Disclosures

• Financial:
  – None

• Intellectual:
  – ND
  – Anecdotal
  – “Outside of the box” doesn’t mean I don’t like what’s “inside the box”.

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MS Pain

- CNS = can create just about any symptom in the body. Very common to overlap with other conditions. Vague. UTI, IBS, Fatigue.
- Neuropathic pain can be disabling
- Spasticity, weakness, fatigue are also common and limit functionality
- Standard of care can help many, may also create side effects which impact patient negatively.
Off label use of medication

• Medications can be “altered” to change route of administration/dosage which can potentially have less side effects.

• Medications that have on-label use for another condition, may have positive impact in MS.
Changing route of administration

• Topical preparations:
  – Compounding pharmacies can make up creams/suppositories/troches
  • Examples:
    – GABA/AMI/KETO/LIDO cream (5/2/2/5%)
    – Baclofen/Cyclobenzaprine/Verapamil (5/5/2%)
    – Ketamine topical 0.5-20%*

• Infusion
  – MgCl 200mg/ml. 1000mg – Spasticity. Neuropathy
Off label

• Naltrexone
  – The use of low-dose naltrexone (LDN) as a novel anti-inflammatory treatment for chronic pain - Jarred Younger et al
  – Pilot trial of low-dose naltrexone and quality of life in multiple sclerosis. - Cree BA
  – 1.5mg to 6 mg po qhs
    • Sleep, spasticity, improved energy, reduced overall pain.
Cannabis

• State of Washington – Medical Marijuana Law – RCW 69.51A
  • MS – spasticity and intractable pain
  • Must be established patient. Patient must be examined. Options other than MMJ must be discussed. Practice can not be based on MMJ Rx. Provider cannot have relationship with MMJ dispensary or recommend that patient go specific facility. No ingested samples (topical <0.3 THC OK). Once authorized, provider can discuss routes of administration, dosing etc.
  • Tamper proof paper. Not Rx pad:
    – https://www.doh.wa.gov/Portals/1/Documents/Pubs/630123.pdf

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Cannabis

– MMJ Database stats (5/18)

– Recognition Cards
  • Total cards created: 32,123
  • Adult Patient – age 18 and over cards: 29,324
  • Minor Patient – under age 18 cards: 245
  • Designated Provider cards: 2,554

– Medical Marijuana Consultant Certifications
  • Active certifications: 730
  • Total consultants working in stores: 547

– Medically Endorsed Stores
  • * Active stores: 192
  • Inactive stores: 341

-Source: WA - DOH

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Cannabis

- WSU College of Nursing – Dr. Louise Kaplan
- DEA C-I
  - CBD ?
- Concern if patient works for Fed or travels interstate. States may prosecute based on absolute weight of item. (1 - 12 oz drink = 12 oz MMJ)
Cannabis

• Does it even help?
  – It depends....
  • Routes of administration are important
    – Inhaled effects tend to be over “threshold” and lead to changes in mood, concentration, awareness
    – Ingested can take time to occur and may not result in complete reduction in symptoms. If patients repeat ingested dosing they may “overshoot” the mark and be uncomfortable from the effects.
    – Topical may not be absorbed enough to have noticeable effect
  • Patient sensitivity to pain and effects of MMJ are also factor

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AUC – Inhale/Ingest
Is it safe? – Mostly

- High LD50 – Canine ingested 3000mg/kg Primate IV THC 92mg/kg - Large mammals vs. small mammals
- Minimal* interactions with most medications. (Opioids*)
- Concern with anti-convulsants, patients with epilepsy
  - (GWPH/ZYNE)
- Case reports of arrhythmia. Recent study suggest: > aMI risk, though no increased risk of heart abnormalities
- Chronic Cyclic vomiting
- Lung health concerns for inhaled/combusted - Vaping??

– Likely causes dependence, however no “withdrawal” effect.
Cannabis

• What to tell patients about CBD vs. THC
  – CBD likely the more “medicinal” aspect of cannabis. Has antispasmodic, neuroleptic activity
  – THC tends to have more euphoria, mood/sensory altering effects.
  – Both can impact short term memory. Focus.
  – Both may improve sleep/anxiety/change “perception” of pain.
CAM Therapy for pain

• Mindfulness - MBSR
  – Stress/depression/cognition
    • The Effectiveness of Mindfulness-Based Stress Reduction on Psychological Distress and Cognitive Functioning in Patients with Multiple Sclerosis: a Pilot Study. Blankespoor RJ et al
  – Pain (?)
    • Mindfulness Meditation for Chronic Pain: Systematic Review and Meta-analysis. Hilton L et al.

• Yoga
  – The Effect of Group Mindfulness-based Stress Reduction and Consciousness Yoga Program on Quality of Life and Fatigue Severity in Patients with MS. Nejati S et al.
CAM for MS

• Acupuncture for MS
  – Review of studies shows poor evidence.
    • Acupuncture and multiple sclerosis: a review of the evidence. Karpatkin HI
  – Clinical reports can vary from “cure” to “scam”
  – Generally helpful for pain, spasms, sleep, “stress”
CAM therapies – “series of unfortunate names”

• Manual therapies:
  – Craniosacral therapy, Rolfing, Bowen therapy (not Jim), Feldenkrais

• “Electro” therapies:
  – EMS – Pain “gating”, muscle stim, neurotrophic(?)
  – PEMF - Microcirculation
  – PoNS – (HSDT*)

• “FLOAT” – Mg bath.
MS Pain - Conclusion

• Acknowledge pain as well as the difficulty/complexity of the condition itself
• Encourage patient to take “ownership” of their pain management strategies
• Explore “outside of box” strategies if standard of care is not successful
• Guide towards least harmful routes of medication administration
• Educate regarding pain cycles/patterns/triggers