

Bone Marrow Transplant (BMT) is the Main Cure available for Thalassamia

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Introduction:

The thalassamias refer to a diverse group of hemoglobin disorders characterized by a reduced synthesis of one or more of globin chains ($\alpha, \beta, \gamma, \delta, \epsilon, \zeta$). The main cure available today for thalassamia is bone marrow transplantation (BMT) from compatible donor. On December 3, 1981 a 14-month-old child with β -thalassemia major received BMT from his HLA-identical sister in Seattle. On December 17, 1981 the Pesaro team performed a transplant in a 16-year old thalassamia, using marrow from his HLA-identical brother. This patient rejected the graft.

Methods:

In our study, twenty two transfusion dependent thalassemia patients were recruited. When HLA matched donor was detected, he or she was checked for asymptomatic infection, electrolytes and endocrinopathy. Donors were either heterozygous for β -thalassemia or normal homozygous.

Results:

In our center 22 transfusion dependent hemoglobinopathies (10 girls and 12 boys, age 3-26y, Mean=15.6y) underwent to HSCT from September 2010 until May 2014. Graft failure happened in 3 patients. Retransplantation was done for one patient who was X variant hemoglobinopathy. Twenty patients were disease free and didn't need to transfusion after BMT. Although in our BMT center, few thalassemia patients underwent to transplantation, 20 of 22 were independent to blood transfusion after transplantation. One patient who underwent to retransplantation is independent to transfusion.

Conclusion:

Patients and their family were very pleased and satisfied. We suggest all patients with β -thalassemia who have HLA-identical related donors should be transplanted as soon as possible.

Keyword: Bone Marrow Transplant, HLA-identical, β -thalassemia.

Oral Presentation

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