Pain Management in the Opioid Use Disorder Person

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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.

The capacity for *hope* is the most significant fact of life. It provides human beings with a sense of destination and the energy to get started.

Norman Cousins

Anatomy of an Illness

Treatment Goals

Person in Pain	Provider
1. Reduce Pain Intensity (48%)	1. Improve Function (41%)
2. Diagnosis (22%)	2. Minimize side-effects(26%)
3. Improve Function	3. Find Diagnosis
4. Minimize side-effects	4. Improve Enjoyment
5. Improve enjoyment	5. Reduce pain intensity

Clinical Journal of Pain

Pain and Addiction

Potential for mutual mistrust:

- Provider
  - drug seeking
  - dependency/intolerance
  - fear / lack of knowledge
- Patient
  - lack of empathy
  - avoidance
  - Fear/ lack of knowledge

Altered Pain Experience Opioid Dependent Persons

- 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)

300 lb. Mustard Seed…

www.youtube.com/watch?v=qX9FSZJu448

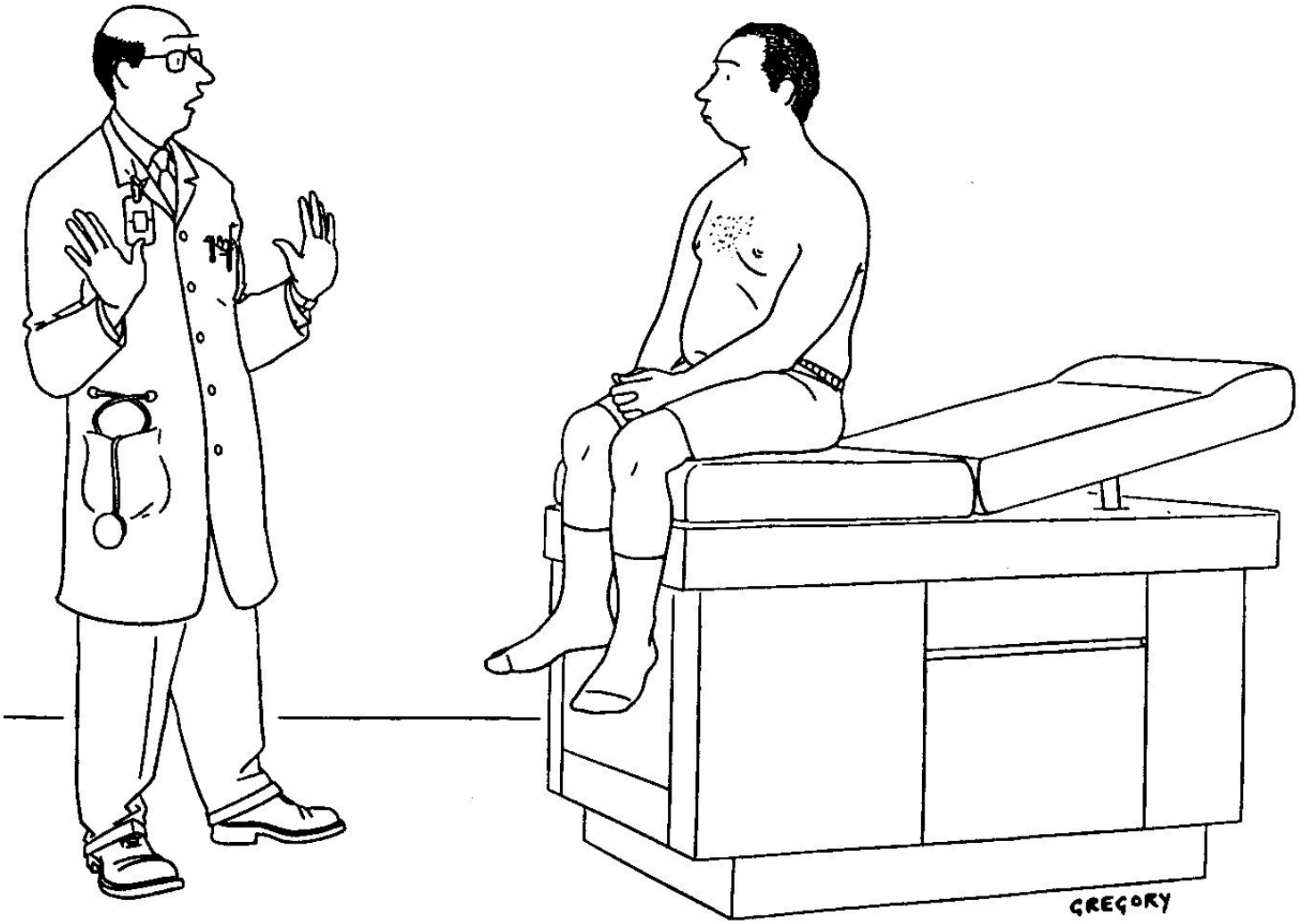
Blackboard Illustrations and 5 min on Chronic Pain

www.youtube.com/watch?v=C_3phB93rvI

Approach to the Person

Maximize provider time with person/family

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



"Whoa…way too much information"

