

Pain Management in People Who Have OUD; Acute vs. Chronic Pain

Developer: Stephen A. Wyatt, DO

Medical Director, Addiction Medicine

Carolinas HealthCare System

Reviewer/Editor: Miriam Komaromy, MD, The ECHO Institute™

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under contract number HHS250201600015C. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.



Disclosures

Stephen Wyatt has nothing to disclose



Objectives

- Understand the complexities of treating acute and chronic pain in patients with opioid use disorder (OUD).
- Understand the various approaches to treating the OUD patient on an agonist medication for acute or chronic pain.
- Understand how acute and chronic pain can be treated when the OUD patient is on an antagonist medication.



Pain and Substance Use Disorder

- Potential for mutual mistrust:
 - Provider
 - drug seeking
 - dependency/intolerance
 - fear
 - Patient
 - lack of empathy
 - avoidance
 - fear



Altered Pain Experience Opioid Dependent Patients

- Less pain tolerance when opioid dependent
- Less pain tolerance on agonist maintenance.
- Less pain tolerance in women on methadone maintenance after cesarean delivery

Martin J (1965), Compton P (2000), Meyer M (2007)

Approach to the Patient

- Attitudes
 - Develop comfort in caring for patients with substance use disorder (SUD)
 - Non-judgmental, patient-centered care
- Skills
 - Reflect the patient's perspective to build rapport
 - Motivational interviewing skills
- Knowledge of SUD and pain management

