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Headaches and Sleep Disorders: A Literature Review on Bidirectional Connections

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Introduction

Sleep disorders occupy an important position among the pathologies that can precede the onset of headaches. Studies indicate that patients with chronic headache have a high prevalence of insomnia, daytime sleepiness, and snoring.

Objective

To understand the pathophysiological relationship between headaches and sleep disorders and to recognize the concomitant characteristics of these health and well-being issues.

Methods

This study is a literature review, using PubMed and Scopus as databases, where articles published between 2003 and 2024 were selected, containing the following descriptors: headache; sleep disorders; bidirectional relationships; insomnia; literature review. Inclusion criteria highlighted publications in English, Spanish, or Portuguese, and peer-reviewed articles, including systematic reviews, meta-analyses, clinical trials, and observational studies containing the aforementioned descriptors. Exclusion criteria included publications that do not address the proposed theme, studies in languages other than those mentioned above, and duplicate articles.

Results

Sleep disorders, such as insomnia, are risk factors for migraine and its chronification, with migraine attacks acting as triggers for sleep disorders. Chronic paroxysmal hemicrania and cluster headache are related to REM sleep. Insomnia affects about 50% to 66% of patients with migraine. Hypothalamic dysfunctions and sleep apnea are relatively common in headaches. Snoring increases the propensity for headaches, and poor sleep quality exacerbates daily headaches. Patients with chronic headache have a prevalence of morning sleepiness, insomnia, and snoring. Patients with obstructive sleep apnea are more frequently diagnosed with headaches compared to those without apnea. The most frequent sleep disorder in headache patients is obstructive sleep apnea. Night awakenings, insomnia, bruxism, and restless legs syndrome are regularly observed in patients with headache.

Conclusion

There is a prevalence of insomnia, hypothalamic dysfunctions, and sleep apnea as frequent sleep disorders in chronic migraine and tension--type headache. The bidirectionality between disorders and headaches is noted, affecting each other concomitantly, with comorbidities such as anxiety and depression influencing the perpetuation of these problems.

