

Transfusion Reactions

| Type | Timing | Symptoms | Cause |
|----------------------|--------------|---|---|
| Anaphylactic | Minutes-3hrs | Urticaria, wheeze, hypoT | Type 1 HSR against plasma proteins in transfused blood, IgA-deficient pts. |
| Acute hemolytic | <1 hr | Fever, hypoT , tachy, flank pain, jaundice, hemoglobinuria | Can be intra or extravascular hemolysis. ABO incompatibility is intravasc w/ hemoglobinuria, host atb against donor RBC atgs is extravasc w/ jaundice |
| Febrile nonhemolytic | 1-6hrs | Fever , HA, chills, flushing | Host atbs against donor HLA/WBCs or cytokines from storing blood |
| TRALI | <6 hrs | Noncardiogenic pulm edema, SOB | Donor atbs again recipient's neutrophils and lung cells |

Fever with hemodynamic changes = acute hemolytic

Fever while HDS = febrile nonhemolytic

Hemolytic Transfusion Reaction

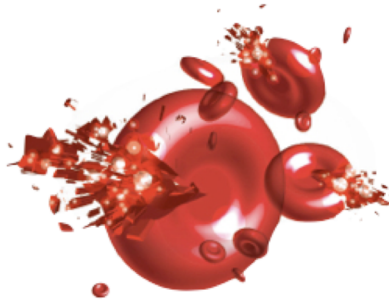
The most serious transfusion reaction

ABO Incompatibility

Lysis of transfused RBCs

Hemoglobinemia and Hemoglobinuria

Immediate fever and chills
Headache
Nausea/vomiting
Myalgias
Dark urine
Hypotension



Management

- 1 Stop the transfusion
- 2 Immediate vigorous crystalloid infusion
- 3 Diuretic therapy to maintain urine output 1 to 2 mL/kg/hr