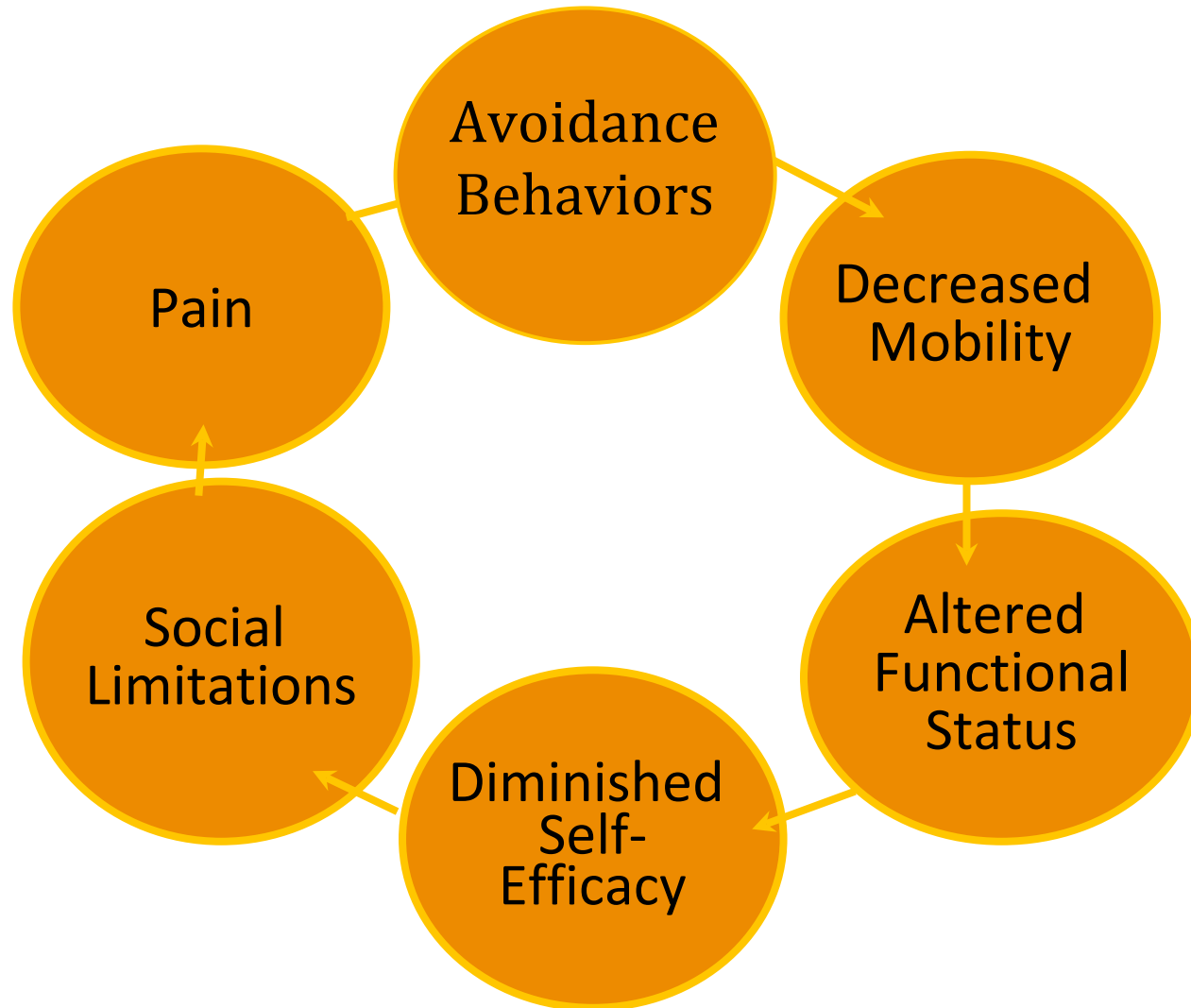


Pain Treatment in Patients with SUD

- Explain potential for relapse
- Explain the rationale for the medication management to patient and supports
- Establish a treatment plan with the patient
- Encourage family/support system involvement
- Frequent follow-ups
- Consultations and **multidisciplinary** approach



