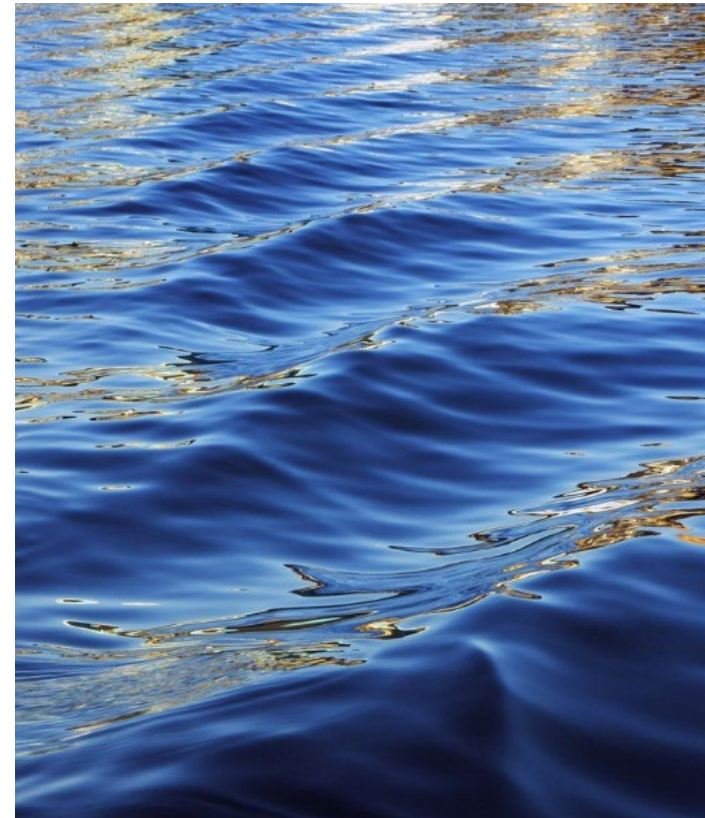


Integration of Cannabis into Clinical Practice: Clinician's Perspective

Soorena Khojasteh MD
System Chief, Pain Medicine
Main Line Health



Overview

- Background
- Obstacles/Areas of Improvement

Background

- Open comprehensive pain management practice in 2018 for large health system serving the Greater Philadelphia area
 - Offerings include procedural approaches to treatment of pain, medication management, integrated behavioral health, and rehabilitative services
 - Medication Management focusing on multimodal opioid sparing strategy"
 - Acetaminophen
 - NSAIDs like Ibuprofen, Naproxen, Celecoxib, Meloxicam
 - Muscle relaxers: cyclobenzaprine, tizanidine, baclofen
 - Neuropathics: Gabapentin, Pregabalin, Duloxetine
 - Opioids
- Patients arrive to practice on varying doses of opioids prescribed by varying sources including primary care physicians, surgeons and other pain management practices
 - **GOAL: Improved pain control/functionality while decreasing opioid dosing to safer levels**
 - CDC guidelines of OME less than 90, and less than 50 if coadministered other controlled substances

Opioid De-escalation

- When patients asked how opioids help answers included:
 - Pain relief
 - "take the edge off"
 - "help with sleep"
 - "relax me"
- Our multimodal regimen was very good at addressing pain from multiple angles, gap in care existed with certain symptoms
 - Medications to address these concern including benzodiazepines, and sleep aids
 - Solution: Introduction of medical cannabis as part of the multi-modal approach
 - Majority of studies or case series utilize cannabis as monotherapy with minimal efficacy
 - We would be using as part of the "tool box"

Approved Conditions in Pennsylvania

- Amyotrophic lateral sclerosis.
- Anxiety disorders.
- Autism.
- Cancer, including remission therapy.
- Crohn's disease.
- Damage to the nervous tissue of the central nervous system (brain-spinal cord) with objective neurological indication of intractable spasticity, and other associated neuropathies.
- Dyskinetic and 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 in combination with primary therapeutic interventions.
- 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.

Observations

- Successes
 - >90% of patients less than OME 30 in practice
 - Allowed for transition to buprenorphine based products
 - Buprenorphine activate Mu receptor to address pain while antagonizing the kappa receptor which provides anxiolysis, sedation, euphoria in higher doses
 - Cannabis has effects similar to kappa stimulation by opioids
- Concerns
 - Cannabis use disorder
 - Standardization/Dosing

DSM V Definitions: sound familiar

Opioid Use Disorder

- Opioids are often taken in larger amounts or over a longer period than was intended.
- There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- Craving, or a strong desire or urge to use opioids.
- Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.
- Important social, occupational, or recreational activities are given up or reduced because of opioid use.
- Recurrent opioid use in situations in which it is physically hazardous.
- Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
- Exhibits tolerance
- Exhibits withdrawal

Cannabis Use Disorder

- Taking more cannabis than intended
- Difficulty controlling or cutting down cannabis use
- Spending a lot of time on cannabis use
- Cannabis cravings
- Problems at work, school, and home as a result of cannabis use
- Continuing to use cannabis despite social or relationship problems
- Giving up or reducing other activities in favor of cannabis
- Taking cannabis in high-risk situations
- Continuing to use cannabis despite physical or psychological problems
- Tolerance to cannabis
- Withdrawal when discontinuing cannabis

Current Process in Majority of States

- Physician "certifies," with no input into what kind of products the patient receives/purchases at the dispensary
 - Issues with this approach
 - Products vary dramatically in THC/CBD amounts, ratios, etc
 - **Solution: Standardization of extraction processes and validation of products**
 - Majority of product being sold is inhalational
 - **Solution: Improved non-inhalational products, but also a role for more elegant legislation**
 - No clear dosing strategy
 - **Solution: Treating the varying indications for medicinal cannabis as separate by providing patients and physicians dosing strategies to address the condition**
 - Example: Chronic pain doses of CBD may be 30mg twice daily, whereas CBD dosing for anxiety closer to 300mg daily.
 - No limits on purchasing
 - **Solution: Improved Legislation**

SOLUTION: "MEDICAL-IZATION"