

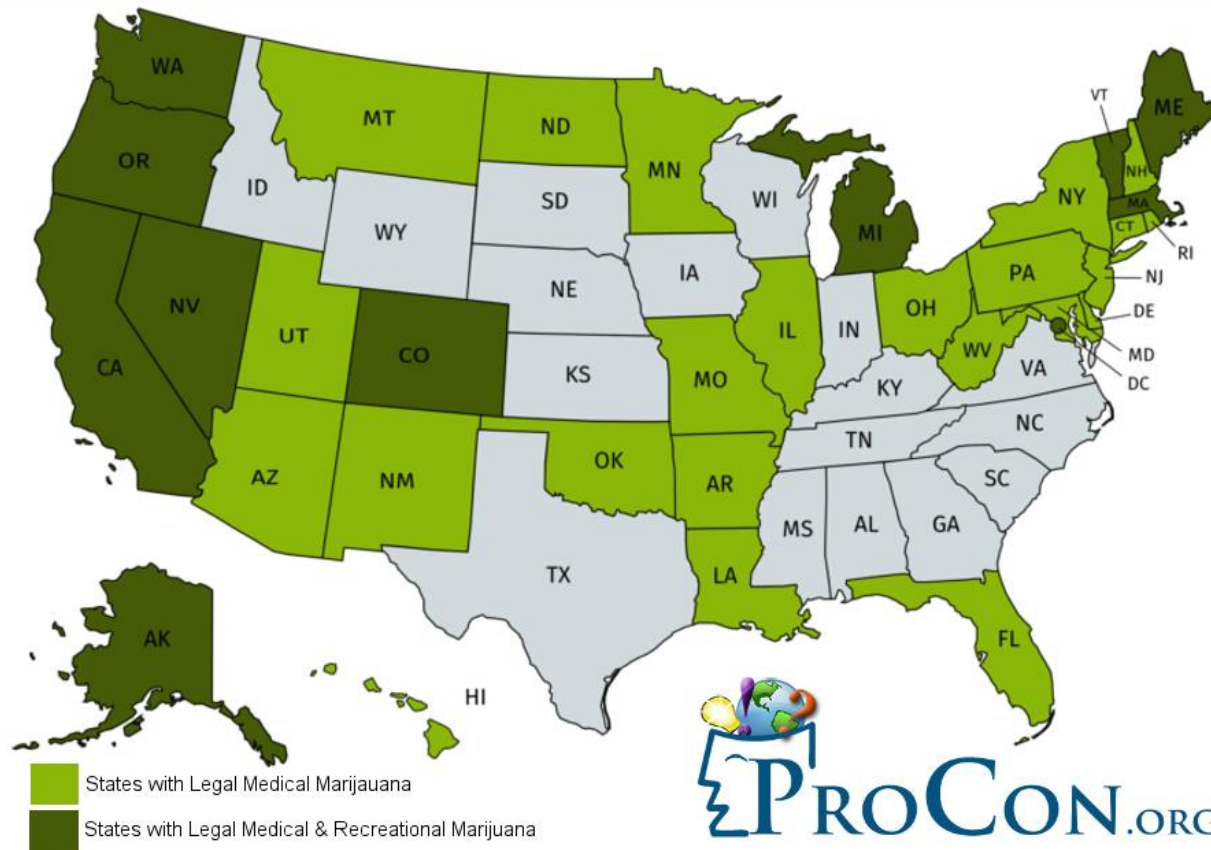
Medical Cannabis Program at Bellbrook Family Practice

Nov 14th, 2018



Updated US Cannabis Laws

33 Legal Medical Marijuana States & DC
10 Legal Recreational Marijuana States & DC




Ohio House Bill 523

- ▶ November 8th, 2016
- ▶ Will allow people with certain medical conditions, upon the recommendation of an Ohio-licensed physician certified by the State Medical Board, to purchase and use medical marijuana
- ▶ To be regulated by 3 government agencies:
 - ▶ Ohio Dept. of Commerce
 - ▶ State of Ohio Board of Pharmacy
 - ▶ State of Ohio Medical Board
- ▶ Recommendation, not prescription
 - ▶ Schedule I



How does it work?

The cannabinoid receptors are further divided into 2 main subtypes, known as cb1 and cb2.



CB1 is found mostly in the brain.



CB2 receptors are mostly found within the immune system.

