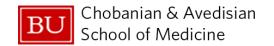
Pain and Opioid Use Disorder

Immersion Training in Addiction Medicine Program 2025 Addiction Medicine Lightening Rounds

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Daniel P. Alford, MD, MPH
Professor of Medicine
Associate Dean, Center for Continuing Education









Pain and OUD: General Considerations

- ~60% individuals seeking OUD treatment report chronic pain vs 20% of general population
- Pain is a risk factor for OUD with ~80% reporting pain as reason for initial opioid use
- Key symptom of opioid withdrawal is increased pain mediated by increased intracellular cAMP which facilitates pain transmission
- Methadone (oral) and buprenorphine (sublingual) confers analgesia for ~6-8 hours; patients on once daily dosing for OUD treatment will not feel analgesic effect beyond this

OUD and Increased Pain Sensitivity

- Patients with active OUD (in absence of withdrawal)...
 - have less pain tolerance (i.e., more pain sensitive) than peers in remission or matched controls
 - have less pain tolerance than siblings without an addiction history
- Patients taking medications for OUD (MOUD)
 (i.e. methadone, buprenorphine) have less
 pain tolerance than matched controls



Compton MA. *J Pain Symptom Manage*. 1994 Compton P et al. *J Pain Symptom Manage*. 2000 Compton P et al. *Drug Alc Depend*. 2001

Opioid Agonist Treatment (OAT) and Acute Pain

- Preclinical and clinical studies now suggest that concurrent use of opioid analgesics in patients with OUD maintained on OAT (i.e., buprenorphine or methadone) is effective
- Best available evidence suggests
 - Continue OAT (baseline daily opioid equivalence) during and after surgery to prevent withdrawal-mediated pain
 - Often have higher opioid analgesic requirements due to increase pain sensitivity and/or opioid cross tolerance between MOUD and opioid analgesic – may require dosing more frequent intervals
 - Addition of opioid analgesics will not compromise recovery; undertreated pain, however,
 can be a trigger for use and result in disengagement in care

OAT and Chronic Pain

 Since Opioid Treatment Programs (methadone maintenance) only dose (dispense) methadone once daily, patients may require addition of short-acting opioid analgesics for pain if nonopioid analgesics are ineffective

Note: it is illegal to prescribe at-home methadone for the treatment of OUD whether or not the patient has concurrent pain (Harrison Narcotics Act of 1914)

 Unlike methadone, buprenorphine can be prescribed in primary care and dosed multiple times per day to treat OUD and pain

Naltrexone Maintenance and Pain

- Opioid antagonist effect of oral naltrexone lasts up to 72 hours;
 IM naltrexone lasts at least 25 days
- For acute pain management:
 - STOP naltrexone (no taper required)
 - Multimodal: consider nonopioids and regional anesthesia
 - Use of agents like ketamine or lidocaine
 - If opioids needed, will require high doses with close monitoring of respiratory status

Summary

- Account for increased pain sensitivity in patients with OUD whether or not they are taking MOUD
- Continue buprenorphine or methadone during acute pain including surgery
- Consider split dosing buprenorphine for co-treating pain and OUD