

4th International Conference and Exhibition on **Nutrition**

October 26-28, 2015 Chicago, Illinois, USA

Effect of one year supplementation of vitamin C and E on the concentrations of serum 25(OH) D in elderly people

Srour M¹, Alavi Naeini A² and Elmadfa I¹

¹University of Vienna, Austria

²Tehran University of Medical Sciences, Iran

Vitamin D status is affected by aging, elderly patients with MCI (Mild Cognitive Impairment) show different levels of vitamin D status. Insufficient data are available about the influence of long term supplementation with antioxidants on the status of serum 25(OH) D. In this study the impact of one year intervention with vitamin E and C on the content of serum 25(OH) D in MCI-patients was assessed. A 12-month, double-blinded, placebo-controlled trial was conducted in 220 elderly Iranian individuals with MCI aged between 60-75 years. Divided into two main groups, the intervention group included 110 persons who were given a daily dose of 300 mg α -tocopherol acetate and 400 mg ascorbic acid and the other 110 persons (control group) received specially for this study designed placebo. After adjusting for potential confounding factors, serum 25(OH) D contents were assessed in all patients at base line, 6 and 12 months of intervention using ELISA kit. Although serum 25(OH) D levels were throughout the observation, time significantly increased in the supplemented group after 6 months (from 90 ± 9.2 to 120 ± 11.5 nmol/L, $P < 0.001$). The differences found between the control and supplemented groups were not significant after 6 months (control and supplemented: 120 ± 11.0 and 120 ± 11.5 nmol/L, respectively, $P < 0.99$), and also after 12 months of intervention (control and supplemented: 108 ± 10.5 and 115 ± 11.2 nmol/L, respectively, $P < 0.68$). One year of antioxidants supplementation with vitamin E and C in elderly subjects with MCI lead to significant increment in the serum 25(OH) D levels in supplemented group, indicating that this additional moderate dose of α -tocopherol in combination with ascorbic acid may increase the bioavailability of 25(OH) D in the supplemented group.

Biography

Srour M has completed his PhD from Vienna University. His research interests focus on the effect of supplementation on status of essential fatty acids and fat soluble vitamins in elderly population.

srour_77@hotmail.com

Notes: