

Effects of oral magnesium supplementation on migraine prophylaxis

Mohamad Goldust

Tabriz University of Medical Sciences, Iran

A number of experimental studies have implicated the importance of magnesium ion in the pathophysiology of migraine. Magnesium has been also administered for both prophylactic and acute therapy in migraine, but the question of its efficacy has not been studied adequately. So the aim of this study was to evaluate the effects of oral magnesium oxide supplementation associated with routine treatments of migraine seizures. In this clinical trial study, effects of 500 mg/day oral magnesium oxide for migraine prophylaxis and serum magnesium concentration in 77 migrainous adults (case=33, control=44) aged 34.10 ± 9.61 years, were assessed. Significant reduction in migraines, migraine days, headache severity and migraine index in the both groups compared with baseline, were observed. In magnesium oxide group compared with control group, 50% or greater reduction in migraines ($P < 0.01$) and headache severity ($P < 0.05$) were significant. Statistically non-significant decreases in migraine index and migraine days in the magnesium oxide group were reported. Magnesium supplementation increased significantly ($P < 0.001$) serum magnesium concentration while in control group no difference was seen. It seems that magnesium oxide supplementation associated with the routine treatments may be effective especially in patients with low level of serum magnesium.

Biography

Mohamad Goldust is a medical student in Tabriz university of medical sciences. He is the manager of educational affairs in student research committee of Tabriz university of medical sciences. He has many medical publications and has participated in many world international congresses. He has many research projects that led to multiple awards.

drmgoldust@yahoo.com