

CVAD Care and Maintenance - Lumens Without Valves

Female1: Hi, Sherry. What are we going to do today?

Female2: Today we're talking about CVAD maintenance and care.

F1: Okay, and which one are we going to use?

F2: We're going to be using this PICC line and we'll be flushing and locking it off.

F1: Why does this one look a little bit different, it has these clamps and these don't.

F2: With this PICC line it has no internal valve and it's open-ended. So we need to have this clamp on so when we do flush it, heparinize it and lock it off. The heparin helps to prevent a clot.

F1: So what do we need to do to start?

F2: We have alcohol swabs. We're going to be caring for both of these, so even if you're just using one, you still need to do the flushing and/or locking for the second one or third one. We have our normal saline flush and heparin. We always heparinize the PICC's with the external clamps on them. And it's 100 units per ml and we flush with 3 mls or 300 units.

F1: So how do we know that?

F2: You check your CVAD care and maintenance protocols and it will tell you. Okay, so I have my saline flush here ready, so I'm just going to use my alcohol swab and swab that.

F1: So what happens if when you look at that cap and it has a lot of old blood or anything like that in it?

F2: Good question. So if it's got a lot of old blood it's unlikely that it's going to clear. You may be able to clear it with your flush. If you're not able to clear it with a

flush you need to replace it with a new needleless cap.

F1: Okay, so would it be a good time to do that right now?

F2: We could do that right now.

F1: Well, we don't have to do it now but-- so if you were giving this and you saw it was looking a little worse for wear, you could just change that cap.

F2: Yeah, you easily could do that right now. Yes. You just want to prefill it with a bit of saline so there's no air in there. So I've swabbed my end [needleless cap] really well. I've got my saline. And I'm going to get my air out of the syringe and attach it. This one has not been in use so we see that the clamp is clamped. I'm going to unclamp it. Then we're going to check for a little bit of flashback of blood. You always want to aspirate and check for that flashback. We'll say that we got a little bit of flashback there. And then I'm going to do that turbulent flush. Stopping and starting. And that will really scrub the inner lumen of that central line.

F1: What if you can't push in?

F2: If you can't push in, so, yeah, it could be clogged. So you want to troubleshoot. So you're going to go-- you might have a troubleshooting protocol at your institution and you can go ahead and check that. So something easy might be just to get the patient to change their arm position, get them to change position, lie down maybe. Might be sometimes just a kink in the line itself. You might need to change the dressing. Worse case it's actually clogged and you need an order for some declogging anticoagulant.

Okay, so I've cleansed that with saline. We know we need to heparinize. So we've got this prefilled syringe with the heparin that we need. If there's any air

I'm going to get rid of it.

F1: So do we have to clamp this between or is just having the cap on there enough?

F2: Having the cap is enough. If I were to take off the needleless cap then you would certainly have to clamp because then it's open. You could cause an air emboli to the patient. I've got that on, so I'm going to go ahead and flush with my 3 mls [of heparin]

F1: And that's 100 units per ml?

F2: Yes. Take that off and then clamp. Then we'd go ahead and continue to do the same on the second one.

F1: Okay, and what do we have to chart on this?

F2: So typically you're just noting in your MARs. Sometimes the order will come up in your MARs that you need to the flushing and locking and so you sign off that order and it will tell you whether you need to heparinize or not.

F1: Okay. Thanks.

F2: All right.