



The 2nd International Neuroinflammation Congress and 2nd Student Festival of Neuroscience

Shefa Neuroscience Research Center, Tehran, Iran, 17-19 April, 2018

The Neuroscience Journal of Shefaye Khatam

Volume 6, No. 2, Suppl 1

Poster Presentation

An Overview of the Effect of Inflammation Induced by Temporal Epilepsy on the Hippocampus and Amygdala Based on Nerve iMaging

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Published: 17 April, 2018

Abstract

Temporal epilepsy is a common neurological disorder that begins before adulthood. Two -way factors in causing epilepsy and continuing attacks can be inflammation that is caused by immune system and infection. The hippocampus and amygdala are part of a limbic system that relies on memory and emotional regulation. The purpose of this study was to review the effect of epileptic-induced inflammation on the hippocampus and amygdala based on neuroimaging. In a vast library search, the keywords “neuropathic inflammation, temporal epilepsy, amp; hippocampus amygdala” were searched for the pedagogical, pedagogical, science and medical sciences databases, as well as Google Scholar in a five-year period. 50 related articles were identified in English, review articles showed that, contrary to the common view that the cause of temporal epilepsy is the onset of the hippocampus, chronic inflammation resulting from trauma and infection can be an important component in epilepsy. In a recent study on animal and human models that were performed through neuronal imaging, a range of hippocampus and amygdala malformations was observed, which significantly explained the poor performance of memory and learning among affected children than peers. Inflammation, as an effective factor in epilepsy, causes specific biochemical changes in the neurotransmitter of TNFX and decreases glutamate and neuronal levels in the cystic gyrus. Given the available evidence, neuroimaging as an inflammatory diagnostic tool can lead to early epilepsy treatment.

Keywords: Neuroinflammatory, Temporal Epilepsy, Hippocampus, Amygdala, Neural Imaging

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