Know mindful, No mindless

1. Know the patient, know the pain
   a) Establish relationship first
   b) Communication and Teamwork
   c) Systems approach to needed data
      i. Pain engine(s)
      ii. Psychological engine(s)
      iii. Outpatient data = Know past
      iv. Plant seed of recovery (HOPE) early
      v. Motivation(s) for treatment
      vi. Contextual aspects of presentation

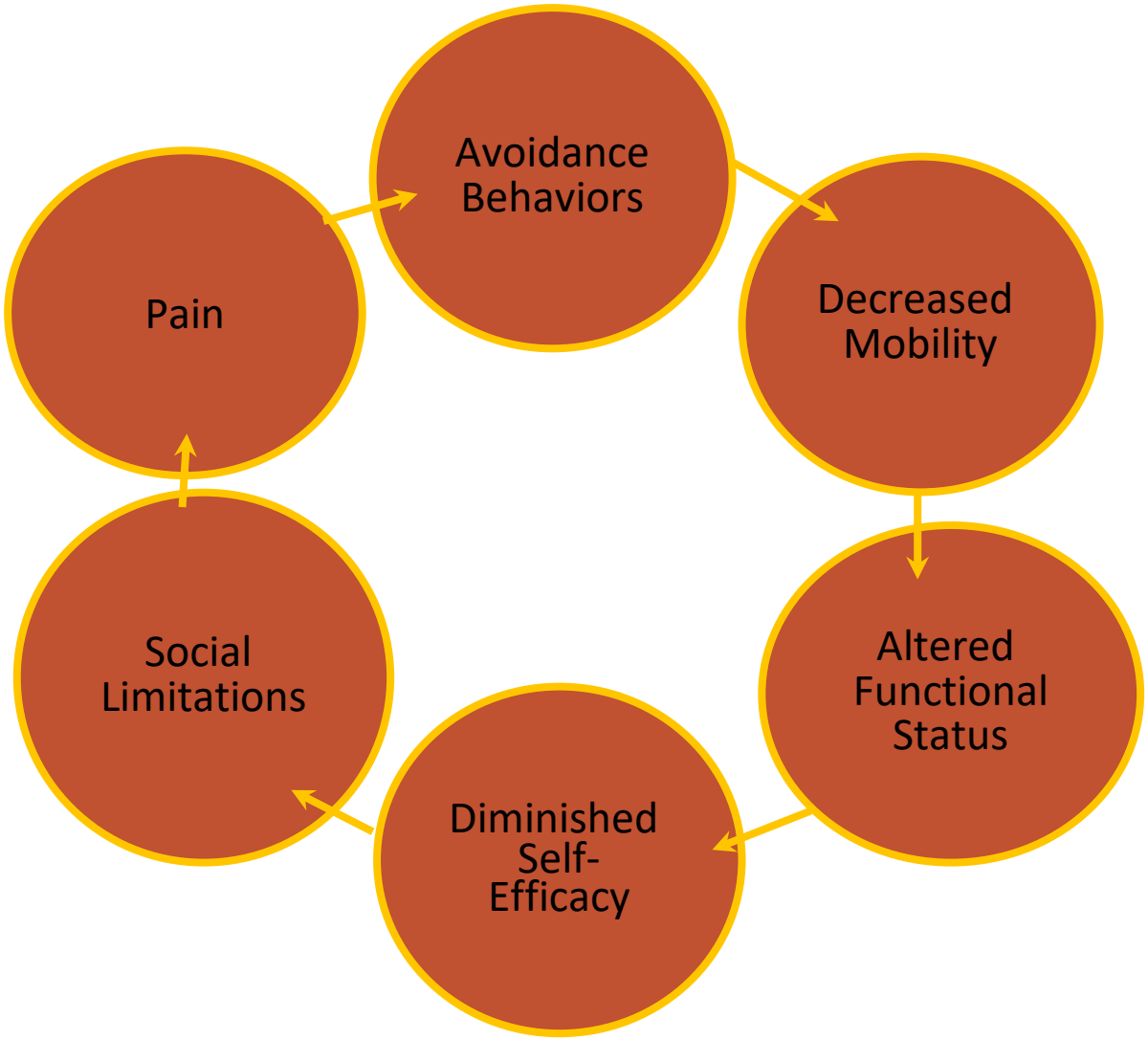
Pain Treatment in People with SUD

- Explain potential for relapse(iatrogenic)
- Explain the rationale for the medication management to patient and supports
- Establish a treatment plan with the patient
- Encourage family/*support system involvement*
- See frequently, esp. around medicalizations
- Consultations and **multidisciplinary** approach

What Is PAIN?

