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Poster Presentation

The Neuroprotection Effect of Erythropoietin in Cerebral Ischemia

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Abstract

Cerebral ischemia causes death of millions people all over the world, annually and also suffering more people from neurological deficits and neuromuscular disorders. In our country, 250 to 300 people experience mild to severe stroke, daily. In this study we reviewed 120 original paper selected from PubMed database. Our keywords were erythropoietin, anti-inflammatory, stroke, neuropathy and cerebral ischemia. Studies have been revealed that anti-inflammatory and neuroprotection effects of erythropoietin are mediated by receptors that available in cerebral cortex, spinal cord, hypothalamus and hippocampus. These effects include the ability to repair neural inflammation, prevention of neural cell death, preservation of surviving neural cells, regulation of neurogenesis, anti-apoptosis and anti-coagulation. Erythropoietin also prevents Alzheimer's disease, Parkinson's disease, epilepsy, multiple sclerosis, and other motor diseases. All studies showed that erythropoietin has anti-inflammatory and neuroprotection properties and can decrease probability of cerebral ischemia, impressively. Today, erythropoietin is considered as an attractive and effective therapeutic approach to cerebral ischemia; one of the most common causes of morbidity and mortality around the world.

Keywords: Erythropoietin, Anti-Inflammatory, Stroke, Neuroprotection, Ischemic Brain

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