



Insomnia in migraine patients: impact on disability, depression, and anxiety - a partial analysis

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Introduction

Migraine is a complex neurological disorder with profound interactions with the body's homeostasis, particularly the sleep-wake cycle.

Objective

To evaluate the effect of sleep parameters on individuals with migraine and their association with migraine severity and mood.

Methods

This is a cross-sectional study involving 49 participants diagnosed with migraine and treated at the Headache Clinic of PUC-PR, Londrina-PR, Brazil. Demographic, anthropometric, and clinical data were collected, along with responses to validated questionnaires: Migraine Disability Assessment (MIDAS), Headache Impact Test (HIT-6), 12-item Allodynia Symptom Checklist (ASC-12), General Anxiety Disorder-7 (GAD-7), Beck Depression Inventory (BDI), Insomnia Severity Index (ISI), Epworth Sleepiness Scale (ESE), and Morningness-Eveningness Questionnaire (MEQ). Spearman's correlation was used to examine the relationships between variables, considering statistical significance for $p < 0.05$.

Results

The study participants were predominantly female (69.4%) with a median age of 36 (27-47) years. Chronic migraine was present in 35 (71.4%) participants, 11 (22.4%) were using preventive medications, and 24 (49.0%) had medication overuse. The most common chronotype was intermediate (49.0%), followed by morning (44.9%) and evening (6.1%). Moderate to severe insomnia was identified in 10 (20.4%) and excessive daytime sleepiness in 15 (30.5%) participants. There was a strong correlation between insomnia and depressive symptoms ($r = 0.555$; $p < 0.001$; $R^2 = 0.308$), as well as between insomnia and anxiety symptoms ($r = 0.521$; $p < 0.001$; $R^2 = 0.271$). Additionally, there was a moderate correlation between insomnia and migraine-related disability ($r = 0.302$; $p = 0.035$; $R^2 = 0.091$) and insomnia with age ($r = 0.331$; $p = 0.02$; $R^2 = 0.109$).

Conclusion

Sleep disorders are common among individuals with migraine and impact their mood and migraine-related disability.