- A complex experience embracing physical, mental, social and behavioral processes, compromising the quality of your life
  - Can be triggered by psycho-emotional stimuli
  - Acute pain is adaptive and stops
  - Chronic pain is not adaptive and continues

Vicious Cycle of Uncontrolled Pain



Philosophy and Goals:

Pain is unavoidable, suffering is modifiable

- Primary Goals are Two:
  - Reduce pain and suffering
  - Maintain/Increase functioning
- Everyone has unused potential
- Feelings, beliefs, thoughts, and actions
  - We possess ability to use these to create negative feedback loops that re-cycle to increase pain and suffering. Thankfully, the reverse is true.

Perceived Pain as Suffering

At risk patients

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

Never start that which you will not stop: Exit Strategy at Onset

"It sort of makes you stop and think, doesn't it"

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Fax (987) 654-3211

Lic. #: A12345
DEA #: AA7654321
NPI #: 789456123

110922A12345 #00001

Name Shirely Hurtz DOB 6/06/6

Address 123 Diversion Way Date 5/30/18 M/F

℞

Percocet 5 mg

Sig.- 1-2 po each 4-6 hrs prn pain

Disp.- 120

Refill NR 1 2 3 4 5 Void After _____ ☐ Spanish

☐ Do Not Substitute-Dispense As Written

Sue D. Goode

Signature

Rx

SEE BACK FOR LIST OF SECURITY FEATURES

No Magic Bullet

Truth should not be Punitive

Treatments

- *EDUCATION*
- Progressive Exercise
- Aerobic/strength
- Water activities
- Yoga/Tai Chi
- *Massage*/Acupuncture
- Chiropractic
- Heat, TENS, Ice
- Pacing Activity
- **Purpose**/Service
- Mind-Body
  - Diaphragmatic breathing
  - Guided Imagery & MBSR
  - Relaxation Response & CBT
  - Counseling
- Goal Setting
- Fun/Bliss/enjoyment
- Non-opioid medicine
- Sleep Changes
- Food as Medicine
- *EDUCATION*

Only need to exercise on days you eat

Non-Opioid Modalities

- Medications
  - NSAIDS/APAP
  - Anticonvulsants
  - Antidepressants (SNRIs, TCAs)
  - Topical agents
  - Therapeutic weans
- Interventions
  - Nerve blocks/ablations
  - Steroid injections
  - Trigger point injections
  - Stimulators

Negative Medication Effects

- N= 229 chronic pain
- negative effects with MED increases
- More negative effects with DE increases
- no evidence for any benefit of these drugs
- higher doses were not associated with:
  - less pain, less fear, or less disability
- Combination opioids & benzos. associated with particularly poor outcomes for mood/disability

Clin J Pain 2016;32:285–291

Opioid SR and Benzodiazepines

1. greater pain, pain interference with life, and lower feelings of self-efficacy with respect to their pain
2. being prescribed "higher risk" (>200 MED)
3. antidepressant and/or antipsychotic medications
4. substance use (including more illicit and injection drug use, alcohol use disorder, and daily nicotine use)
5. greater mental health comorbidity and Health Costs

