

Magnesium, L-Tryptophan and Niacin in Prophylaxis Therapy of Pediatric Migraine

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The present study evaluates the efficacy and tolerability of magnesium, l-tryptophan and niacin in prophylaxis therapy of pediatric migraine.

For our study, 20 outpatients, (13 F, 7 M) mean age 8.5 years (SD 1.5), range 6-12 years, suffering from migraine without aura (ICDH '04 criteria) were enrolled. The mean duration of disease was 1.8 (SD 0.8) years, range 1-3 years. At baseline the mean frequency of attacks was 7.4/month (SD 2.1), range 4-12; the mean number of drugs intaking for acute attacks was 6.3 tablets/month (SD 1.8). During the six month evaluation period magnesium 45 mg, l-tryptophan 175 mg, and niacin 12.5 mg (per os twice daily) was administered. All patients filled a headache-diary card during the evaluation.

The results of our study indicates that the basal frequency of attack was 7,4 (SD 2.1) and 4,4 (SD 1.9), 3,3 (SD 1.8), 2,4 (SD2.2), after 1, 3 and 6 months respectively [P=0.003; P<0.0001; P<0.0001].The basal value of intaking drugs for acute attacks was 6,3 (SD 1.8) and 3,8 (SD 1.6), 2,6 (SD 1.6), 1,8 (SD1.6) after 1, 3 and six months respectively [P=0.0001; P<0.0001; P<0.0001](T-test analysis). Magnesium, l-triptophan and niacin was well tolerated (4 patients complained somnolence, asthenia, lack of concentration and gastralgia but none patient withdrew the study).

These data showed a good efficacy in reduction of frequency and intensity of headache attack, a good tolerability and a very good reduction of drugs intaking for acute attacks. Our study suggests that magnesium, l-triptophan and niacin could be an alternative therapy for pediatric migraine prophylaxis.