Trabalhos Científicos

Título: Efficacy Of Cinnarizine For Pediatric Migraine: A Meta-Analysis Of Randomized Controlled Trials

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Resumo: Migraine represents the most prevalent form of headache among the pediatric population. To reduce reliance on painkillers and improve quality of life, preventive medications can be used. Cinnarizine, a type L calcium channel blocker, has shown promising results in migraine prophylaxis in adults, but its efficacy and safety are still unclear in children and adolescents. To analyze the efficacy and safety of Cinnarizine for migraine prophylaxis in children and adolescents. We conducted a systematic search across Scopus, Pubmed, and Web of Science databases for randomized controlled trials (RCTs) that investigated Cinnarizine for migraine prevention in children and adolescents. A random-effects model was used to calculate the mean differences (MDs) with 95% confidence intervals (CIs). For binary endpoints, we computed odds ratios (OR), with 95% CIs. Heterogeneity was established using I^2 statistics. Efficacy was measured by migraine frequency, severity based on Visual Analogue Scale (VAS), and good response, defined by a reduction 8805,50% in frequency. Sedation as an adverse event was used to evaluate safety. Statistical analysis was performed using R software, version 4.4.0. Six RCTs were analyzed, comprising 472 children and adolescents, among which 44.5% were in the cinnarizine group. Mean age ranged from 8.9 to 11.2 years and patients were predominantly male (57.8%). Migraine with aura was present in 21.1% of the included population, when considering 327 patients. Compared to the control group, which included placebo, topiramate, sodium valproate, amitriptyline and propranolol, there was no significant statistical difference in migraine frequency (MD -1.2536 days, 95% CI -3.0092-0.5020, I^2 89%, p = 0.162), headache severity (MD -0.7523, 95% CI -1.8256-0.3211, I^2 = 71%, p = 0.170) and more than 50% reduction in headache frequency (OR 1.58, 95% CI 0.81-3.08, I^2 = 53%, p = 0.181042). Furthermore, the occurrence of sedation as an adverse event was comparable to the control group (OR 1.51, 95% CI 0.53-4.31, I^2 = 0%, p = 0.441563). This systematic review and meta-analysis suggests that the use of cinnarizine in children with migraines does not result in a significant reduction in frequency or severity. Sedation was not significantly associated with the use of the medication, demonstrating a favorable safety profile of the medication.