عنوان مقاله:

Intraperitoneal injection of Neuroaid on alteration of Stathmin levels in the prefrontal and striatum regions following total sleep deprivation in male Wistar rats

محل انتشار:

هشتمین کنگره علوم اعصاب و پایه و بالینی (سال: 1398)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Sepideh Zarei - *Department of Pharmacology, Pharmaceutical Sciences, Tehran Medical Sciences, Islamic Azad University*

Mohammad Nasehi - *Cognitive and Neuroscience Research Center (CNRC), Tehran Medical Sciences, Islamic Azad university*

Solmaz Khalifeh - *Cognitive and Neuroscience Research Center (CNRC), Tehran Medical Sciences, Islamic Azad university*

Mohammad-reza Zarrindast - *Department of Pharmacology School of Medicine, Tehran University of Medical Sciences, Tehran, Iran*

خلاصه مقاله:

Background and Aim : Studies show that sleep is a fundamental need and is essential for survival. Long-term sleep deprivation has negative effects on health, memory, learning and mechanisms of neural plasticity.Stathmin is one of the important proteins involved in neural plasticity. Stathmin plays a key role in synaptic plasticity and consequently in neural plasticity by controlling microtubule stability and dendritic translocation of AMPA receptors. On the other hand, recent research shows that Neuroaid has neuroprotective property and can increase neural plasticity.Methods : In this study we investigated the effect of intraperitoneal injection of Neuroaid on alteration of Stathmin levels in the prefrontal and striatum regions following total sleep deprivation in male Wistar rats.Results : The results showed that sleep deprivation significantly reduced the Stathmin levels in the prefrontal and striatum regions.Conclusion : Intraperitoneal injection of Neuroaid compensates the decrease in neuronal plasticity caused by sleep deprivation and significantly increases the Stathmin levels in the prefrontal and striatum regions.

کلمات کلیدی:

Sleep deprivation, Neural plasticity, Stathmin, Neuroaid