The 6th International Road Safety and 3rd International Neurotrauma Congress
Shefa Neuroscience Research Center, Tehran, Iran, 15-16 February, 2017
The Neuroscience Journal of Shefaye Khatam
Volume 4, No. 4, Suppl 2

Poster Presentation

From Well to Bed: Stem Cell Therapies for Neurotrauma

Hadi Aligholi*

Department of Neuroscience, School of Advanced Medical Sciences and Technologies, Shiraz University of Medical Sciences, Shiraz, Iran

Published: ***15 February, 2017***

Abstract

Neurotrauma is one of the main medical problems that affect considerable number of population especially young persons in all countries. Neurotrauma not only is a serious threat for life but also creates various disabilities and consequently imposes large costs to society. Following central nervous system (CNS) injury, tissue damage occurs via primary and secondary mechanisms. Despite many attempts, there is no definite solution for repairing of damaged tissue of CNS. In recent years, stem cell therapy has opened a new way in front of scientists to address this problem. Today, several sources are available for neural repairing including embryonic, fetal, umbilical and adult stem cells. Embryonic stem cells have great proliferative capacity but their use is associated with ethical and immunological concerns. On the other hand, adult stem cells create an outstanding opportunity for autologous transplantation. In this regard, adult neural stem cells can produce real neural cell lines including neuron, astrocyte and oligodendrocyte. Although there are several questions about neural stem cell utilization such as the fate of stem cells and the control of cell dividing after transplantation, which need more basic studies, some clinical trials have been started in phase I or II especially for spinal cord injury. In conclusion, we are in the beginning of the stem cell therapy for CNS repair, consequently scientists must move forward with caution.

Keywords: Neurotrauma, Stem cell, Central nervous system.

Corresponding Author: Hadi Aligholi
E-mail: *hadialigholi@yahoo.com*

[Downloaded from shefayekhatam.ir on 2026-11-06]