Qualifying Diagnosis

- ▶ **AIDS cachexia**
- ▶ **Amyotrophic lateral sclerosis (ALS)**
- ▶ **Alzheimer's disease**
- ▶ **Cancer**
- ▶ **Chronic pain**
- ▶ **Chronic traumatic encephalopathy (CTE)**
- ▶ **Crohn's disease**
- ▶ **Epilepsy or another seizure disorder**
- ▶ **Fibromyalgia**
- ▶ **Glaucoma**
- ▶ **Hepatitis C**
- ▶ **Inflammatory bowel disease**
- ▶ **Multiple sclerosis (MS)**
- ▶ **Parkinson's disease**
- ▶ **Positive status for HIV**
- ▶ **Post-traumatic stress disorder**
- ▶ **Sickle cell anemia**
- ▶ **Spinal cord disease or injury**
- ▶ **Tourette's syndrome**
- ▶ **Traumatic brain injury**
- ▶ **Ulcerative colitis**

Qualifying Diagnosis

- ▶ AIDS cachexia
- ▶ **Amyotrophic lateral sclerosis (ALS)**
- ▶ **Alzheimer's disease**
- ▶ Cancer
- ▶ Chronic pain
- ▶ **Chronic traumatic encephalopathy (CTE)**
- ▶ Crohn's disease
- ▶ Epilepsy or another seizure disorder
- ▶ Fibromyalgia
- ▶ **Glaucoma**
- ▶ **Hepatitis C**
- ▶ Inflammatory bowel disease
- ▶ Multiple sclerosis (MS)
- ▶ **Parkinson's disease**
- ▶ **Positive status for HIV**
- ▶ **Post-traumatic stress disorder**
- ▶ **Sickle cell anemia**
- ▶ **Spinal cord disease or injury**
- ▶ Tourette's syndrome
- ▶ **Traumatic brain injury**
- ▶ Ulcerative colitis

Not on the List (yet)

- ▶ **Insomnia**
- ▶ **Depression**
- ▶ **Anxiety**
- ▶ **Constipation**
- ▶ **Parkinsons**

- ▶ **Can petition State Medical Board for additional diagnosis**

Ohio Info Video

[Medical Marijuana video](#)

How do you take it?

- ▶ Vaporize – flower, oil, concentrates
- ▶ Topical – creams, ointments, patches
- ▶ Oral – oil, foods, drinks, lozenges



- ▶ NO: smoking, conduction based vaporizers, advertising to children

No Guarantees

- ▶ **Office visit and evaluation \neq recommendation**
 - ▶ Not everyone qualifies
 - ▶ Contraindications
- ▶ **Doesn't work for everyone**

Promise

ARTICLE IN PRESS

American
Pain
Society

RESEARCH
EDUCATION
TREATMENT
ADVOCACY



The Journal of Pain, Vol ■, No ■ (■), 2016; pp 1-6
Available online at www.jpain.org and www.sciencedirect.com



Medical Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain

Kevin F. Boehnke,* Evangelos Litinas,[†] and Daniel J. Clauw^{‡,§}

*Department of Environmental Health Sciences, School of Public Health, University of Michigan, Ann Arbor, Michigan.

[†]Om of Medicine, Ann Arbor, Michigan.

[‡]Departments of Anesthesiology, Medicine (Rheumatology), and Psychiatry, Medical School, University of Michigan, Ann Arbor, Michigan.

[§]Chronic Pain and Fatigue Research Center, Medical School, University of Michigan, Ann Arbor, Michigan.

Abstract: Opioids are commonly used to treat patients with chronic pain (CP), though there is little evidence that they are effective for long term CP treatment. Previous studies reported strong associations between passage of medical cannabis laws and decrease in opioid overdose statewide. Our aim was to examine whether using medical cannabis for CP changed individual patterns of opioid use. Using an online questionnaire, we conducted a cross-sectional retrospective survey of 244 medical cannabis patients with CP who patronized a medical cannabis dispensary in Michigan between November 2013 and February 2015. Data collected included demographic information, changes in opioid use, quality of life, medication classes used, and medication side effects before and after initiation of cannabis usage. Among study participants, medical cannabis use was associated with a 64% decrease in opioid use (n = 118), decreased number and side effects of medications, and an improved quality of life (45%). This study suggests that many CP patients are essentially substituting medical cannabis for opioids and other medications for CP treatment, and finding the benefit and side effect profile of cannabis to be greater than these other classes of medications. More research is needed to validate this finding.

