



Vitamin D supplementation in migraine headache

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Background: As an anti-inflammatory and antioxidant agent, vitamin D is one of the agents which has been of interest in relation to headache recently. In the current review, in addition to observational and case-control studies, we included clinical trials concerning the effects of vitamin D supplementation on migraine/headache.

Methods: Based on a PubMed/MEDLINE and ScienceDirect database search, this review study includes published articles up to June 2019 concerning the association between migraine / headache and vitamin D status or supplementation.

Results: The percentage of subjects with vitamin D deficiency and insufficiency among migraineurs and headache patients has been reported to vary between 53 to 100%. Moreover, an inverse association between serum levels of this vitamin and migraine/headache has been shown in most of the previous studies. Furthermore, in a number of these studies, vitamin D level was negatively correlated with frequency of headaches. In addition, the present findings show that supplementation with this vitamin in a dose of 1000-4000 IU/d could reduce the frequency of attacks in migraineurs.

Conclusion: The present findings regarding vitamin D supplementation in migraineurs indicate that in addition to routine drug therapy, vitamin D administration might reduce the frequency of attacks in migraineurs. However, these results have yet to be confirmed.