Marijuana/Cannabis and CBD in Headache 2020

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Frequently Asked Questions:

• When should patients with headache consider medical marijuana/cannabis?
• What forms of medical cannabis are available?
• How does it work?
• Does it work?
No doctor's recommendation required
Doctor's recommendation required
Limited THC content (low-THC, high-CBD)
Prohibited
Find Medical Marijuana Near You

Medical Marijuana Availability in Pennsylvania

Map data ©2019 Google Terms 20 mi
Medical Cannabis

For PA residents:

1. Register on the website
2. See an approved practitioner to get certified
3. Pay $50 for your medical marijuana ID card
4. Visit a Pennsylvania dispensary with your medical marijuana ID card.
Fact or Myth?

Medical cannabis is more effective for migraine or cluster headache than other pain disorders.

Evidence for medical cannabis in pain:

Strong:
- Chronic pain in adults (especially to reduce opioid use)
- Spasticity (especially multiple sclerosis)

Moderate:
- Fibromyalgia
- Neuropathic Pain
Cannabis in migraine

- No controlled placebo controlled trials
- A few small retrospective database studies (single-center, patients enrolled in a clinic) exist
- Effectiveness in pain is not necessarily better than available medications (i.e. tricyclic antidepressants, gabapentin)

Qualifying Medical Conditions (PA)

- Amyotrophic lateral sclerosis.
- Anxiety disorders.
- Autism.
- Cancer, including remission therapy.
- Crohn’s disease.
- Damage to brain or spinal cord with objective neurological indication of intractable spasticity, and other associated neuropathies.
- Dyskinetic + spastic movement disorders.
- Epilepsy.
- Glaucoma.
- HIV / AIDS.
- Huntington’s disease.
- Inflammatory bowel disease.
- Intractable seizures
- Multiple sclerosis.
- Neurodegenerative diseases.
- Neuropathies.
- Opioid use disorder for which conventional therapeutic interventions are contraindicated or ineffective, or for which adjunctive therapy is indicated
- Parkinson’s disease.
- Post-traumatic stress disorder.
- Severe chronic or intractable pain of neuropathic origin or severe chronic or intractable pain **
- Sickle cell anemia.
- Terminal illness
- Tourette syndrome

** Migraine is an indication in NJ
Our experience:

• Most patients we certify have daily headache: migraine, post-traumatic and new daily persistent headache are common diagnoses.
• Anxiety (72.9%) and insomnia (62.5%) are common
• 71.4% used it two or more times per week, 25.0% every day.
• 71.4% used an inhaled form.
• Side effects included dry mouth/throat (46.4%), dry/red eyes (35.7%), fatigue/lethargy (35.7%), and increased appetite (35.7%).
• Before 46.4% of the subjects used acuyr medications > 10 days per month. After the rate dropped to 25.0%.
• Marijuana use seemed to improve anxiety: 57.1% reported improvement, and insomnia 78.6% reported improvement
How does cannabis it work?

• We have receptors called cannabinoid receptors: CB1 and 2
• CB1 is abundant in the brain. CB2 is mostly outside the brain but have a role in chronic pain
• These receptors are activated by endocannabinoids which (1) modulate release of neurotransmitters and (2) regulates homeostasis in the brain, skin, GI tract, liver, cardiovascular system, genitourinary function, and bone
• Some of the effects of endocannabinoids are similar to that of non-steroidal drugs (ibuprofen, naproxen, etc)
• Future treatments could promote endocannabinoids or prevent their breakdown
Fact or Myth?

• For patients with migraine, edible or capsule formulations are usually most effective

• Oral formulations usually take 2+ hours to take effect
• Must be metabolized by liver
• Potential for overconsumption
• Less evidence for chronic or acute pain
Inhalation

- Smoking
- Dabbing
- Vaping
- Hookah

Dabbing: ‘dab’ of cannabis concentrate put onto heated surface (nail)
Sublingual Tinctures
Nasal Sprays

CannatolRx
Rescue NASAL SPRAY
5MG THC/SPRAY
0.1ML/SPRAY
FOR INTRANASAL USE ONLY

Verra Wellness
Nasal Mist
Natural
15 ml

Topical

MARY'S MEDICINALS

Transdermal Patch

Mary's award-winning patches are born out of a commitment to accurate dosing and the application of advanced delivery methods. Offering a quick onset and unsurpassed duration, Mary's patches are 2x2 squares, easy to use, and adhere simply to any venous part of the skin for discrete, all day (or night) relief.

