



Individualized and structured guidance on sleep hygiene and water intake in migraine - partial analysis of results from the randomized clinical trial

Gabriela Terenzi Rizzi¹, Rubem Soter Neto¹, Rafael Guilherme Vrech da Silva¹, Giovana Specian Chaves¹, Regina Célia Poli Frederico², Carlos Eduardo Coral de Oliveira², Edna Maria Vissoci Reiche², Valéria Aparecida Bello², Aline Vitali da Silva²

¹Graduate of Medicine, Pontifícia Universidade Católica do Paraná Paraná, Campus Londrina, Medicine School, Department of Medicine, Londrina, Paraná, Brazil.

²Professor, PhD, Pontifícia Universidade Católica do Paraná, Campus Londrina, Medicine School, Department of Medicine, Londrina, Paraná, Brazil.

Introduction

Migraine is a prevalent and debilitating primary headache disorder deeply influenced by lifestyle. Sleep disturbances are the second major trigger for migraine attacks, and some studies suggest that behavioral changes in sleep can reduce the intensity and frequency of headaches. Proper water intake is widely recommended; however, there is scant clinical evidence of the benefit of this intervention.

Objective

To evaluate the effect of individualized and structured guidance on sleep hygiene and water intake on the disability and impact of migraine compared to the control group.

Method

This study is a randomized, controlled, non-blinded clinical trial in which participants were randomly assigned to one of three groups: (1) control, (2) sleep hygiene, and (3) water intake. Individuals with migraine aged between 18 and 59 years, treated at the Academic Headache Clinic of PUCPR, Londrina-PR, Brazil, were included. The control group participants received usual care, the sleep hygiene group received individualized and structured guidance on sleep hygiene, and the water intake group received a 900ml water bottle and were instructed to drink three or more bottles per day. Participants were evaluated at baseline (T0) and after 12 weeks (T12) through a structured interview and self-administered questionnaires: Migraine Disability Assessment (MIDAS), Headache Impact Test 6 (HIT-6), Allodynia Symptom Checklist (ASC-12), Generalized Anxiety Disorder 7-item (GAD-7), Beck Depression Inventory (BDI), Insomnia Severity Index (ISI), and Epworth Sleepiness Scale (ESS).

Results

Twenty-three participants completed 12 weeks of follow-up, with 8 in the control group, 6 in the water intake group, and 8 in the sleep hygiene group. The groups are comparable, with no differences in demographic and clinical characteristics ($p>0.05$). Within groups, there was an improvement in different parameters analyzed when comparing T0 and T12 ($p<0.05$). However, there was no better performance in the parameters evaluated when comparing the intervention groups with the control group, probably due to the small sample size so far.

Conclusion

The results demonstrate that lifestyle interventions related to sleep and water intake are feasible in the context of medical care in a specialized outpatient clinic.