Prevalence of leg cramps during pregnancy and effects of supplemental therapy

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Abstract

Introduction: Leg cramps are common painful spasms especially in the lower extremities during pregnancy. The purpose of this study was to find a suitable alternative in the treatment of the disease.

Materials & Methods: 217 patients reported leg cramps with different degrees and frequencies among 401 pregnant women in the second half of their pregnancies who visited the Prenatal Clinic of Imam Khomeini Hospital from July to December 2002. After preliminary evaluations for ruling out electrolyte imbalances or insufficient supply of dietary micronutrients, patients were randomly allocated into supplemental therapy (Calcium, magnesium or vitamin B intake for 2 weeks) and control groups. The groups were compared after 4 weeks according to their complete relief from leg cramps. The clinical findings and the data collected from the patients were analyzed by chi-square and t-student tests and a logistic regression model using the SPSS ($V._{10}$) software.

Results: There was a significant improvement in patients receiving vitamin B with 71% complete and 19% relative relief from leg cramps, compared to 9% complete relief in the control group-29% and 52% in the groups receiving magnesium and calcium respectively ($p<0.0001$).

Conclusion: Although the high prevalence of leg cramps (55%) in the patients was not necessarily related to dietary habits, but it seemed that supplementing symptomatic patients with vitamin B could be beneficial.

Key Words: Leg cramps, Vitamin B1, Vitamin B6, Pregnancy, Calcium, Magnesium, Supplemental therapy.

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