



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 Khaksar², Ali Jahanbazi Jahan-Abad^{1*}, Arezou Eshaghabadi¹, Sayed Mostafa Modarres Mousavi¹, Hassan Hossini Ravandi¹

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

²Histology 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-1 α and IL-1 β . Interleukin-1 beta (IL-1 β) 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-1 β is measurable in the serum or CSF of healthy individuals. Although changes in IL-1 β expression in CSF and serum following injury appear to be small, attempts have been made to correlate IL-1 β levels with outcome. It have been reported that in severe brain injury patients, high concentrations of IL-1 β in CSF were associated with poor outcome and increased intra cranial pressure.

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

***Corresponding Author:** Ali Jahanbazi Jahan-Abad

E-mail: a.jahanbazi65@yahoo.com