

SW Regional Transfusion Committee

Guidance for the use of Blood Components

The advice below is based on recommendations from the National Blood Transfusion Committee, a Manual for Blood Conservation and approved by the SW Regional Transfusion Committee.

Red Cell Concentrates

- **Acute blood loss/peri-operative transfusion**
 - In a controlled situation, with adequate volume replacement – transfuse if blood loss >30%. This equates to a Hb of ~7g/dl
 - Uncontrolled haemorrhage – Hb unreliable, resuscitation required by experienced clinician
 - If further blood loss unpredictable eg gastrointestinal haemorrhage keep Hb >10g/dl
- **Critical care** – maintain the Hb >7g/dl
- **Post-chemotherapy** – suggest Hb threshold of 8 or 9g/dl
- **Radiotherapy** – suggest maintain Hb >10g/dl
- **Chronic anaemia** – maintain Hb to prevent symptoms of anaemia. Hb >8g/dl appropriate for many patients
- **Known cardiovascular disease** or significant risk factors, suggest Hb >8g/dl instead of >7g/dl
- **Symptoms / signs of anaemia** for which red cells may be required include; increased angina, new ischaemia on ECG, syncope/postural hypotension or breathless and/or tachycardia for no other reason

Transfusion to above an Hb of 10g/dl is very rarely required

FFP (12-15ml/kg)

- **Replacement of coagulation factor deficiency** where factor concentrate unavailable
- **Bleeding and coagulopathy** with PT above upper limit of reference range
- **Massive transfusion** use local guidelines
- **Reversal of warfarin** if major bleeding or emergency surgery - **prothrombin complex concentrate** usual treatment of choice
- **Liver disease patients** with a PT within 4 seconds of the control value are unlikely to benefit
- **Thrombotic thrombocytopenic purpura** when available virally inactivated

Platelets (1 adult therapeutic dose)

- If platelet count **<10** x10⁹/l
- If platelets **<20 x10⁹/l with additional risk factors** for bleeding eg sepsis
- **Active bleeding** or pre invasive procedure keep >50 x10⁹/l and refer to local guidelines
 >75 x10⁹/l if massive bleeding
 >100 x10⁹/l if multiple, eye or CNS trauma/surgery
- If **bleeding caused by platelet dysfunction**

Cryoprecipitate

- Bleeding or before an invasive procedure **if fibrinogen <1g/l**
- Bleeding from **thrombolytic therapy**
- Renal or liver failure with abnormal bleeding when DDAVP not appropriate
- Inherited hypofibrinogenaemia when concentrate not available

Further details on blood transfusion will be available on hospital intranet sites or from the blood transfusion laboratory.