ANNUAL MEETING ABSTRACTS

1217 The Effect of Megadose of Human Umbilical Cord Blood Mononuclear Cells on Alzheimer's Disease Mice

N. Ende, R. Chen, D. Ende-Harris
Blood Bank, New Jersey Medical School-UMDNJ

Background: Human umbilical cord blood mononuclear cells have been found to delay the onset of vasculites and prolong the life of MLR lpr/lpr mice, that have an autoimmune disease similar to human Lupus. Recent studies have indicated that megadose of human cord blood mononuclear cells can delay the onset of symptoms of paralysis in SOD1 mice, that carry a mutant transgene for amyotrophic lateral sclerosis, for an average of 52 days. This therapy on SOD1 mice was conducted without the use of immunosuppression. We therefore decided to evaluate the effect of meagdose of cord blood mononuclear cells on mice with Alzheimer's disease without the use of immunosuppression.
Design: 24 mice were divided into 3 group (a) 9 untreated (b) 7 treated with congenic bone marrow (c) 8 treated with 105-112 x 10^6 `cord blood mononuclear cells.
Results: At 153 days of age: in the untreated group, 7 out of the 9 animals were dead in group (a) 6 of the 7 mice were dead in group (b), all animals were alive group (c) that received a megadose of cord blood mononuclear cells.
Conclusion: Preliminary studies indicate that megadose of human umbilical cord blood mononuclear cells can significantly delay the onset of symptoms and prolong the life of Alzheimer's disease mice. **(Supported by the Abraham S. Ende Research Foundation).**