Prophylactic treatment of childhood migraine headaches

Mahmoud Reza Ashrafi

Professor of Pediatric Neurology, Tehran University of Medical Sciences

Migraine headaches are among the most common neurological disorders in patients referred to pediatric neurology clinics. Approximately 10% of children and 28% of adolescents experience these headaches. The mean age of onset for migraine headaches is in the elementary school age and has a severe impact on the quality of life and school performance, therefore development of an effective and safe agent for the prophylaxis of migraine headaches in children is essential for improving the short-term condition and long-term educational success. In spite of the widespread use of pharmacologic agents, at this time there is no FDA-approved treatment for the prophylaxis of headaches in children with migraine. Few prophylactic agents have been suggested, including anti-seizure medications (ASMs) Tricyclic antidepressants, Beta blockers, Antihistamines, Calcium channel blockers, and Nonsteroidal antiepileptic drugs (NSAIDS) . Calcium channel blockers have been demonstrated to be effective in migraine prophylaxis. Flunarizine is the only FDA approved prophylactic agents for migraine prophylaxis in children . Cinnarizine is an L-type calcium channel blocker with a number of different proposed pharmacologic effects that may underlie the mechanism of action of its preventive effects on migraine. Our experiences showed that cinnarizine administered at bedtime as a single dose of 1.5 mg/kg/day or 50 mg/day in children weighing less than or more than 30 kg, respectively, is effective and safe in the prophylaxis of migraine headaches in children.

Keywords: Migraine, Children, Prophylaxis, Calcium Channel blockers