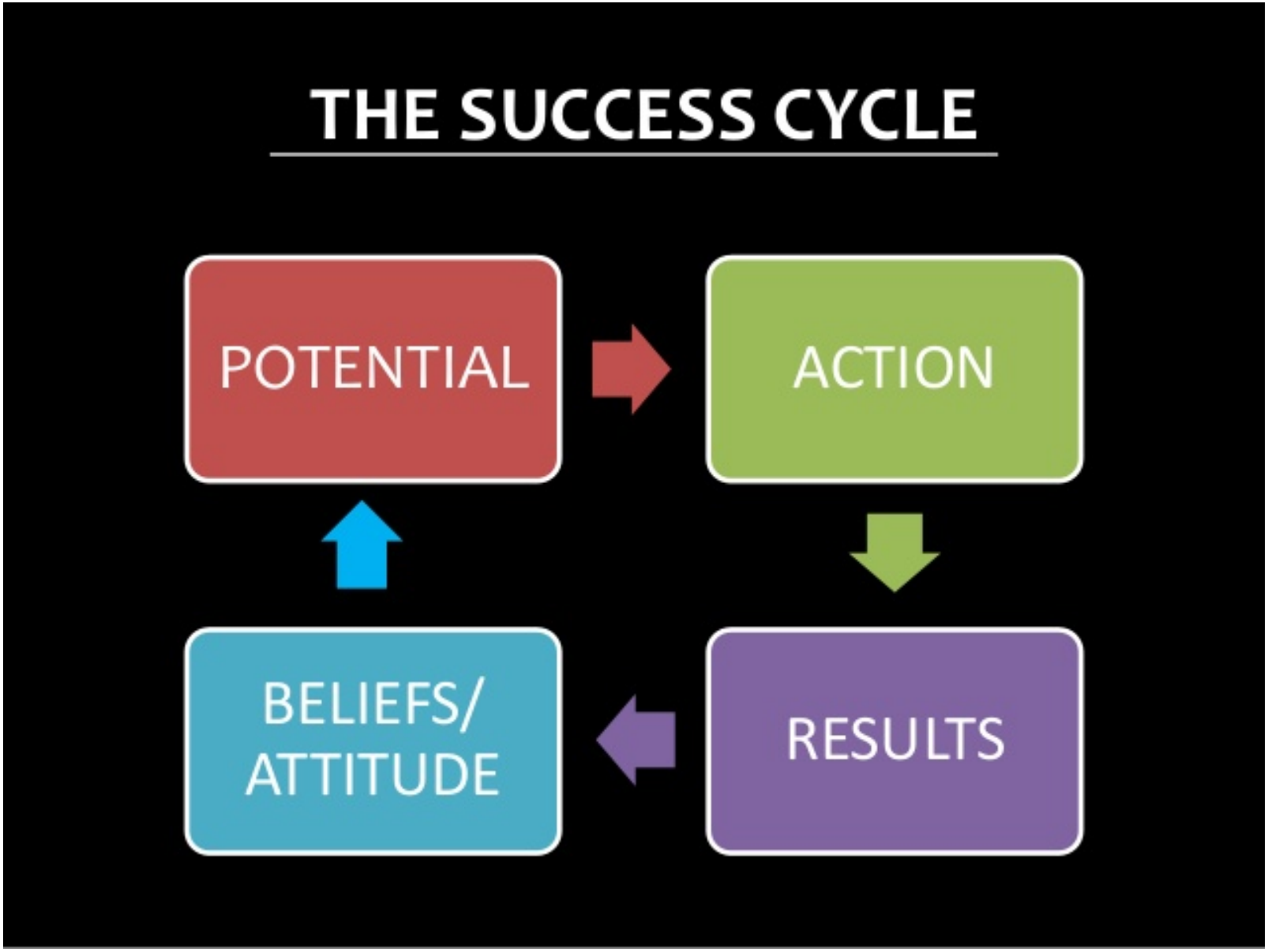
Pain Medicine 2015; 16: 356–366

Is Opioid Weaning Safe & Effective

- Weaning more effective if patient engaged, feels dignified and respected
- Dose reduction must be balanced with stability of pain/function, avoiding harm related to mental health or medical issues
- 67 Studies evaluating LTOT tapering– limited by low-quality
- Common themes included multidisciplinary therapy, emphasis on nonphamacologic intervention & self care strategies
- Findings suggest that pain, function, & quality of life may improve during and after opioid dose reduction

