

BroadcastMed | Laparoscopic Gastric Bypass Surgery

DR. NESTOR DE LA CRUZ-MUNOZ: This is Dr. de la Cruz-Munoz. We're going to show you a laparoscopic gastric bypass on a 31-year-old woman who has significant obstructive sleep apnea, some back pains, as well as some other minor comorbidities, and has, after getting educated on the different options, chose the bypass for her operation.

OK, so again, we're going to put our trocar to go into the abdomen.

SPEAKER 1: Staging 20, 15.

DR. NESTOR DE LA CRUZ-MUNOZ: Hold this. Knife.

LA CRUZ-MUNOZ:

SPEAKER 2: Now we're at-- OK, go ahead and [INAUDIBLE].

DR. DE LA CRUZ-MUNOZ: OK, I think she's tight. Knife.

[BEEP]

DR. NESTOR DE LA CRUZ-MUNOZ: OK, look down here.

LA CRUZ-MUNOZ:

[BEEPING]

DR. NESTOR DE LA CRUZ-MUNOZ: OK. OK, grasper. Got it.

LA CRUZ-MUNOZ:

OK, so we're going to start by moving some of the omentum, or some of the fat in the abdomen. And we're going to cut through it in order to make it easier to do the rest of the bypass a little bit later. So we're going to take this all the way down to the colon right here, which we're beginning to see in the picture.

OK, there it is. Grasper. We're going to find the beginning of the small intestine. Look down. Come on, look down. Slide that up.

And so the small intestine starts right here. There it begins. We count down, 10, 15, 20, 25, 30, 35, 40, 45, 50.

OK, grab it right here. Very nice.

Turn the camera please. Look at it. Look over here to me. Bring it to me. On me. Great. Clip apart. OK. All right, now we're going to count down, to make the bypass limb. 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 10, 15, 20, 30, 35, 40, 45, 50.

So we go down about a meter and a half, or about four feet, four and a half feet, to do this bypass limb. Harmonic.

OK, push that hand in. Good, grab. So this is where we're going to join the two pieces of the small intestine together. And this is what allows the mixing of the juices from the stomach with the food a little bit farther down than normal. Let go. Let go.

So it's going to be right down here, where we're going to get the juices that come from the leftover stomach that doesn't see the small intestine anymore-- I mean, that doesn't see the food anymore. And the pancreatic juices and the bile, they're going to flow down through what, in the video, was the green channel, and mixes with the food that comes down with the blue channel. And we're going to do that part second.

So this is what it looks like when we join two pieces of bowel together on the inside, right there. Look down for me. OK, stapler. So these same staplers which allow us to cut and separate bowel allow us to join them together if we put one piece in each side.

There's the inside. Look down. OK. So here we're going to mark where we're going to put our last stapler. And by putting in these stitches, we just can hold it a little bit easier than we would if we just used our graspers.

Right there. Three needle. Stapler. OK, let go. Grasper. Short.

OK, clip up higher, and the stapler back. OK, let it go. Clip up higher.

OK, so this is what the bottom union, or anastomosis, looks like. Here these two pieces of bowel are joined together with staplers. This is the front side of it.

We're going to flip it over, look at the back side. This is what it looks like from the backside, where they're joined together. Making sure that the whole thing looks good and strong. Put it back in position.

And then one of the things that happens when we put together these two pieces of bowel is that there's this opening in the middle that could potentially allow-- look down-- could potentially allow for a hernia to poke through and a piece of bowel to come on through and can cause problems. So we're going to go ahead and close this with some sutures.

Let me have the other needle driver, please. OK. Come on in a little bit, please. Good. OK, grab. Right there.

SPEAKER 3: Candy?

CANDY: Mm-hm.

SPEAKER 3: We have those blue, not red.

CANDY: That's OK. I probably don't have time to color them now.

DR. NESTOR DE LA CRUZ- So now if you look down, this is the defect, or the hernia defect, that we'll be closing to try to prevent problems later. Well, I'm gonna slide. Well, we'll keep it like that. Hang on one second. Hook up. OK.

MUNOZ:

So once we're sure we've completely closed, then we'll finish here and move up to the stomach part.

CANDY: Thank you.

DR. NESTOR DE Oops. Ah, caught. OK, scissors. Candy, can you go ahead and stand her up, please?

LA CRUZ-

MUNOZ:

So we're going to change the position of the patient now, now that we've done the bottom half, to do the upper part. And this gives us some more space up here. If you see, the liver is in the upper part of the abdomen. It's nice and small. We had her shrink it with a preoperative diet.

And you can see, as the patient gets put in a kind of a standing up position, it gives us a little bit more space to operate. Now we're going to retract the stomach so we can see it a little bit better. Right there. Perfect. Come on in.

So here we are dissecting up at the top of the stomach, where it becomes the esophagus. And this is going to let us know where we're going to finish our little gastric pouch. OK, come on out with the camera a little bit. This is going to be our spot. We're picking our spot to transect the stomach.

Go ahead, pull, pull. And then trying to come close to the stomach to avoid disrupting as many tissues as possible and the nervous supply to the rest of the stomach. We're going to dissect in here. Come on in with the camera. Pull, pull, please. There you go. Come on in with the camera.

