ADMINISTRATION OF Rh IMMUNE GLOBULIN VIA CONTINUOUS INFUSION FOR IMMUNE THROMBOCYTOPENIC PURPURA

PURPOSE

To provide guidelines for the administration of RH Immune Globulin (RhIG) via Continuous Infusion for Immune Thrombocytopenic Purpura (ITP)

SITE APPLICABILITY

BC Children’s Hospital only

EQUIPMENT

- Patient’s chart with order for Rhesus Immune Globulin (RhIG)
- Consent for Blood Products
- Identification band
- Personal Protective Equipment (PPE)
- Chlorhexidine/alcohol swabs
- 2 Straight Infusion sets (2429-007)
- 2 0.9% Normal Saline of appropriate volume
- Infusion pump “brain”
- Y connector

From Transfusion Medicine Laboratory
- RhIG in mini bag
- Transfusion tag
- Transfusion record

PRE-ADMINISTRATION

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ENSURE order for RhIG exists.</td>
<td></td>
</tr>
<tr>
<td>2. ENSURE that informed consent for RhIG administration is complete.</td>
<td>Informed Consent is required by law for the administration of RhIG.</td>
</tr>
<tr>
<td>3. REFER to TR.05.07 RhIG Fact sheet in Medworxx for additional information on RhIG.</td>
<td></td>
</tr>
<tr>
<td>4. CHECK the patient’s most recent platelet count.</td>
<td></td>
</tr>
<tr>
<td>5. SEND the Blood Component/ Derivative/Factor Concentrate Request form to TML.</td>
<td>To avoid unnecessary delay in administration of the RhIG.</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td></td>
</tr>
<tr>
<td>TML will supply the required RhIG dose in a 50 mL 0.9% Normal Saline mini bag.</td>
<td></td>
</tr>
<tr>
<td>6. ENSURE that the patient is aware of the RhIG administration. <strong>Explain</strong> procedure to patient.</td>
<td>Allows the patient to prepare for the procedure.</td>
</tr>
<tr>
<td>7. ENSURE that an identification band in place. <strong>No Identification (ID) Band, No RhIG</strong></td>
<td>RhIG should not be administered to women who lack positive identification.</td>
</tr>
<tr>
<td>8. ENSURE peripheral vascular access or central vascular access line of sufficient gauge is established.</td>
<td>Gauge or lumen size should be large enough to allow the flow of the RhIG product within the specified administration time.</td>
</tr>
<tr>
<td>9. ENSURE a dedicated line of 0.9% Normal Saline for the administration of RhIG.</td>
<td>To avoid inadvertent co-administration of incompatible fluids or medications.</td>
</tr>
<tr>
<td>10. <strong>PERFORM</strong> Pre-Transfusion Assessment within 30 minutes of starting the infusion and prior to spiking the bag.</td>
<td>Identify any clinical manifestations that may be cause for delaying the transfusion e.g. fever. Identify any pre existing clinical manifestations that may be confused with a transfusion reaction e.g. fever or pre-existing rash</td>
</tr>
</tbody>
</table>

- Dipstick urine for blood
- Measure vital signs, vital signs include:
11. **ADMINISTER** pre medications as ordered.

The pre-medication should be administered at a suitable time to allow for maximum effectiveness.

12. **DOCUMENT** findings of pre transfusion assessment including any pre-medication related to transfusion preparation, e.g. antihistamines.

Establish baseline levels so that any transfusion-related deviations in patient’s clinical condition will be recognized.

13. **ARRANGE** for the transport of RhIG. **Complete** the Blood Release Request Form.

Ensure that the person transporting the RhIG obtains the right product for the right patient.

14. **ASSEMBLE** required equipment:
   - **Prime** the administration set and rescue line.
   - **Connect** primed line to patient’s IV access
   - **Start infusion** at ordered rate or to TKVO.

   Facilitates completion of task in a timely manner.

**Note:**
- RhIG does not require a filter.
- A straight administration set is used for administering RhIG via continuous infusion.
- A rescue line **must** be used and should be Y connected to the RhIG line.

15. **START** the infusion within 20 minutes of issue.

To avoid unnecessary wastage.

**Note:**
- If a decision is made not to administer the RhIG, return the product to TML immediately.
- **Never** store RhIG in unapproved fridges such as medication fridges.

16. **PERFORM** the pre administration check. The pre-administration check must be completed by **two health care providers**, with required competencies, **one of whom shall administer the product**.

**Initial check:**
- **Visual Inspection:** The integrity of the RhIG product is checked for:
  - Leaking or tampered ports
  - Cloudiness or turbidity
  - RhIG that appears abnormal should not be administered without further investigation. Contact TML @ 7388 for an explanation of abnormal appearance.

**CONFIRM** that Informed Consent has been obtained.

**Compare the patient’s unique identifiers:**
- First and last name
- DOB
- MRUN on
- Front sheet of the patient’s chart
- Blood product order
- Product Tag
- Transfusion record

To detect any abnormalities that may indicate that the administration should not proceed.

Consent is required for the administration of RhIG.

