Selvakumar, Kiruthika, et al, 2023 Abstract

Preliminary Efficacy Of Aerobic Training For Migraine Symptoms

Objective
This study aims to analyse the preliminary effectiveness of aerobic training on migraine pain level, sleep quality, quality of life, and resting-state brain waves among university students with migraine symptoms.

Migraine is a primary neurological headache. Treatment condition includes medications; however, these medications, when given for a longer duration, can have side effects. If migraine is left untreated or undiagnosed, it is reported that around 2.5% of individuals with migraine may develop to have a chronic condition.

Results
After the primary EEG analysis using MATLAB, the amplitude, frequency, frequency band ratio, and power spectrum density will be analysed. Mixed design analysis and intention to treat analysis will be used to assess the efficacy of aerobic training monitored by procedures such as **electromyography** (**EMG**).

Participants and Clinicians
The target participants are 88 university students with migraine symptoms. Both genders aged 18–40 years will be included.

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Methods
Participants in this group will undergo an **electromyography** (**EMG**) **biofeedback** training for the trapezius and frontalis using a rose for relaxation three times per week for six weeks. Each session will be 30 minutes, with a five-minute resting period between each muscle session. **Neurotrac Myoplus 4 Pro instrument** will be used for EMG biofeedback training. The rose game for relaxation provides an **EMG biofeedback** when the participant's rose opens when relaxation is detected, and the aim is to relax completely and stay relaxed.

The primary outcome is resting-state electroencephalography (EEG) brain, and the secondary outcomes are sleep quality, quality of life, and migraine pain level. The post-test assessments will be performed at week six.

The full abstract cab ne found at https://pubmed.ncbi.nlm.nih.gov/37747888/.