Now we're going to be transecting these little vessels to get to the back side of the stomach to allow us to come around behind it. OK, great. Grasper. And there we are. We're behind the stomach. We're trying to do as little damage to the body as possible, as little surgery, and limit what we do to what's absolutely necessary.

OK, let go. So now we're going to start transecting the stomach. And we're going to make it basically a small extension of the esophagus that's coming from here, up in the chest.

Here's part of the liver. Here's the other part of the liver. And this is all the diaphragm, right up here. And so you'll see that we're going to leave behind a good 85%, 95% of the stomach that's no longer going to see food. But if you notice, we haven't really touched it much at all.

So this is where we want to end up. We're going to do our little dissection here to get in there. Mm-hm. Good. OK, that's where we want to end up, right there. Come on out.

So we want our pouch to be a nice tubular pouch. OK, come on in. Come on out. OK, one more fire.

Put this inside there. Put a RAY-TEC inside. OK, come on in there. OK, with this last fire, we're going to finish making our pouch. Hold that. We'll have separated completely the gastric pouch from what we call the gastric remnant, or the leftover stomach, that's no longer seeing food.

OK, we've got a little good blood supply up at the top. So we'll get it with a little clip. OK.

Grasper. Do you have a long grasper. OK, so we'll put this right in here. We'll take it out in a few minutes. We're going to come back to this in a second.

Follow me down. So now we're going to come back to where we started, this piece about here that was transected, or cut. And then the union, they're both brought up. And they're going to be put up next to our gastric pouch. And this is going to be where the blue comes down in the video, which is the food.

OK, look over here. OK, grab the camera from-- or actually, just grab the pouch, please. Harmonic. Grab the pouch. Up front, please. There. OK.

OK, so here, we are just moving a little bit of the fat out of the way to make the union a little bit cleaner when we do it. OK, look over here. Come on, bring it up to this spot.

And then one more use of the stapler to join up the stomach pouch, which is right up here, with the small bowel. OK, that should-- let go.

OK, grab it. Grab it. Squeeze it. Thank you. Hold it right there.

OK, bring it up next to it. Come on in with the camera. OK, let go. OK. So now we're looking inside the stomach pouch and up towards the esophagus.

We're going to have our anesthetist pass the tube through so that we're sure, when we close this, that we have a nice opening. OK, keep on going. Keep on coming. Right there's perfect. Harmonic. Come on in, please.

OK, and then I normally close this by hand. I don't like stapling this second fire across the intestine for a couple different reasons. But so we close this by hand here. And it gives us a nice customized union with the size that we'd like.

OK. Go for it. Grab right there. Come on in. All right. OK. Come on up. OK.

OK. Thank you. Save me this vicryl for later. OK, let me have the graspers.

So one of things I started doing a long time ago to try to make the union a little bit stronger-- suction-- was to over sew the entire union, or anastomosis, with another stitch once we're done. So this is kind of the standard right here.

[SNEEZING]

Excuse me. This is kind of the standard. But what we try to do is-- grab here-- over sew this entire thing to give it a little bit more strength and to decrease a chance of a leak here. So we flip this around. And we start on the back wall. OK. And so we put in these stitches all the way around.

OK, we're getting nearly all the way around here. This is where we started. And we're going to go back to this point.

OK, scissors. So now that we've completed that, we're going to go ahead and test it to make sure that it's intact with no leaks and no issues. Go for it. So everything's nice and blown up.

You see the size of the gastric pouch here. It's nice and small, with a straight line all the way up. Separation from the remnant that no longer sees food. And then this is the small bowel that's attached to it. OK, great, Candy.

Go again to try to make sure that there's not going to be any bleeding from our cut edges. We'll go ahead and review them. Look on up. And anything that looks like it could bleed, we'll put a nice, soft clip on there. OK.

SPEAKER 2: Do you want the drain?

DR. NESTOR DE Yeah. We'll just irrigate things out, make sure it's nice and clean and dry. And then we'll leave a drain in here
LA CRUZ- overnight to get any-- come on. Any extra fluids or blood that may come will get collected by this drain and
MUNOZ: removed.

Look down. Now, we'll remove our trocar and our liver retractor. Make sure everything looks good there. Please flip it around right there.

Good. Take out your trocar. OK, that's it. If you guys could turn on the lights.

SPEAKER 2: Got it.

DR. NESTOR DE So we just finished her laparoscopic gastric bypass. It went very well. Anesthesia's going to be waking her up
LA CRUZ- now. And then she's going to go spend a couple hours in the recovery room. I'll go talk to the family and let them
MUNOZ: know how everything went.

And then when she's done in the recovery room, she'll go upstairs to the floor. Just like most of the other patients, we'll get her up walking around in a little while. Hopefully, a few times today.

Tomorrow morning, we'll do an upper GI, or some x-rays, of her stomach to make sure everything looks OK. We'll do some blood work and get her started on liquids. And if she feels up to it, hopefully she can go home tomorrow afternoon. Thank you.