Perspective: This article suggests that using medical cannabis for CP treatment may benefit some CP patients. The reported improvement in quality of life, better side effect profile, and decreased opioid use should be confirmed by rigorous, longitudinal studies that also assess how CP patients use medical cannabis for pain management.

© 2016 by the American Pain Society

Key words: Medical cannabis, opioids, chronic pain, side effects.

Chronic pain (CP) is among the most common and expensive medical conditions, affecting >100 million Americans, and with total direct and indi-

rect costs of up to \$635 billion per year.⁸ Despite their high prevalence, treatment of CP conditions is difficult. Treatments for CP conditions often require incremental lifestyle changes (exercise, sleep hygiene, stress reduction) and repeated doctor visits to monitor changes, which is increasingly challenging in the current economic and medical climate.¹⁶ Furthermore, other potentially efficacious therapies (eg, cognitive behavioral therapy and complementary approaches) are not often covered by insurance. Finally, opioids—one of the most common medication used to treat CP—are ineffective for many types of CP, as well as being addictive and associated with significant morbidity and mortality.¹ Indeed, opioids are the most common prescription drug implicated in overdose deaths, involved in up to 75% of overdoses, and estimated to be responsible for at least 17,000 deaths annually.¹⁰

Received December 4, 2015; Revised February 23, 2016; Accepted March 7, 2016.

Dr. Clauw has performed consulting services for and/or served on scientific advisory boards of Pfizer, Lilly, Forest Laboratories, Johnson & Johnson, Purdue Pharma, Nuvo, Cerephex, Tonix, Iroko, Takeda, Cerephex, IMC, Zynerva, and Sanumed. He has received grant support from Pfizer, Forest, Merck, Nuvo, and Cerephex. Dr. Litinas is the Chief Medical Officer at Om of Medicine, a medical cannabis dispensary in Ann Arbor, Michigan.

Mr. Boehnke reports no conflicts of interest.

Address reprint requests to Daniel J. Clauw, MD, University of Michigan, 24 Frank Lloyd Wright Dr, PO Box 385, Ann Arbor, MI 48106. E-mail: dclauw@med.umich.edu

1526-5900/16.00

© 2016 by the American Pain Society

<http://dx.doi.org/10.1016/j.jpain.2016.03.002>

Adverse Effects

Short Term

- ▶ Euphoria/intoxication
- ▶ Short term memory
- ▶ Anxiety/paranoia
- ▶ Sedation
- ▶ Hunger
- ▶ Vehicle dependent

- ▶ Not recommended during pregnancy

Long Term

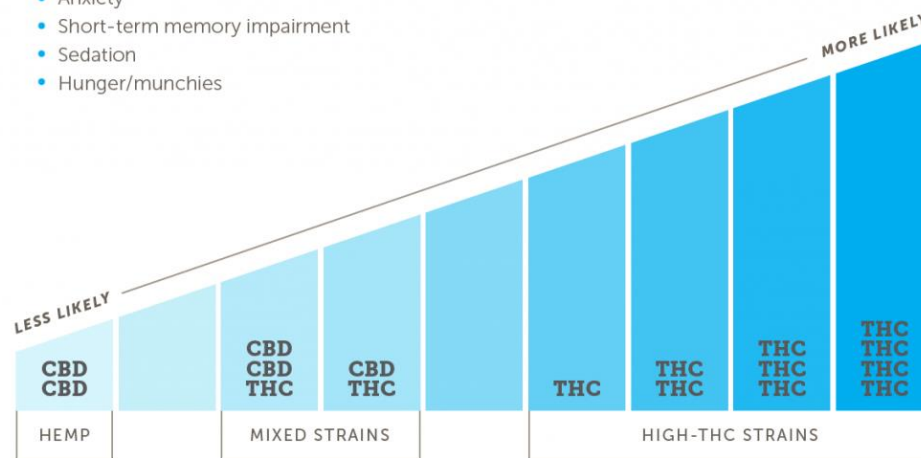
- ▶ Increased psychosis
- ▶ Lower IQ
- ▶ Dependence
- ▶ Cannabinoid Hyperemesis
- ▶ Heart Disease (?)

