Pain Management Considerations for Chemical Dependency Patients

Bill Dickinson, D.O., FASAM, FAAFP
Objectives

• Discuss the risks of using opiate/opioid medications in these patients
• Review options for pain control for these patients
“Well, time for our weekly brain-stem-storming session.”
Pain Specialist View

- Focus on providing adequate pain relief
- Allay patient concerns about addiction
- Addiction from medical care is rare
- Under treatment of pain is more common

Principles of Addiction Medicine, 3rd, Pain and Addiction, pg1483
Addiction Medicine View

- See failed pain management and addiction
- See consequences of increased opioid availability, both licit and illicit
- Aware of pain patients selling medication
- Rarely see increased opioid use increasing quality of life
The American story

- 2.3 million Americans reported using heroin \( \geq \) once (1998)
- 149,000 new users (1999)
  - 980,000 persons using at least weekly (1998)
- 810,000–1 million chronic users of heroin
- Only 170,000–200,000 receiving treatment

Addiction to prescription opioids

- Prescription opioid drug abuse and misuse (eg, oxycodone, hydrocodone)
- Estimated to be 3 million (DAWN 2002)
  - 1.9 million persons aged ≥12 had used OxyContin non-medically at least once in their lifetime
  - (2002 National Survey on Drug Use and Health (NSDUH))
Abuse of prescription opioids: a growing problem

Non-medical OxyContin use – 2002

Prescription drug monitoring: American Society of Interventional Pain Physicians, 2002
“Between 1999 and 2002....opioid analgesic poisonings increased by 91.2%”
Paulozzi et al; Pharmacoepidemiology and Drug Safety 2006; 15: 618-627

Figure 1. Drug poisoning mortality rates by manner of death, US, 1979–2002. Drug poisoning deaths are coded by ICD-9 E codes from 1979 to 1998 and by ICD-10 X and Y codes from 1999 to 2002. Codes used were: E850-858 and X40-44 for unintentional, E950.0-950.5 and X60-64 for suicide, and E980.0-980.5 and Y10-14 for undetermined poisoning.
Unintentional OD: 2\textsuperscript{nd} Leading Cause of Accidental Death!

CDC: 2007 ATLANTA - Unintentional fatal drug overdoses in the United States nearly doubled from 1999 to 2004
“Deaths from overdoses on methadone rose 390 percent between 1999 and 2004 and the rise is continuing.”

**Figure 7.** Unintentional methadone poisoning deaths, 2004.

Source: National Center for Health Statistics.
Key Informant Network, Dr. Cicero

Coverage Area
Conclusions

Prescription drug abuse is widespread with 2/3 of informants reporting abuse. OxyContin and Hydrocodone abuse are also the most prevalent drugs of abuse being observed in 50-60% of all ZIP codes.

Status of Key Informant Network, Theodore J. Cicero, PhD, 2005
Conclusions

In terms of rate of growth, methadone, buprenorphine and morphine are increasing at the greatest pace. It is rare for abuse of one drug to occur alone in any zip code; rather, the pattern is poly-substance abuse.

Key Informant Network, T. Cicero, PhD, 2005
Conclusions

Approximately 87% of OxyContin and other prescription drug abusers had past histories of alcohol or opiate abuse, whereas the remaining 13% of the individuals were reported to have no history of alcohol or opiate abuse, at least to the extent known by the informant.

Key Informant Network, T. Cicero, PhD, 2005
How the brain works.
Liking

Liking or drug reward is increased dopaminergic activity in the mesolimbic pathway: the ventral tegmental area (VTA), the nucleus accumbens (NA), and basal forebrain. Reversible and adaptive.

Principles of Addiction Medicine, 3rd, Pain and Addiction, pg1395
Wanting

Wanting is an effect of dopamine release in the mesolimbic pathway which heightens and strengthens both learning and memory in the brain. Long lasting with permanent reorganization in synaptic connections. Explains persistent use in spite of negative effects.

Principles of Addiction Med, 3rd, Pain and Addiction, pg 1395
Nucleus Accumbens
Ventral Tegmental Area
Prefrontal Cortex
Amygdala
Locus Coeruleus
Periaqueductal Gray Area
Arcuate Nucleus
Ventral Tegmental Area
Locus Coeruleus
Changes in the brain of an addicted person

- Neurobiologic changes lead to:
  - Compulsive opioid use
    - To feel or function normal
    - To avoid pain
    - To escape pain
  - Loss of control over intake
  - Impaired social and occupational function
The Natural Reward Mechanism is “Hijacked”

“There exists....outside alkaloids and habit, a sense for opium, an intangible habit which lives on, despite the recasting of the organism. The dead drug leaves a ghost behind. At certain hours it haunts the house”

-Jean Cocteau 1889-1963
$60 SAVINGS CARD

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Offer Expires 12/31/2008.

