

## C14. TRANSFUSION REGIMENS IN MAJOR THALASSAEMIA- NITH EXPERIENCE.

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**Background:** Basic treatment in thalassemia major is the regular blood transfusions throughout life in parallel with iron chelation therapy. Current transfusion schemes for thalassemia major have main objective adequate suppression of bone marrow hyperactivity. There are: 1) super-transfusion regimen maintaining pretransfusion Hb over 11g/dl, 2) hipertransfusion regime with pretransfusion Hb values over 10g/dl and 3) moderate transfusion regimen with values between 9 and 10g/dl.

**Aim:** Analyses of blood transfusion regimens for major thalassaemia patients in NITH Subjects There are a number of 100 patients with  $\beta$  thalassemia major registreted at NITH level, aged 4 and 46, in chronic transfusion every 2-5 weeks. Our practice involves transfusion of leucodepleted red cell concentrates (pre-storage filtration) extended RhD-Kell phenotype, before each transfusion being performed cross-match tests and screening new irregular antibodies.

Most patients are in moderate transfusion regimen, maintaining pretransfusion Hb values over 9g/dl; it allowing normal growth and development of the body, conducting of regular physical activity and proper suppress bone marrow activity. There are also a number of patients (20-30%) who are rather in an undertransfusion regime with mean pretransfusion Hb about 8g/dl.

**Conclusion:** Optimal transfusion regimen is one that can correct severe anemia, which suppress ineffective erythropoiesis and minimizes iron accumulation from transfusion.

Sustained transfusion therapy maintaining pretransfusion Hb values over 9g/dl, alongside the needs of adjusted chelation therapy for each patient led to a significant increase in quality of life and its duration for thalassemia major.