Opioids for Pain Treatment in Persons with Opioid Use Disorder

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Educational Objectives

At the conclusion of this activity participants should be able to:

- Identify principles of pain treatment in opioid use disorder
- Describe pain treatment in opioid use disorder and chronic non-terminal, non-cancer pain
Pain Treatment in Opioid Use Disorder

**Goals**

- Safe and effective pain treatment
- Support of opioid use disorder recovery (avoid relapse)
  - Initiate and enrich usual recovery activities
  - Expose to small rewards to promote effective pain coping
- Avoid personal and public health consequences of opioid use disorder
Pain Treatment in Opioid Use Disorder

*General Principles*

- Engage patient
- Treat pain safely and effectively
- Address opioid use disorder
  - Treatment including medication (methadone or buprenorphine) and counseling is needed
- Address pain facilitators including substance withdrawal
Listen to and Engage Patient

- Past experiences can shape treatment choices
- Perceptions and expectations of treatment efficacy impacts outcomes
- Investment in plan facilitates cooperation
- Plan treatment when pain anticipated
- Engagement in self-management critical to chronic pain treatment, helpful for all pain
  - Focus on non-medication modalities
Treat Pain Safely and Effectively

- Untreated pain may drive opioid use disorder, self medication and misuse
- Reduce or resolve causes when possible
- Provide appropriate pain relief
  - Non-medication approaches when effective, safe, easily available and acceptable to patient
  - Less-rewarding meds when safe and effective
  - Potentially rewarding medications when needed with appropriate limits on use
- Plan treatment when pain anticipated (eg for elective procedures or surgery)
Address Pain Facilitators

Commonly:

• Acute pain
  - Anxiety, PTSD, sleep disturbance, substance issues, substance withdrawal (particularly opioid withdrawal)

• Chronic non-cancer pain
  - Anxiety, PTSD, sleep disturbance, substance issues, depression, functional losses, learning, and reward
  - See Assessing OUD lecture

• Terminal pain
  - Anxiety, PTSD, sleep disturbance, substance issues, depression, functional losses, spiritual challenges, grief over impending losses
Address Opioid Use Disorder

• Acknowledge the challenge
• Assure not an obstacle to working for analgesia
• Encourage and support recovery
  ▪ Discuss what has been valuable for patient
  ▪ Identify or intensify psychosocial support
    ▪ Substance use counselor, self help groups, sponsor, faith-based interventions, mindfulness (see Mindfulness lecture), etc.
  ▪ Continue or offer pharmacologic support like methadone or buprenorphine
  ▪ Assure safety: limited access and supply
    – 3 to 5 day supply of opioids, if prescribed
Address Opioid Use Disorder

- Address physiologic issues of drug use
  - Treat withdrawal as appropriate
  - Anticipate opioid tolerance in opioid-dependent individuals
  - Be aware of opioid reward effects
Address Opioid Use Disorder

Consider Opioid Reward

• Some drugs and dosing regimens induce greater reward than others
  ▪ Rapidity of increase in blood level (IV vs oral opioids)
  ▪ Magnitude of blood level
  ▪ Specific receptor effects
  ▪ Periodicity of effects
    ▪ Intermittent vs stable (Kreek et al, 1998; Gardner, 2011)

• Does not occur in all individuals
Opioid Reward Considerations
Routes of Administration

- IV administration
- IM/SC administration
- Oral administration

CNS side effects (Reward, sedation, etc)
Analgesia
Pain

Plasma Concentration

Time

0
Opioid Reward Considerations
Schedules of Administration

- Pain
- Withdrawal if opioid dependent

Intermittent Bolus Administration
Long-acting, CR meds
Patient controlled analgesia (PCA)

CNS side effects (Reward, sedation, etc)

From prior PCSS-O presentation
Address Opioid Use Disorder

Consider Opioid Reward Effects

- Strategies to minimize if desired
  - Slow onset drugs (methadone, *can only be dispensed through a methadone maintenance program in the outpatient setting*)
  - Stable blood levels (sustained release meds: oxycodone, morphine, fentanyl)
  - Kappa agonists (pentazocine, butorphanol) less reward
    - Note mu antagonism, can’t use mu agonists
  - Partial mu agonists (buprenorphine or tramadol)
- In acute pain, focus on relief. *Transient reward won’t likely affect long-term course of opioid use disorder*
Educational Objectives

At the conclusion of this activity participants should be able to:

• Identify principles of pain treatment in opioid use disorder

• Describe pain treatment in opioid use disorder and chronic non-terminal, non-cancer pain
Mr. Smith: “I have a pain in my side that won’t go away”