Ann Intern Med. 2017;167:181–191

Balance Safety and Efficacy


THE SUCCESS CYCLE
POTENTIAL
ACTION
RESULTS
BELIEFS/
ATTITUDE

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

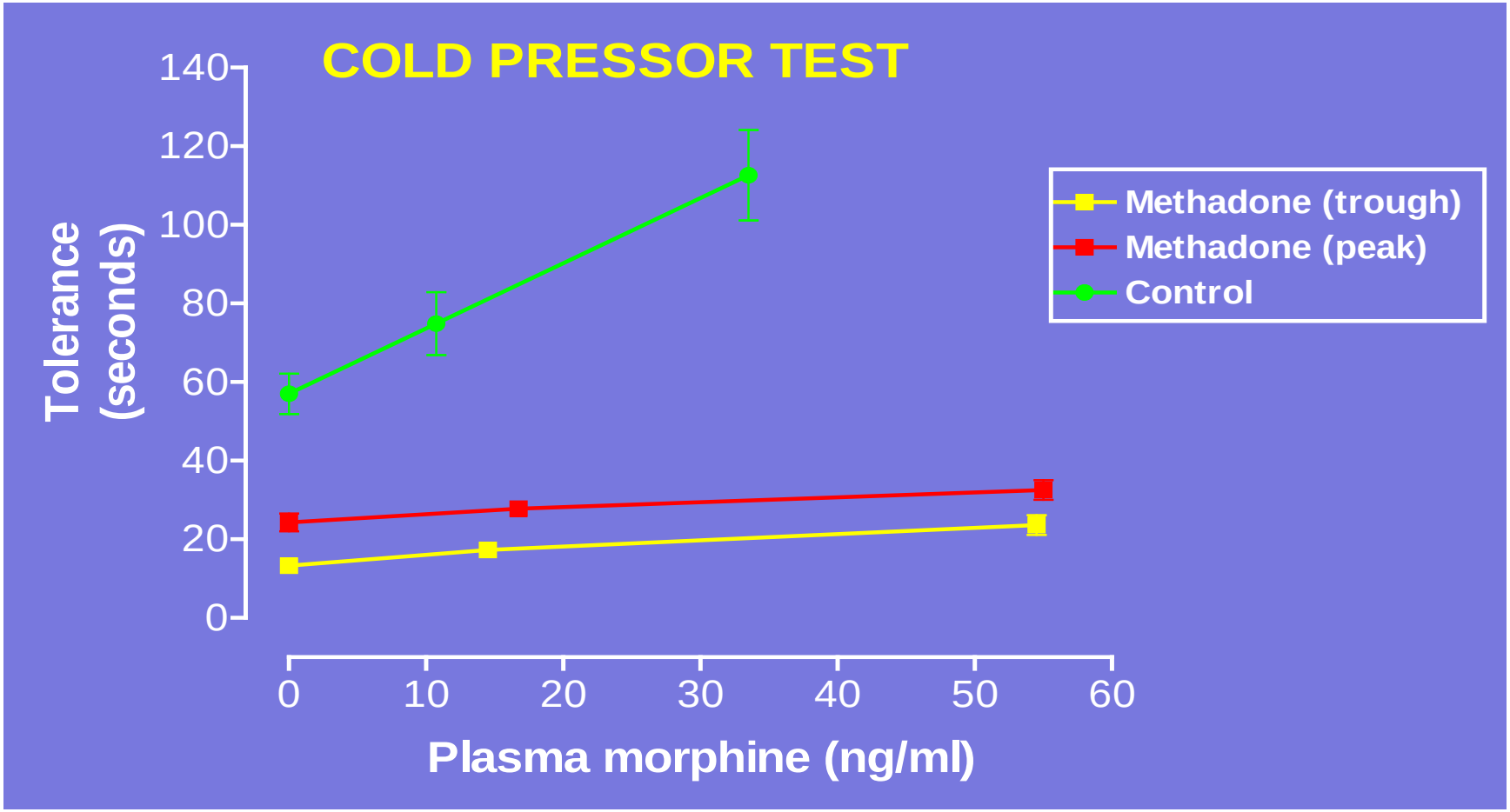
Methadone Maintenance and Chronic Pain

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 can partially block the euphoric effects of other opioids.

Morphine in MM patients



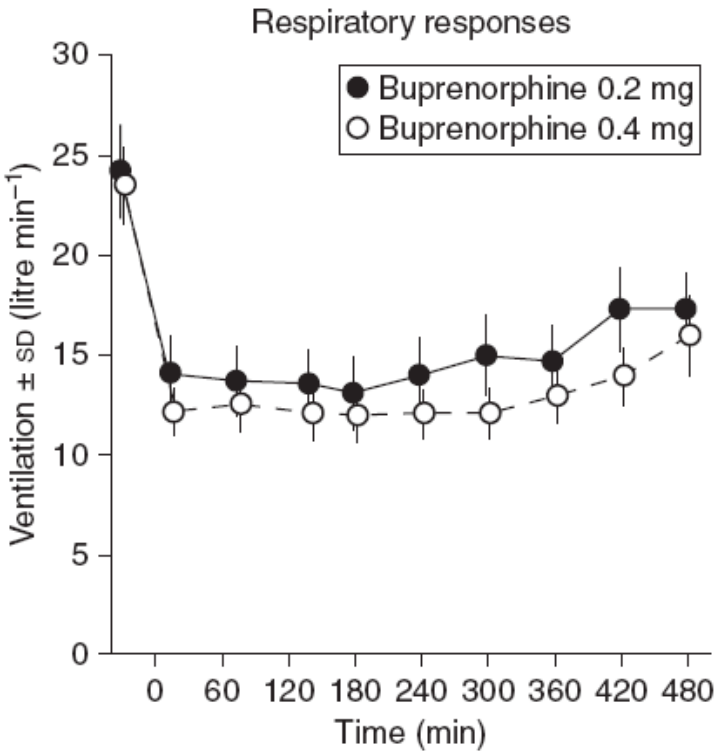
Problems associated with Pain Management in MMT Patients

