

Regulatory Considerations & Toxicology Screens When Prescribing Opioid Therapy: The Concept of Balance

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Disclosures

- This lecture is NOT specific to the Dept. of Veterans Affairs Institutions or any other Federal Institution.
- Information provided may be applied to any clinical setting as each attendee deems appropriate.
- Speakers Bureaus
 - Janssen, Merck, Ortho-Biotech, Ortho-McNeil, Pfizer, Purdue Pharma.

Overview of Topics

- Introduction
 - Previous history of chemical abuse
 - Opioid contracts
 - Trends in prescribing opioids vs abuse
- Opioid chemistry
 - How does it relate to product selection?
 - How does it relate to urine toxicology screens?
- Urine screens / Serum levels
 - Interpreting urine screens
 - Patient access to adulterating urine screens
 - Serum screen / patient case
- Summary and concept of **BALANCE**

Opioid Therapy: 20 Years of Progress

Opioid therapy in chronic pain

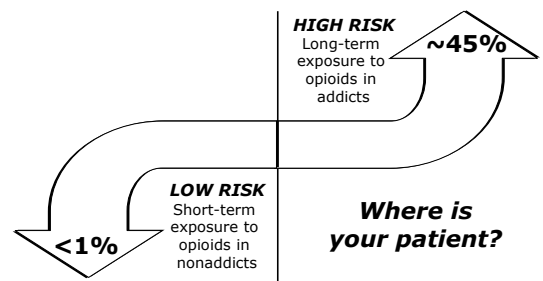
- Assess 4 outcomes over time
 - Pain relief
 - Side effects
 - Function—physical and psychosocial
 - Drug-related behaviors

Opioid Therapy: 20 Years of Progress

Opioid therapy in chronic pain

- Addressing chemical dependency
 - Know laws and regulations
 - Communicate
 - Structure therapy to match perceived risk
 - Assess behaviors comprehensively
 - Possess a range of strategies to respond to aberrant behaviors
 - Know how to relate to addiction-medicine community

Risk of Addiction or Aberrant Behavior With Opioids



Trends in Medical Use and Abuse of Opioid Analgesics

- Use 1990-1996
 - MS ↑ 59%
 - Fentanyl ↑ 1168%
 - Oxycodone ↑ 23%
 - Hydromorphone ↑ 19%
- Rx abuse reported per year
 - Meperidine ↓ 39%
 - Oxycodone ↓ 29%
 - Fentanyl ↓ 59%
 - Hydromorphone ↓ 15%
 - Morphine ↑ 3%

Joranson DE, Ryan KM, Gilson AM, Dahl JL. JAMA. 2000;283:1710-1714.

Drug-Related Behavior Predictive of Addiction

Probably More Predictive

- Selling prescription drugs
- Prescription forgery
- Stealing or "borrowing" drug from another person
- Injecting oral formulation
- Obtaining prescription drugs from nonmedical source
- Multiple episodes of prescription "loss"
- Concurrent abuse of related illicit drugs
- Multiple dose escalations despite warnings
- Repeated episodes of gross impairment or dishevelment

Probably Less Predictive

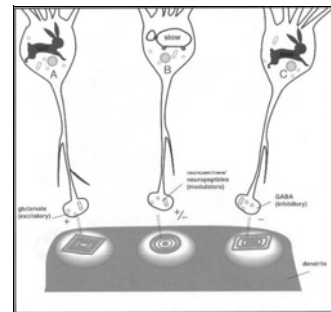
- Aggressive complaining
- Drug hoarding when symptoms milder
- Requesting specific drugs
- Acquisition of drugs from other medical sources
- Unsanctioned dose escalation once or twice
- Unapproved use of the drug to treat another symptom
- Reporting psychic effects not intended by the clinician
- Occasional impairment

Portenoy, 1997





Opioid Contracts

- One provider writes Rx
- One pharmacy dispenses medication
- No dose escalation w/o input of practitioner
- No early refills
- Limited or no access to prn meds for chronic pain
- Consent to random urine and/or serum screens
- Appropriate behavior to all professional staff
- Consequences will follow if contract is broken:
 - 1 warning (depending on behavior)
 - (+) for cannabinoids or heroin vs hydromorphone
 - Change of medication (no opioid or alternative opioid)