- 35 yo obese male who is new to your practice
- Chronic, nonspecific moderately-severe right upper quadrant pain
- Family history of alcohol use disorder
- Denies personal history of substance use disorder
- Multiple ED visits for pain and morphine refills
- Troubled by impact of pain on his work
Mr. Smith’s Physical Exam

- Review of prior records suggest extensive work up with no reversible cause for patient’s pain
- Normal neurologic, musculoskeletal, and joint exam
- Severe tenderness to palpation in the RUQ
- Elevated PHQ-9 score
- Multiple opioid prescriptions in the past 6 months from various ED providers
- He has been out of his Extended Release (ER) morphine for 2 weeks and would like a prescription today
## OPIOID RISK TOOL

<table>
<thead>
<tr>
<th>Item</th>
<th>Mark each box that applies</th>
<th>Item Score If Female</th>
<th>Item Score If Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Family History of Substance Abuse</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>[ ]</td>
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<td>3</td>
</tr>
<tr>
<td>Illegal Drugs</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Prescription Drugs</td>
<td>[ ]</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2. Personal History of Substance Abuse</td>
<td></td>
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</tr>
<tr>
<td>Alcohol</td>
<td>[ ]</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Illegal Drugs</td>
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<td>4</td>
</tr>
<tr>
<td>Prescription Drugs</td>
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<td>5</td>
<td>5</td>
</tr>
<tr>
<td>3. Age (Mark box if 16 – 45)</td>
<td>[ ]</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. History of Preadolescent Sexual Abuse</td>
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<td>[ ]</td>
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<td>3</td>
<td>0</td>
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<tr>
<td>5. Psychological Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention Deficit Disorder, Obsessive Compulsive Disorder, Bipolar, Schizophrenia</td>
<td>[ ]</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>[ ]</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL** 10

**Total Score Risk Category**
- Low Risk 0 – 3
- Moderate Risk 4 – 7
- High Risk ≥ 8
Lab/Imaging Evaluation

- POC Urine drug test = + opioids
- CBC normal
- CMP normal
- Vitamin D mildly low
- Vitamin B12 normal
- CT abdomen with contrast negative

What would you do?
Recommendation for Mr. Smith

- Express concern about his prior use of ER morphine
- Explain that the risks of opioid therapy outweigh the benefits at this point
  - Do not offer a taper due to concern for possible OUD
- Continue work up to render a specific diagnosis
- Offer alternative, safer treatment options for pain
- Refer for treatment for suspected OUD
- Schedule follow up with you in 2 weeks
When to say ‘no’ to a request for long-term opioid therapy

- Patients with current, *untreated* substance use disorders or mental health disorders should NOT be placed on long-term opioid therapy.
- **Definite No**
  - Benzodiazepine use, alcohol use disorder, opioid use disorder, other substance use disorder
- **Proceed with caution**
  - Cannabis, tobacco, alcohol use
  - Strong family or personal history of substance use disorder
  - Mental illness, history of trauma, young age
Saying ‘no’ to a request for opioids

- Alternate evaluation, therapies and continued care should be offered when refusing to write an opioid prescription.
- Continue regular patient visits to re-evaluate goals of care and treatment.
Use a Risk-Benefit Framework

NOT...

- Is the patient good or bad?
- Does the patient deserve opioids?
- Should this patient be punished or rewarded?
- Should I trust the patient?

RATHER...

Do the benefits of opioid treatment outweigh the untoward effects and risks for this patient (or society)?

Judge the opioid treatment – NOT the patient

Mr. Smith’s Outcome

- Extensive work up negative
- Osteopathic evaluation consistent with myofascial pain
- Admitted he was making “homemade opioid tea” from organic poppy seeds and using on a daily basis
- Re-offered opioid use disorder (OUD) treatment
- Pain remained a problem for him
If he had agreed to OUD treatment and continued to have pain, what is your approach?

- Multimodal treatment
  - Exercise, meditation, weight loss, complementary and alternative treatments, cognitive behavioral therapy
- Utilize non-opioid medication options
- Consider opioids only for acute flares of pain
  - Very close monitoring, informed consent
  - 3-5 day Rx for opioids only
  - Share risk with a key support person
- Utilize medication assisted treatment for partial or full analgesic benefit
  - Methadone analgesia 4-6 hours (can only be prescribed for opioid use disorder in a federally licensed clinic)
  - Buprenorphine 4-6 hours, can dose BID or TID for pain (off label use for pain, requires DEA X waiver for OUD treatment)
What if he wants to use medicinal cannabis for pain relief?

