Consent for Blood Transfusion
Guidance for Healthcare Practitioners in the UK

Informed consent discussion

This is a generic list covering the SaBTO guidance recommendations – the discussion should be tailored to cover what is important to the individual patient.

☐ **BENEFITS**

Red cells: Relieve symptoms of anaemia;
Prevent complications of anaemia (tissue ischaemia, organ damage);
Earlier mobilisation/ quicker recovery after illness or surgery

Platelets/plasma: Stop or prevent bleeding

☐ **RISKS** and actual or potential consequences

- Wrong blood/wrong patient
- Febrile non-haemolytic reaction
- Allergic and hypotensive reactions
- Pulmonary complications:
  - Transfusion-Associated Circulatory Overload (TACO)
  - Non-TACO: Transfusion-Related Acute Lung Injury (TRALI)
- Haemolytic Transfusion Reaction - acute or delayed
- Transfusion Transmitted Infection - bacterial, viral, other
- Antibody formation
- Iron overload
- Unknown risks
- Other complications – TANEC and TA-GvHD
- The patient can no longer donate blood

See reverse for explanation of these risks

☐ **ALTERNATIVES** as relevant/appropriate to the clinical situation

Red cells: IV/Oral iron; Other haematinic replacement (B_{12}, folate); Erythropoietin; Cell salvage (surgery)

Plasma: Factor concentrates if applicable

Platelets: Tranexamic acid

☐ **INFORMED PATIENT**

Provide patient information sheets, allow time to read and give an opportunity to ask questions. There may be particular considerations to take into account for specific patient groups, such as paediatrics, multi-transfused, etc.

☐ **CONSENT (or REFUSAL)**

Document your discussion and outcome in the patient's care records. If the patient refuses the proposed treatment (transfusion), try to explore why; contact a transfusion expert if required. Ensure the patient understands the possible consequences of declining the transfusion; ensure any advance decision is applicable and valid.

This document was downloaded from:
https://www.jpac.org.uk/transfusion-practice/consent/guidance-for-healthcare-practitioners/

To see the Frequency and Risk Reduction measures for each of these, scan or click on the QR code ↓

Wrong blood/wrong patient – where a patient is transfused with blood component of an incorrect blood group or was intended for another patient. This could potentially lead to an ABO incompatible transfusion, which could be fatal.

Febrile non-haemolytic reaction – characterised by a rise in temperature and/or other inflammatory symptoms such as rigors, myalgia or nausea. In some cases, they may require medical intervention. The cause is not fully understood but is thought to be due to residual white cells in the component or cytokines built up during storage. Usually, a reaction to a specific unit of blood component, it is difficult to mitigate against and often unpredictable.

Allergic reactions are those occurring up to 24 hours following a transfusion of blood components, for which no other obvious cause is evident. These are reactions to plasma proteins in the donor unit (often against a specific donor); difficult to avoid and usually unpredictable. Range from mild to severe (including anaphylaxis), with symptoms including flushing, urticaria or rash, wheeze, bronchospasm, stridor, angioedema and circulatory problems (not typically associated with fever type symptoms).
Hypotensive reactions – defined as a decrease in blood pressure during or within 1 hour after cessation of a transfusion, most often present as a sudden, profound drop in blood pressure within 15 minutes of starting the transfusion and respond rapidly to stopping the transfusion. Thought to be mediated by bradykinin response. Range from moderate (a drop in systolic blood pressure of ≥30 mmHg and a systolic blood pressure of ≤80 mmHg) to severe (shock).

Transfusion-Associated Circulatory Overload (TACO) – acute or worsening respiratory compromise and/or acute or worsening pulmonary oedema during or up to 12 hours after transfusion.
Can occur after transfusion of relatively small volumes if there are patient risk factors.

Non-TACO: Transfusion-Related Acute Lung Injury (TRALI) – acute dyspnoea with hypoxia and clear evidence of pulmonary oedema on imaging developing within 6 hours of transfusion, where the patient's respiratory state in the last 12 hours was considered as stable or improving and circulatory overload is not thought to be a major contributor to the reaction.
May be due to antibodies in the donor which react against recipient white blood cells.

Haemolytic Transfusion Reaction (HTR) occurs when antibodies in the patient's plasma react with antigens on transfused allogeneic red blood cells, causing haemolysis. HTR occurring during, or within 24 hours of, transfusion is classed as *acute*; a *delayed* HTR can occur days to weeks after the transfusion. Symptoms include fever, rigors, chills, hypotension, pain, dyspnoea, tachycardia, nausea, or restlessness; acute HTR can be life-threatening.

Transfusion Transmitted Infection (TTI) – an infection following a transfusion, where there was none before and no alternative source of infection, and at least one component transfused came from a donor with the same transmissible infection or was shown to contain the agent of infection. TTI may be bacterial, viral, or other such as prions, protozoa and filaria.

Antibody formation – atypical antibodies can form when the patient's immune system has been exposed to blood group antigens that they do not have themselves. This can happen following a blood transfusion or a pregnancy.

Iron overload – non-bleeding patients who receive multiple units of red cells (>10) are at risk of having excess iron stored in their body tissues leading to iron toxicity. This can damage organs such as the heart and liver. Each unit of red cells contains about 200-250 mg of iron.

Unknown risks – there is an established network in the UK which continually collates and analyses reports of adverse reactions and events related to transfusion (the SHOT haemovigilance system). This enables any new emerging safety concerns or trends to be identified and addressed promptly.

Other Complications

Transfusion-Associated Necrotising Enterocolitis (TANEC) – necrotising enterocolitis (NEC) is a serious neonatal gastrointestinal condition that affects about 1 in 20 very premature babies; about 1 in 3 will die of NEC, survivors are at high risk of long-term health and developmental problems.
Transfusion-Associated Graft versus Host Disease (TA-GvHD) – engraftment and clonal expansion of viable donor lymphocytes in a susceptible host, characterised by fever, rash, liver dysfunction, diarrhoea, pancytopenia and bone marrow hypoplasia occurring less than 30 days after transfusion.