High Cannabinoid Use in Osteoarthritic Patients Awaiting Hip and Knee Arthroplasty Highlights Need for Clinical Awareness

Patrik Abdelnour, Michael Tanzer¹, Adam Hart¹

¹McGill University Health Centre

INTRODUCTION:

Cannabinoids can offer potential benefits in the management of osteoarthritis (OA) by reducing inflammation, providing positive analgesic effects, and decreasing opioid use. While the significance of cannabinoid usage in OA is evident, there remains a lack of understanding of its use. The aim of this study is to -document self-reported cannabinoid use among patients with end-stage knee and hip OA, and to investigate for clinico-demographic factors associated with cannabinoid use in these patients.

METHODS:

Patients booked for hip or knee arthroplasty for end-stage OA were prospectively recruited to participate in this study prior to their surgery. A detailed cannabis history including consumption, types of cannabis products consumed, and quantity was obtained. Tobacco and alcohol use were also assessed. Binary parametric analysis was done using odds ratios and by using either Pearson Chi-Square test or Fisher's Exact Test. Fisher's exact test was used in the event that any cell had an expected count of less than 5. The Shapiro-Wilk test revealed that the continuous variables were non-normally distributed. Therefore, mean comparisons were performed using the Mann-Whitney U test. The statistical significance was set at $P \le 0.05$ for this investigation.

RESULTS: One hundred and forty-eight patients with end-stage OA (94 hips and 54 knees) were recruited. The overall cannabinoid usage rate was 16% and was more common in hip than knee OA (p=0.05). This is double to reported use in the general population. Among cannabis users, 92% consumed it on a regular basis. Patients 6 years younger (p=0.016) and consumption of 7 or more alcoholic drinks/week (p=0.045) were significantly associated with cannabinoid use. Smoking was also strongly associated with cannabis use: history of smoking more than 8 pack years (p=0.005) or over 5 years of tobacco use (p=0.004) or over 10 years of tobacco use (p=0.007) or over 4 cigarettes consumed per day (p=0.024).

DISCUSSION AND CONCLUSION: Cannabis products are consumed by many patients with end-stage OA and tend to be used on a regular basis. Despite being older, OA patients have double the cannabinoid usage as compared to the general population, suggesting a large portion might be exploring cannabinoids for symptom management. These findings emphasize the need for healthcare professionals to better understand the implication of its use.