Pain Management in the Opioid Use Disorder Patient

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Disclosures

There are no relevant financial relationships with ACCME-defined commercial interests for anyone who was in control of the content of this activity.

Altered Pain Experience Opioid Dependent Patients

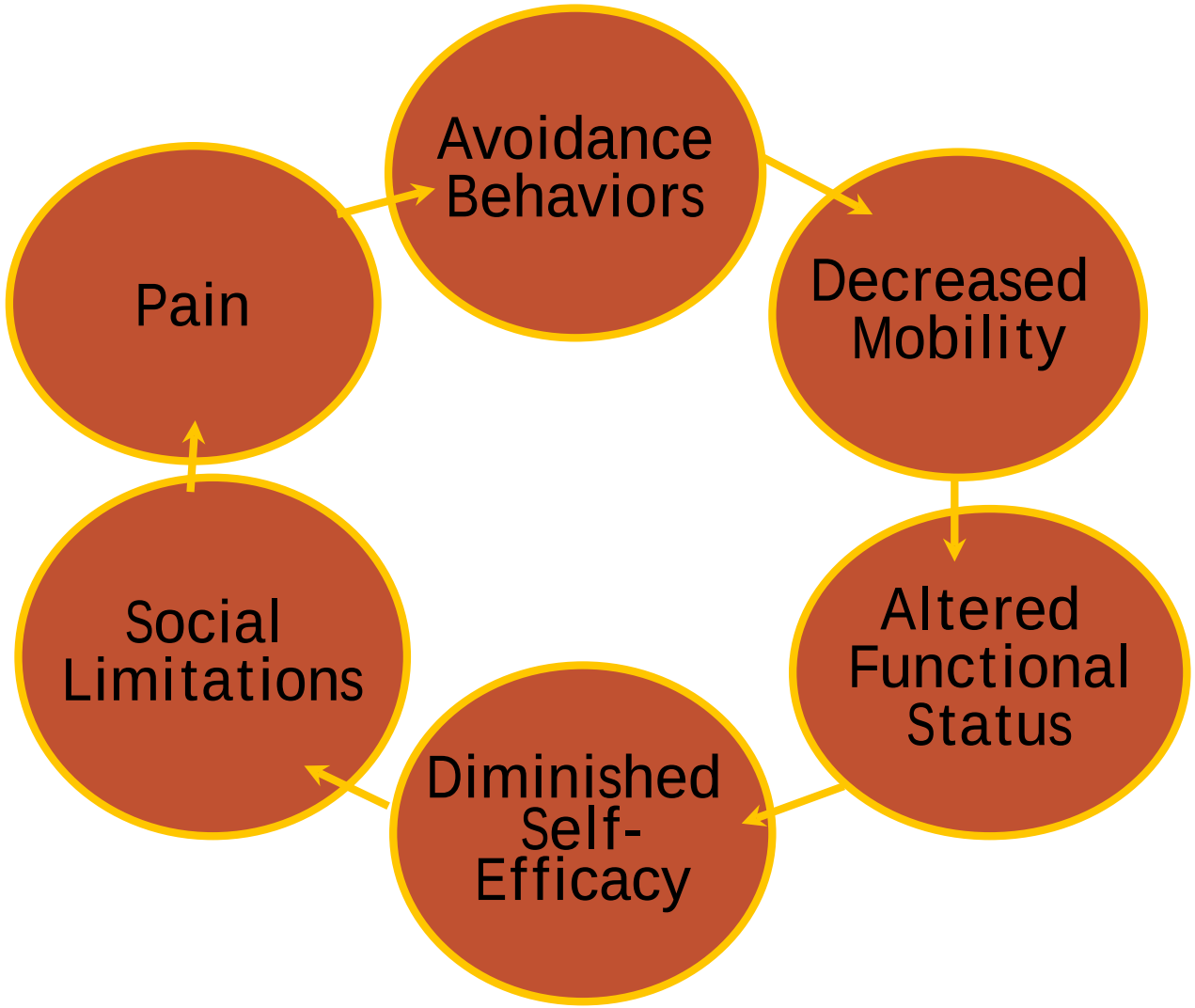
- Less pain tolerance when opioid dependent
- Less pain tolerance on agonist maintenance.
- Less pain tolerance in women on methadone maintenance after cesarean delivery

