The 5th International Road Safety and Pediatric Trauma Congress

Shefa Neuroscience Research Center, Tehran, Iran, 20-22 January, 2016

The Neuroscience Journal of Shefaye Khatam

Volume 3, No. 4, Suppl. 3

Poster Presentation

Is Interleukin-1 Beta Correlated with Intra Cranial Pressure after Traumatic Brain Injury?

Sajad Sahab Negah[1, 2], Zabihollah Khaksar[2], Ali Jahanbazi Jahan-Abad[1*], Arezou Eshaghabadi[1], Sayed Mostafa Modarres Mousavi[1], Hassan Hossini Ravandi[1]

[1]Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran

[2]Histology and Embryology Group, Department of Basic Sciences, Faculty of Veterinary Medicine, Shiraz University, Shiraz, Iran

Published: ***20 January, 2016***

Abstract

Traumatic brain injury is a leading cause of disability and death from injury in the world. The Interleukin-1 (IL-1) is a family of cytokines that act as key mediators of the inflammatory response peripherally and centrally. Based on many studies, researchers found that the IL-1 is the well-known molecule in relation to acute TBI in the models of both focal and diffuse injuries. The IL-1 family includes the closely related agonists IL-1α and IL-1β. Interleukin-1 beta (IL-1β) is a pro-inflammatory cytokine with a key role in the inflammatory response following TBI and studies indicate that attenuation of this cytokine improves behavioral outcomes. IL-1β is measurable in the serum or CSF of healthy individuals. Although changes in IL-1β expression in CSF and serum following injury appear to be small, attempts have been made to correlate IL-1β levels with outcome. It have been reported that in severe brain injury patients, high concentrations of IL-1β in CSF were associated with poor outcome and increased intra cranial pressure.

Keywords: TBI, IL-1β, Intra Cranial Pressure.

Corresponding Author: Ali Jahanbazi Jahan-Abad

E-mail: *a.jahanbazi65@yahoo.com*

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