



Non-Pharmacological approaches in migraine treatment: literature review

Bruna Verdi Scabeni¹, Cinara Leitão Pereira², Gabriela Maria Vicente de Melo³,
Heulália Teodora Cerqueira Gonçalves⁴, Julia Cavalcanti Brito⁵, Marcela Guedes Ferreira da Silva⁶,
Nara Emily Sanches de Carvalho⁷

¹Pato Branco University Center, Pato Branco, Paraná, Brazil

²Federal University of Roraima, Boa Vista, Roraima, Brazil

³Federal University of Rio Grande, Rio Grande, Rio Grande do Sul, Brazil

⁴María Serrana Private University, Assunção, Paraguai

⁵Federal University of Vale do São Francisco, Petrolina, Pernambuco, Brazil

⁶Federal University of Bahia, Salvador, Bahia, Brazil

⁷Pontifical Catholic University of Minas Gerais, Belo Horizonte, Minas Gerais, Brazil

Introduction

Migraine has various triggering factors, whether environmental, psychological, or biological, commonly reported during early childhood and adolescence. Despite the high prevalence of underdiagnoses, treatments, when administered, demonstrate low adherence due to their complexity. The interaction of various drugs, which can be ineffective or contraindicated, as well as triggering unpleasant side effects, can lead to other complications such as the chronicization of headaches and medication overuse. Therefore, non-pharmacological measures have been considered in recent years.

Objective

to analyze the different non-pharmacological approaches in the treatment of migraine, their indications, and to understand which ones have the greatest clinical efficacy. Methods: the present study is a literature review, where scientific articles were searched in the PubMed and Google Scholar databases, addressing the management of migraine and its non-pharmacological treatments. Randomized clinical trials and systematic reviews from the last 7 years were included in the research.

Results

the biofeedback technique increased the efficacy of pharmacological treatment, leading to a reduction in the use of analgesics and the frequency of migraines. Mindfulness meditation as a prophylactic treatment was as effective as prophylactic medication in reducing the frequency of migraine attacks. Aerobic exercises combined with amitriptyline reduced migraine attacks more than amitriptyline alone. Acupuncture demonstrated efficacy comparable to botulinum toxin A and topiramate. Vagus nerve stimulation and transcranial magnetic stimulation were effective in reducing the frequency and intensity of migraines. The use of nutraceuticals such as magnesium and riboflavin showed efficacy in the treatment of migraine.

Conclusion

this study highlighted the significant impact of non-pharmacological therapies in the treatment of migraine patients, making it clear that drugs are not the only treatment options for pain management. Understanding these alternatives is important for reducing polypharmacy and improving patients' quality of life.