OxyContin®
(OXYCODONE HCI CONTROLLED-RELEASE TABLETS)

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Cards are good only with a valid prescription for OxyContin® Tablets and cannot be used more than once per seven day period.
Your card will be activated with your first use. Once activated, the card can only be used by the same patient. If you lose your card, please call 1-800-815-4987.

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• Your Savings Card provides immediate savings of up to $60 off your out-of-pocket expenses on your prescription for OxyContin® Tablets after your out-of-pocket payment of $20. This Card is valid only if you have a prescription for OxyContin® Tablets and cannot be used more than once per seven day period.

• To receive your savings, give the attached Savings Card along with a valid prescription for OxyContin® Tablets to your retail pharmacist.

• You can use this Savings Card with every prescription for OxyContin® Tablets during the program period (offer expires 12/31/2008), so remember to retain your card for future savings. Cards are good only with a valid prescription for OxyContin® Tablets and cannot be used more than once per seven day period.

• You are responsible for reporting the use of this card to any private insurer that pays or reimburses for any part of the prescription filled.

Constipation is a common side effect of opioid medications. For information on constipation and savings go to:
www.senokot.com

Please read Patient Information located on reverse side.

This card is not an insurance card.

• Offer is not valid for prescriptions covered in whole or in part by Medicaid/Medicare, government-funded health programs, salaries that have an "all payer" anti-kickback law, or private indemnity or HMO insurance plans which reimburse you for the entire cost of your prescription drugs. This offer is valid in Massachusetts for cash-paying patients only (i.e., those who do not have any prescription coverage). This offer is only good in the U.S. at participating pharmacies and is not valid if prohibited by any state or local law.

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HOW TO TITRATE PATIENTS ON OxyContin®

Recommended initial dose for opioid-naive patients is 10 mg q8h.

Titrates patients every 1 to 2 days, if necessary. Increase the dose of OxyContin Tablets by 50% to 60%, if necessary, do not increase the dosing frequency. There is no maximum daily dose or ceiling of the analgesic efficacy.

Manage breakthrough pain with OxyIR (a long-acting OxyContin IM immediate-release) capsules 15 to 60 mg of the 12-hour dose of OxyContin Tablets.

Monitor the dose of OxyContin Tablets if more than 2 rescue doses of OxyIR Capsules are required per day. Refer to package insert when converting from 30 mg q8h.

If cessation of therapy is indicated, patients receiving doses of 20-60 mg/day can usually have therapy stopped abruptly with little risk of withdrawal symptoms. However, with higher doses, it is recommended to taper the dose of OxyContin Tablets to reduce the risk of precipitating withdrawal symptoms.

OxyContin 80 and 116 mg Tablets for use only in opioid tolerant patients requiring daily maintenance, equivalent changes of 160 mg and 230 mg respectively.
### EASY 12h COMPARABLE DOSE GUIDE

**Comparable doses of OxyContin® Tablets and combination opioids**

<table>
<thead>
<tr>
<th>PRODUCT/DOSE</th>
<th>COMPARABLE DOSE</th>
<th>OXYCONTIN®</th>
<th>COMPARABLE DOSE</th>
</tr>
</thead>
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<tr>
<td>Percocet® (5 mg)</td>
<td>1 tablet q6h</td>
<td>10-20 mg</td>
<td>q12h</td>
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<tr>
<td>Percocet® (4.5 mg)</td>
<td>1 tablet q6h</td>
<td>10-15 mg</td>
<td>q12h</td>
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<tr>
<td>Vicodin® (10 mg)</td>
<td>1 tablet q6h</td>
<td>20-30 mg</td>
<td>q12h</td>
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<td>Lorcet* (5 mg)</td>
<td>1 tablet q6h</td>
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<td>q12h</td>
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<tr>
<td>Lortab* (5 mg)</td>
<td>1 tablet q6h</td>
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<td>q12h</td>
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<td>Daypro® (50 mg)</td>
<td>1 tablet q6h</td>
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</tr>
<tr>
<td>Tylenol® with Codeine (30 mg)</td>
<td>1 tablet q6h</td>
<td>20-30 mg</td>
<td>q12h</td>
</tr>
<tr>
<td>Tylenol® (5 mg)</td>
<td>1 tablet q6h</td>
<td>10-20 mg</td>
<td>q12h</td>
</tr>
</tbody>
</table>

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Please read accompanying professional prescribing information.
OxyContin® Tablets are to be swallowed whole, and are not to be broken, chewed or crushed. Taking broken, chewed or crushed OxyContin Tablets could lead to the rapid release and absorption of a potentially toxic dose of oxycodone.
Titrate patients every 1 to 2 days, if necessary.

