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Poster Presentation

A Critical Balance between Repair and Demolish of Proinflammatory Factors to Improve Effects of Neuroinflammation

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Abstract

One of the most important problems in neuroscience researches is the understanding what is the communication between the immune system and central nervous system. Proinflammatory factors play an important role in this communication. The dysregulation of proinflammatory factors such as cytokines and chemokines is a central feature in the development of neuroinflammation. One of the important cytokines is tumor necrosis factor superfamily molecules that role of this cytokine is in the activation, proliferation, differentiation, and migration of immune cells into the central nervous system. Another important cytokines especially in the onset of inflammatory process is interleukin-1 because of overexpression of this factor which affects with produces many reactions that cause dysfunction and neuronal death. Neuroinflammation is inflammation of the nervous tissue and it is immune response to variety of cues such as infection, toxic metabolites, traumatic brain injury, or autoimmunity. The central nervous system is an immunologically privileged site because the role of blood brain barrier, it has special structure that is composed of astrocytes and endothelial cells. This review will focus on how proinflammatory factors affect neuroinflammation process.

Keywords: Neuroinflammation, Proinflammatory, Cytokine

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