Neurotransmitter Signals



Chemical Classes of Opioids

Rx EXAMPLES >	PHENANTHRENES	BENZOMORPHANS	PHENYLPIPERIDINES	DIPHENYLHEPTANES
	 <ul style="list-style-type: none"> MORPHINE morphine codeine hydrocodone* hydromorphone* levorphanol* oxycodone* oxymorphone* buprenorphine* nalbuphine butorphanol* naloxone* heroin (diacetyl-morphine) 	 <ul style="list-style-type: none"> PENTAZOCINE pentazocine diphenoxylate loperamide 	 <ul style="list-style-type: none"> MEPERIDINE meperidine fentanyl sufentanil alfentanil remifentanyl 	 <ul style="list-style-type: none"> METHADONE methadone propoxyphene
X-SENSITIVITY >	PROBABLE	POSSIBLE	LOW RISK	LOW RISK

*These agents lack the 6-OH group of morphine, possibly decreasing cross-sensitivity within the phenanthrene group.
 Reisine T, Pasternak G. Opioid analgesics and antagonists. In: Hardman JG, Limbird LE, Molinoff PB, Ruzdon RW, Gilman AG, eds. Goodman and Gilman's The Pharmacological Basis of Therapeutics. 9th ed. New York, NY: McGraw-Hill Companies; 1996:521-555.
 Willette RL. Analgesic Agents. In: Delgado JN, Remers WA, eds. Wilson and Griswold's Textbook of Organic Medicinal Chemistry. 9th ed. JB Lippincott Company, Philadelphia, Pa. 1991:629-654.

Courtesy of Dr. Jeffrey Fudin

Fentanyl: Qualitative vs Quantitative

- Labcorp™ (Subcontracted to National Medical Service)
- Quantitative Serum Fentanyl = \$65.25
- Urine Screen = \$59.14
 - If positive, requires quantitative
 - **Confirmation** = \$84.64

http://www.labcorp.com/ots/medpro_sat.html

Interpreting Urine Screens: Clinical Examples

Patient on sustained release oxycodone and urine screen is negative.

What does it mean?

- A. Pt is not likely to be taking the full dose.
- B. Pt is likely to be diverting drug.
- C. Pt may be taking the dose prescribed.
- D. A and B above

Sample Urine Drug Screen Cutoff Levels

Screen	Cutoff (ng/mL)
Amphetamine	1000
Barbiturate	200
Benzodiazepine	200
Cocaine	300
Opiates	2000
Cannabinoids	50
Methadone	300
PCP (phencyclidine)	25

Example: Beckman Synchron CX5CE at Memphis VAMC.

Interpreting Urine Screens: Clinical Examples (cont'd)

Patient on DURAGESIC® (fentanyl transdermal system) CII and urine screen is negative.

What does it mean?

- A. Pt is not likely to be using the patch.
- B. Pt is on too low of a dose.
- C. Something went wrong with the lab test.
- D. Most phenylpiperidines are not included in urine toxicology screens.

Interpreting Urine Screens: Clinical Examples (cont'd)

Patient on DURAGESIC with no medication for breakthrough pain and the urine screen is positive. What does it mean?

- A. Pt may be taking fentanyl as prescribed.
- B. Pt may be injecting heroin or hydromorphone.
- C. Pt may be snorting sustained released oxycodone.
- D. All of the above

- Note: What is the implication with regard to DAWN data?

Interpreting Urine Screens: Clinical Examples (cont'd)

- Patient on methadone and urine screen is negative. What does it mean?

- A. Pt is likely diverting the methadone.
- B. Pt is on too low of a methadone dose.
- C. Something went wrong with the lab test.
- D. Methadone is not included in urine toxicology screens.

Interpreting Urine Screens: Clinical Examples (cont'd)

- Patient on methadone and urine screen is positive. What does it mean?

