

**NESTOR F. DE LA CRUZ-MUNOZ:** I'm doctor de la Cruz-Munoz, thank you for coming in this morning. We're going to be doing a

**CRUZ-MUNOZ:** laparoscopic sleeve gastrectomy on a 20-year-old woman whose BMI is 38 this morning. She's got some sleep apnea, she's got some reflux and significant back pain from her weight, so she's hoping to lose some weight to get herself in a little bit better health.

All right, so in our sleeve gastrectomy we're going to a couple of small trocars to get into the abdomen and then hide the biggest incision down in her belly button so that afterwards you can't see much at all. OK, back up. All right. So this way we can see right through the different layers of the abdominal walls we're going in to get in safely. OK, so now we're inside the belly. Hold that. Candy, can you put her in some reverse [INAUDIBLE] please. So as we look inside, we see the liver looks nice and clean, little adhesions down here. Everything else looks fine.

So as I said, we're to try to hide the biggest incision inside her belly button, so that later when she heals, all she'll have is a couple of tiny little scars on the outside. The rest will be hidden away and non-visible. OK, let's switch to scope. Grasper harmonic. OK, Candy, let's flare out that NG tube. Get the stomach decompressed and then take it out. So we're dissecting up at the top of the stomach so we know where our final dissection point and surgery point is going to be when we separate it out-- just of interest, there's the adrenal gland, the left adrenal gland at the top of the field, hiding right next to the diaphragm. All right, let's go down, look over here. We've got a little bit of blood coming from where our trocar came in. Here's the end of the stomach, so we're going to go about 5 centimeters or so, 4 to 5 centimeters from the end, just right here. We're gonna mark this so we know where our other endpoint is for the surgery.

Come on over here, let's start here where it's easier. See the-- grab there for me. Look up. There you go, perfect. So we're going to start by removing of the blood vessels to the piece of the stomach that's going to be taken out. And this allows us to see it all much better and complete the surgery. And we're using a machine that coagulates vessels by vibration, by ultrasonic vibration. So we're going to work our way all the way up to the top of the stomach where we had marked it at the beginning.

I'm taking care to avoid the pancreas, which is right behind us, and the spleen, which we're coming up to right here. Come on in with the camera. We see the stomach and its relationship to the spleen, it's right on it. So we're going to mobilize this off. OK, we'll leave the very tip at the top. Come on down here. Let's go backwards, hold the stomach for me. We're going to go

down to our other endpoint, right next to where the stomach ends. That's going to be right here. Then look to make sure there are no adhesions-- look up top. Get underneath there. Good. All right, Candy, if you could please pass the 38 French.

So right now we're going to place a bougie, or calibration tube, into the stomach, and this way we can size our sleeve to the appropriate size. We currently use a 38 French bougie. OK, perfect, there it is. We're going to want it aligned all the way we left. Push in a little bit more, tiny little bit more. Perfect, hold it right there, Candy. We're going to change our camera to one of the other port sites so that can see and put our stapler in. Need you to hold onto this. Hold that. It'll get a little bit better in a second as it gets warmed up. So we're going to slide on over and align it with where we cut. Look to the left, please. Look to the left. That's it-- where we started our cut. Look up at the top. You want it beside the bougie. No, don't pull. There it is at the edge. We're going to look on the backside, and we're right at the edge. So we're going to let this compress here for a second.

And we're using a stapler here that allows us to put staples on both sides of the stomach and cut in the middle, so we separate without ever having to really open a hole in the stomach. OK, clip applier. Look down at the bottom. We look here-- oftentimes there's a little bit of bleeding. So we'll put a clip right at that spot. OK. OK. Let's move up, stapler. So now essentially we're going to go up alongside the bougie. Yeah, go ahead and pull that. Good, very nice. So we stay parallel to the bougie and parallel to the lesser curvature of the stomach or what's on the left hand side, on the screen. Let's flip it over and look at the back side, please. OK, that looks parallel, perfect. OK, put it back. OK. And we'll come along. And again, you can see the pancreas behind her stomach right here. And we're going to just work our way up along the bougie, all the way to the top of the stomach, leaving a small tube of stomach that looks kind of like a sleeve on a long-sleeved sleeve shirt. And that's why it's called the sleeve gastrectomy. Come on in with the camera.

So since we didn't do the hole dissection above, we're going to come in in the right spot here and dissect through. That way, we separate this apart, find our right plane, through the hole. OK. Good. Candy, you can remove the bougie if you like. OK. I think I'll use this for the video of the sleeve, because I like that dissection. Showing how to make that easy. You don't use energy near the genie junction right there. OK. Watch out. Let go. And you don't risk burning it when you're doing that dissection. OK. All right, Candy, if you want to pass an OG. Let's have the Harmonic. And then we can easily remove the part that we hadn't taken off at the

beginning, now that we see it clearly. As a matter of fact, let me have a clip applier. OK, Harmonic.

It makes it much easier and safer to take it off the spleen, as well. Let that go. Let's look over here at this. Let me have a clip applier real quick. OK, grab that corner-- not where the vessel, right there-- perfect. No, not where the vessel is. There you go, perfect. And now we're going to take, clip a couple of these bigger vessels. Bring it up, I see this edge here. No, let go of that and grab it right on the edge. Uh-huh. Perfect. There we go, this is the one I want to see. So we do this just to make it a little bit more safe, hopefully decrease the chance of bleeding after surgery. As you see, there's very little blood loss normally during surgery. Move down. OK, let's move this up. Keep following me down. Follow me down, let me see the edges.

So any of the bigger vessels, I'll try to come across. Look over here. OK. OK, follow it up. Let me see, there was a little spot here I wanted to get. All right, are you in, Candy?

Yeah.

Come in a little bit more. Right there's perfect. Got a little bruise here. OK. So now we're going to test our sleeve to make sure the staple lines look good, that there are no leaks. Go ahead. That's a plate. So we're filling it up with some blue colored water. And if there's a problem, we will see blue coming out of here. But right now the staple line all looks nice and clean. Everything else looks good. The spleen looks good. Let me have a clip up higher again. Hold it, Candy, for a second. Again, the same thing that I did on the fat on the sides, I'm going to do here on the stomach. So any little spot that looks like it could potentially bleed, I'll try to put a clip. Come on down. Cut off of these bigger vessels going into the sleeve. OK, great. And we're essentially done.

So now we're going to take the stomach out through the belly button. And again, this allows us to use the natural hiding spot or a natural scar to do the biggest part of the work.

Can I turn on the light?

Yeah, can we have the lights on in here, please, and let me have the surgical lights. So now pull the stomach out through there. There it is. OK, that's fine. You want to take out your trocars so it looks nice and clean. OK. All right, turn off the light and let's see, it looks good. Perfect. I can see your side, I'll start with your side. OK. OK, come on out. Great. Scissors.

Well the case went very nicely, just as we had hoped. They're going to wake her up now. She'll

spend a couple of hours in the recovery room and then they'll put her upstairs on the floor, on 12 South, which is our bariatric floor. We'll get her up and walking around with the nurses this evening, hopefully several times. Tomorrow morning she'll get some x-rays, some bloodwork done. If all looks good and she's feeling good, we'll start her liquids, and hopefully if all goes according to plan, we'll get her out of here tomorrow afternoon. All right, thank you, guys.