The patient must be properly identified prior to RhIG administration.
Check the RhIG order for:
- Specific blood product e.g. RhIG
- Dose in micrograms-mcg or international units-IU
- Route of administration
- Date of administration
The information on the label on RhIG (lot numbers), the product tag & the transfusion record must match. Compare details on the RhIG label, the product tag and transfusion record.

**Patient’s unique identifiers:**
- First & last name
- DOB
- MRUN

**Product information:**
- Lot number(s)
- Dose in mcg or IU
- Expiry date
- Check for any TML comments

**Final check in the presence of the patient**
1. Ask the patient, where possible, to state her full name and date of birth and compare to the ID band.
2. **Compare the patient’s unique identifiers:**
   - First and last name
   - DOB
   - MRUN
   - With the patient’s unique identifiers:
     - ID band
     - Product Tag
   - If you find any discrepancies DO NOT proceed. Contact TML @ 7388 immediately.

17. **DOCUMENT** the checking procedure by signing the transfusion record.

**Record:**
- Signature of both staff members who carried out the pre administration check
- Date of transfusion
- Start time

**ADMINISTRATION**

**PROCEDURE**

18. Immediately after the verification checks have been completed **INITIATE** the transfusion.

**Do not use** ports marked “Do not Use/Do not Remove”

19. **Infuse** at 1 mL/kg/hr, **up to a maximum of 50 mL/hr**, for first 15 minutes.
    **Increase** the rate of the infusion to 5 mL/kg/hr, to a maximum of 150 mL/h for the remainder of the infusion, if initial infusion rate is well tolerated.

**Table 1: Patient Monitoring During RhIG Continuous Infusion for ITP Patients.**

Remain with, or be in a position to closely observe, the patient for the first 15 minutes following the start of the infusion (when product actually reaches the patient) and observe for signs and symptoms of a transfusion reaction.
Measure vital signs:

- After 5 minutes
- After 15 minutes
- After 60 minutes

Dipstick urine for blood:

- After 2 hours
- After 4 hours
- After 8 hours

⚠️ Patients should remain in the clinical area for the duration of the infusion. Patients who must leave the clinical area during the infusion must be accompanied by an RN.

⚠️ The patient should be monitored closely for 8 hours after administration and monitored for signs and symptoms of hemolysis such as back pain, shaking chills, fever, and red/brown urine. Absence of signs & symptoms of hemolysis within eight hours does not indicate hemolysis cannot occur subsequently.

20. Instruct patient/guardian to report immediately symptoms such as back pain, shaking chills, feeling hot, red/brown urine, or shortness of breath/difficulty in breathing.

21. In the event of a suspected reaction:
   - STOP immediately
   - Reassess vital signs
   - Reconfirm unique identifiers on the patient’s ID band and the RhIG.
   - Seek assistance and notify physician.
   - Refer to TR.07.01 Transfusion Reaction Procedure & TR.07.02 Quick Reference guide and complete the Transfusion Reaction Report Form (00055606)

   Patient/guardian will be aware of the:
   - Signs & symptoms of a reaction
   - Actions to take should they experience a reaction

   To minimize harm.
   To keep the vein open.
   To seek direction for management of the reaction.

   To ensure correct procedure is followed.
   To report the reaction

22. COMPLETION of infusion.
   - Flush the administration set with 0.9% Normal Saline.
   - Ensure tubing is flushed thoroughly post infusion.

23. RETURN to previously ordered intravenous solution, or saline/heparin lock vascular access.

   DO NOT de-access CVC or remove IV cannula until:
   - 8 hours post RhIG infusion, and
   - the last set of post transfusion vital signs are recorded

   Patient safety issue as the patient may experience an adverse reaction to the RhIG.

24. DOCUMENT
   Complete the transfusion record:
   - Volume infused
   - End time
   - Transfusion reaction noted: yes or no

   Complete the product tag:
   - Date/Time transfused
   - Transfused by
   - Transfusion reaction noted: yes or no

   Record in patient’s chart:
   - Response to transfusion
   - If an adverse reaction occurred then record all signs & symptoms experienced by the patient.

   At the time of the administration the patient’s medical chart shall be updated.

25. FILE transfusion record in patient’s chart.

26. RETURN the completed product tag to TML

27. GIVE the patient the patient notification tag section of the product tag. The notification tag may be filed

   All patients who receive RhIG should receive notification in writing.

   To ensure full traceability of the product.
in the patient’s chart and given to the patient at discharge.

28. For in-patients continue to **.observe** for signs & symptoms of a reaction post administration.

For out-patients, **.review** post administration care:

- **INSTRUCT** patient/guardian to report any symptoms such as back pain, shaking chills, feeling hot, shortness of breath or difficulty in breathing, red/brown urine, decreased urine output, and signs of fluid retention such as sudden weight gain and/or swollen feet, post discharge.
- **GIVE** the “Heading Home after a Transfusion” form to the patient/guardian.
- **DISCHARGE** 8 hours post administration, if clinically stable.

Reactions can occur post RhIG administration. Patient/guardian should be aware of the potential of reaction, signs and symptoms of a reaction and post infusion care.

**REFERENCES**


TR.05.07 RhIG Fact sheet [http://bcowhcms.medworxx.com/Site_Published/bcc/PolicyManualView.aspx](http://bcowhcms.medworxx.com/Site_Published/bcc/PolicyManualView.aspx)