

Digital brVitamin K2: A promising new treatment for nocturnal leg cramps

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Dear Editor, This letter aims to emphasise the potential role of Vitamin K2 in managing nocturnal leg cramps (NLCs). Our goal is to raise awareness about this emerging treatment for people suffering with nocturnal leg cramps.

Nocturnal leg cramps (NLCs) are characterised by sudden, involuntary, and recurrent contractions of lower limb muscles, typically occurring during sleep or rest. These episodes can last from a few seconds to several minutes, often causing severe pain and sleep disturbances.^{1,2} Approximately 30% of adults experience NLCs at least five times per month, while around 6% report a frequency of 15 or more episodes per month, with prevalence increasing with age.³ Limited evidence supports the effectiveness of various pharmacological and non-pharmacological treatments, including exercise, magnesium supplements, and calcium channel blockers, in reducing NLC frequency.¹ Moreover, quinine, previously used for NLC treatment, is no longer recommended due to severe adverse effects, including thrombocytopenia, cardiovascular complications, hearing loss, rash, electrolyte imbalances, headaches, orthostatic hypotension, and dizziness.^{1,4}

Recent research published in October 2024 has demonstrated that Vitamin K2 treatment for NLCs has a favourable safety profile and effectively reduces cramp recurrence, severity, and duration.⁵ A placebo-controlled randomized clinical trial was conducted to determine the efficacy of Vitamin K2 in controlling NLCs which included people of 65 years and older with more than 2 recorded episodes of NLCs during 15 days of examination.⁵ The cramp frequency in the Vitamin K2 group was significantly

reduced with a mean of 0.96 ± 1.41 , as compared to the placebo group with mean frequency of 3.63 ± 2.20 .⁵ NLC severity was also decreased in Vitamin K2 group with a mean of -2.55 ± 2.12 in contrast to the placebo group -1.24 ± 1.16 .⁵ The reduction in mean (SD) NLC duration was also higher in vitamin K2 group -0.90 ± 0.88 minutes than the placebo group -0.32 ± 0.78 minutes.⁵ Furthermore, no adverse effects were reported in the Vitamin K2 group.⁵

We encourage physicians and the broader community of practitioners to verify the efficacy of Vitamin K2 in cramp management and its effect on the living conditions and sleep of patients with NLCs, and to carry out larger scale clinical trials to further determine its effectiveness.

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