



AAN 71st ANNUAL MEETING ABSTRACT

Abstract Title: Medical Cannabis for Chronic Migraine: A Retrospective Review

Objective: To examine the effects of medical cannabis (MC) on chronic migraine (CM)

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Background: New York State (NYS) authorized cannabis for medically certified patients in 2015. No guidelines exist for the use of MC in chronic migraine patients. The limited body of literature for MC leaves providers underequipped and patients vulnerable.

Design/Methods: This retrospective chart review of patients with CM, per International Classification of Headache Disorders (ICHD-3), examined 316 patients over the age of 21 with at least one month of MC through Dent Neurologic Institute.

Results: On NYS MC, 83.2% (263) patients reported improvement in their headache profile. The average monthly migraine frequency change was a 42.1% decrease, from 12.7 to 7.4. Over half of the patients (171) reported improvement in their headache frequency, with 25.7% (44) experiencing $\geq 75\%$ reduction of headache days. More than one third of patients, 38.3% (121), reported sleep improvement, 30.7% (97) reported anxiety improvement, and 24.7% (78) reported mood improvement. Twenty-eight patients used opioid pain medications for chronic migraine-related pain at the start of MC and 50% (14 patients) reduced their opioid consumption while on MC after an average of 5.6 years of opioid use. Less than a quarter, 23.1% (73), of patients reported side effects (SE), all mild or moderate severity.

Patients taking a 20:1 (tetrahydrocannabinol: cannabidiol) ratio reported more headache profile improvement than patients on a 1:1 ratio ($p=0.039$). A high to low ratio carried a risk ratio (RR) of 1.97 for reduction in headache medications. A non-equal ratio carried a RR of 1.61 for mood improvement, with similar RR observed for anxiety (1.65) and sleep (1.70) improvements. There was no significant difference in SE among high to low, equal, or low to high ratios. Low to high ratios carried a negative RR for developing affective SE, such as fatigue and euphoria.

Conclusions: MC may play a safe role in CM management by helping to improve headache profile, anxiety, sleep, mood, and opioid reduction. Future prospective studies are required to examine the role of MC in CM within a placebo-controlled environment.

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