- Continue to recommend OUD treatment
- Advise that he is at higher risk to develop a cannabis use disorder given his underlying OUD
- Inform him of the following principles about cannabis
  - Narrow therapeutic window
  - Cannabis with higher CBD content (vs THC) *may* be effective for some forms of pain, but rigorous testing is needed
    - Cannabis is not regulated, so label ingredients may be misleading
  - Side effects: nausea, vomiting, paranoia, worsening of anxiety or depression, weight gain, reduced functional status
Wendy: “Help me with my migraines”

- 43 yo female with long history of migraine headaches, high health care utilization, depression, anxiety, sexual abuse as a child, and domestic violence as an adult.
- Sought outpatient treatment for opioid use disorder 6 months ago but never stopped her prescription for hydrocodone/APAP
- Currently maintained on daily hydrocodone/APAP BID and nortriptyline
- Continues to have daily, debilitating migraines
Wendy

- Admits that she craves opioids
- Spends most of her day in bed
- States that she is unable to stop or cut back on opioids
- Increased depression, mental instability when she stops opioids
- Frequently obtains opioids from friends
- Her husband is concerned about her use
- PDMP shows 3 dental prescribers, 3 physician prescribers, and >4 pharmacies
Does she have an opioid use disorder?

- What sounds like a “straight forward” case of opioid use disorder persisted for >1 year because subjective and objective measures were not evaluated
- PDMP data was “eye opening” for the patient
Wendy’s Outcome

• Transitioned off of opioids to outpatient buprenorphine/naloxone maintenance treatment
  ▪ Requires special training and DEA X waiver
• Active engagement with outpatient OUD treatment
• Migraines dramatically improved
• Hospital/ED utilization decreased
• Mental health improved
• Family life improved
• Quality of life improved
Other Models of Care to Address Pain and Opioid Use Disorder

- Integrated Pain and Opioid Use Disorder Clinics in Primary Care
- Multidisciplinary pain programs
  - Treat pain and opioid use disorder
  - Maximize active modalities of treatment
  - Enhance self-care
  - Cleveland Clinic program showed low resumption of prescription opioids at 12 months after full tapering
    - 22% resumed opioid use
    - Depression was predictive of restarting opioids

Other models:
Co-occurring Disorders Clinic (CODC)

- Clinic within Ambulatory Care Service to evaluate, treat, manage and monitor co-morbid pain and opioid use disorder
  - Patients with pain and high risks associated with opioid use
    - History of substance use disorder
    - Family history of substance use disorder
    - Younger age
    - Psychiatric illness
  - Non-compliant patients
  - Complex pain regimens
  - Prescribed high dose opioids
Plan of CODC

• Integrate treatment of co-occurring pain and addiction
  ▪ Can provide treatment for pain and opioid use disorder simultaneously
  ▪ Can provide pharmacologic and non-pharmacologic treatments for pain to minimize opioid use

• Embed the clinic within primary care
  ▪ CODC providers available for immediate consultation
  ▪ Greater acceptance of pain and opioid use disorder as a disease like other medical conditions
  ▪ Decreased stigmatization

• Utilize the chronic care model to treat co-occurring pain and opioid use disorder
Outcomes: 65% of participants are still active in the program.

Outcomes: **pain scores** before and during buprenorphine treatment.

- **OFF opioids 14%**
- **Discontinued 21%**
- **Active on BUP 65%**

**BEFORE**

Mean score: 6.39 (95% CL 6.2, 6.6)

**DURING**

Mean score: 5.6 (95% CL 5.4, 5.8)

Pain scores **DECREASED** after buprenorphine treatment. This difference is statistically significant.

From prior PCSS-O presentation
In Summary Treatment of Pain in Opioid Use Disorder

- Address both pain and opioid use disorder recovery
- Attention to the multidimensional experience of pain
- Consider physiologic dependence and its implications for pharmacologic management
- Take measure to support control of medications
References

PCSS-O Colleague Support Program and Listserv

- PCSS-O Colleague Support Program is designed to offer general information to health professionals seeking guidance in their clinical practice in prescribing opioid medications.
- PCSS-O Mentors comprise a national network of trained providers with expertise in addiction medicine/psychiatry and pain management.
- Our mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
- The mentoring program is available at no cost to providers.

For more information on requesting or becoming a mentor visit: [www.pcss-o.org/colleague-support](http://www.pcss-o.org/colleague-support)

- Listserv: A resource that provides an “Expert of the Month” who will answer questions about educational content that has been presented through PCSS-O project. To join email: pcss-o@aaap.org.
PCSS-O is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: Addiction Technology Transfer Center (ATTC), American Academy of Neurology (AAN), American Academy of Pain Medicine (AAPM), American Academy of Pediatrics (AAP), American College of Physicians (ACP), American Dental Association (ADA), American Medical Association (AMA), American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society for Pain Management Nursing (ASPMN), International Nurses Society on Addictions (IntNSA), and Southeast Consortium for Substance Abuse Training (SECSAT).

For more information visit: www.pcss-o.org
For questions email: pcss-o@aaap.org

Twitter: @PCSSProjects

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