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Poster Presentation

Vitamins Level Change in Spinal Cord Injury

Seyed Reza Abtahi^{1*}, Moosa Javdani², Mohammadreza Alijani¹, Rasool Rahimi Junqani¹

¹Shahrekord University, Shahrekord, Iran

²Department of Clinical Sciences, Faculty of Veterinary Medicine, Shahrekord University, Shahrekord, Iran

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Abstract

Spinal cord injury (SCI) is damage to the spinal cord that leads to sudden loss of motor and autonomic function and sensory under the level of the injury. Studies showed that individuals with SCI has a clear tendency to vitamins level change. The aim of this study was to review the vitamins level in spinal cord injury. Vitamins C level decrease in the injured spinal cord patient. Vitamins C have major antioxidant functions and play certain roles in the secondary injury response to the direct initial spinal cord injury. Vitamin D insufficiency is common in SCI individuals owing to the presence of many contributing factors including limited sun exposure and intake, use of medication and endocrine perturbations. Vitamin E has major antioxidant functions and this vitamin deficiency was shown in persons with SCI. Vitamin B complex helps to alleviate degeneration in the nervous system and vitamin B1 (thiamine), vitamin B6 (pyridoxine) in combination with vitamin B12 are clinically administered. These vitamins levels have varied with progression of spinal cord injury. Vitamin B12 level in the injured spinal cord have been shown decreasing. Although, effectiveness of oral vitamin B12 treatment has not yet been confirmed in persons with SCI. It is recommended that physicians consider vitamins deficiency in their patients with SCI, particularly in those with neurologic and/or psychiatric symptoms. These symptoms may be reversible if treatment is initiated early.

Keywords: Spinal Cord Injuries, Vitamin, Deficiency

***Corresponding Author:** Seyed Reza Abtahi

E-mail: A.bseyedreza46@yahoo.com