## **Understanding Surgical Drains**

(0:00 - 0:36)

Hi, I'm Dr. Guy Cappuccino, and today I'm going to talk a little bit about understanding closed suction drainage tubes and how to manage them. These guys, drains, I know, they suck, get it? Anyway, first off, why do we need suction drains? After surgery, fluid can collect underneath the skin in a space, and if that fluid is not drained in a timely fashion, it can build up to what we call the seroma, which is essentially like a water balloon under your skin, and that can cause problems, you might imagine. So we need to drain that fluid out until the body can heal.

(0:37 - 0:53)

So a drain, a closed suction drain like this guy, has three components. It has the drainage bulb, which collects the fluid. It has the part of the drain that's outside the body, and then the part of the drain that's inside the body, and as you can see, there are these tiny little perforations.

(0:54 - 3:27)

Those allow the fluid to enter the tube and then be pulled out by suction. After surgery, the drain will be inside, secured, typically by stitches, but sometimes by tape as well, so it doesn't pull out of the body, and then you'll be given instructions on how to collect and measure the amounts that come out. But in general, if you look at this tube, there are gradations on it, let's say 25, 50, 75, and 100 cc, and you're just going to record what comes out on a sheet.

To make the drain operate, you pop the top, there's a little stopper on there, you squeeze it to evacuate all the air, you put the stopper back in, and then when you release, it holds suction, thus pulling fluid from inside the body. As the fluid fills the container, it will slowly expand, and when it is completely expanded, there is no more suction. At this point, it has to be emptied.

So you would pop the top, squeeze it out, and then go ahead and replace that stopper and wait until it fills up again. One of the most common questions we get after surgery is, I have one drain in the right and one drain in the left, and one is putting out a lot of fluid and the other is not putting out any. That's totally fine, there's nothing to worry about.

It's typical that these drains will overlap a little inside and maybe one drain is just more active than the other. That will usually bounce out, sometimes it will switch, sometimes it's positional based on how you're sitting or laying, but it is absolutely nothing to worry about if one is putting more than the other drain out. Another question we get is, how do we manage what looks like clots and clogs? And sometimes you'll get little bits of blood clot in the drain which needs to be evacuated.

So the way to do it is called stripping the drain. Here's how you do it. Let's imagine that the drain is inside your body and it comes out of the body right there.

What you do is you take your non-dominant hand and pinch the tube to occlude it, take your other hand and it helps to lubricate it with some Vaseline, and you pinch and you pull and you're creating a force that pushes all of that fluid and contaminant out of this section of the drain. And you move your non-dominant hand closer and you repeat and you repeat and you repeat until you get to the bulb. And you may have to do it more than once, that forces all the clot out of that drain and allows it to be open again.

(3:29 - 4:30)

The next question we sometimes get is, is it normal for there to be some drainage around the hole where the drain comes out? Yes, there is some drainage that can happen and that's normal and if that's the case just put a little extra gauze and some tape to absorb whatever comes out. However, if you notice a large amount coming out and you can't maintain suction, meaning you put the stopper in and it immediately opens back up again, so in other words it's not holding suction, evaluate where the drain is coming out of the skin. If you don't see any white dots, then the drain is not pulled out.

If you see two dots, it's starting to get close to pulling out. If you see one dot, you're getting really close and that's usually a problem where you start to suck air into the drain because as you can see the first few holes are just a couple of centimetres beyond that. So if you do happen to see one, two, three dots outside the body, you can see them.

(4:30 - 5:18)

It usually means it's no longer functioning, it would have to be removed and you would just let us know and we'll help you with that process. Finally, when you're showering or you just need to manage it and you don't have a pocket to put your drain in, I recommend getting an old lanyard or necklace. You can take the drain and clip it.

There's a clip on it. You can take the drain and clip it right to there so it will dangle from the necklace and not pull where it comes out of the body. This is handy for when you shower or like I said if you don't have a garment that has holes or pockets in it.

So in summary that's the basic understanding of how the drain works and how to manage it and if you have any further questions of course you can always contact the office. I hope this was helpful.