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Poster Presentation

The Effect of Melatonin as a Therapeutic Goal on Multiple Sclerosis Through Immune Processes

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Abstract

Multiple sclerosis is an autoimmune disease of the central nervous system which is accompanied by demyelinating the neurons. The imbalance between the T cell effectors and T cell regulators is thought to have a role in the pathogenesis of the disease. Melatonin is a hormone that is secreted by pineal gland which has an important role in circadian rhythm and immune-modulatory effects. Melatonin has an effect on the regulatory T cells and cytokines that suggests its role as a therapeutic target. The researchers experimented that melatonin is reduced in some MS patients which could increase pro-inflammatory cytokines such as TNFα. We review the effect of melatonin on the immune system and clinical symptoms of MS patients. The purpose of this study was to determine the effect of melatonin in improvement the symptoms and down regulation in the immune system of MS patients.

Keywords: Melatonin, Multiple sclerosis, Immune processes

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