Single Dose Packaging | 10mg
CBD | Cannabidiol  | THCa | Tetrahydrocannabinolic Acid
CBN | Cannabiol  | CBD:THC 4:1 | Cannabidiol/Tetrahydrocannabinol

Single Dose Packaging | 20mg
THC Indica | Tetrahydrocannabinol
THC Sativa | Tetrahydrocannabinol
Rectal Suppository

Cannabis Vaginal Suppository
Menstrual Cramps
Cannabis plants: 2 natural compounds

1. Tetrahydrocannabinol (THC): psychoactive
2. Cannabidiol (CBD) not psychoactive

Both act on cannabinoid receptors (1 and 2) but THC is much stronger

CBD can either make THC more or less effective depending on the amount
Cannabis Sativa (Marijuana) vs Cannabis Sativa L. (Hemp)

- **Marijuana**: flowers, stems, and leaves of female plant
  - High THC, low CBD

- **Hemp**: seed and fiber
  - Low THC, High CBD

Fact or Myth?

- For patients with pain, we typically recommend products with THC, rather than CBD alone.

- No evidence for CBD products in acute or chronic pain
- Over the counter CBD products often very low dose, not clearly effective
Indications: THC

• Good Evidence
  – Cancer chemotherapy induced nausea and vomiting
  – Appetite loss and cachexia in cancer or HIV/AIDS
  – Neuropathic and chronic pain
  – Spasticity in multiple sclerosis (MS)

• Some Evidence
  – Tremor and bladder dysfunction in MS, spinal cord injury, Tourette syndrome, glaucoma, dystonia, IBS, Crohn’s disease, pulmonary disease, and Parkinson’s disease

Grotenhermena and Muller-Vahlb  Critical Reviews in Plant Sciences 2016, 35, 5–6, 378–405
Cannabidiol (CBD)

No intoxication even in high doses
No reinforcement, craving, or compulsive use
CBD does not appear to convert to THC
Clinical studies:
• Anxiety and posttraumatic stress disorder
• Schizophrenia
• Parkinson’s disease
• Dystonia
• Dravet syndrome: severe myoclonic epilepsy of infancy (Lennox-Gastaut) FDA approved
Genus Cannabis

- C. *sativa*: tall with narrow leaves
  - Less sedating

- C. *indica*: short with dense branches
  - More sedating

Sativa and Indica Cannabinoid Breakdown

- THC
- CBD
- CBN

SATIVA

INDICA
Fact or Myth?

• Medical marijuana appears safer than many other pain medications – including opioids.

  - No risk of overdose
  - No physical dependence
  - Low rates of addiction in adults
Cannabis side effects

• Usually a pleasant relaxing experience but..
  – Occasionally anxiety/panic, well-being may alternate with dysphoria
  – Cognitive: distortion of time perception, memory lapses, difficulty in concentration
  – Improves taste and enhances sensory appeal of foods

• Increased heart rate, hypotension with standing

• Occasionally can CAUSE nausea or vomiting

• Not recommended in pregnancy or breastfeeding
The Certification: Considerations

- How likely is it to help?
- Are therapies effective?
- For acute use or daily use?
- Are there barriers to using (job, cost, family)
- Plans for pregnancy?
- Risks of substance abuse/misuse/addiction
When do I recommend it for migraine?

• As acute treatment as a “rescue.” Especially if other medications ineffective or contraindicated
• When cost is not an issue. If for prevention willing to use >1/day
• Having significant disability, has been on multiple conventional treatments
• When we have an established relationship
• Patients should sign a contract prior to certification
Future Directions

Better evidence for when (or when not) to consider using
Enhancing our own body’s endocannabinoids
Preventing breakdown of natural endocannabinoids

Trial and error
Lack of evidence for headache
Not covered by insurance
Significant side effects