

[MUSIC PLAYING]

**DAVID DIEHL:** I've been using the DiLumen overtube for almost two years now. Initially, the design was such that it was a little bit more challenging to insert the overtube into, particularly through the sigmoid colon. But with design changes, the overtube slides very easily over the colonoscope. And I really have found that it functions very much like a single balloon enteroscopy device, but for the colon.

And as such, I can get very deep intubation. I can shorten loops very easily, and this device has been my go-to device in patients who have a very long or tortuous colon. I find that if I come out, load the DiLumen device, and then go in, I can shorten the colon and achieve the cecum very rapidly.

I'm making really good progress, but she has a very long and tortuous colon, so what I'm going to do at this point-- I have almost all the scope in. And that-- I'm going to straighten the scope using the aft balloon on the DiLumen, and then advanced the overtube up, which will stabilize the colon. Looks like it took. OK.

**SPEAKER 1:** [INAUDIBLE]?

**DAVID DIEHL:** [INAUDIBLE].

**SPEAKER 1:** We're inflating the aft balloon. Aft balloon's inflated.

**DAVID DIEHL:** OK, the aft balloon's inflated. So then I'm going to pull both the balloon and scope back, and this will straighten out any loop that is present on the left side of the colon. At this point, I'll ask my assistant to deflate the balloon, and I'm going to move the overtube up.

**SPEAKER 1:** Deflating.

**DAVID DIEHL:** And so I'm now I'm holding the colonoscope and just moving the overtube only, sliding it over the scope. OK. And then inflate the aft balloon again. So now I'm straightening a little bit, and having my assistant hold the handle, to just hold that against the bed.

I'm now adding scope at the back end and the handle. The loop has been reduced. I have a good one-to-one movement. So the balloon is up or down?

**SPEAKER 1:** Down.

**DAVID DIEHL:** OK. So inflate the balloon.

**SPEAKER 1:** [INAUDIBLE].

**DAVID DIEHL:** I'm going to reduce the loop again. So I did pick up some ground there. She has an extremely long colon.

**SPEAKER 1:** Balloon's up.

**DAVID DIEHL:** OK. So balloon's up. I will pull scope and DiLumen back, thereby straightening a loop on the left side. OK. So the loop has been straightened. And now I'm going to ask you to drop the balloon.

And I'm going to move the DiLumen over to forward over the scope, holding the scope in position. OK, balloon is down, so scope is not moving, but the overtube is moving. All right. Now, reinflate the aft balloon.

**SPEAKER 1:** Aft balloon is inflated.

**DAVID DIEHL:** I'm reducing the loop again, pulling back on both the scope and overtube. Here, I feel like the loop has been reduced. I'm asking my assistant to hold the handle of the overtube, and I am pushing in the scope.

And you can see I make good progress through an area that was previously-- I couldn't reach it because of looping, but I have reduced the loop in the left colon. You can see how-- this looks like transverse colon. I mean, the colon is so long. So I'm out of scope again, but I could repeat that shortening maneuver.

And now I'm getting good one-to-one, again, past a spot that I was-- couldn't reach it because of the excess looping, but because I'm able to reduce that, I'm now getting by. You can see I've done that shortening maneuver several times to great advantage. So I'm getting some looping here. So what I'm going to do is use the DiLumen to straighten out the colon. And inflate the aft balloon.

**SPEAKER 1:** Inflated.

**DAVID DIEHL:** OK. And then I'm now pulling the scope and that overtube back, straightening out any loop that happens to be present on the left colon, about there. And then I'll have my assistant deflate the balloon. And now what I'm going to do-- a loop-- is there a four-by-four with loop on it? With loop.

**SPEAKER 1:** [INAUDIBLE].

**DAVID DIEHL:** Thanks. Thank you. OK, I'll lube up the overtube. And what I'm doing now is I'm advancing the overtube while holding the scope and position. I didn't thank you. The overtube slides very easily over the scope.

At this point, I'll have the assistant inflate the aft balloon again. With the aft balloon inflated, the assistant holds the handle, and now I am pushing the scope through the fixed device. Oh, a lot of water in here.

**SPEAKER 1:** Mm-hmm.

**DAVID DIEHL:** And you can see the scope really moves one to one because there is no loop anymore-- I've reduced the loop completely. Actually, it looks like I may be in the cecum. So at this point, I'm pretty far. I mean, it's probably near that hepatic flexure area, and there's a lot of looping, and external pressure is not solving that.

So I'm going to use the DiLumen overtube to shorten their colon. So what I do is, the balloon is down, and what I'm going to do is hold the scope and push-- make sure I lube up the overtube-- and I'll slide the overtube along the scope. So holding the scope steady, and I'm pushing the scope-- the overtube forward. At this point, I'll have my assistant inflate the aft balloon, and then maybe you can come around here.

**SPEAKER 1:** Push it forward a little bit more.

[INTERPOSING VOICES]

**SPEAKER 1:** Yep, good, good. Now it's inflated.

**DAVID DIEHL:** OK. So the aft balloon's inflated. Next, what I'll do is pull the overtube and scope back. This will straighten out the left colon, sigmoid colon, and whatever loop there is.

And then I'm going to have my assistant hold the DiLumen handle, and I'll just add the scope. And you can see it just goes forward like power steering. I've straightened out that loop, and the scope is now very one to one. So right here, we've reached the anastomosis. The scope right now is at 80.

**SPEAKER 1:** 80, OK.

**DAVID DIEHL:** Yeah, and remember, that's as-- I've got a good shortening, and I was able to get one-to-one insertion. So if you can see the scope position on X-ray, it would be very short. Probably would look like a question mark.

The ability of the DiLumen device to allow colon shortening is one of the most important functions of this device. If I'm able to shorten, I remove any loops. And then I have good one-to-one movement of the scope that facilitates mucosal resection.