Blood Transfusion Reactions

Blood Therapy SIM Learning Outcomes:

1. Identify the risks to patient in receiving blood transfusion
2. Describe signs and symptoms of adverse transfusion reaction(s)
3. Outline the steps of safe blood administration including appropriate assessments and monitoring.
4. Discuss the clinical management of an adverse transfusion reaction,
5. Discuss the communication process including the reporting required when an adverse transfusion reaction occurs (SBAR)

Blood Therapy SIM Briefing (10 min)

1. Provide learners with copy of worksheet
2. Review all info on worksheet including vital signs

Watch video clip (5:45)

http://mediasite.uoit.ca/mediasite/SilverlightPlayer/Default.aspx?peid=c63c70e9c703461aae877b9346e8482b

Complete De-briefing using following attached questions (20-30 minutes)
Debriefing – Blood Transfusion Reaction

1. What are your immediate thoughts related to what was happening to Mrs. Grant?

2. Prior to receiving blood Mrs. Grant Hgb was 64, she was cross and typed for 2 units blood and Dr. Walberg wrote an order for the transfusion. Starting from this point walk me through the steps the nurse will follow to get the blood transfusion up and running.

3. You are Mrs. Grant’s nurse and you are obtaining her consent for the transfusion and she says to you “I am really worried about receiving blood, isn’t their risks with this”? How would you respond?

4. Once the blood is up and running ongoing assessment and monitoring of the patient is a key nursing responsibility. Mrs. Grant asks you “why do you keep checking on me and taking my blood pressure and temperature? How would you explain this nursing care to Mrs. Grant?

5. Mrs. Grant started to develop urticaria –I am interested to know your thoughts on the significance of this finding and why? What type of blood transfusion reaction do you think Mrs. Grant is experiencing and why?

6. If the nurse caring for Mrs. Grant had not responded immediately to the changes she observed what are your thoughts as to how the situation may have unfolded in comparison to Mrs. Grant’s experience.

7. Mrs. Grant developed a rash on her arm but overall her vital signs were stable. What changes would you have seen with Mrs. Grant if she was experiencing a febrile reaction? Walk me through what steps you would take to manage the situation?

8. Let’s talk about an anaphylactic blood transfusion reaction–what would be the presenting signs and symptoms of this type of reaction. As the nurse caring for a patient who is receiving a blood transfusion and they experience this type of reaction what is your priority intervention and what do you see as the greatest risk for your patient?

9. Dr. Walberg ordered Diphenhydramine 25-50mg IV stat? As Mrs. Grant’s nurse you go into her room to administer this medication and she asks you-What are you giving me? Why?

10. I am interested to know how you came to that decision for the dosage of diphenhydramine you would administer. If Mrs. Grant did not respond to the diphenhydramine give me some details as to your next steps.

11. I would like to take a few minutes to discuss communication and team work. What observations related to the team dynamics of the nurses caring for Mrs. Grant can you share? What is your view of the communication between the nurses and Mrs. Grant?
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<tr>
<th>Allergies:</th>
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<tbody>
<tr>
<td>Peanut Butter&lt;br&gt;Dust&lt;br&gt;Grass</td>
<td>Age: 40 Sex F</td>
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<tr>
<th>Admitting Diagnosis:</th>
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<tr>
<td>G 5 P 4 SVD 23/03/15 @ 0401</td>
<td>SW 107</td>
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Recent PPH<br>Hbg 64<br>IV Site intact<br>IV NS infusing at 100mL/hr

- ✔ Blood Administration Consent signed and in chart
- ✔ Blood was verified by TWO nurses
- ✔ Blood infusion was started with 30 minutes of receiving blood on unit
- ✔ Pt has never received a transfusion before

**Dr’s order:**<br>One unit RBC over 2 hours now. Repeat CBC in am.

Blood infusing now

Pre-transfusion vital signs:
T-37.1 P-110 R-20 BP 88/60 SpO2 95% on R/A Chest clear

Vital Signs at 15 minutes
T-37.3 P-104 R-19 BP 90/64 Sp02 96%

**Report: What did you hear:**

**What are vital signs when nurse rechecks?**
T- P- R- BP Sp02

**Your Observations:**

What would you document?
Possible Transfusion Reactions:

- Acute hemolytic transfusion reaction
- Transfusion-related acute lung injury (TRALI)
- Febrile non-hemolytic transfusion reaction
- Anaphylaxis
- Minor Allergic reaction
- Severe Allergic reaction
- Transfusion-associated circulatory overload
- Bradykinin mediated hypotension

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