



Allogenic Mesenchymal Stem cell Therapy for CADASIL patient: first clinical Case Report

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Abstract:

CADASIL, Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy, is an inherited small vessels disease that characterized by central nervous system dysfunctions caused by mutations in the Notch-3 gene. Clinical manifestations accrue due to brain's vasculopathy, neurodegeneration, and immune system reaction. We describe here an effective method for treatment of CADASIL by using mesenchymal stem cell therapy. A CADASIL case, 36 years old man, neuroimaging and genetic analysis for Notch-3 confirmed the diagnosis, is reported. In the present case, two stem cell injections have been performed at intervals of three weeks. The patient had no significant complications in the post-transplant period. No immediate or delayed side effects following MSC infusion were observed. He developed neither malignancy nor unwanted cells or any infectious complications 18 months after the transplantation, we performed a Cerebral MRI showed stable cerebral lesions and his gait and balance improved. Anti-HLA Antibody measurement confirmed that the patient's immune system was not stimulated by injected cells. With regard to his neurological symptoms, Scale for the assessment and rating of ataxia (SARA), The Multiple Sclerosis Functional Composite measure (MSFC), Quality of Life Assessment (QOL), and Cognitive Functioning Status (ACE-R), the patient did not has further deterioration of his previous clinical status in the follow up period of 18 months.

Further studies need to be performed to show the generalizability of the results.



Biography:

Dr. Vahideh Nasr working as Assistant Professor at Shahid Beheshti University of Medical Sciences, Iran. She has interest towards Research Interest on Physical Therapy and Rehabilitation.

Publication of speakers:

- Vahideh Nasr et al ; Allogenic Mesenchymal Stem Cell Therapy for CADASIL Patient: First Clinical Case Report, 2013 Sep 27.
- Vahideh Nasr et al ; Three-Dimensional Transesophageal Echocardiography Measurement Of Aortic Valve Surface Coaptation Indexed To The Annular Area Correlates With Severity Of Aortic Insufficiency; 2013 May 13.

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