



Dialysis Emergencies OSCE
Scenario 4. Hemolysis due to Chloramines

Dr. _____

I'm over here in the MICU, and Mr. Port is short of breath, and has really severe back and chest pain, after about 10 minutes of dialysis. His EKG is ok according to the intern, but his blood has turned dark brown-red.

What should I do?

1. _____ Stop dialysis _____ Continue dialysis
STOP (Fatal)

2. _____ Give back the blood _____ Clamp the lines. Don't give back
STOP (Fatal) the blood.

3. **FELLOW WILL BE COMING IMMEDIATELY.** Y _____ N _____
FATAL

4. Do you want me to send labs or anything else?

_____ Vitals

_____ Oxygen

_____ Calcium chloride or gluconate to bedside

_____ iStat or stat potassium

_____ Hct/Hgb

_____ Type and Screen

_____ Check chloramines

_____ Water temperature

_____ Other (indicate)

_____ None

STOP

Tell the fellow that this is an OSCE, and that you have a few questions about the scenario. Ask him to meet you at your location. Circle answers:

1. Provide a positive dipstick for chloramines. Ask: "This is the result of a test on the product water coming from the RO. What does this indicate?" _____

2. What is the most likely cause of the symptoms? Hemolysis; Other (indicate) _____

3. What are some specific things that can produce this? Too high water temperature; chloramines break-through; saturation of the carbon filter; hypotonic dialysate; copper, bleach, silver-stabilized hydrogen peroxide; nitrates; shearing at the roller pump.

4. What do you need to check for to make sure the patient is ok? Potassium level; monitor: EKG for hyperkalemia changes; labs for hemolysis; Hct; Hgb; Type+Screen.

5. What should you do to look for an etiology? Water temperature; chloramines in product water; check dialysate conductivity; check roller pump function.