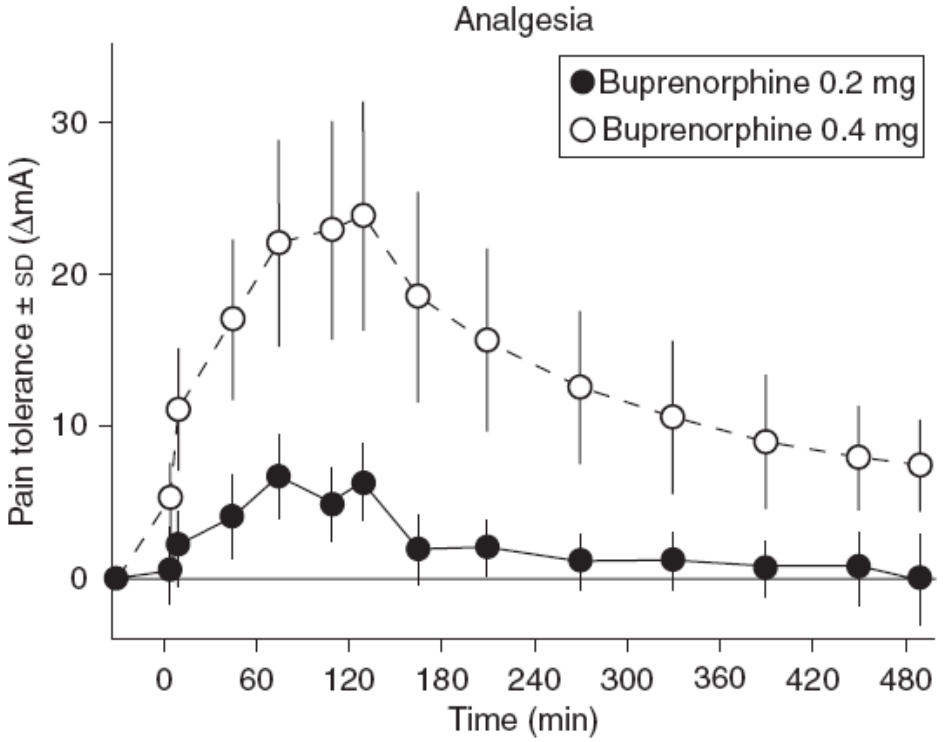
- Methadone clinics cannot administer methadone more than once daily
- Methadone can only be prescribed for opioid use disorder in an OTP (in ED/Hosp. Ok)
- Drug testing more confusing if an additional opioid is being prescribed
- Focus on non-medication and non-opioid medication treatments for pain

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 <u>but legal for pain</u>

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 Person

- Attempt stabilization with non pharmaceutical and non-opioid treatments

1. Consider splitting buprenorphine dose
2. Consider temporary dose increase
3. Consider using a full agonist with buprenorphine.
4. Consider discontinuation of buprenorphine and initiating a full agonist

- Know that a higher than normal dose of opioids will likely be required. Buprenorphine causes hyperalgesia and opioid tolerance*

Pain Medicine 2018; 0: 1–10*

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: Newer Data

- buprenorphine can be continued throughout surgical course, and full opioid agonists can be added for additional pain control

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

Table 4. *Summary of recommendations for perioperative management of buprenorphine.*