Increase the dose of OxyContin Tablets by 25% to 50%, if necessary; do not increase the dosing frequency. There is no maximum daily dose or "ceiling" to analgesic efficacy.

Manage breakthrough pain with OxyIR® (oxycodone HCl immediate-release) Capsules CII at 1/4 to 1/3 of the 12-hour dose of OxyContin Tablets.

Evaluate the dose of OxyContin Tablets if more than 2 rescue doses of OxyIR Capsules are required per day.
Physical Dependence

- Endogenous Endorphin System
- Mu, Kappa, Delta Receptors
- Tolerance, Physical Dependence,
- Prolonged Withdrawal Syndrome
  - Endocrine basis?
“Well, first the bad news — you’re definitely hooked.”
Approach to Acute Pain Treatment

- Respect the disease of addiction
- Monitor for withdrawal
- Provide pain management
- Document the treatment plan
- Monitor and adjust
- Taper opioids

Principles of Addiction Med 3rd, Pain and Addiction, pg 1408
Respect the Disease of Addiction

- Openly discuss all concerns
- Involve the patient in decisions
- Facilitate, support the recovery process
- Educate staff and family about pain and addictive disorders
Potential for Withdrawal

- If the patient is dependent on opiates/opioids, then a baseline replacement is used.
- 72 hour rule
- Possible withdrawal from other substances
Effective Pain Management

- Consider non-opioid treatment
- Establish effective dose
- Avoid older agonist-antagonist opioids
- Use less rewarding opioids: slow release, PCA, continuous infusion (Less liking)
Monitor and Adjust

- Pain intensity
- Ability to adhere to all other medical/surgical treatment
- ADL’s
Taper

- Opioids for pain
- Consider what is the usual course of pain and opioid use in non-dependent patients
- Discuss treatment options
Treatment Plan

• Pain control
• Interaction with other providers
• Recommendations and referrals for treatment
Universal Precautions in Pain Medicine

1. Make diagnosis appropriate differential
2. Psychosocial assessment with risk of addictive disorders
3. Informed consent
4. Treatment agreement
5. Pre or post intervention assessment of pain level and function

6. Appropriate trial of opioid therapy with or without adjunctive medication
7. Reassessment of pain scores and level of function
8. Regularly assess the “4 A’s” of pain medicine
9. Periodically review pain diagnosis and comorbid conditions, including addictive disorders

10. Documentation

4 A’s of Treatment Outcomes

1. Analgesia (level of pain relief)
2. Activities (psychological functioning/quality of life)
3. Adverse Effects (side effects)
4. Aberrant drug taking behavior (Addiction)

Passik, SD, Weinreb, HJ. Adv Ther. 2000;17:70-83
Principles of Prescribing

- Single prescriber, single pharmacy
- Patient and Prescriber sign agreement
- Use lowest effective dose
- Caution on conditions that may potentiate adverse opioid effects: COPD, CHF, sleep apnea, elderly, hepatic and renal impaired
- Assess function, monitor for misuse, random urine drug screens

Interagency Guideline on Opioid Dosing for CNCP, WA State Agency Med Director’s Group, 03/2007
Before the First Prescription

• Is your paperwork in order?
  – Agreements signed?
  – One pharmacy selected / one prescriber agreed upon?
  – UDT sample collected?
  – If appropriate, current doses confirmed?
    • Via pharmacy?
    • Via past prescriber/prescribers office?
Chronic Pain Syndrome

- Marked alteration of behavior, depression and anxiety
- Marked restriction in daily activities
- Excessive use of medication/medical srvs
- No clear relationship to organic disorder
- History of multiple nonproductive tests, treatments, surgeries
Approach to Chronic Pain: Goals

• The reduction of pain
• Improved pain-associated symptoms: sleep problems, depression/anxiety, physical function
• Decrease dependence on medication

Principles of Addiction Medicine, 3rd, Pain and Addiction, page 1413
Approach to Chronic Pain

