Cannabidiol as a treatment for arthritis and joint pain: an exploratory cross-sectional study

Frane N. et al. Journal of Cannabis Research. 2022; 4:47. [1]

Introduction

Arthritis is a common and sometimes debilitating disease with a significant treatment gap. 20 million people suffer from arthritis and musculoskeletal disorders in the UK, while as many as 1 in 2 are dissatisfied with their pain management.[2]

With the long-term **effectiveness of traditional analgesics limited by side effects**, there is a pressing need to explore alternative treatments.

The efficacy of cannabinoids (CBD) for pain and inflammation in arthritis has shown promise in preclinical studies. Many arthritis patients already self-medicate with CBD, but studies investigating its therapeutic potential are limited.

This paper presents the findings of **an exploratory survey of clinically diagnosed arthritis patients** on their experiences with therapeutic CBD.

Aim of the study

To explore patient perceptions of the effectiveness of CBD for arthritis symptoms and its impact on their use of other pain medication.

Methods and materials

428 adults with arthritis causing joint pain were recruited online for an anonymous survey on the perceived efficacy of **CBD** for symptom alleviation. Respondents included patients with a diagnosis of rheumatoid arthritis (RA), osteoarthritis (OA) or other autoimmune arthritis. The **effect on self-reported symptoms** before and after CBD use were evaluated by:

- Improvement in pain, sleep quality and physical function using a 5-point scoring system ranging from “much worse” to “much better”
- Arthritis pain ratings on a 0-10 numerical rating scale (NRS)

Patients also indicated if they stopped or reduced other medications due to CBD use.

The survey was reviewed by the Feinstein Institute for Medical Research Clinical survey department.

Primary Outcomes

The effect of CBD use on pain, physical function, and sleep quality, pain intensity and reduced use of other analgesics.

Results

The study achieved its primary outcome, with the majority of patients reporting improvements in pain, physical function and sleep (figure 1). Approximately 1 in 3 patients rated their symptoms as “much better” after CBD, which is validated as a clinically important improvement.

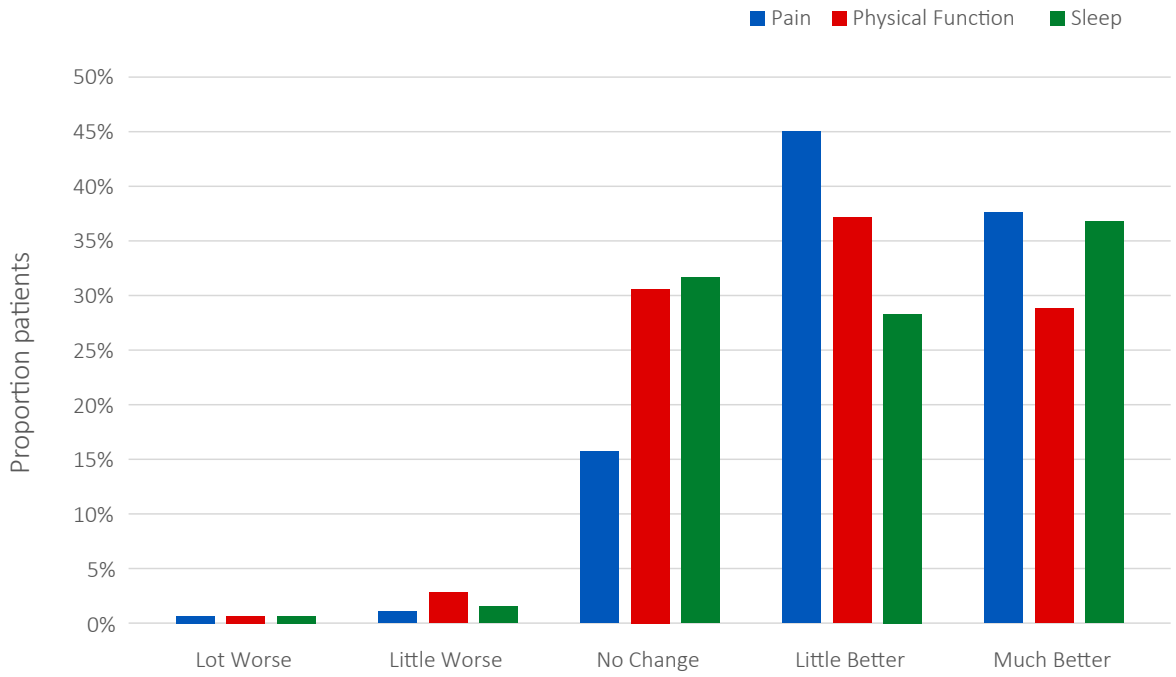

Figure 1. Patients' global impression of change in pain intensity, physical function, and sleep after using CBD for joint pain.

Across arthritis types, patients reported a significant reduction in pain after CBD use, with a 44% reduction in NRS pain scores (-2.58 points; $p<0.001$). A clinically important improvement was defined as a 30% reduction in pain from baseline.

Most respondents using CBD for joint pain reported reducing or stopping other analgesics due to CBD use (60.5%), including anti-inflammatories, acetaminophen and opioids. This was associated with greater frequency ($p<0.001$) and duration of CBD use ($p=0.004$).

59% of patients reported no side effects and of reported side effects 84% were considered mild, suggesting that CBD is well tolerated.

Discussion

Patients report **symptom relief using CBD for arthritis, with pain reduction exceeding validated clinically important improvements.** Additionally, CBD appears to have a mild side effect profile and may reduce reliance on other analgesics, which carry a risk of more serious complications and dependency.

References

1. Frane, N., Stapleton, E., Iturriaga, C., Ganz, M., Rasquinha, V. and Duarte, R., 2022. Cannabidiol as a treatment for arthritis and joint pain: an exploratory cross-sectional study. Journal of cannabis research, 4(47), pp.1-13.
2. National Institute of Clinical Excellence (NICE). NICE Impact: Arthritis. Available at: https://www.nice.org.uk/about/what-we-do/into-practice/measuring-the-use-of-nice-guidance/impact-of-our-guidance/nice-impact-arthritis (Accessed: December 2022).

rokshaw
medical cannabis