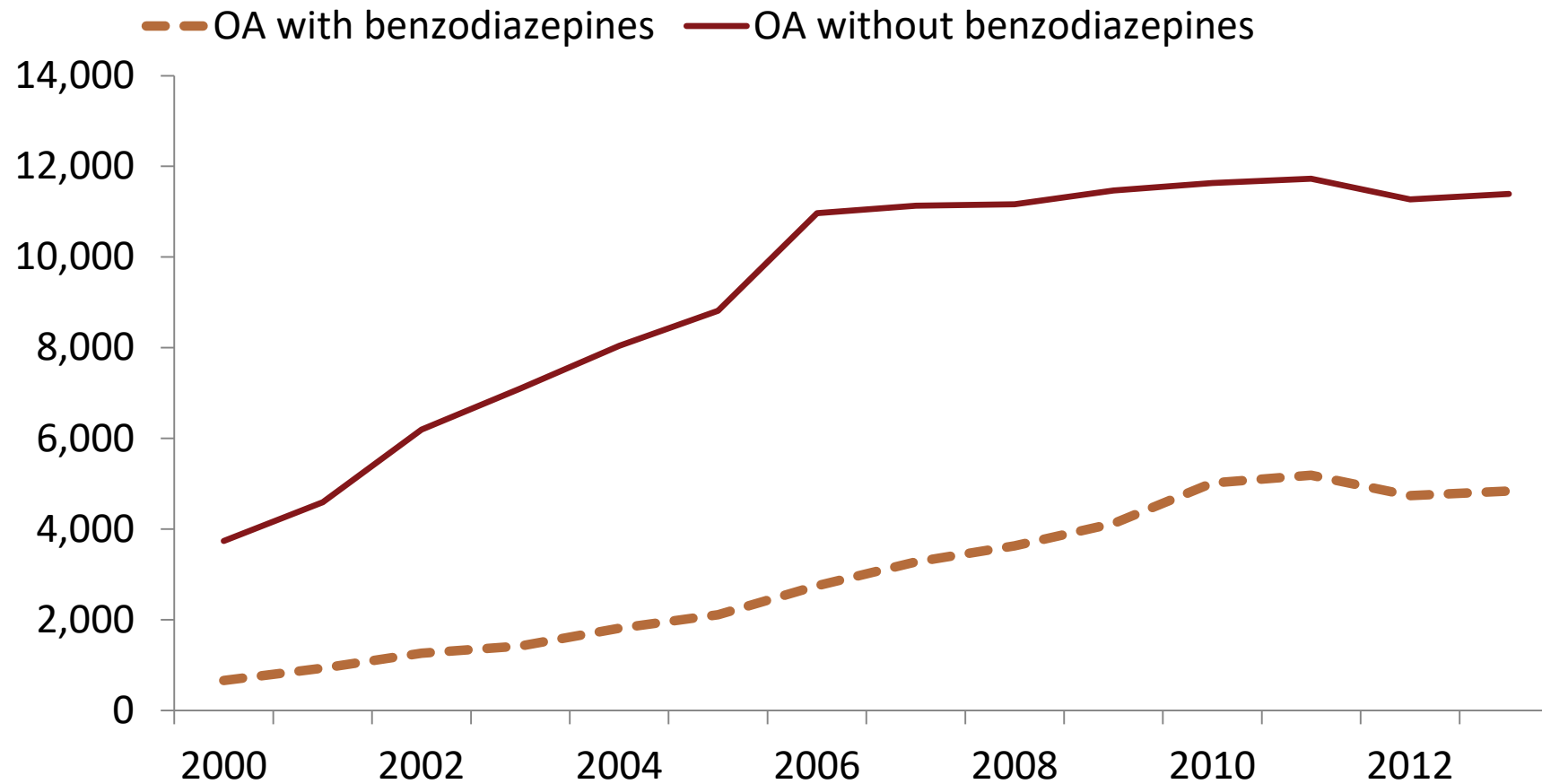
Vicious Cycle of Uncontrolled Pain



Perceived Pain as Suffering

- At risk patients
 - Past history of substance use disorder
 - Emotionally traumatized
 - Dysfunctional / alcoholic family
 - Lacks effective coping skills
 - Dependent traits

Number of Opioid Analgesic Poisoning Deaths by Involvement of Benzodiazepines United States, 2000–2013^{24, 25}



Alternative Therapies for Chronic Pain

Psychological Interventions

- Cognitive therapy
 - Monitor thoughts and feelings
 - Attention diversion and distraction
 - Imagery and Hypnosis
- Behavioral therapy
 - Activity monitoring
 - Stress monitoring and reduction
 - Relaxation and Biofeedback
 - Communication Skills, e.g. assertiveness training
 - Goal setting, monitor progress



Non-Opioid Alternatives to Pain Management

- Medications
 - NSAIDs
 - Anticonvulsants
 - Antidepressants (SNRIs, SSRIs, TCAs)
 - Topical agents
- Non-Pharmacologic
 - Exercise
 - Manual therapies
 - Acupuncture
 - Orthotics
 - TENS
- Interventions
 - Nerve blocks
 - Steroid injections
 - Trigger point injections
 - Stimulators



Treatment of Acute Pain During Agonist Treatment

- Maintain current dose of the agonist treatment
- Methadone and buprenorphine analgesic properties are shorter acting than their potential to reduce craving and withdrawal so divided doses are more effective.
- Opioid analgesic doses will typically be higher due to cross tolerance and increased pain sensitivity
- Risk of relapse may be higher with inadequate pain management
- Avoid using mixed agonist/antagonist meds (e.g. butorphanol)

Acute Pain in the Methadone Tx Patient

- Continue once daily methadone dose
- Add full agonist for acute pain and post-op
- Patients on agonist therapy will have a higher tolerance
- Continue to monitor the patient when titrating and tapering the opioid

Alford DP, Compton P, Samet JH. Ann Intern Med 2006
Kantor TG et al. Drug and Alc Dependence. 1980

Methadone Maintenance and Chronic Pain

Determining Opioid Effect on Pain:

- Opioid Responsive Pain: Following the administration of methadone there is pain relief then 6-8 hrs. later pain returns.
- Pain Due to Opioid Withdrawal: Pain returns >24hr after administration of methadone

Note: Methadone typically blocks the euphoric effects of other opioids.