- Physical modalities
- Cognitive-behavioral interventions
- Invasive (interventionalist) treatments
- Medications, both non-opioid and opioid
Multidisciplinary Pain Rehabilitation

- Education (for patient, family, support)
- Reconditioning physical therapy
- Medication
- Nerve blocks, Tens
- Biofeedback/relaxation
- Psychotherapy (patient and family)
- Treat psychiatric comorbidity
- Chemical dependency treatment

 Principles of Addiction Medicine, 3rd, Pain and Addiction, pg 1433
“Sorry, no water. We’re just a support group.”
Periodic Review

- Urine drug testing
- Analgesia
- Activities of Daily Living (ADL’s)
- Adverse effects
- Aberrant Behavior
- Patient affect

Balancing Clinical and Risk Management for Chronic Pain Pts on Opioids, AAFP CME Monograph
ANYTIME, ANYWHERE... LET IT FLOW!

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Behavioral Predictors of Misuse

- **Illegal/Criminal**: Forgery, theft, diversion
- **Dangerous**: Aggressive/threatening, overdoses, accidents (MVA) by intoxication
- **Aberrant**: Drug hoarding, request specific Rx, other sources, noncompliance, reports unintended mind/mood effects, resists change, misses appts, not following treatment plan
Behavioral Predictors of Misuse

- Use of medication in unapproved fashion
- Uses other sources to obtain medication: Physicians, ED, illicit
- Use of other abused substances
- Repeated requests for dose increases and/or early refills
- Work, family social deterioration
- Positive urine drug screen(s)

Balancing Clinical and Risk Management of Chronic Pain Pts on Opioids, AAFP CME Monograph
How likely is my patient to have another substance use disorder?

<table>
<thead>
<tr>
<th>Co-morbid substance disorder</th>
<th>Lifetime percentage</th>
<th>Current percentage</th>
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</thead>
<tbody>
<tr>
<td>Cocaine dependence</td>
<td>65</td>
<td>40</td>
</tr>
<tr>
<td>Cocaine abuse</td>
<td>12</td>
<td>3</td>
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<td>Cannabis abuse</td>
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<td>Alcohol dependence</td>
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<td>25</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Sedative-hypnotic abuse</td>
<td>13</td>
<td>2</td>
</tr>
</tbody>
</table>

*N=716*

Brooner et al, Archives of General Psychiatry 1997
INSTITUTE FOR THE STUDY OF EMOTIONAL STRESS

Hey... I feel better already.
Prescribing Concerns

- Federal Law
- State Law
- State Medical Boards
- Fear of Producing Addiction
- Fear of scrutiny
- Uncomfortable with addicts

Principles of Addiction Medicine, 3rd, Pain and Addiction, pgs 1466, 1479
Yellow Flags (exercise caution)

- Multiple, unsanctioned dose increases
- Repeated lost or stolen medication
- Early refills
- Double doctoring
- UDT negative for prescribed medications
Red Flags (stop prescribing)

- Use of illicit drugs i.e. cocaine
- Tampering UDT specimen
- Crushing/snorting oral medications
- Injecting oral medications
- Trafficking i.e. selling or giving controlled substances to someone without lawful authority
Termination of Controlled Substances Agreement

Dr ______________________ has informed me that my trial of opioid therapy has come to an end and has been deemed unsuccessful. While every effort will be made to reduce the risk of withdrawal symptoms from occurring, which may include a temporary increase in my pain level, I understand that this may not be entirely possible. During the taper period, I may be offered, at the doctors’ discretion, medications that might help reduce these symptoms of opioids withdrawal. Although distressing, I have been advised that these withdrawal symptoms are unlikely to be life threatening and will subside over time, with or without treatment.

For this reason, he has indicated that over the next one month, my dose of ______________________ will be gradually tapered.

Alternatively, at my request, I have elected to remain on my current dose of medication and will attempt to find my own prescriber for these controlled substances. I realize that if I have not been able to find a new prescriber over this period of time, I may be offered a rapid taper of ______________________ or referral to a Drug Treatment Program (i.e. Methadone Maintenance Treatment) to address my drug dependency.

Please strike out and initial the paragraph that does not apply.