Type of Surgery	Buprenorphine Management	Perioperative Pain Management	Postoperative Monitoring
Elective surgery with low postoperative opioid requirement (e.g., bronchoscopy, colonoscopy, cystoscopy)	Continue buprenorphine perioperatively without taper.	Utilize non-opioid adjuvants (NSAIDs, COX-2 inhibitors, NMDA antagonists). Utilize regional anesthesia if applicable. Maximize local anesthetic infiltration by surgeon.	Post anesthesia care unit and regular nursing floor Discharge home if pain is adequately controlled.
Elective surgery with intermediate postoperative opioid requirement (e.g., laparoscopic, thoracoscopic, arthroscopic, open neurosurgical)	Discontinue buprenorphine 3 days prior to procedure. No pure agonist therapy for bridging needed.	High affinity pure mu-opioid receptor agonist therapy, consider high-dose PCA. Utilize non-opioid adjuvants (NSAIDs, COX-2 inhibitors, NMDA antagonists). Utilize regional anesthesia if applicable. Maximize local anesthetic infiltration by surgeon.	Post anesthesia care unit Discharge home if pain is adequately controlled. Consider intensive care unit bed for respiratory monitoring in difficult to control pain.
Elective surgery with high postoperative opioid requirement (e.g., laparotomy, thoracotomy, orthopedic procedures)	Discontinue buprenorphine 3–5 days prior to procedure. Consider pure opioid agonist for one to 2 doses to manage withdrawal symptoms.	High affinity pure mu-opioid receptor agonist therapy, consider high-dose PCA. Utilize non-opioid adjuvants (NSAIDs, COX-2 inhibitors, NMDA antagonists). Utilize regional anesthesia if applicable. Maximize local anesthetic infiltration by surgeon.	Post anesthesia care unit Consider intensive care unit bed for respiratory monitoring.
Emergency surgery with low postoperative opioid requirement	Continue buprenorphine perioperatively without taper.	Utilize non-opioid adjuvants (NSAIDs, COX-2 inhibitors, NMDA antagonists). Utilize regional anesthesia if applicable. Maximize local anesthetic infiltration by surgeon.	Post anesthesia care unit and regular nursing floor Discharge home if pain is adequately controlled.
Emergency surgery with intermediate or high postoperative opioid requirement	Ascertain last dose of buprenorphine. Discontinue buprenorphine, do not administer perioperatively.	High affinity pure mu-opioid receptor agonist therapy, consider high-dose PCA. Utilize non-opioid adjuvants (NSAIDs, COX-2 inhibitors, NMDA antagonists). Utilize regional anesthesia if applicable. Maximize local anesthetic infiltration by surgeon.	ICU for respiratory monitoring

Study on Sublingual Buprenorphine In 95 pain people referred "opioid detox."

- 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 bup./ nalox.
  - Good retention in treatment with relatively few complaining of increased pain

Malinoff H, 2005; Heit HA, Gourlay DL. 2008; Pade PA, 2012

SL Buprenorphine: Pain Dosage
OFF LABEL

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

Chronic Pain Not (maybe 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)
- Antispasmotics (ex. Baclofen)
- Antineuropathic agents (ex. Gabapentin)

Nonpharmacologic Therapies:

- Stress management/CBT
- Exercise
- PT/OT
- Chiro/Osteopath.
- 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:
  - 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
  - at 25 days there is a 98% elimination of the drug typically recommend waiting an additional 3 days

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

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DEA #: AA7654321
NPI #: 789456123

110922A12345 #00001

Name Ms. Ima S. Ober DOB 4/06/86

Address 321 Sobriety Lane Date 5/22/18 M/F

℞ Oxycodone/APAP 5 mg/325 mg

Sig.1-2 po each 6-8 hrs for 2 days,1 po each 6-10 hr for 2 days, 1 po each 8-12 hr as needed for 2 days, stop. (do not exceed 8/day)

Disp.- thirty-two (26)

