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

Oral Presentation

Coagulation Factors in Multiple Sclerosis may Represent Diagnostic and Therapeutic Strategies

Mokhtar Ahmadi*, Hossein Feizi, Fatemeh Shahbeigi

Islamic Azad University, Mashhad Branch, Mashhad, Iran

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

Abstract

Multiple sclerosis (MS) is a neuroinflammatory autoimmune disease which mediated by various molecular and cellular immune components However Recent reports have shown that coagulation factors that traditionally separate from the immune system might also be involved in MS development and progression.studies on experimental autoimmune encephalomyelitis (EAE) and human MS patients reports alterations of some factors of the coagulation cascade such as fibrin, thrombin, prothrombin, factor X and FXII to confirm that coagulation factors have an important role in pathogenesis of autoimmune inflammatory disorders, recent studies report that Genetic deficiency or pharmacologic blockade of FXII significantly protected from EAE and also fibrin depletion, either genetically or using anticoagulants, significantly reduces neurolinflammation, and axonal damage in EAE. Another important study shows that increase thrombin activity is an early event and increases with progression of neuroinflammatory disease, with noted microglial activation and axonal damage. In this review we aim to evaluate elevated coagulation factors of tissue or blood as a new therapeutic strategy for the treatment of MS or other neuroinflammatoy disorders. As we described some coagulation factors such as fibrin and thrombin are significantly increased in MS and blockade of this factors in EAE improve neurolinflammation, and axonal damage so maybe using anticoagulants in Clinical trials develop treatment of MS.

Keywords: Coagulation factor, Multiple sclerosis, MS, Neuroinflammation

Corresponding Author: Mokhtar Ahmadi

Email: *Mokhtarahmadi88@yahoo.com*

[Downloaded from shefayekhatam.ir on 2026-09-11]