Preparing Medications From An Ampoule

Female1: So we're going to prepare a medication from an ampoule.

Female2: Yes. Now an ampoule is a glass container that holds medication. One dose only. There's a couple safety things you have to think about 'cause you have to break this glass. And so you have to think about how you're going to keep yourself safe. There are ampoule breakers that you can use. Little plastic tubes basically that are going to fit over top. If you don't have that, it's a little bit of a luxury, you can protect yourself with an alcohol swab wrapped around the neck and use that to break. First thing you, of course, need to do is check your MAR, take your medication out of your medication system. And then make sure you have the right patient, the right drug.

F1: All the--

F2: All those rights.

F1: All the rights.

F2: Whether there's six rights, ten rights, twelve rights, the literature's all very different. So in this case I have-- everything is correct. My-- I took my medication out of the medication system. You want to always make sure that the medication is out of the neck. The supplier will tell you how many millilitres they will provide to you. Sometimes they'll give you a smidge more but not a whole lot. So if you have a significant amount in the neck, chances are you're not going to have the correct dose.

F1: So how do you get that down?

F2: Good question. So you can either flick it or if that doesn't work, you actually grab it and turn it in a circle and somehow that just shakes up everything up and gets it to the bottom. All right. So I've done my hand hygiene. I'll use my ampoule breaker and I'm going to snap this away from--

F1: I noticed, yeah, you do it away from you, right?

F2: Yeah, and sometimes things break into multiple pieces. Again, the ampoule breaker keeps me safe. So I've decided that I need a 1 ml syringe because I need a half ml of my medication. And because this was an ampoule I need a blunt fill filter.

F1: So that you don't drop any of the shards, like, in case some of those went in the--

F2: Exactly. 'Cause the last thing you want to do is put shards of glass into your patient. Okay, so we've used principles of asepsis, not touching any of those connectors. And then to take these caps off, you just pull straight off. You've lure locked it on so things should stay very connected. Yeah. And then you can approach this a couple of ways. Sometimes if I'm having days where I'm really shaky I keep my ampoules on the table and I put my needle in this way. Other days I don't feel shaky, so you can actually invert your ampoule this way. And I'm going to draw up my medication. So the other--

F1: Yeah, I can see you've got that little air bubble in there.

F2: Yeah, so some syringes do that more than others. So there's an air bubble here that I need to displace. So I'm just going to pull down a little bit. I'm going to do some flicking. When the air bubble reaches the top I'm just going to pull back just a smidge, just to empty out this hub. And then I'm going to correct my dose and I

know I need half a ml. So if this was a narcotic I'd have to say, Wendy, I'm wasting some morphine or fentanyl or whatever it is. Because narcotics are controlled substances. And then I have my corrected dose. I'm going to recap my needle using the scoop cap method. And now I need to change my needle to something that I'm going to inject into my patient. And before I do that I'm just going to make sure that I have a label 'cause I need to label my syringe before I go to the bedside and I'm going to take the MAR and the syringe to the bedside.

F1: Okay, so you took the name and what the drug is and how much?

F2: Yeah, actually two patient identifiers, so name and birthdate. You could do name and a hospital number. Your drug, your dose, what time it is and your signature so that you know when you get to the bedside that this is definitely the medication that you prepared.

F1: So when you're doing narcotics and that, I noticed that you said, okay, it was .5 or half a ml in there, but that's actually 5 milligrams of morphine. Which one do you write on there?

F2: The dose. Definitely milligrams. Although that's a really good question. So until you become really familiar with your drugs and you know that 5 milligrams is .5 of a ml, you might put that volume down just in case accidentally you get to the bedside and maybe that syringe has been depressed a little bit and you've lost some volume. And that could be your doublecheck.

F1: Okay.

F2: Yeah, so Wendy, I've changed over to my needle. This is subcutaneous injection and my patient is a fairly healthy young adult. So one inch is plenty long. And it's

a safety needle, so whenever possible, we should be using safety needles for our protection, to protect us from needle sticks.

F1: And so what happens if the person-- if it's a bariatric patient or somebody where there's lots of tissue there. Do you use a longer needle or--

F2: So that's a really good question. So you always have to think about the route of your medication and this being subcutaneous one inch will be sufficient for somebody who's really large. If we were doing an IM definitely you would have to go to a larger, longer length to make sure that you get into that tissue.

F1: So subcutaneous one inch is fine.

F2: Yes.

F1: Okay, and I know some people-- I actually like the way that it's labeled here on the top. I see some people put it on here, though, on the barrel. Is there any--

F2: Really I think it comes back to preference. I think it's always important to be able to visualize what your volume is so that you can guarantee when you are at the bedside about to give the dose that you have your full dose with you.

F1: Okay. And so before we go to the bed, what do we need to take with us to the bedside?

F2: We need to take the drug, the MAR and an alcohol swab.

F1: Do we have to wear gloves to do this?

F2: Good question. Again, it's about point of risk assessment, so the risk of me being exposed to blood during a subcutaneous injection is low. Some nurses will choose to wear gloves. Some will choose not to. Again, it's-- the Centre for Disease Control is really trying to make people responsible for their own actions. So do

the assessment. If I knew the patient was on anticoagulants, I may think the risk is higher. You're never wrong to be more safe.

F1: Okay.