Patient: ______________________ Date: ______________________
Witness: ______________________ Date: ______________________
Controlled Substances Act, 1970

- Federal law
- Established USA system of drug control
- Reflects both control and availability
- Parallels international treaties
- DEA

Principles of Addiction Medicine, 3rd, Pain and Addiction, page 1466
State Medical Board Guidelines

- Evaluate each patient for addiction history
- Addiction medicine consultation
- Specialty consultation
- Extra care and attention
- Treatment plan includes misuse possibility
- Vigilant to drug seeking behaviors
1998: Model Guidelines for the Use of Controlled Substances for the Treatment of Pain

Cooperative effort: FSMB, the American Pain Society, the American Academy of Pain Medicine, the American Society of Law, Medicine, and Ethics

No exclusion of addicts from pain control

Principles of Addiction Medicine, 3rd, Pain and Addiction, pg 1471
Guidelines for Rx with Abuse Potential

- Clear rules and contract
- Rx sufficient medication, titrate as needed
- Adjunct medications and therapies
- One pharmacy, no lost or stolen Rx
- Clean/sober monitoring by family/friend
- See patient more frequently if needed
- Brings Rx to visit, random UA’s
- Document plan, changes, thoughts well

Principles of Addiction Medicine, 3rd, Pain and Addiction, pg 1477
Physicians and Rx Drug Abuse

The 4 D’s

- Dated: Not aware of current standards
- Duped: Easily manipulated by addicts
- Disabled: Judgment impaired by their illness or their own alcohol/drug problem
- Dishonest: Script doctors

David Smith, MD (1980)
Principles of Addiction Medicine, 3rd, Pain and Addiction, pgs 1489-1490
Pseudoaddiction

- Drug seeking behaviors iatrogenically induced through inadequate tx of pain
- Driven by patients need for pain relief
- Patient escalates demands for pain relief
- Behavioral changes to show pain severity
- Crisis of mistrust between patient and Dr.
- Believe patient’s pain report as valid

Principles of Addiction Medicine, 3rd, Pain and Addiction, pg1485
Methadone

- Long acting, 24-36 hr ½ life
- Accumulates because of the long ½ life
- Good base for short term pain control
- Used in Opiate Substitution Therapy (OST) and in Chronic Pain programs
- Sedative and other opioid interaction
Buprenorphine

Schedule III partial opioid agonist
(Agonist – Antagonist)
History of Buprenorphine

- 1980’s........Use in Europe
- 1992..........US–1st injectable, later research
- Oct. 2000....Drug Abuse Treatment Act
- Oct. 2002....DEA releases
- Jan. 2003....Available by Rx, DEA waiver
What is buprenorphine?

- Partial µ-opioid agonist
- High receptor affinity and receptor occupancy:
  - 95% occupancy at 16 mg
  - Blockade or attenuated effect of the use of additional opioids
- Lower intrinsic activity than full agonists:
  - Favorable safety profile due to “ceiling” effect
  - Lower street value
  - Lower abuse potential

(Greenwald et al, 2003)
(Walsh and Eissenberg, 2003)
Understanding opioid effects

- **Full agonist**
- **Partial agonist**
- **Antagonist**

Effect

- Decreased maximal effect

100%

Dose

Effect
Agonist vs. Antagonist

- **Agonist**
  - Stop cravings
  - Stop withdrawal
  - Control pain
  - No euphoria

- **Antagonist**
  - Cause withdrawal
  - Little or no effect from other opiates/opioids
Pharmacologic benefits

- Slow receptor dissociation:
  - Longer duration of action
  - Milder withdrawal
- Lower physical dependence liability than full agonists
- Limited development of tolerance
- Ceiling effect on respiratory depression
  - Increased safety against overdose
Buprenorphine: Pharmacological Advantages

Partial Agonist
• high safety profile/ceiling effect
• low dependence

Tight Receptor Binding
• long duration of action
• slow onset
• mild abstinence
Buprenorphine: a treatment built on solid foundations

- Extensively tested in 46 international clinical trials:
  - 5275 patients from France, Australia, England and the US
- A Cochrane review of 13 studies concluded “buprenorphine is an effective intervention for the treatment of opioid dependence”
Buprenorphine retains more patients than methadone in detox

Johnson et al, 1992
Buprenorphine in medical withdrawal and maintenance

Kaplan-Meier curve of cumulative retention in treatment (Kakko et al, 2003)
Ideal in maintenance

• Increases retention compared with placebo
• Comparable efficacy to methadone when used in clinically equivalent doses
• “Ceiling” level of receptor activation increases safety
• Blocks or attenuates effects of other opioids Reduces concomitant opioid use
• NOT A CURE – enables participation in a comprehensive program of rehabilitation
More patients retained with buprenorphine in maintenance