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

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

Cycle of Uncontrolled Pain



Perceived Pain as Suffering

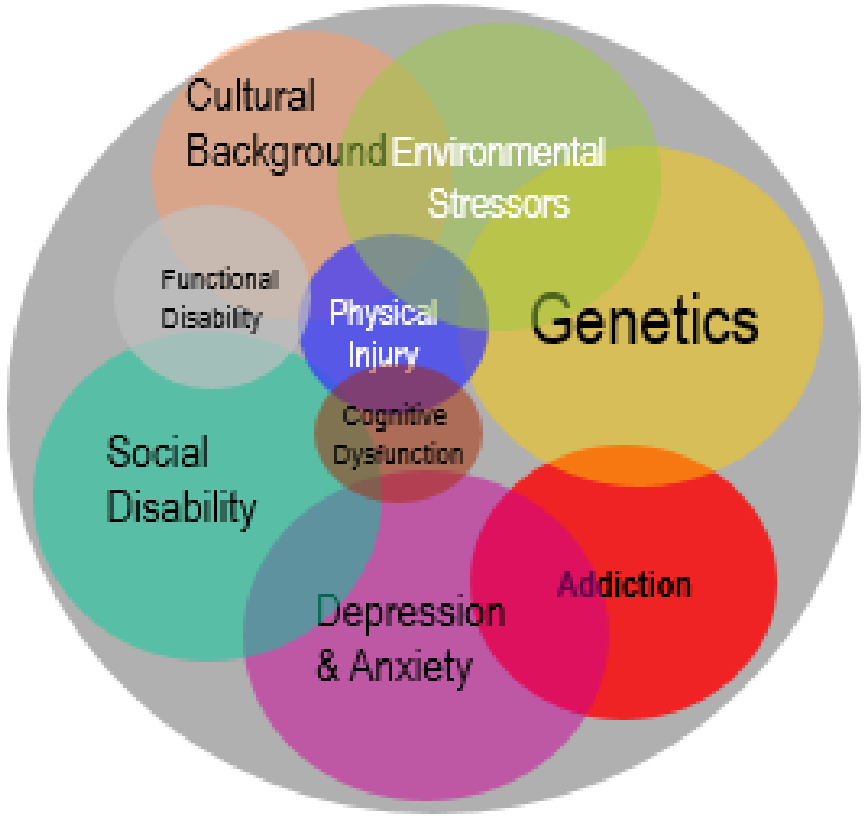
At risk patients

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

Chronic Pain Has Many Drivers

Patient "A"
Pain 8/10

Patient "B"
Pain 8/10



Gatchel RJ. Am Psychol. 2004

Alternative Therapies for Chronic Pain

Psychological Interventions

- Mindfulness therapy
- 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)

Alford DP, et.al. Ann Internal Med 2006

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.

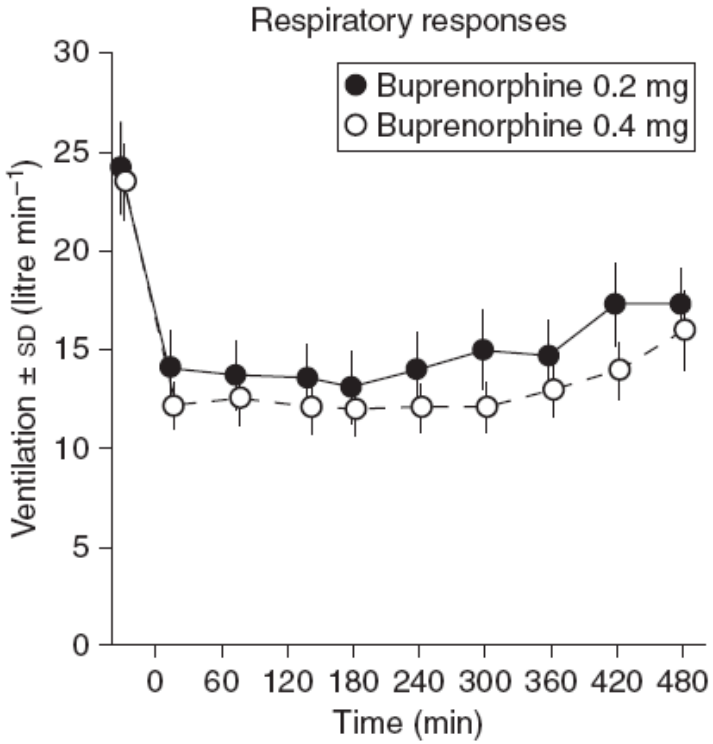
Problems associated with Pain Management in MMT Patients

