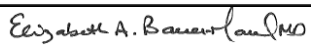
UnityPoint Health Methodist | Proctor	Page # 1 of 4	Section: Blood Products	Policy #: C-07
CARE COORDINATION	Approved by CNO: 		Date: 6/14/17 Review by: 6/14/18
	Approved by Pathologist:  Elizabeth A. Bauer-Marsh, M.D.  Adam Quinn, D.O.		May 22, 2017 May 15, 2017
	Supersedes: 6/05, 3/08, 1/11, 8/11, 5/12, 6/13, 6/25/14, 6/15, 7/16 Date Revised: 6/14/2017		
	Primary Responsible Parties: Rich Borge, Kathy Turpin Secondary Responsible Parties: Elizabeth Bauer-Marsh/Dr. Adam Quinn		
	Joint Commission Standard: PC		
SUBJECT: SUSPECTED TRANSFUSION REACTION			

I. POLICY:

In the event of a suspected transfusion reaction all blood products (red blood cells, platelet pheresis, cryoprecipitate and fresh frozen plasma), will be discontinued until a reaction is confirmed or denied by proper investigative procedures.

II. PURPOSE AND STANDARD:

Provide guidelines for the immediate, appropriate nursing intervention when a patient who is receiving a blood transfusion exhibits symptoms of a transfusion reaction.

III. EQUIPMENT:

Normal Saline
IV tubing
Sterile needle

IV. POLICY SCOPE:

R.N.

V. GENERAL INFORMATION:

A. Transfusion reactions can occur at any time from beginning of the transfusion of blood or blood components and up to weeks after completion of the transfusion in the case of a delayed transfusion reaction. Symptoms that may be associated with packed red blood cells suspected transfusion reactions are:

1. flushing of the face
2. pain in the chest or lumbar region
3. nausea
4. vomiting
5. fever

6. chills
7. signs of shock
8. temperature spike of >=2^0F with or without associated transfusion reaction symptoms.

B. Symptoms of delayed red cell transfusion reactions include:
   1. hemolysis with a declining hemoglobin
   2. mild jaundice
   3. hemoglobinuria
   4. fever

C. Symptoms for Plateletpheresis transfusion reaction may include:
   1. Fever $\geq$ 3^0F rise
   2. rigors
   3. shortness of breath (breath $\geq$ 28 breaths per minute)
   4. rise in systolic blood pressure ($\geq$ 30 mmHg)
   5. tachycardia (HR$\geq$ 120/min or $\geq$ 40 beats /minute rise)
   6. nausea & vomiting
   7. lumbar pain
   8. drop in systolic blood pressure ($\geq$ 30 mmHg)

D. Symptoms for cryoprecipitate/Fresh Frozen Plasma transfusion reaction may include:
   1. Signs of anaphylactic shock – airway constriction with wheezing and dyspnea, cyanosis, swelling of the tongue or throat, redness, rash, itching, decreasing BP, weak and rapid pulse, pallor, light headedness, dizziness.
   2. Shortness of Breath

VI. PROCEDURE:

A. Suspected RBC transfusion reaction:
   1. Immediately stop the infusion by clamping the blood tubing securely.
   2. Do not remove the IV catheter. IV access should be kept open in case emergency medications would need to be given.
   3. Do not open the normal saline tubing. (Prevents infusion of blood in the blood tubing).
   4. Prepare a new bag of normal saline solution and IV tubing for administration.
   5. Disconnect the blood tubing from the IV catheter and attach a sterile cap to maintain sterility of blood and tubing. Do not remove the unit of blood from bedside until the Technologist arrives so that identification can be verified.
   6. Connect the new tubing and begin the infusion of normal saline.
   7. Contact the physician as soon as possible to inform him/her of possible reaction. Inquire as to whether the blood should be resumed or a new unit hung. If blood has been spiked for greater than 4 hours, do not resume transfusions.
   8. Call the Blood Bank immediately (4922), regardless of the physician's response, to inform them of a suspected transfusion reaction.
   9. Order a transfusion Reaction Workup.
   10. Chart the transfusion reaction in the EMR.
       - In the Blood Administration Flowsheet, under "Suspected Reaction?" fill out "Yes". Complete all the sections under "Suspected Transfusion Reaction".
       - If electronic medical record (EMR) is unavailable, document all signs and symptoms on the Blood Transfusion Record (attached to the unit), and record the following:

- Name of Lab Person Notified, Date/Time notified
- Name of Physician Notified, Date/Time notified
- Reaction symptoms, Date/Time occurred
- Reaction interventions
- Final transfused unit number, component type
- Date/Time transfusion began
- Date/Time transfusion ended
- Approximate volume transfused
- Type of Solution given with Blood
- Previous transfusion history, including reactions

Update the EMR once available, or scan recorded transfusion reaction into EMR.

11. Collect all empty bags from previously transfused units. If physician orders discontinuation of the unit, Blood Bank will bring back the unused portion. If the unit is to be continued, the floor personnel must return the empty bag to Blood Bank. A Lab Technician will come to unit to draw a post-transfusion blood sample if indicated, and may pick up the unused portion of blood, forms, and the empty bags from previously transfused units.
12. Document.
13. Continue to observe patient and monitor patient's vital signs closely until symptoms subside.

B. Suspected FFP/Cryo transfusion reaction:

1. Stop the infusion immediately.
2. Notify physician.
3. If physician suspects a transfusion reaction, chart the transfusion reaction in the EMR.
   - In the Blood Administration Flowsheet, under "Suspected Reaction?" fill out "Yes". Complete all the sections under "Suspected Transfusion Reaction".
   - If EMR is unavailable, document all signs and symptoms on the Blood Transfusion Record (attached to the unit), and record the following:
     - Name of Lab Person Notified, Date/Time notified
     - Name of Physician Notified, Date/Time notified
     - Reaction symptoms, Date/Time occurred
     - Reaction interventions
     - Final transfused unit number, component type
     - Date/Time transfusion began
     - Date/Time transfusion ended
     - Approximate volume transfused
     - Type of Solution given with Blood
     - Previous transfusion history, including reactions
   - Update the EMR once available, or scan recorded transfusion reaction into EMR.
4. Notify the Blood Bank. The Blood Bank personnel will contact the pathologist on call and document the event on the recipient's history card.

C. Suspected plateletpheresis transfusion reaction:

1. Stop transfusion immediately. Adverse results can occur anytime during and up to 90 minutes post-transfusion.
2. Notify physician.
3. If physician suspects a transfusion reaction, chart the transfusion reaction in the EMR.
   - In the Blood Administration Flowsheet, under "Suspected Reaction?" fill out "Yes". Complete all the sections under "Suspected Transfusion Reaction".
   - If EMR is unavailable, document all signs and symptoms on the Blood Transfusion Record (attached to the unit), and record the following:

- Name of Lab Person Notified, Date/Time notified
- Name of Physician Notified, Date/Time notified
- Reaction symptoms, Date/Time occurred
- Reaction interventions
- Final transfused unit number, component type
- Date/Time transfusion began
- Date/Time transfusion ended
- Approximate volume transfused
- Type of Solution given with Blood
- Previous transfusion history, including reactions

- Update the EMR once available, or scan recorded transfusion reaction into EMR.

4. Retrieve Plateletpheresis unit for possible culture and return both unit and a copy of the completed Product Identification Tag to Blood Bank. The product will be cultured if indicated to investigate the reaction.

Reference:

AABB Technical Manual 18th edition, 2014 and the AABB Standards 15th edition, 2010