- Buprenorphine 8 mg: 42
- Methadone 60 mg: 32
- Methadone 20 mg: 20

* p<0.4 methadone 20 mg

Johnson et al, 1992

In treatment at 17 weeks
13 consecutive opiate-free urines

Ling et al, 1998
Mean opioid craving – 16-week completers

Ling et al, 1998
Buprenorphine: Pharmacological Advantages

Partial Agonist
• high safety profile/ceiling effect
• low dependence

Tight Receptor Binding
• long duration of action
• slow onset
• mild abstinence
Pharmacodynamic drug interactions

- CNS depressants and sedatives (e.g., benzodiazepines):
  - All opioids have additive sedative effects when used in combination with other sedatives
  - Increased potential for respiratory depression, heavy sedation, coma, and death

- Despite favorable safety, use caution with concomitant psychotropics (e.g., benzodiazepines)
Effects of buprenorphine on $\mu$-opioid receptor availability

MRI

Binding potential ($B_{max}/K_d$)

Bup 0 mg

Bup 2 mg

Bup 16 mg

Bup 32 mg

D Nutt. Personal communication
Ceiling effect on respiratory depression

Adapted from Walsh et al., 1994

Human respiratory rate
For how long does buprenorphine work?

- **Duration of action is dose related:**
  - 4–8mg: 4–12 h
  - >8–16mg: ~24 h
  - >16–32mg: 2–3 days
    (or 2–3 x maintenance dose)

- **Elimination half life**  ~24–36 h

- **Steady state equilibrium achieved after 3–7 days**

Note: high individual variability
Buprenorphine: Considerations for Pain Management


Buprenorphine: Considerations for Pain Management

Rolley E. Johnson, PharmD, Paul J. Fudala, PhD, and Richard Payne, MD
Department of Psychiatry and Behavioral Sciences, Behavioral Pharmacology Research Unit (R.E.J.),
Johns Hopkins University School of Medicine, Baltimore, Maryland; Department of Psychiatry
(P.J.F.) and Behavioral Health Service (P.J.F.), University of Pennsylvania School of Medicine,
VA Medical Center, Philadelphia, Pennsylvania; and Department of Neurology (R.P.), Memorial
Sloan-Kettering Cancer Center, New York, New York, USA

Abstract
New effective analgesics are needed for the treatment of pain. Buprenorphine, a partial mu-opioid agonist which has been in clinical use for over 25 years, has been found to be amenable to new formulation technology based on its physiochemical and pharmacological profile. Buprenorphine is marketed as parenteral, sublingual, and transdermal formulations. Unlike full mu-opioid agonists, at higher doses, buprenorphine’s physiological and subjective effects, including euphoria, reach a plateau. This ceiling may limit the abuse potential and may result in a wider safety margin. Buprenorphine has been used for the treatment of acute and chronic pain, as a supplement to anesthesia, and for behavioral and psychiatric disorders including treatment for opioid addiction. Prolonged use of buprenorphine can result in physical dependence. However, withdrawal symptoms appear to be mild to moderate in intensity compared with those of full mu agonists. Overdoses have primarily involved buprenorphine taken in combination with other central nervous system depressants. J Pain Symptom Manage 2005;29:297–326. © 2005 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.
Open label study 95 consecutive patients on long term opioid therapy (LTOA) failing treatment based on:
- Increased pain
- Decreased Functional Capacity
- Emergence of opioid addiction (8%)

Induced on buprenorphine 4-16mg (8mg mean dose)

86% Experienced moderate to substantial pain relief
- Mood and function improved

8% Discontinued due to side effects or increased pain
WHY YOU NEVER HEAR ABOUT THE HUMORISTS OF THE MIDDLE AGES...

JUST CAN'T LEAVE WELL ENOUGH ALONE, CAN YOU
Who can train you to become certified?

- Accredited buprenorphine training courses can be conducted only by:
  - ASAM (American Society of Addiction Medicine)
  - AAAP (American Academy of Addiction Psychiatry)
  - AMA (American Medical Association)
  - AOA (American Osteopathic Association)
  - APA (American Psychiatric Association)
  - Others designated by the Secretary of HHS
How Can I Prescribe Buprenorphine?

- AAAP CD ROM Course
- ASAM Course
  [www.buprenorphinecme.com](http://www.buprenorphinecme.com)
- Apply for DEA Waiver
  - Posting on SAMHSA website optional
- Buprenorphine Mentoring Program
  [www.pcssmentor.org](http://www.pcssmentor.org)
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“Lord we thank you”