The 1st International Neuroinflammation Congress and 1st Student Festival of Neurosience

Shefa Neuroscience Research Center, Tehran, Iran, 11-13 April, 2017

The Neuroscience Journal of Shefaye Khatam

Volume 5, No. 2, Suppl 2

Poster Presentation

The Role of Cannabinoids in Ischemia Stroke

Mohammad Bagher Khorrami[1,2], Fatemeh Forouzanfar[3], Hamid R. Sadeghnia[3,4], Sajad Sahab Negah[5*]

[1]Department of New Sciences and Technology, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

[2]Social Security Organization, 17th Shahrivar Hospital, Mashhad, Iran

[3]Department of Pharmacology, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

[4]Neurocognitive Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

[5]Department of Neuroscience, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Published: ***11 April, 2017***

Abstract

Inflammation serves a protective function in controlling infections and promoting tissue repair, and can also cause damage to tissue and disease. Many types of cells involved in this process, expressing the components of the cannabinoid signaling system that can be controlled endogenously or pharmacologically. Cannabinoids inhibit neuroinflammation and the immune cells express the whole machine which constitutes a functional cannabinoid signaling system. Two cannabinoids G receptors coupled to proteins were cloned; CB1 receptors were expressed primarily by neurons and CB2 receptors, which are mainly expressed by immune cells. Cannabinoids have anti-inflammatory effects Animal models of neuroinflammation. Inflammation of the central nervous system can be occurred as a secondary injury in Ischemic stroke is a major cause of death and disability in major industrialized countries. It has been reported that activation of CB1 and CB2 receptors prevented neuronal death in response to ischemia. We suggested the evaluation of agonist or antagonist of cannabinoid receptors may be effective on apoptosis and inflammation in ischemic stroke.

Keywords: Cannabinoid, Ischemia, Neuro-inflammation, CB1, CB2

Corresponding Author: Sajjad Sahab Negah

Email: *Sahabsajad@yahoo.com*

[Downloaded from shefayekhatam.ir on 2024-04-19]