Administering Medications - Direct IV into an IV with an Infusion

Female1:   Hi, Renee.

Female2:   Hi, Wendy.

F1:   What are we up to today?

F2:   So let's show students how to give an IV direct medication into a PVAD short

that has an infusion going.

F1:   Okay.

F2:   So of course you've done your assessment. You've made your decision about

which drug to give, what dose, route, patient, time, all that stuff. Your hand

hygiene's part of it. You go to your medication dispensing system. You take the

medication out according to your policy. And then you prepare it with all of the

principles that we've talked about before. I have my medication ready. I have my

flush ready. I've brought my MAR to the bedside. I've checked my two patient

identifiers and all is well. I've informed the patient what I'm going to give them

and if there's anything I need them to be on the look out for I've informed them

about that. So first thing I want to think about is so when I prepared my drug I had

to look at the drug monograph. So in our health authority we have a parenteral

practices manual which gives us all kinds of great information about what is the

drug, what are the common side effects, how can we give this drug IV. Do we

push it or give it direct; Do we put it in a mini bag, what kind of volume. What

kinds of things do we need to look out for. How fast can we give it? So in this

case I am giving morphine. I can give it over two minutes. So I've prepared it

according to the guidelines and I've had to look at compatibilities. I have an IV

solution running. I also have a mini bag running as well, so I have to make sure that this drug is compatible with this solution and this solution. So if everything's compatible I can go ahead and push. If things aren't compatible then I have to stop something. And what I have to think about is where am I going to give this IV direct morphine; where's the port that I'm going to inject it. And I can have nothing coming behind it that's going to potentially contaminate and mix with the morphine.

F1:   Okay.

F2:   That happened to me one time in practice. I thought I had flushed the lines adequately and I hadn't. And I could see the crystallization in the tubing happen really quickly.

F1:   Oh, yes, like it's snowing, right?

F2:   Yes. So I had to shut it off. Run, get some new tubing and bag ready and disconnect it. Actually I disconnected it right at the patient because I didn't want to risk any of that particulate getting into them. I don't know what it would have done inside the patient but it might not be good. I've checked compatibility and it is all good. You find the port closest to the patient which is this one.

F1:   Do we have to worry about the rate here because this is going pretty slow.

F2:   Yeah, I'm going to do that in just a second. Good question.

F1:   Okay.

F2:   All right. So the protocols tell you to flush before and after you give IV meds. Some nurses will default to say this is my flush before and this is my flush after. So again, it's going to depend on your rate that you choose, right. So this IV

pump has a feature called bolus. So I'm just going to stop it and I'm going to run a bolus at 40 mls and I'm going to run it over 3 minutes. I know the drug's going to take me two minutes to push. Plus I'm going to give it another minute. So I'm going to put it in over three minutes. Press okay. And here we go. And you can notice that the sound changed. That's because the IV's running a little bit quicker. So we're bolusing now. That's our pre-flush. Now I'm going to take my medication. I've cleaned my port 15 to 30 seconds. And I'm going to just push this over two minutes.

F1:   Now I've seen some people, some nurses, instead of using the bolus feature that they'll just increase the rate.

F2:   Yes, you can do that. The good thing about the bolus feature is when the bolus is done it will go back to the original rate. If you just increase the rate, which isn't wrong, but you forget to correct it before you leave, then the patient could receive a bolus.

F1:   Yes, like the whole thing.

F2:   Yeah. Or likewise if you--

F1:   So it's a safety thing, you should be using the bolus feature.

F2:   Yeah, and if you're running your IV with gravity you would just simply open it up and increase the rate. Always thinking about the patient and questioning is increasing the rate going to cause them any harm.

F1:   That's right.

F2:   So if they have a history of pulmonary edema, heart failure, renal failure you have to be really careful with how much you are going to bolus them with. Okay, so

our time has lapsed. The drug is in. I've disconnected. And now we still have 15 mls that is going to bolus in and do our end flush.

F1:   So what would we do if, say, the secondary medication was not compatible. How would that change what you did?

F2:   Okay, so then I would have to think about what is this medication. Can I temporarily stop it while I push my med. And then restart it. Or not. So let's say you could temporarily stop it. You can simply clamp your secondary line.

F1:   And then do we worry about what's in here?

F2:   Yes, you do. So then you're going to run a bolus to flush this out. Then you're going to give your drug and then bolus it again and then restart your medication that's incompatible. Sometimes patients have additives to their IV that-- in the primary bag that are incompatible. In which case you-- I'm just going to stop this. If the primary solution is incompatible and you're running multiple IV meds and it's really important that they receive whatever the additive is in there, let's say it's heparin. You'll just go start another IV site, just for IV purposes.

F1:   Okay.