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Poster Presentation

The Effect of Melatonin on EDSS and Fatigue in Multiple Sclerosis

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Abstract

Multiple Sclerosisis (MS) is a common demylinating disease of CNS that inflammation and stress oxidative processes have an important role in clinical courses and progression of it. Suppressing the antigen-presenting capacity of glial cells seems a convinient way of reducing inflammatory activity in MS. The aim of the present study was to determine the anti-inflamatory effects of Melatonin on fatigue and EDSS in MS. In a double-blind, placebo-controlled exploratory study, 62 patients with relapsing remitting MS were randomised to oral Melatonin 3 mg or placebo daily for 8 weeks. Scale of Fatigue in MS and disability was studied by assessing FSS (Fatigue Severity Scale) and EDSS (Expanded Disability Status Scale) on weeks 1 and 8. 47 patient in intervention group and 15 patient in placebo group completed the study. In patient, treatment with Melatonin produced a significant decrease in FSS vs placebo patienta.Although in control group،the average of FSS was 35.866 that after intervention، was 41.Because the score of placebo patient is near or upper than 36 ،this study suggested that Melatonin has a significant effect on improving and decreasing fatigue in MS. Also in this study the average of early EDSS was 2.96 in intervention group and 4.86 in placebo group and after treatment with melatonin was 2.8 and 4.53 in intervention and placebo group respectively. This study suggested that melatonin has a weak effect on improvement of disability and EDSS in MS. Our study shows that use of melatonin along side of First-line drugs such as mitoxantrone، IFN – B or glatimer acetate can improve fatigue in patient with MS.

Keywords: EDSS, Fatigue, Melatonin, Multiple Sclerosis

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