

AAN 73rd ANNUAL MEETING ABSTRACT

Media Contacts:
Renee Tessman, rtessman@aan.com, (612) 928-6137
M.A. Rosko, mrosko@aan.com, (612) 928-6169

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Abstract Title: Exercised Brain in Pain: Quantification of Exercise in Migraine Patients Seen at a Large Tertiary Headache Center

Press Release Title: Do People with Migraine Get Enough Exercise? *Two-and-a-Half Hours of Exercise a Week May Reduce Migraine Triggers*

Authors: Mason Dyess¹, Ami Cuneo¹, Arnav Narula², Gabriella O'Fallon³, Helen Haley⁴, Daniel Krashin⁵, Sau Mui Chan-Goh¹, Marcel Budica¹, Silvie Belaskova⁶, Natalia Murinova¹

¹Neurology, University of Washington, ²Research Volunteer, University of Washington, ³Student, Case Western University, ⁴Student, Boston University, ⁵Psychiatry and Pain, Seattle VA Hospital, ⁶Biostatistics, International Clinical Research Centre, St. Anne's University Hospital, Brno, Czech Republic

Objective: Quantify the amount of exercise in patients diagnosed with migraine in a tertiary headache clinic at the University of Washington. Analyze migraine characteristics and comorbidities as they relate to exercise.

Background: Scientific evidence has shown that exercise can be an effective migraine prophylaxis in some patients. This study aims to quantify the number of patients referred to our headache clinic who achieved the minimum recommended amount of exercise per week, evaluate if low levels of exercise was associated with an increased risk of chronification and assess exercise in migraine patients as it relates to other common comorbidities.

Design/Methods: All new patients referred to our headache clinic complete a detailed patient intake questionnaire. This questionnaire asks about amount of exercise per week, headache characteristics, sleep, depression, anxiety and stress. Data are analyzed by headache providers who diagnose patients using the ICHD-3 criteria.

Results: In our analysis, n=4879 unique patients were diagnosed with migraine. 74.7% (n=3644) with chronic and 25.3% (n=1235) with episodic migraine. Exercise-related questions were completed by 95% (n=4647) of patients. 27% (n=1270) of those who exercised reported achieving 150+ minutes of moderate to vigorous exercise weekly, the minimum level recommended by the World Health Organization (WHO). Our analysis suggests that exercise level below the recommended level by WHO is correlated with an increased rate of depression, anxiety and sleep problems.

Conclusions: We identified that most patients with a migraine diagnosis do not get the minimum level of exercise recommended by the WHO. For patients achieving 150 minutes or more of moderate exercise per week, rates of depression, anxiety and sleep problems are lower. We recommend raising awareness that exercise can have a significant impact on the headache itself, and on associated migraine comorbidities. Counseling patients with migraine on recommended exercise levels should be considered by any medical provider.