

Transfusion Therapy Discussion Questions

Red Blood Cells:

1. In what situation would whole blood be transfused to a patient?
2. Why must whole blood transfusions be ABO identical?
3. What hemoglobin level indicates that transfusion of red cells may be necessary?
4. By how much will one unit of red cells increase the hemoglobin and hematocrit?
5. List the clinical indications for a red cell transfusion.
6. What symptoms may a patient have that indicates they may need a red cell transfusion?
7. An individual who is type A can receive what types of red cells?
8. An individual who is type AB can receive what types of red cells?
9. What is a red cell exchange transfusion?
10. What patient population commonly receives red cell exchange transfusions?

11. How does intraoperative blood salvage work?

Plasma:

- 1. What are the PT and APTT levels that indicate a plasma transfusion may be necessary?**
- 2. What clinical diseases or situations could require a plasma transfusion?**
- 3. If a patient is type O, what type plasma products can they receive?**
- 4. If a patient is type B, what type plasma products can they receive?**
- 5. Is the Rh of the donor and patient important when transfusing plasma products?**
- 6. What is a plasma exchange?**
- 7. What are some common clinical indications for a plasma exchange?**

Platelets:

- 1. Given the following patient's histories, at what platelet level should they be transfused platelets?**
 - a. Bleeding with DIC**
 - b. Chemotherapy**

- c. Cardiac bypass
 - d. Massive transfusion
-
2. If ABO matched platelets are unavailable, is it better to transfuse platelets that are red cell compatible or plasma compatible?
 3. Does the Rh of the platelet matter during transfusion? Why or why not?
 4. What are signs and symptoms of low platelet counts that could indicate transfusion of platelets is needed?

Cryoprecipitate:

1. List clinical indications that would suggest transfusing cryoprecipitate.
2. What is the main use of cryoprecipitate transfusion?
3. What is considered one adult dose of cryoprecipitate?
4. When transfusing cryoprecipitate, should it be red cell ABO compatible or plasma ABO compatible? Why?

Granulocytes:

1. List the clinical indications for a granulocyte transfusion?

2. What is the dosage for transfusing granulocytes?
3. When transfusing a granulocyte, should it be red cell ABO compatible or plasma ABO compatible? Why?

Special Transfusion Situations:

1. In the case of an emergent transfusion where no blood type is available, what RBC type should be given to the patient?
2. In the case of an emergent transfusion where no blood type is available, what FFP type should be given to the patient?
3. What blood type should be given for a red cell neonatal transfusion?
4. What modifications should be performed on the red cells for a neonatal transfusion?
5. Why are units used for neonatal transfusion <7 days old?
6. What speed of transfusion is considered a massive transfusion?
7. What is the strategy for transfusing blood in a massive transfusion situation?
8. What are some common causes of massive transfusion?

9. What are complications of massive transfusion?

10. Why are sickle cell patients often give phenotypically antigen matched RBC units?

11. Why do oncology patients require RBC and platelet transfusions more often?

12. What is cytappheresis?

13. When is leukapheresis used?

14. When is plateletpheresis used?

15. What is extracorporeal photopheresis and for what patients is used?

16. What is selective adsorption?

17. What are examples of how selective adsorption is used?

Blood Product Administration:

- 1. How long can red cell products be out of storage and still be acceptable for use?**

- 2. With what product should red cells be transfused?**

- 3. Within what period of time must a unit of blood be transfused?**

- 4. What verifications must be performed at the bedside before blood is administered?**