



Dialysis Orders OSCE
Scenario 3. Dialysis Membrane Reactions

Dr. _____

We just started dialysis a few minutes ago, and Mr. Blue is itching all over, and says he feels tight and like he might throw up. 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
STOP (Fatal) the blood.

3. **FELLOW WILL BE COMING IMMEDIATELY. Y_____ N_____**
FATAL

4. We've already stopped dialysis and taken down the set. Is there anything else?

_____ Vitals

_____ Oxygen

_____ EKG Monitor

_____ Crash Cart

_____ Epinephrine (EpiPen) at bedside

_____ Benadryl

_____ Steroids

STOP

Tell the fellow that this is an OSCE, and that you have a few questions about the scenario. Circle answers:

1. What do you think is the most likely problem here? Dialysis membrane reaction/allergy; Reaction to sterilant/ethylene oxide; Reaction to heparin; Reaction to component of dialyzer set (plasticizers, etc); Other _____

2. What are some of the specific causes of this type of reaction? Dialysis membrane; ethylene oxide; endotoxin; heparin; latex; acetate; formaldehyde.
3. This used to be called “first use syndrome”. What dialysis membranes are most likely to be associated with first use syndrome? Unmodified cellulosic/cuprophane; cellulosic membranes reused with bleach. Un-reused dialyzer membranes. Other _____
4. What drug makes patients receiving RRT with an AN69 membrane more likely to have a membrane reaction? ACE inhibitors; Other _____
5. What type of reaction is this? Anaphylactoid; Other _____
6. Is this less likely to be seen with reuse? Y _____ N _____

The “type A syndrome” is described here. Some patients, largely on cellulosic dialyzers, have much milder symptoms about 30 to 60 minutes into the treatment, which are reported to ameliorate as the treatment proceeds. This is called “Type B”, and is complement mediated. The author of this exercise can’t imagine waiting to see if things are going to improve.

*Optional: It is a good practice to provide the fellow with a review article on membrane and other reactions associated with RRT components.