

- myelomeningocele. *Eur J Pediatr Neurol* 2002; 6: 109-113.
2. McLone DG, Knepper DA. The cause of Chiari II malformation. A unified theory. *Pediatric Neuroscience* 1989; 15: 1-12
  3. Sener RN. Cerebellar agenesis versus vanishing cerebellum in Chiari II malformation. *Comput Med Imaging Graphics* 1995; 6: 491-494.

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## First-Cousin BMT in Thalassemia with Thymogam Conditioning

Allogeneic bone marrow transplantation (BMT) is the only curative therapy for thalassemia major. The cure rates in class 1 thalassemia are 90-95% and about 70-80% in class 3 thalassemic children(1). However, only 25-30% of these children have a HLA identical sibling available as a donor for possible BMT(2). In such a situation the parents and first cousins are an option as a donor, when a history of consanguineous marriages is a custom in certain families. We had one such situation where a sibling donor was not available, but a first cousin of the patient was HLA identical, and was hence used as the donor.

The conditioning regimen used for bone marrow transplant in thalassemia involves the usage of ATGAM (Equine antithymocyte globulin). This drug is used as an immunosuppressive agent to suppress the T-lymphocytes. Thymogam is anti-thymocyte globulin harvested from horses immunized with T-lymphocytes and is manufactured in India. Thymogam costs half the price of ATGAM and has been used in the treatment of aplastic anemia in India(3) and also in allogeneic peripheral blood stem cell transplant(4). However it has not been used as conditioning agent in BMT. We recently used thymogam (30 mg/kg/d from day 4 to day 2) for

conditioning regimen in BMT for thalassemia with an intention of reducing costs. The effort was successful and we recommend this conditioning as one option in patients with thalassemia major.

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## REFERENCES

1. Lucarelli G, Andreani M, Angelucci E. The cure of thalassemia by bone marrow transplantation. *Blood Rev* 2002; 16: 81-85.
2. Richard K Burt, H. Joachim Deeg, Scott Thomas, George W. Santos. Bone marrow transplantation (Vademecum). 1996; 133-135. Landes Biosciences. USA.
3. Choudhry DR, Kumar R, Mishra P, Mahapatra M, Chatterjee T, Saxena R, *et al*. Response to antithymocyte globulin therapy in severe aplastic anemia: A single center study from India. *Turk J Haematol (supplement)* 2005; 22: Abstract.
4. Kumar R, Prem S, Mahapatra M, Seth T, Chowdhary DR, Mishra P, *et al*. Fludarabine, Cyclophosphamide and horse antithymocyte globulin conditioning regimen for allogeneic peripheral blood stem cell transplantation performed in non-HEPA filter rooms for multiply transfused patients with severe aplastic anemia. *Bone Marrow Transplant*. 2006 Mar 6; [Epub ahead of print].