Dialysis Emergencies OSCE
Scenario 1. Air Embolism

Dr. ____________
I’ve been having trouble with Mrs. White’s catheter really pulling negative since she got on, and now the venous air alarm is going off and there are bubbles in the venous trap. She’s a little short of breath and dizzy. What do you want me to do?

1. _______ Stop dialysis _________ Continue dialysis
   STOP (Fatal)

2. _______ Give back the blood _______ Clamp the lines. Don’t give back the
   blood.
   STOP (Fatal)

3. FELLOW WILL BE COMING IMMEDIATELY. Y____ N____
   FATAL

4. OK. I’ve already done that. Do you want anything else?
   ___________ High flow, high % O2.
   ___________ Put patient on the left side, with the head down.
   ___________ Vitals/EKG Monitoring
   ___________ Crash Cart
   ___________ Other.
   STOP

Tell the fellow this is an OSCE and that you have a few more questions about the
scenario. If not already there, ask him to meet you at your location. Circle the answers.

1. What is the most likely cause of these symptoms and signs? Venous air
   embolism; Other _________________

2. What are some ways that air embolism can be produced during dialysis? Leak
   into system at catheter (after air detector); failure of air detector; “air rinse” or
   other intervention that allows infusion after disabling air detector.
3. Why do you place the patient on the left side with the head down in this scenario? To keep the air in the right heart (atrium and ventricle) and out of the pulmonary circulation. Other __________________

4. What use high concentrations of O2? It allows for faster reabsorption of the air (mostly nitrogen) from the blood. Other __________________________