

The impact of Vitamin A supplementation on Psychiatric manifestations of Multiple Sclerosis; A double blind placebo control clinical trial

Danesh Soltani ¹, Tina Roostaei ², Mohammad-Hossein Harirchian ^{3*}, Nahid Beladi Moghadam ⁴, Ali akbar Saboor-Yaraghi ⁵, Mohammad-Ali Sahraian ⁶, Shahriar Nafissi ⁷, Mansoureh Togha ⁸, Sama Bitarafan ⁹, Niyaz Mohammadzadeh Honarvar ¹⁰

1-Iranian Center of Neurological Research, Neuroscience Institute, Department of Neurology, Imam Khomeini Hospital, Tehran University of Medical Sciences, Tehran, Iran

2-Iranian Center of Neurological Research, Neuroscience Institute, Department of Neurology, Imam Khomeini Hospital, Tehran University of Medical Sciences, Tehran, Iran

3-Iranian Center of Neurological Research, Neuroscience Institute, Department of Neurology, Imam Khomeini Hospital, Tehran University of Medical Sciences, Tehran, Iran

4-Department of Neurology, Imam Hossein Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran

5-Department of Molecular and Cellular Nutrition, School of Nutrition and Dietetics, Tehran University of Medical Sciences, Tehran, Iran

6- Sina MS Research Center, Neuroscience Institute, Department of Neurology, Tehran University of Medical Sciences, Tehran, Iran

7-Iranian Center of Neurological Research, Neuroscience Institute, Department of Neurology, Shariati Hospital, Tehran University of Medical Sciences, Tehran, Iran

8-Sina MS Research Center, Neuroscience Institute, Department of Neurology, Tehran University of Medical Sciences, Tehran, Iran

9-Iranian Center of Neurological Research, Neuroscience Institute, Department of Neurology, Imam Khomeini Hospital, Tehran University of Medical Sciences, Tehran, Iran

10-Department of Molecular and Cellular Nutrition, School of Nutrition and Dietetics, Tehran University of Medical Sciences, Tehran, Iran

Decreasing the population and activation of inflammatory T helper cells in multiple sclerosis (MS) patients using vitamin A derivatives (retinoic acids) has been well documented. The present study determined the effect of vitamin A supplementation on psychiatric signs in MS patients.

The subjects were 101 relapsing-remitting MS patients enrolled in a placebo-controlled randomized clinical trial. The treatment group was administered 25000 IU/d retinyl palmitate (RP) for 6 months followed by 10000 IU/d RP for another 6 months. The results for baseline characteristics, modified fatigue impact scale and Beck Depression Inventory-II were recorded at the beginning and end of the one-year study.

The non-normal distribution data was compared between groups using a nonparametric test (Mann-Whitney) and normal distribution data was analyzed using a parametric test (independent sample t-test).

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The results showed significant improvement in the treatment group for fatigue ($p = 0.004$) and depression ($p = 0.01$). Vitamin A supplementation helped during interferon therapy in the treatment process and improved psychiatric outcomes for anti-inflammatory mechanisms.

Keywords: Multiple sclerosis, vitamin A, fatigue, depression