The 2nd International Neuroinflammation Congress and 2nd Student Festival of Neurosience
Shefa Neuroscience Research Center, Tehran, Iran, 17-19 April, 2018
The Neuroscience Journal of Shefaye Khatam
Volume 6, No. 2, Suppl 1

Poster Presentation

Combination of Herbal Medicine and Nanomedicine: a Novel Therapeutic Target for Neurodegenerative Diseases

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Published: *17 April, 2018*

Abstract

Inflammation is a pathologic condition that includes a wide range of diseases namely neurodegenerative diseases. Several natural anti-inflammatory components have been identified in plant extracts used in traditional medicine for the relief of inflammation. Herbal medicine is showing difficulty in crossing the blood-brain barrier (BBB). So that the ability to pass the BBB is the main concern for using them at neurodegenerative diseases treatment. Nano-Liposomes and Noisomes provide a unique opportunity to deliver pharmaceuticals into the cells and interaction with the target site. So they have been considered as Nano-carriers for brain drug targeting and overcoming the BBB and transition anti-inflammation herbal medicine namely curcumin for neurodegenerative disease curing. The aim of this review is to explore the different approaches studied to transport and deliver herbal medicine to the brain by using liposome and noisome systems as a carrier. This review has analyzed the most recent approaches for herbal medicine delivery to the central nervous system (CNS). The overall literature clearly shows that herbal medicine needs a modern delivery system for treatment of neurodegenerative disease. Several systems have been used to deliver drugs to the brain, such as using peptides, antibodies, and RNA aptamers for optimizing targeting ability liposomes and noisome for passing BBB. It can be concluded that the development of liposomes and noisome for brain delivery are still in their infancy, although these systems have the potential to revolutionize the ways in which medicine is ordered.

Keywords: Nano, Herabal Medicine, Anti-Inflammation Medicine, Liposome, Niosome

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