. Drain comes out from over there, little tiny holes right there. Just give you a little panoramic view of the whole process, and that's basically all there is. There's not a whole lot --

01:08:12

SCOT A. CURRIE, MD: Maybe show the belly button too. Maybe that can help people get a sense of where everything --

01:08:18

LUCIANO DiMARCO, DO, FACOS: Belly button is right there. And there it is. And that's -- I mean, the holes that we made are actually smaller than the patient's belly button, and that's the whole process. All right, folks. Thank you all very much. It's been a pleasure being with you today. I hope you all have enjoyed the show here.

01:08:49

SCOT A. CURRIE, MD: Did you have any final comments?

01:08:51

LUCIANO DiMARCO, DO, FACOS: Well, I think this patient is going to do great. As you can see, I really don't anticipate her being in the hospital for longer than a day or so. And Scott, the only comment I have to make is you've got to get to the office, buddy. Come on, let's go.

01:09:10

SCOT A. CURRIE, MD: Well, thank you. And I'd also like to thank everybody for watching our webcast today. So on behalf of myself and my partners, Dr. Lou DiMarco and Dr. Matt Davidson and the whole team here at Pinnacle Health, we'd like to thank you for watching. In about two hours, our program will be archived on orlive.com, where you can watch it at any time. And if any questions do arise, you can certainly contact us here at Pinnacle Health or at the Weight Loss Clinic, and our number there is 717-909-0290. Thanks again.

01:09:48

ANNOUNCER: This has been a minimally invasive Roux-en-Y gastric bypass performed from Pinnacle Health System in Harrisburg, Pennsylvania. OR-Live makes it easy for you to learn more. Just click on the "request information" button on your webcast screen and open the door to informed medical care.

[end of webcast]