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Poster Presentation Research

Psychosocial Stress of Maternal Deprivation Enhanced Volume of Lateral Ventricle in Rat Brain

Hassan Hosseini-Ravandi[1], Milad Ahmadi[1, 2*]

[1] Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran.
[2] Faculty of Veterinary Medicine, Karaj Branch, Islamic Azad University, Karaj, Iran.

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Abstract

Brain areas implicated in the stress response include the amygdala, hippocampus and prefrontal cortex. Neonatal stimulation of an animal by handling or by enhanced maternal care induces at adult age a decrease of the hypothalamo-pituitary adrenal (HPA) response to stressors, a decrease of anxiety in a novel environment, and neuroanatomical changes. In this present study we demonstrated that maternal deprivation can affect lateral ventricle volumes in rat brain. After 21 day of ages rats were divided two groups, that social and isolated for 8 weeks in separated case. In 8th week all brains were fixed and after tissue processing, Toloeiden blue staining was done. The histological data showed increased volume in lateral ventricle on isolated rats. The present data at least partly explain contrasting effects of social isolated on volume loss of lateral ventricle in rats.

Keywords: Rat, Stress, Maternal Deprivation, Lateral Ventricle.

Corresponding Author: Milad Ahmadi

E-mail: *pmiladz@gmail.com*

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