Side Effects

LIKELIHOOD OF CLASSICAL THC EFFECTS

Potential THC-induced side effects include:

- Anxiety
- Short-term memory impairment
- Sedation
- Hunger/munchies



BFP Office Policies

- ▶ Initial Evaluation/Annual
- ▶ Followups - Must be seen every 90 days
 - ▶ Visits dedicated to cannabis treatment/evaluations
- ▶ Payment - Time of service
 - ▶ Annual - \$200
 - ▶ Follow-ups in office - \$100, Follow-ups phone call - \$50 - 3 per year
 - ▶ As of now not covered by commercial insurance, Medicare, or Medicaid
 - ▶ Visits, product
 - ▶ Could change with re-scheduling
- ▶ Drug testing/OARRS reporting

Prior to Visit

- ▶ **Diagnostics/Imaging**
 - ▶ Diagnosis by specialist if epilepsy, fibromyalgia, Tourette's, etc
 - ▶ Imaging if chronic pain
 - ▶ Prior treatments
- ▶ **Forms**
- ▶ **ID**

Abuse Prevention

Start Talking!

Building a Drug-Free Future

starttalking.ohio.gov



If you or someone you know is struggling with addiction, call 877-275-6364 for information and a referral.

Questions?

US00630507B1

(12) **United States Patent**
Hampson et al.

(10) **Patent No.:** US 6,630,507 B1
(45) **Date of Patent:** Oct. 7, 2003

(54) **CANNABINOIDS AS ANTIOXIDANTS AND NEUROPROTECTANTS**

(75) **Inventors:** Aidan J. Hampson, Irvine, CA (US); Julius Axelrod, Rockville, MD (US); Maurizio Grimaldi, Bethesda, MD (US)

(73) **Assignee:** The United States of America as represented by the Department of Health and Human Services, Washington, DC (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/674,028

(22) **PCT Filed:** Apr. 21, 1999

(86) **PCT No.:** PCT/US99/08769
§ 371 (e)(1), (2), (4) **Date:** Feb. 2, 2001

(87) **PCT Pub. No.:** WO99/53917
PCT Pub. Date: Oct. 28, 1999

Related U.S. Application Data

(60) Provisional application No. 60/082,589, filed on Apr. 21, 1998, and provisional application No. 60/095,993, filed on Aug. 10, 1998.

(51) **Int. Cl. 7** A61K 31/35
(52) **U.S. Cl.** 514/454
(58) **Field of Search** 514/454

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,304,669 A 12/16/27 Adams 568,723

OTHER PUBLICATIONS

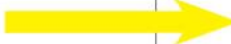
Windholz et al., *The Merck Index*, Tenth Edition (1983) p. 241, abstract No. 1723.
Mechoulam et al., "A Total Synthesis of dl- Δ^1 -Tetrahydrocannabinol, the Active Constituent of Hashish," *Journal of the American Chemical Society*, 87:14:3273-3275 (1965).
Mechoulam et al., "Chemical Basis of Hashish Activity," *Science*, 18:611-612 (1970).
Ottersen et al., "The Crystal and Molecular Structure of Cannabidiol," *Acta Chem. Scand. B* 31, 9:807-812 (1977).
Carha et al., "Chronic Administration of Cannabidiol to Healthy Volunteers and Epileptic Patients," *Pharmacology*, 21:175-185 (1980).
Corsroo et al., "Acute and Chronic Antiepileptic Drug Effects in Audiogenic Seizure-Susceptible Rats," *Experimental Neurology*, Academic Press Inc., 70:626-637 (1980).
Turkanis et al., "Electrophysiologic Properties of the Cannabinoids," *J. Clin. Pharmacol.*, 21:449S-463S (1981).
Carlini et al., "Hypnotic and Antiepileptic Effects of Cannabidiol," *J. Clin. Pharmacol.*, 21:417S-427S (1981).
Karlter et al., "The Cannabinoids as Potential Antiepileptics," *J. Clin. Pharmacol.*, 21:437S-448S (1981).
Corsroo et al., "Antiepileptic Potential of Cannabidiol Analogs," *J. Clin. Pharmacol.*, 21:428S-436S (1981).

(List continued on next page.)

Primary Examiner—Kevin E. Weddington
(74) *Attorney, Agent, or Firm*—Klarquist Sparkman, LLP

(57) **ABSTRACT**

Cannabinoids have been found to have antioxidant properties, unrelated to NMDA receptor antagonism. This new found property makes cannabinoids useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, such as ischemic, age-related, inflammatory and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia. Nonossvochoactive



"Assignment," in general, is the act of transferring to another the ownership of one's property, i.e., the interest and rights to the property. In 37 CFR 3.1, assignment of patent rights is defined as "a transfer by a party of all or part of its right, title and interest in a patent [or] patent application..."