Problems associated with Pain Management in MMT Patients

- Methadone clinics cannot administer methadone three or four times a day
- Methadone can only be prescribed for opioid use disorder in an OTP
- Drug testing more confusing if an additional opioid is being prescribed
- Focus on non-medication and non-opioid medication treatments for pain

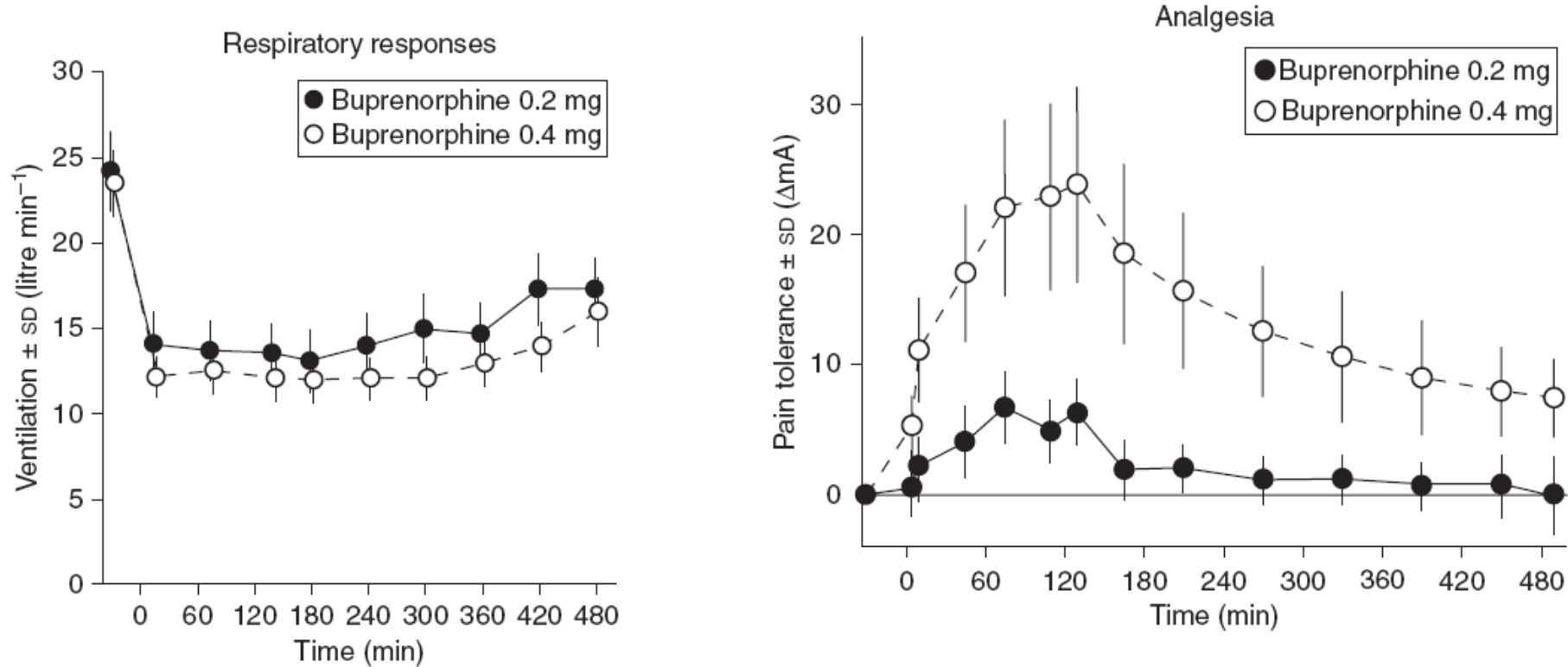


Buprenorphine for Pain

- Sublingual combination, buprenorphine/naloxone and generic mono-products are only approved for treatment of opioid use disorders
 - It can be used off label for pain
- The parenteral and transdermal forms are not approved for treatment of OUD
 - It is illegal to use these formulations for the treatment of an OUD



Buprenorphine Safety and Pain



An increase in the dose can improve analgesia but there is no change in respiratory depression.