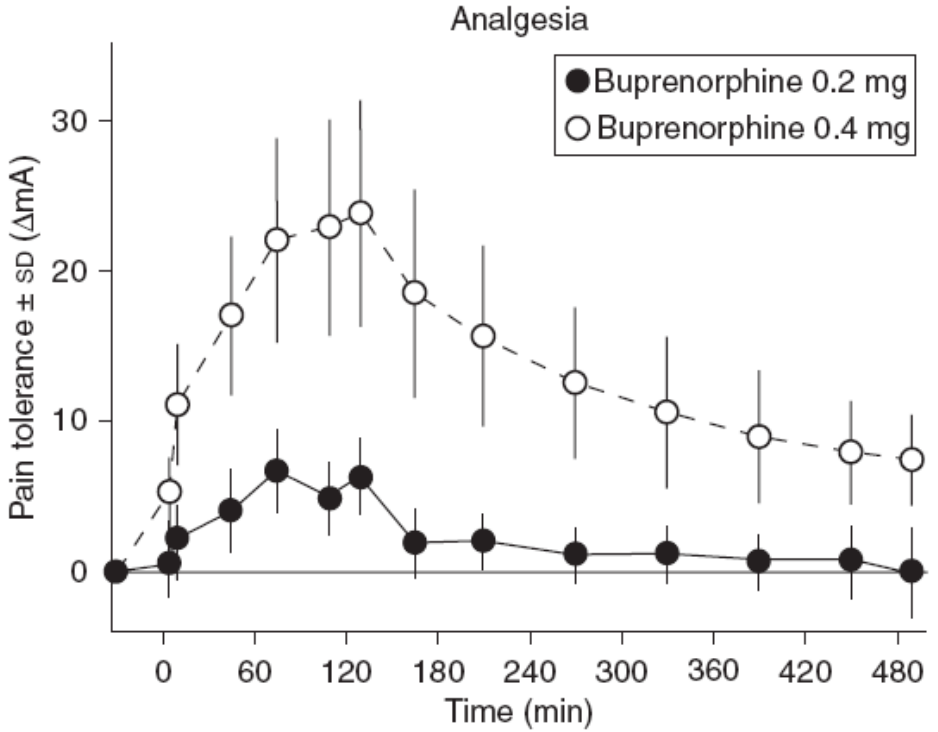
- Methadone clinics cannot administer methadone three or four times a day
- Methadone can only be prescribed for opioid use disorder in an OTP
- Drug testing more confusing if an additional opioid is being prescribed
- Focus on non-medication and non-opioid medication treatments for pain

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.

Dahan A et al. Br J Anaesh 2006

Acute Pain in the Buprenorphine Maintained Patient

- Attempt stabilization with non pharmaceutical and non-opioid treatments
- Consider splitting buprenorphine dose
- Consider temporary dose increase
- If full agonist needed, use a full agonist with buprenorphine.
- In rare cases is it appropriate to discontinue buprenorphine and initiate a full agonist

Perisurgical Pain Management

For major surgical procedures:

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

(Kornfeld, Am J Ther, 2010, Oifa, Clin Ther, 2009)

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 Long Acting Injection: Mild to Moderate Acute Pain

Non Opioid Therapies:

- Acetaminophen
- NSAIDs
- NMDA antagonists (ex. Ketamine)
- Alpha-2 agonists (ex. Clonidine)
- Antispasmotics (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 Long Acting Injection: 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 Long Acting Injection:
  - 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 then initiate oral naltrexone and discontinue oral naltrexone 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