



Headache in Children and Adolescents: Challenges in the Treatment

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Introduction

Headache is a common complaint reported by children and adolescents. It is estimated that 60% of children and adolescents experience headaches, and around 8% have migraines, causing impairment in both academic performance and quality of life. To diagnose headaches, it is necessary to obtain a detailed medical history and perform a comprehensive physical examination. Concerning the detailed medical history, children under 6 years of age often struggle to provide details about their headache history, requiring parental involvement to provide most of the information. In the case of adolescents, they typically provide a complete headache history, with minimal parental assistance, and parents may be excluded from the consultation to investigate alcohol and drug use.

Objectives

To review and to summarize challenges in the treatment of children and adolescents presenting headache based on a critical and up-to-date analysis of existing literature.

Methods

This study is an integrative literature review. Was used a search engine with the DeCS/MeSH descriptors "Headache," "Pediatric," and "Treatment" in the PubMed, ScienceDirect, and BVS databases. The period covered was from 1998 to 2023. In this way, 289 articles were found, according to inclusion criteria, in English, Portuguese, or Spanish, with full-text availability. In the end, 100 articles were analyzed, of which 8 were selected for this review.

Results

Based on the analysis of the articles, it is evident that the quality of life of pediatric and adolescent patients can be improved through the application of preventive treatment for acute migraine episodes. The treatment of migraines can be divided into two categories: preventive treatments and acute treatments. Regarding preventive treatment, it has been found that approximately 60% of children and adolescents improve with a three-pronged approach: 1 - counseling on lifestyle management (including sleep, exercise, hydration, caffeine, and avoiding skipping meals); 2 - acute therapy with optimal dosing, specifically non-steroidal anti-inflammatory drugs and triptans; and 3 - preventive treatment with some evidence of efficacy. As for acute treatment, most episodes are managed on an outpatient basis. Since acute medications are more effective when taken while the pain is still mild. It is generally recommended that families and adolescents have these medications readily available. This review also demonstrated that new routes of administration, such as transdermal absorption, can be explored to enhance the acceptance of pharmacological treatment at home, in addition to the need to assess the prevalence of the placebo effect in clinical trials with pediatric patients. The introduction of a stable sleep schedule (averaging 8 hours), regular aerobic exercise, and a balanced diet serve as complements to pharmacological therapy.

Conclusion

The integrative treatment approach for migraine in pediatric and adolescent patients holds promise for improving quality of life. In addition to traditional pharmacological treatments, new administration routes may offer more accessible solutions. The incorporation of healthy habits, such as adequate sleep, regular exercise, and a balanced diet, complements pharmacological treatment. Cognitive-behavioral therapy also stands out as an effective resource, especially for adolescents with chronic migraines. This comprehensive approach can provide a more positive prognosis, surpassing results achieved with medication alone or isolated lifestyle changes.

Keywords: Headache; Pediatric; Treatment.