Taking The Exit Ramp: Managing the Complications of Chronic Opioid Use

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Objectives

• Review common complications of CHRONIC opioid use with ability to appropriately diagnose

• Review CDC treatment guidelines

• Review basic exit strategies to use when complications do occur
Common Complications

- Tolerance
- Dependency
- Opioid Induced Hyperalgesia
- Opioid Use Disorder
- Unintentional Overdosage
Unintentional Overdosage
The Opioid Epidemic
CDC Guidelines

• Non-pharmacologic and non-opioid pharmacologic therapies are preferred

• Opioid therapies should be used only when benefits outweigh the risk and always in conjunction with the above

• Establish treatment goals and periodically reassess risk/benefits always with an exit strategy in mind

• Use immediate release opioids when starting and keep MMEs <50 whenever possible and need to clearly justify going >90

• Be prepared for recognizing and referring for treatment OUD
• *Risk stratify new starts

• *Monitor the Prescription Monitoring Program (PMP)

• *Utilize Urine Drug Screens

• *Avoid combined use of benzodiazepines

• *Strongly consider prescribing naloxone
Morphine Equivalents

- > 50 Meqs= increased incidence of OD
- >120 Meqs= exponential increase of OD
- Hydrocodone = 1:1
- Oxycodone = 1.5:1
- Hydromorphone = 8:1
- Fentanyl = 100:1
- Methadone = ???
Tolerance

- Shift to right of opioid dose response curve
- Unrelated to progression of primary disease
- Pharmacodynamic rather than pharmacokinetic
- Down regulation
- Desensitization
Dose-Response Curves for the Analgesic and Depressant Effects of Morphine

Dose-response curve for the analgesic effect of morphine

Dose-response curve for the depressive effect of morphine on respiration

Margin of safety
Dependency

- Marked by phenomenon of withdrawal
- Physical and psychologic
- Decoupling of protein G from receptor activation
- Rebound increase in cAmp
- Glial cell activation
- Release of pro-inflammatory cytokines i.e. TNF
Figure 2. Schematic of opioid receptor mechanism.
Opioid Withdrawal Syndrome

- Akathisia
- lacrimation and rhinorrhea
- excessive sweating
- yawning
- myalgias/arthritis-significant discomfort
- anxiety
- sleep disturbance
- diarrhea
- abdominal cramping
- piloerection
- nausea and vomiting
- mydriasis with blurred vision
- tachycardia
- hypertension
Medical Opioid Detox
7-10 DAYS

• Clonidine typically .1mg po bid until symptoms clear. Helps control adrenergic symptoms of withdrawal and craving to some degree.

• NSAIDs

• Muscle relaxers

• Trazodone 50-150mg q HS prn sleep

• Phenobarbital 30-120mg BID/TID not to exceed 400mg

• Be prepared for nausea and diarrhea

• Buprenorphine
Case #1

- 68 y/o WF with stage 4 pancreatic cancer with previously well controlled pain now reporting 7-8/10 pain levels. Has been on sustained release morphine 30mg q 12 with oxycodone/acet. 10/325 q 6 prn break through pain with only about a 50% pain improvement with her prn dosing as compared to 6 weeks ago. There is no obvious evidence of disease progression.
Question #1
The next best course of treatment would be:

A. Stop all opioids and convert to non-opioid analgesia

B. Reduce the Morphine Equivalents due to new CDC guidelines

C. Increase the Morphine Equivalents

D. Refer back to oncology for more chemotherapy
Opioid Induced Hyperalgesia

- Very common- probably as high as 30% of chronic opioid users
- Amplification phenomenon of spinal cord and mid-brain
- Increase in pain related to increase in dosage-usually confused with tolerance
- CCK and NMDA receptor sensitization/ neuroplasticity
- Treatment requires discontinuation of opioids
  - Buprenorphine
- Conversion to nonopioid treatments
Conversion to Non-opioid Analgesics and Modalities

• NSAIDs including cox-2’s/ketorolac
• Tricyclics, SSRI’s, SNRI’s- especially duloxetine
• Topicals- especially diclofenac gel
• Antiepileptics- topiramate, gabapentin, depakote
• Acetaminophen including IV route
• Massage, manipulation, PT, acupuncture -ACP Back Pain Guidelines
• Interventional pain management-ESI’s, RFA’s, stimulators
• Transdermal Buprenorphine (Butrans)
Case #2

- 72 y/o BM with h/o regional pain syndrome involving the R leg referred to me by his Family Medicine specialist due to escalating pain with patient requiring more opioid for control. He had been on combination of opioids at reasonable doses and neuropathics but was having difficulty controlling his dosage bc of the pain. He was having level 8/10 pain despite oxycodone 10mg TID and he was beginning to take more q day and running out early. His pain was increasing despite his increasing the opioid dosing.
Question #2
What is the next best treatment choice?

A. Conversion to non-opioid therapies

B. Refer for treatment of opioid use disorder

C. Increase morphine equivalents due to tolerance

D. Add low dose alprazolam so oxycodone will work better

Response Counter
Opioid Use Disorder

• Inability to consistently abstain
• Impaired behavioral control
• Phenomenon of craving
• Persistent use despite negative consequences—compulsive use
• Diminished recognition of significant problems with one’s behaviors and interpersonal relationships
• Dysfunctional emotional response
• Involves cycles of relapse and remission
• W/O treatment—progressive disability and/or premature death
• Currently about 2.5 million in U.S.

• 1.9 addicted to prescription opioids

• $55 billion/year in total cost

• Increased risk of HIV, chronic hepatitis, STD’s

• Requires aggressive treatment with referral to addiction specialists

• Medical urgency

• (ASAM/National Survey on Drug Use and Health)
• Don’t react emotionally
• Don’t reactively “fire” the patient
• Don’t take any behavior personally
• Don’t simply “cut them off”
• Do stabilize and refer for addiction treatment
Case #3

- 65 y/o WF with RA and HTN started on chronic opioids for chronic pain related to RA 10 years ago. Had escalation of pain requiring escalation of opioid dosing. 5 years ago, she began escalating her own dosing and was “cut off” by prescribing physician due to concerns she was “developing a problem”. She then began illicit acquisition and use of oxycodone when she was unable to stop on her own. She then progressed to oral hydromorphone, and finally at the age of 63 began injecting hydromorphone intravenously. She is still reporting level 8/10 pain despite IV hydromorphone use.
Question #3

The next best course of treatment is?

A. Stabilize her back on a controlled oral dose of hydromorphone to stop the IV use and prescribe naloxone.

B. Refer for treatment for opioid use disorder and prescribe naloxone

C. Convince her she just needs to decide to stop using

D. Discharge from your practice for violating her controlled medication contract

Response Counter
Thank You

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