



# The 5<sup>th</sup> International Road Safety and Pediatric Trauma Congress

Shefa Neuroscience Research Center, Tehran, Iran, 20-22 January, 2016

*The Neuroscience Journal of Shefaye Khatam*

Volume 3, No. 4, Suppl. 3

## Poster Presentation

### Progesterone Act as Neuroprotective in Traumatic Brain Injury

Elham Mohammadzadeh<sup>1,2\*</sup>, Sajad Sahab Negah<sup>1,3</sup>, Arezou Eshaghabadi<sup>1</sup>

<sup>1</sup>Shefa Neuroscience Research, Khatam Alanbia Hospital, Tehran, Iran

<sup>2</sup>Department of Biology and Anatomical Sciences, Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

<sup>3</sup>Histology and Embryology group, Basic Science Department, Faculty of Veterinary Medicine, Shiraz University, Shiraz, Iran

**Published: 20 January, 2016**

#### Abstract

Traumatic brain injury (TBI) is one of the leading causes of death in men under the age of 35 that mostly occurs due to the road accidents. Current clinical treatments have not enough repair and prevention of secondary damage caused by cytotoxicity. Progesterone, as a primary sex hormone, acts as neuroprotection in TBI and stroke. Progesterone increases anti-oxidants and decreases inflammation factors. Furthermore it contributes in axonal remyelination, and increases synaptogenesis after TBI. This review article focused on the effect of progesterone mechanisms on inflammation factor which involved in TBI. Although, many of TBI mechanisms have not been discovered, but studies showed that this hormone can be a safe treatment for TBI and other neurodegenerative diseases.

**Keywords:** TBI, Progesterone, Neuroprotective.

**\*Corresponding Author:** Elham Mohammadzadeh

**E-mail:** [elhammohammadzadeh85@gmail.com](mailto:elhammohammadzadeh85@gmail.com)