CBD Use at a Pain Management Clinic, Our Experience with CBD as a Mechanism for Polypharmacy Reduction, 10-month data set

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

ABSTRACT

Pain practitioners are tasked with complex pain management patients. Often, these patients are on a multitude of medications to address their pain related issues. At our pain management clinic (Pain Consultants of Arizona) we recognize many of the referrals we see involve side effects to a given regimen. Oftentimes, this involves a comprehensive pain management approach. While the opioid class of medications have been highlighted in the last decade for their potential harm, it is well documented that the multitude of non-opioid medications can contribute to morbidity and mortality.[1] In terms of a medication regimen, we were interested in the possibility of Cannabidiol (CBD) as a natural treatment to address pain related symptoms[2] for our patients and to reduce some of the medications that may be contributing to real or potential side effects.

INTRODUCTION

One of the main concerns for our multidisciplinary pain clinic are patients who get referred on a less than ideal pharmacotherapy regimen. This is a primary concern for all healthcare providers who deal with complex pain management patients. While the spotlight and narrative on opioids is an enormous concern, of additional concern to pain practitioners is the additive and sometimes synergistic cognitive and CNS depressant side effects of many of the other medications that we prescribe including: tricyclic antidepressants[3] (pain and sleep), skeletal muscle relaxants[4] (pain, muscle spasm and sleep), Anti-epileptics[5] (nerve pain) and selective serotonin reuptake inhibitors[6] (nerve pain). In addition to the concern for CNS depression, we included the use and elimination of NSAIDS in this group as the anti-inflammatory effect of CBD[7] was a genesis for elimination of NSAID users due to side effects. While many of the applications of these medications have worked for their intended purpose, these authors wanted to explore the growing patient use of CBD to ameliorate some of the cognitive effects and side effects of polypharmacy in a pain management patient.

We specifically wanted to explore the patients use of cannabidiol (CBD) and observe which medications, if any, were reduced or eliminated given the patient reported benefits of CBD.

MATERIALS AND METHODS

This was a partially prospective and partially retrospective 10-month data set from July 2018 to May 2019. Patients were followed during this time period and throughout the study and elected voluntarily to try cannabidiol (CBD). We excluded tinctures for this study, and this was limited to a specific brand of CBD capsules and cream in order to address the wide range of CBD manufacturers and variable purity[8]. This was specifically 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).

We looked at the variety of patients who had taken CBD over the course of the data set. Of this group, we looked at the ratio of those that added CBD to their existing pharmacologic regimen. Over the course of the data set we tracked those patients that had a reduction or elimination in their pain medication (NSAID, skeletal muscle relaxer, neuropathic, and opioid) regimen while on their course of CBD.

RESULTS

Overall, during the course of the 10-month data set, we had reductions in each of the subsets of pain medications as well as patients achieving reductions in multiple subsets of pain medications.

Percentage of patients voluntarily reducing their polypharmacy regimen:

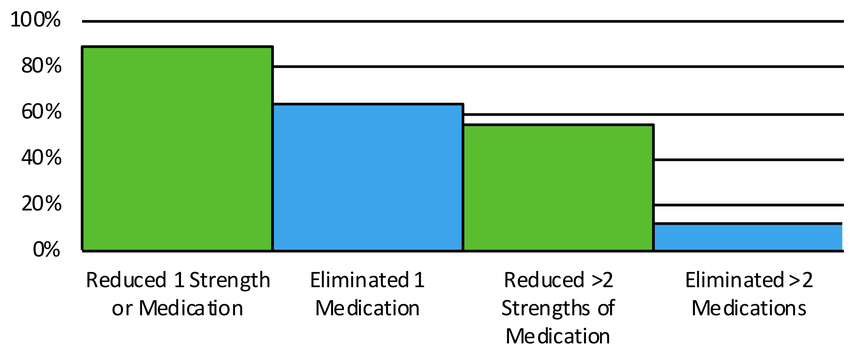
- By at least one strength of one medication: 89%
- That eliminated at least one medication: 64%
- That reduced at least two strengths of medications: 55%
- That eliminated at least two medications: 12%

Breakdown of medications that were voluntarily reduced and/or eliminated:

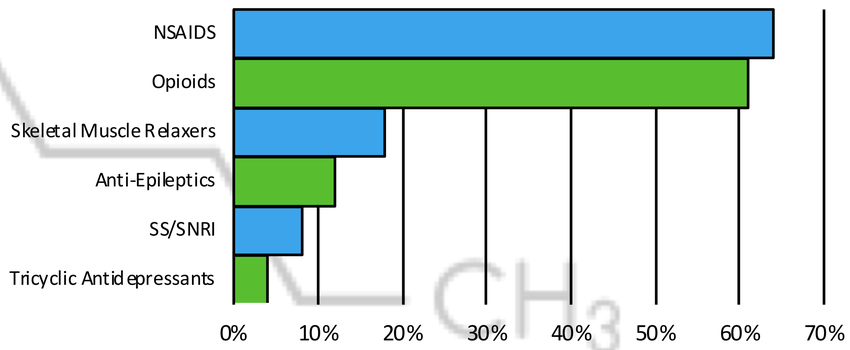
- NSAIDS: 64%
- Skeletal Muscle Relaxers: 18%
- Anti-Epileptics: 12%
- Tricyclic Antidepressants: 4%
- SS/SNRI: 8%
- Opioids: 61%

Note that there were patients that were also reducing benzodiazepam use, however our clinic does not prescribe these medications, and this reduced our ability to tract this appropriately.

Patients that Voluntarily Changed their Polypharmacy Regimen with CBD Use Over a 10-Month Period.



Medications Voluntarily Reduced and/or Eliminated by Patients with CBD Use Over a 10-Month Period.



DISCUSSION

Polypharmacy is a significant issue for patients as it applies to drug-drug interactions, cognitive delay, additive and potential synergistic side effects. Given the severe consequences of many of the types of pain medications we prescribe, the authors thought that it would be important to evaluate CBD as a means for patients to pursue pain relief, and a treatment with potentially lower side effect profile. The subsequent ability to reduce their pain medication polypharmacy and overall reduce their global side effect profile and potentially improve cognition and other indices is an important step to safer prescribing.

CONCLUSION

We conclude that the data supports the thesis that cannabidiol (CBD) is a viable treatment that can reduce and supplant traditional medications we use for pain. We believe that there is a significant niche in the pain management community as many of our traditional medications have a significant side effect profile that is intolerable, causes unpalatable side effects or has other medical or behavioral consequences that are unacceptable. Given the open-ended aspect of this study, we found patients generally using CBD to reduce or supplant NSAID's and opioids to the greatest degree, and some of the more adjuvant pain medications to a lesser degree. We suspect the patient's decision-making process was centered on the current medications that were perceived as giving them unpleasant and unwanted side effects or stigma. Further limitations of the study include that this was not blinded or randomized; therefore there may be a patient selection bias. Given the potential of a natural based medication with potentially less side effect profile, we feel this study warrants further evaluation related to CBD use in the pain management community.

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