

# Scottish Paediatric & Adult Haemoglobinopathy Network

## Paediatric guideline for Chronic Transfusion in Thalassaemia

### Decision to start regular transfusion

Transfusion should be started when there is clinical evidence of severe anaemia, FTT and/or thalassaemic bone deformity.

### Aims of Transfusion

- Trough Hb levels should be maintained at 90-105 g/l
- A period of hypertransfusion (trough >130 g/l) may be considered prior to SCT.

### Pre transfusion Issues

- Extended RBC phenotyping (or genotyping) should be undertaken before starting regular transfusion and should include typing for : D, C, c, E, e, K, Fy<sup>a</sup>, Fy<sup>b</sup>, JK<sup>a</sup>, JK<sup>b</sup>, M, N, S and s)
- Vaccinate against hepatitis B.
- Consent for long term transfusion should be recorded.

### Red cell selection & transfusion

Red cell requirements:

- ABO compatible
- Fully matched for Rh antigens and Kell
- Negative for current and previously detected significant antibodies
- Units should be <2 weeks old.

A transfusion volume of 15-20ml/kg every 3-5 weeks should achieve the required target.

### Monitoring

- Regular height & weight (3 monthly)
- Regular assessment of spleen size (3-4 monthly)
- Record transfusion requirements – volume, frequency and target/actual pre transfusion Hb (at each transfusion)
- Monitoring for evidence of iron overload (see section on iron chelation)
- Transfusion reactions should be investigated and managed according to the BCSH guideline on the investigation and management of acute transfusion reactions.

### General points

Pre-arranged transfusion should be started within 30 minutes of arrival.

### References:

1. UKT Standards
2. BSH Transfusion guidelines

#### NOTE

*This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.*