

Regeneration of nerves using Stem Cells to cure Autism: Highly sophisticated method to normalise life

Prithiv K R Kumar

Director, Principle Scientist- Poichyadical Stem Cell Centre for Research and Development(POSCERD), Chicago, USA

Abstract

Autism disorder has complex and heterogenous neurodevelopmental pathologies with immune system dysfunction. Autism basically deprives ones communication and social skills including immune abnormalities and neural hypoperfusion. They also cause inflammation manifesting in serum levels of macrophage infected cytokine and thymine altering cytokine. Several factors in neurobiology, changes the application and concept to a more adaptive approach. The best method of them is the cell based therapy. Stem cells have shown potential immunological properties, hence they are helpful in treatment. Molecular and regenerative aspects holds a greater expectations for therapy of Autism spectrum disorder(ASD). This review will focus on stem cell based therapy for ASD in which cells can be potentially designed to target abnormal neurotransmitter, activated microglia, dysfunction membrane in brain, pancreine immunomodulatory effects, blood brain barrier disruptions.

Introduction:

Brief introduction into ASD: They are complex, severe heterogenous neurodevelopmental disorder. Dysfunction in social, communication skills, restricted, repetitive and stereotypical verbal and non verbal behaviour[1]. There are also biochemical events such as intestinal dysbiosis, limited production of glutathione, dysfunction of mitochondria, inflammation of metal toxicity, endoplasmic reticulum and oxidative stress, lower activity of brain immune system[2]. The above are the diverse group of disorders, which helps ASD start on first embryonic stage with rupture of cells leading to disruption and proliferation ending up into laminar disorganisation, neural maturation and reduced neural functioning

Received: September 6, 2022; **Accepted:** September 18, 2022; **Published:** September 28, 2022

Biography

The Prithiv K Kumar is a Stem cells and bio-nanotechnology. Stem cell is my knowledge, India. he is in the third year of his Ph.D. and is a holder of DST-INSPIRE fellowship. She has qualified UGC NET exam twice. The Prithiv K Kumar CEO, La' zer Healthcare Limited, Chicago, USA.

The Prithiv K Kumar is a Stem cells and bionanotechnology. Stem cell is my knowledge, India. he is in the third year of his Ph.D. and is a holder of DST-INSPIRE fellowship. She has qualified UGC NET exam twice. The Prithiv K Kumar CEO, La' zer Healthcare Limited, Chicago, USA.