

Presenting Signs and Symptoms of Transfusion Reactions

Signs and Symptoms of transfusion reactions can be grouped into one of 6 clusters. If any of these alone or in combination are observed during or after the infusion of blood components or products, the Transfusion Service/Laboratory **MUST** be notified immediately

Symptom/Sign Cluster*

Cutaneous	Inflammatory	Cardiovascular	Respiratory	Gastrointestinal	Pain
- Pruritis	- Fever	- Tachycardia	- Tachypnea	- Nausea	- Headache
- Urticaria	- Chills	- Bradycardia	- Dyspnea	- Vomiting	- Chest
- Erythema	- Rigors	- Hypotension	- Wheezing	- Diarrhea	- Substernal
- Flushing		- Hypertension	- Rales		- Abdominal
- Jaundice		- Arrhythmia	- Hoarseness		- Back
- Pallor		- Shock	- Stridor		- Infusion site
- Cyanosis		- Jugular venous	- Pulmonary		- Proximal
- Petechiae		distension	edema		extremity
- Purpura			- Chest		
			tightness		

*Hemoglobinuria is another sign/symptom that can be indicative of a severe transfusion reaction.

Some general principles for treatment are as follows:

1. Immediately stop transfusion and maintain IV site with saline.
2. Flushing the large amounts of remaining blood product in original line may exacerbate the patient's symptoms. It is suggested that a new site, new IV set or a Y connector with limited extension volume be used to limit this risk.
3. Retain the remainder of the donor unit, attached tubing and IV fluids at the bedside.
4. Perform clerical check – check that the information on the blood tag matches that on:
 - a. The blood unit label (ABO and Rh group, donor unit number)
 - b. The patient's hospital identification band
 - c. The patient's Transfusion Service Identification Number (TSIN).
5. Notify the medical house staff / attending physician and Transfusion Service/Laboratory.
6. Obtain physician orders for treatment / resuscitative measures.
7. Document symptoms of reaction, vital signs and other required information on the forms provided for the Transfusion Service / Laboratory, and in the patient's medical chart.
8. Order a transfusion reaction investigation to be collected.
9. Send the completed documentation, requisition, required samples, and the remainder of the donor unit to the Transfusion Service / Laboratory.

Refer to Acute Transfusion Reaction Chart at:

<http://www.albertahealthservices.ca/assets/wf/lab/wf-lab-clin-tm-trxn-algrthm.pdf> for investigation and procedures in common reactions.