Refill NR 1 2 3 4 5 Void After _____ ☐ Spanish

☐ Do Not Substitute-Dispense As Written

P. G. Yuan MD

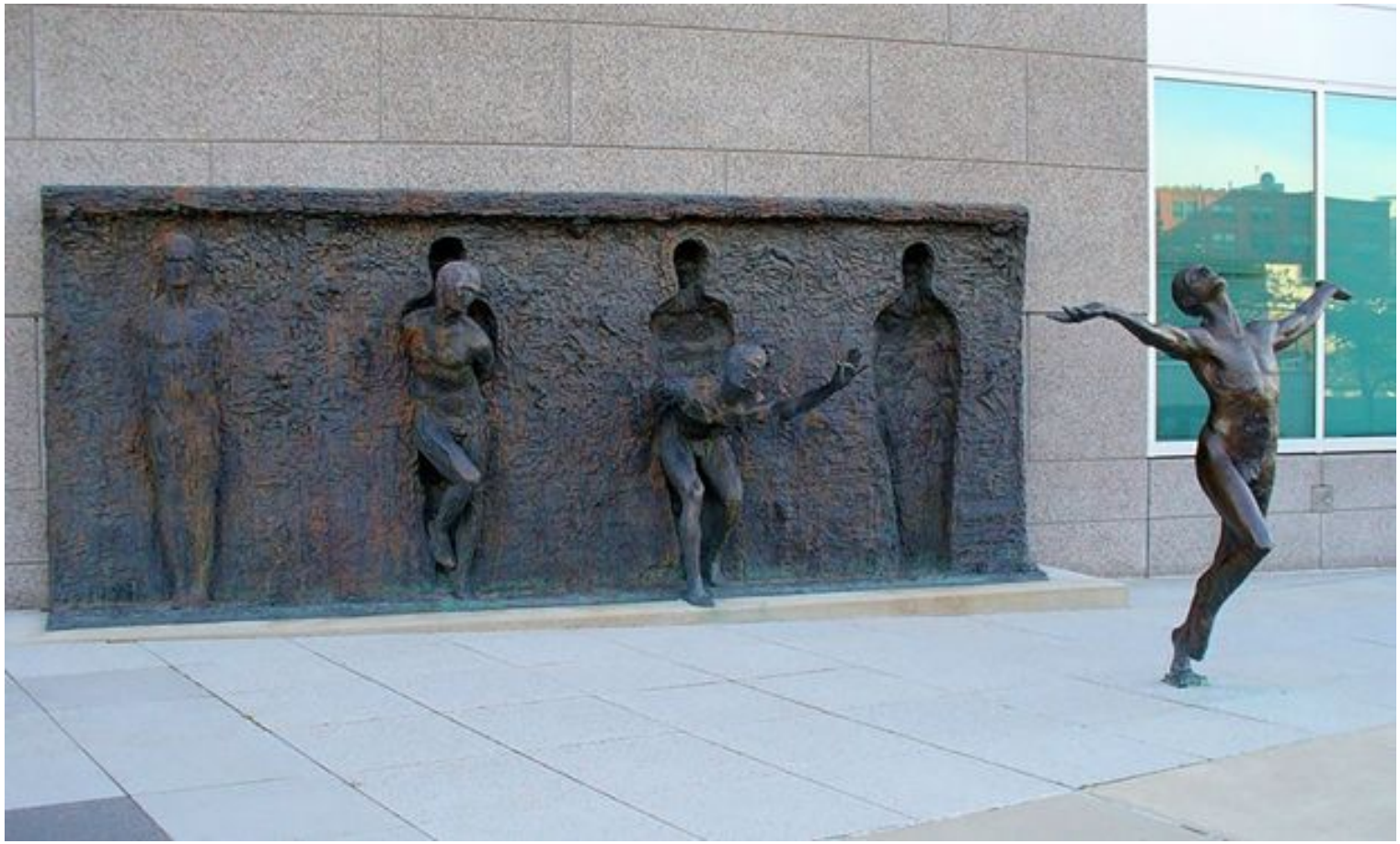
Signature

SEE BACK FOR LIST OF SECURITY FEATURES

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
- Leave nothing to chance
  - Clear and open conversations
  - Clear assignments and Rx writing
  - Start or maintain support treatment
- Strongly recommend multi-disciplinary treatment in managing these complex patients

The Ultimate Goal
Repatriation



pmackie@iu.edu

Heigh-ho heigh-ho its off to Refill Status Quo

Enough is Enough

"I'm not gonna pull the rug out from under you": Patient-provider communication about opioid tapering

4 major themes from these conversations:

1. **Explaining** — patients needed to understand individualized reasons for tapering in addition to general, population-level concerns
2. **Negotiating** — patients needed to have input, even if it was just related to the rate of tapering
3. **Managing difficult conversations** — when patients and providers failed to reach a shared understanding, difficulties and misunderstandings arose
4. **Non-abandonment** — patients needed to know their providers would not abandon them throughout the tapering process.

Matthias, M.S., Johnson, N., Shields, C.G., Bair, M.J., MacKie, P., Huffman, M., & Alexander, S.C. Journal of Pain 2017;18(11):1365

Decisions, Effects & Perceptions

- I've not gone to work and don't even go out. I don't go out with my husband. I don't go out with my daughter. I don't go out with anybody… My **life** is pretty much at a **standstill**. (HQ)

- I can't do the things that I used to do and it kind of makes you ***feel like you can't do anything***… You have to depend on people to do stuff for you because, like I said, I can't even walk from here to the bus stop. (MN)

- (Pain) **affects** your **relationships** because it **affects your attitude**. Sometimes, somebody might want to talk to you or whatever and you are in pain and you don't mean to be mean and rude or not responsive.

- ORT of >7
- > 60 MED dose
- Aggression/hostility/seduction
- Youth/adolescents?
- Opioids on first appt. without “safe” data
- Significant contra-indications
  - OSA, on benzo, zolpidem, morbid obesity, PTSD,
  - <30 min to first smoke, domestic chaos, BAD, cognitive impairment, hazardous ETOH (22%)

MMWR 2014;63:881-5