- A. This is what we would expect.
- B. Pt could be selling methadone and using propoxyphene instead.
- C. A and B above are true.
- D. None of the above

Internet Search for "Clean Urine"

1. **You're Clean** Provides drug testing and detox products designed to help people prepare for and pass a urine or hair drug test. Find out about the company's guarantee.
www.youreaclean.com
2. **pass a drug test urine** Drug testing products and information to help you pass urine and hair follicle drug test.
www.oharetest.com
or hair - **Cheer Test**
3. **You're Clean** Drug Testing. Drug test. Pass a urine drug test, pass a hair drug test. Info for helping people pass the urine drug test & hair drug test. Protect your rights. Don't be a victim of drug testing. Use our proven drug
www.youreaclean.com/index2facts.html#en: drug testing solutions Pass a urine drug test & hair test
4. **pass a drug test Be Negative pass testing Clean** pass a drug test. "Be Negative Coat" Drug Testing Solutions "Be Negative" can provide you with products to help you pass a drug test. You can pass a hair follicle drug test, blood or urine test. We carry detox products and hair cleaners at low prices.
www.beegative.com
5. **Terminator Gold 60 Clean Detox Urine Drug Testing** terminator gold 60 clean detox urine testing drink
www.webpage.com/users/Terminator
6. **anti drug testing products - for urine and hair follicle drug tests** Drug testing products and information to help you pass hair follicle and urine drug tests.
www.cleanest.com/products
7. **Drug Testing Marijuana - Self Test Drug Kits** Unbiased providers of drug and alcohol self / home test kits for people who want to test themselves for marijuana and other drugs.
www.drugtestingmarijuana.com
8. **Always Test Clean** Soils capsules, drinks, and shampoos designed to remove the toxins that cause positive results on urine, hair, or blood drug tests. Find out how each product works.
www.alwaysontestclean.com
9. **Passing a drug test. Pass a drug test.** Pass a drug test. Passing a drug test. Products to help you pass a drug test. Marijuana, cocaine, drug test. Pass meth drug test. False positive amphetamine drug testing information. Passing drug testing. Ways to pass a drug test. Passing a drug test
www.passdrugtesting.com
10. **Hair Drug Testing, Urine Drug Testing, Pass Your Drug Testing** has many resources to help drug testing, pass a drug test. Hair Drug Testing, Urine Drug Testing, Urine Drug Testing hair drug testing, urine drug testing, urine drug testing, urine drug testing.
www.passyourdrugtesting.com/hair-drug-testing-urine-drug-testing.htm
11. **passing urine drug testing, pass a drug test** www.PainDrugTesting.com DRUG TEST ? Pass any drug test. Pass urine drug testing. Pass saliva drug test. Pass hair drug testing. Pass blood drug testing. All products formulated for high toxin levels. We also have drug test kits.
www.passdrugtesting.com/urine_drug_test.html
12. **Drug Testing Products - Marijuana Information - Home Test Kits** Drug testing kits, products and

The Clean Whiz Kit



<http://www.cleanwhiz.com/clearkit.html>

Opioid Therapy: 20 Years of Progress

- Respect the concept of **Balance**
 - Opioids are essential medical therapy
 - Opioids are abusable, particularly by those with the disease of addiction
 - Patients with legitimate medical needs must have access to treatment
 - Regulators and those in law enforcement must stem diversion and abuse
 - Addicts must have access to treatment

Opioid Therapy: 20 Years of Progress (cont'd)

- Respect the concept of **Balance**
 - There must be dialogue among clinicians who treat pain, clinicians who treat addiction, and those who regulate, enforce, and legislate

Opioid Therapy: 20 Years of Progress (cont'd)

- Increasing opioid use in chronic pain: Needs and obligations
 - Expand the evidence base
 - Respect the concept of balance
 - Educate and communicate: patients, families, colleagues, other professionals, regulators
 - Learn prescribing principles
 - Learn how to monitor and document outcomes, including those related to chemical dependency

Questions

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