



Investigation of transfusion reactions

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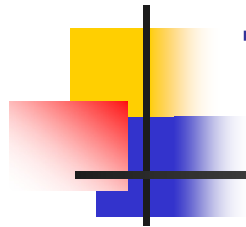
Signs of a Transfusion Reaction

Acute Transfusion Reaction

- Fever
- Rigors
- Restlessness / anxiety
- Dyspnoea
- Pain at infusion site
- Pain in abdo / back / chest
- Respiratory distress
- Hypotension
- Tachycardia
- Haemoglobinuria
- Unexpected bleeding (DIC)

Mild Allergic Reaction

- Fever
- Urticaria
- Rash
- Hives



Transfusion Reaction Form

- **Patient details**
- **Date of transfusion reaction**
- **Type of product**
- **Component details- ABO and Rh**
- **Is it a genuine transfusion reaction?**
- **Is it allergic or haemolytic transfusion reaction?**



Review of patient transfusion history

- **Have they had a previous transfusion recently?**
- **How many Units transfused?**
- **Medications**
- **Other potential causes for signs symptoms of reaction**
- **Recovery time**



Standard investigations

- **FBC, renal and LFTs, urine for haemoglobin**
- **DAT – pre and post**
- **Repeat compatibility testing- group and antibody screen, crossmatch, elution studies, ?serological crossmatch**
- **Haemolysis screen- LDH, haptoglobin and reticulocytes**
- **IgA level, HLA, mast cell tryptase**



Management

- **Infection – blood cultures on patient and sample, withdrawal of components from implicated donor, donor testing and management of donor**
- **IgA deficiency- use IgA deficient products, liaise with allergy specialist**
- **Haemolytic reaction – supportive management (IV fluids, maintain urine output). Blood negative for causative alloantibody. Avoid further transfusion unless necessary**



To finish off.....

- **Appropriate flag - ? New antibody**
- **Samples to NHSBT**
- **Review with results of transfusion reactions and close the loop**
- **SHOT/SABRE**