Acute Pain in the Buprenorphine Maintained Patient

- Attempt stabilization with non pharmaceutical and non-opioid treatments
- Consider splitting buprenorphine dose
- Consider temporary dose increase
- Consider using a full agonist with buprenorphine.
- Consider discontinuation of buprenorphine and initiating a full agonist



Perisurgical Pain Management

- For major surgical procedures:
 - Take the last dose the day before surgery.
 - Restart buprenorphine when pain is stabilized.
 - Continue opioid supplementation either parenteral or oral if necessary
- Alternative:
 - Recent data suggest that buprenorphine can be continued throughout surgical course, and full opioid agonists can be added for additional pain control

When to Consider Sublingual Buprenorphine for Pain

- Patients not benefitting from long term opioid therapy
 - Increased pain
 - Decreased Functional Capacity
 - Emergence of opioid use disorder (8%)
- Buprenorphine maintained patients with pain
 - Suggested that analgesia was better if dosing was divided.
- Chronic non-cancer pain treated with buprenorphine/naloxone
 - Good retention in treatment with relatively few complaining of increased pain

SL Buprenorphine: Pain Dosage

OFF LABEL

- Opioid Naive
 - 1-2 mg BID- QID (3-6mg/day)
- Opioid Tolerant
 - 4mg TID-QID (12-16mg/day)
 - 24mg/day split upper limits
 - 32mg/day maximum split dose

Chronic Pain Not Associated with Worse MAT Outcomes

- Prospective study:
 - Comparing Office-based opioid treatment (OBOT) retention and opioid use patients with and without pain
 - Results:
 - no association between pain and buprenorphine treatment outcomes

Fox AD et al. Subst Abus. 2012;33(4):361-5

- Meta-Analysis review:
 - Chronic non-cancer pain may increase the risk for poor physical, psychiatric, as well as personal and social functioning for patients with opioid use disorder and on MMT

Dennis BB, et.al, Subst Abuse. 2015; 9: 59–80

Naltrexone XR (Extended Release)

Patient: Mild to Moderate Acute Pain

Non Opioid Therapies:

- Acetaminophen
- NSAIDs
- NMDA antagonists (ex. Ketamine)
- Alpha-2 agonists (ex. Clonidine)
- Antispasmodics (ex. Baclofen)
- Antineuropathic agents
(ex. Gabapentin)

Nonpharmacologic Therapies:

- Stress management/CBT
- Exercise
- Physical therapy/Osteopathic Manipulative Treatment
- Peripheral nerve block
- Centroneuraxial block
- Local anesthetic infiltration

Naltrexone XR Patient: Severe Acute Pain

- Naltrexone will block full opioid agonists
- Optimize all non-opioid and non-medication treatment modalities for moderate pain
- May require high dose full opioid infusion in the ICU setting
- As naltrexone effect wanes, full agonist dosing must be closely monitored to avoid overdose



Naltrexone Patient: Elective Surgery

- Oral naltrexone:
 - (1/2 life 14hrs X 5 ½ lives) discontinue 72 hours prior to surgery
- Naltrexone XR Injectable:
 - at 25 days there is a 98% elimination of the drug typically recommend waiting an additional 3 days
 - one can discontinue the injectable form at the normal 4 week interval and the initiate oral naltrexone the discontinuing this 72 hours prior to surgery

Robers LJ. Aust Presc 2008; 31:133

Vickers, AP and A Jolly. British Medical Journal 2006 Jan 21;332(7534):132-3

Arnold R, Childers J, UpToDate, Waltham, MA, Dec. 13, 2014

Summary

- Opioid Use Disorder complicates the management of acute and chronic pain
- Best to maintain agonist or antagonist OUD medication while being treated for concurrent pain
- Strongly recommend multi-disciplinary treatment in managing these complex patients



This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under contract number HSH250201600015C. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

