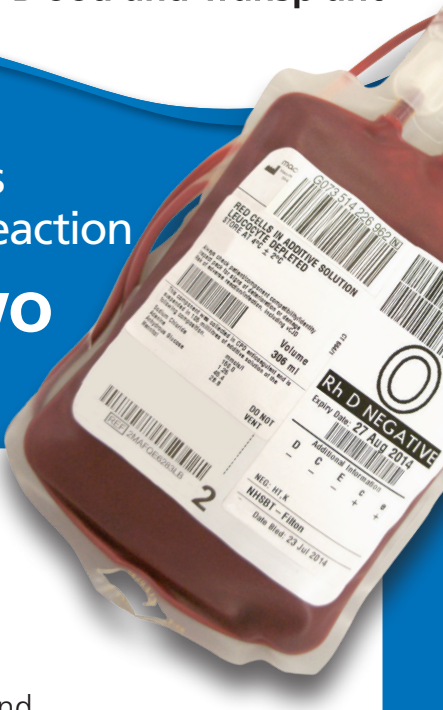
NHS
Blood and Transplant

Single unit blood transfusions reduce the risk of an adverse reaction

Don't give unit two without review



Before you transfuse your patient:

- Does their current haemoglobin level indicate a need for transfusion?
- Do they have symptoms of anaemia?
- What is their target haemoglobin level and would this be achieved by transfusing one unit?
- Only request one unit at a time for stable non-bleeding patients.
- Document the reason for the transfusion.

Each unit transfused is an independent clinical decision

Clinically re-assess your patient after each unit is transfused:

- ✓ Do they still have symptoms of anaemia?
- ✓ Are there any signs or symptoms of a transfusion reaction?
- ✓ Is further transfusion appropriate? Re-check haemoglobin level.

Indications for the use of red cells in adults

This guidance is based on the NBTC Indication Codes for Transfusion (January 2020)

Red cell dose

In the absence of active bleeding, use the minimum number of units required to achieve a target Hb. Consider the size and weight of your patient; assume an increment of 10g/L per unit for an average 70kg adult.

R1 Acute bleeding

Acute blood loss with haemodynamic instability. After normovolaemia has been achieved/maintained, frequent measurement of Hb (including use of near patient testing) should be used to guide the use of red cell transfusion.

R2 Hb ≤ 70g/L stable patient acute anaemia

Consider a Hb threshold of 70g/L and a target Hb of 70-90g/L to guide red cell transfusion. There are different recommendations (based on weak evidence) from other organisations e.g. Association of Anaesthetists.

R3 Hb ≤ 80g/L stable patient and acute coronary syndrom

Use an Hb threshold of 80g/L and a target Hb of 80-100g/L.

R4 Chronic transfusion-dependent anaemia

Transfuse to maintain an Hb which prevents symptoms.
Suggest an Hb threshold of 80g/L initially and adjust as required.
Haemoglobinopathy patients require individualised Hb thresholds depending on age and diagnosis.

5 Radiotherapy – maintain Hb > 100g/L

There is some evidence for maintaining an Hb of 100g/l in patients receiving radiotherapy for cervical and possibly other tumours.

R6 Exchange transfusion

References:
1. Robinson, S. et al. on behalf of the British Society for Haematology (BSH) (2017) The administration of blood components
2. National Institute for Health and Care Excellence (2015) Blood transfusion. NICE guideline (NG24)
3. National Blood Transfusion Committee (2020) Indication Codes for Transfusion in Adults – An Audit Tool 2020 Update https://www.transfusionguidelines.org/uk-transfusion-committees/national-blood-transfusion-committee/responses-and-recommendations

Further copies are available from NHSBT.CustomerService@nhsbt.nhs.uk BLC711.4 2122180 Version 5 – June 2021