

# Use of a specific type of CBD as a method for opioid reduction in patients on chronic opioid therapy, our experience at a pain management center, 10-month data set

J.Julian Grove M.D., Peter K. Kubitz D.O. - Pain Consultants of Arizona, Phoenix AZ

## ABSTRACT

Our initial purpose and objective were to answer the question: can high quality cannabidiol (CBD) be used for chronic pain and supplant some of the more traditional medications we use for pain. Specific to this data set, our primary purpose was to use CBD as an option for patients on chronic opioid therapy who were actively interested in reducing their opioids.

## INTRODUCTION

Due to the ongoing opioid crisis, our authors were interested in addressing the potential for CBD to help with opioid reduction given its pain-relieving qualities<sup>1</sup>. As all practitioners realize when we take care of patients on acute and chronic opioid therapy, there are potential and real concerns regarding the side effects and behavioral consequences of opioids including severe constipation, cognitive effects, addiction, dependency, respiratory depression and the possibility of overdose to name a few. We were interested in the possibility of a potentially safer alternative with a different and more benign side effect profile than many of the opioids and non-opioid adjuvant therapy. We started researching the medical application of CBD with supplementation and addressing separate etiologies of pain that cannabidiol has emerging data on, including, but not limited to, inflammatory pain<sup>2</sup>, nerve pain<sup>3</sup>, and headache<sup>4</sup>. All patients at our pain management center are offered a comprehensive approach for their specific pain management issue. Often, we use comprehensive and complementary therapies in order to decrease or avoid opioid usage and/or to reduce opioids if the particular pain issue has reduced in severity. Many times, the existing therapies are not enough to elicit change or opioid reduction. We felt that the current application of CBD for this refractory subset of patients was timely.

## MATERIALS AND METHODS

For this particular group we offered cannabidiol (CBD) oral capsules ranging from 12.5 mg per day to 100 mg per day (in QD or BID dosing) for patients that were interested in CBD for their pain complaints to see if this would help in their opioid reduction. During the course of the opioid reduction, all other medications they may have been on remained stable including neuropathic, NSAID, and skeletal muscle relaxant. All treatments such as interventional therapies did not deviate from their previous year's treatments.

We followed patients for 10 months (July 2018-May 2019). Over the course of the 10 months, we assessed the opioid intake for our patients and the dose, strength and type of CBD that the physician and patient had jointly chosen. For this particular data set, we limited patients to one brand of CBD as there have been issues with purity of CBD in this unregulated space<sup>5</sup>.

## TYPE OF CBD

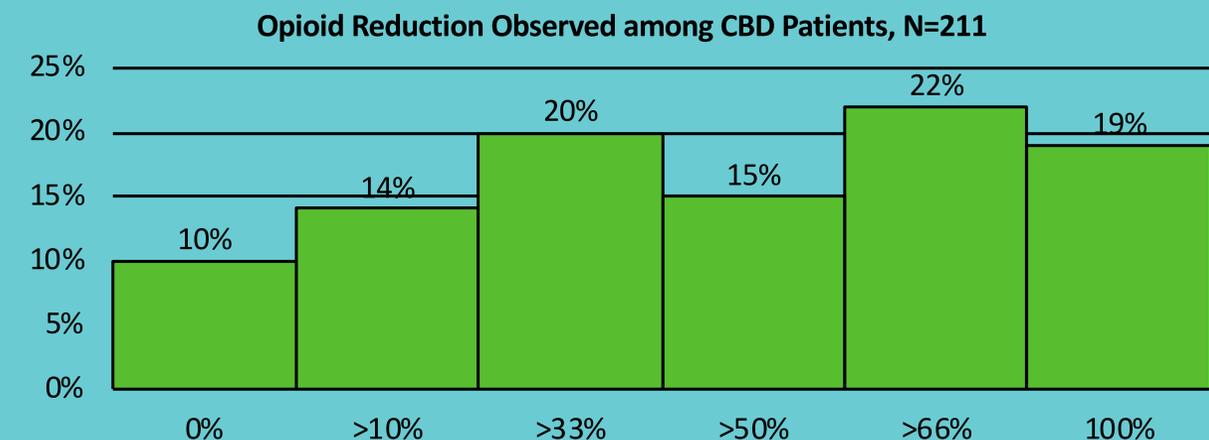
This was a specific, full spectrum CBD cream and specific capsules with supplementation for inflammation (Turmeric, Ginger, Piperine), nerve pain (alpha lipoic acid, Vitamin B12), headache (coenzyme Q10, Riboflavin, Magnesium), and sleep (Melatonin, Vitamin D).

## EXCLUSION CRITERIA

We excluded patients who were not on opioids or who were on opioids less than two weeks as our focus on this study was for chronic pain patients on chronic opioid therapy and did not want to introduce the issue of acute pain resolving on its own. We also eliminated patients who had a definitive therapy that may significantly decrease their pain (such as a total knee arthroplasty for patient with primary osteoarthritis of the knee).

## RESULTS

Overall we are showing 76% of patients achieving greater than 33% reduction in their opioid medications, and 56% of patients achieving greater than 50% reduction in their opioid medications.



## DISCUSSION

In our effort to explore cannabidiol (CBD) as a potential and possible treatment for pain at our chronic pain management center, we felt that a robust test of the efficacy of CBD would, in part, involve its application in helping to reduce opioids in a severely debilitated pain population.

In reference to the data, we feel that that pain-relieving properties of CBD have significantly helped a refractory pain population that involves many patients who have been on opioids for decades and have maximized all of our traditional non-opioid pharmacotherapy and adjuvant medications. We feel that the potential for CBD inserting itself into first line therapy for pain complaints is real, and healthcare providers in primary care and pain specialist realms should explore this possibility for a potentially safer alternative for their patients.

## CONCLUSION

The limitations of this study include a regulatory environment that is exerting pressure on patients to reduce their opioids, as well as the lack of randomization or being blinded. Therefore, there may be a patient selection bias. We feel that this study merits further look at CBD as an alternative treatment for patients trying to wean off opioid medications and more globally as a real and potentially first-line treatment for pain complaints. Further studies looking at both of these applications are emerging and ongoing.

## REFERENCES

<sup>1</sup>Ther Clin Risk Manag. 2008 Feb; 4(1): 245–259.

<sup>2</sup>Future Med Chem. 2009 Oct; 1(7): 1333-1349.

<sup>3</sup>Neurotherapeutics. 2009 Oct; 6(4): 713–737.

<sup>4</sup>Front Pharmacol. 2018; 9: 420.

<sup>5</sup>JAMA. 2017 Nov 7; 318(17): 1708–1709.