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Applicability	Dearborn, Farmington Hills

Urticarial Transfusion Reactions

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

This document will provide guidance for the handling of reported urticarial reactions during or after blood transfusion.

II. CLINICAL SIGNIFICANCE:

- A. Urticarial reactions are characterized by urticaria (hives), pruritis (itching), or flushing. Urticarial reactions occur in 1-3% of all transfusions and are believed to be caused by antibodies in the recipient to donor plasma proteins.
- B. The most notable differences with an urticarial reaction, as opposed to other classification of transfusion reactions is that the transfusion may be resumed if the reaction resolves after antihistamine therapy and that further Blood Bank testing is not indicated.

III. SIGNS AND SYMPTOMS OF AN URTICARIAL REACTION:

- A. Urticaria (hives),
- B. Pruritis (itching), or
- C. Flushing

IV. POLICIES:

- A. Urticarial reactions that resolve with antihistamine therapy are the only type of reaction in

which the transfusion may be resumed.

- B. The decision to resume a transfusion following the after the administration of antihistamine therapy and the resolution of the reaction is the decision of the patient's caregivers, not the Blood Bank. The caregiver's decision must be documented on the back of the *Record of Transfusion (F-1566) Form*.

C. Blood Bank Notification

1. If an urticarial reaction has resolved, the patient's caregiver is not required to notify the Blood Bank or to order and submit a sample for post transfusion sample reaction. It is possible that the Blood Bank will not receive any notification about this type of reaction.
2. The Blood Bank may be notified of an urticarial reaction by the following:
 - a. The caregivers will place an order for a transfusion reaction evaluation in EPIC.
 - b. The caregivers will notify the blood bank via a telephone call.
3. If the Blood Bank is notified about an urticarial reaction, the blood bank staff must have documentation that the urticarial reaction has been resolved before deviating from the complete Suspected Transfusion Reaction Evaluation with post transfusion sample testing.

D. Documentation Requirement when an Urticarial Reaction has Resolved with Antihistamine Therapy

1. If notified of an urticarial reaction, the Blood Bank staff will:
 - a. verify that the symptoms of the reaction have been recorded on the reverse side of the the *Record of Transfusion (F-1566) Form*.
 - b. confirm that the systems have resolved with the administration of antihistamines
 - c. confirm the caregivers decision to resume transfusion is also documented on the reverse side of the *Record of Transfusion*.
 - d. input a Unit Comment in SoftBank, documented with the date, time, the caregivers name/employee number, and the technologist's initials.

E. Blood Bank Notification

1. The Blood Bank may be notified of the urticarial reaction in one of two ways
 - a. The caregivers place an order for a transfusion reaction evaluation in EPIC
 - b. The caregivers notify the blood bank via a telephone call

- F. The blood bank will handle each urticarial transfusion reaction workup based on the following information, found in table 1, *Urticarial Transfusion Reaction Workup*

1. Route of notification
2. Administration of antihistamines
3. Symptom resolution

V. FORMS:

- A. Record of Transfusion (F-1566) Form.
- B. Transfusion Reaction Evaluation Form

VI. PROCEDURE:

Table 1: Urticarial Transfusion Reaction Workup

Route of notification to Blood Bank	Did caregivers administer antihistamines?	Have symptoms resolved?	Blood Bank Actions
Orders placed for a transfusion reaction in EPIC	YES	YES	Proceed as described in table 2, <i>Urticarial Reactions that have Resolved with Antihistamine Therapy</i>
	YES	NO	Complete transfusion reaction workup as described in Transfusion Medicine policy, Laboratory Evaluation of a Suspected Transfusion Reaction
Caregivers placed a call to the blood bank	YES	YES	DO NOT order a transfusion reaction evaluation. Add a unit comment in Soft Bank to document the call from the RN indicating that symptoms have resolved.
		NO	Instruct the caregivers to order a transfusion reaction in EPIC. Complete the transfusion reaction workup as described in Transfusion Medicine policy Laboratory Evaluation of a Suspected Transfusion Reaction .
		Unable to Determine	Add a unit comment in Soft Bank to document that the blood bank told the RN to follow the directions on the reverse side of the <i>Record of Transfusion</i> .
	NO	Not applicable	

Table 2: Urticarial Reactions that have Resolved with Antihistamine Therapy

Follow the steps below if the urticarial reaction has resolved with antihistamine therapy and the caregivers have still requested a transfusion reaction evaluation.

Step	Action
1	Review the documentation to verify that the urticarial reaction has resolved with antihistamine therapy.
2	Document the patient's symptoms in Soft Bank. If the unit is still in issued status, confirm the transfusion. Refer to Blood Bank CDM -Transfusion Reaction Workup .
3	Cancel all of the transfusion reaction tests, including the post Type & Screen, DAT, hemolysis

	checks, and icterus checks; however DO NOT cancel the Pathologist's Consult RXN or the clerical checks.
4	Perform clerical checks in Soft.
5	Print the <i>Transfusion Reaction Workup Interim Report</i> . If necessary, refer to Blood Bank CDM-Transfusion Reaction Workup .
6	Give all paperwork associated with this transfusion reaction evaluation to the Medical Director. <ul style="list-style-type: none"> A. This may include scanning all paperwork associated with this transfusion reaction to the Medical Director
7	After the Medical Director completes the <i>Pathologist Consult of Reaction</i> perform the following steps: <ul style="list-style-type: none"> A. Update the computer record with the code corresponding to the Medical Director's impression, refer to Blood Bank CDM- Pathologist Transfusion Reaction Consult (CRXN). The impression may be obtained from the <i>Pathologist Consult of Reaction report</i>. B. Update the Medical Director's ID in the physician field. C. Print the <i>Patient Transfusion Reaction Workup Report</i>.

VII. REFERENCES:

1. AABB, *Technical Manual*, current edition.

Approval Signatures

Step Description

Approver

Date

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Pending