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Poster Presentation

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

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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-1β, Intra Cranial Pressure.

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