Objectives

- Understanding the scope of addiction in the US
- Understanding the neurobiology of addiction
- Understanding how to predict addiction
- Understanding how to monitor for addiction

Outline

- Definitions
- The scope of addiction
- The dilemma for physicians
- Predictors of abuse
- Ways of protecting yourself
- Urine toxicology screens
- Medications
- Resources available
IASP definition

- Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage

Definitions

- Acute Pain - An adaptive response necessary for the preservation of tissue integrity:
  - short in duration
  - well characterized
  - Self-limiting
  - protective

Definitions

- Chronic Pain – Sensory information that has outlived its usefulness:
  - cause often unknown
  - defined as >3 months
  - treat the underlying disease or process
 Definitions

- **Tolerance:** A state of adaptation in which exposure to a drug induces changes that result in diminution of one or more of the drug’s effects over time
  
  (AAPM, APS, ASAM 2001)

- **Dependence:** Adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist
  
  (AAPM, APS, ASAM 2001)

 Definition

- **Addiction** – Primary, chronic, neurobiological disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations.
  - It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving

  American Society of Addiction Medicine
  American Academy of Pain Medicine
  American Pain Society

 Pain, Opioids, and Addiction

- **Pseudoaddiction:** An iatrogenic syndrome created by the under treatment of pain. It is characterized by patient behaviors such as anger and escalating demands for more or different medications and results in suspicion and avoidance by staff. Pseudoaddiction can be distinguished from true addiction in that the behaviors resolve when pain is effectively treated
  
  (Vitiello & Biddle, 1989)

- **Increased interest in this class of drugs**
  - Advances in design of agonists and antagonists
  - Innovation in drug delivery systems
  - Public awareness of pain management options
  - Recognition of serious consequences of misuse
  - Medico legal aspects of practitioners prescribing practices and prosecution for “overprescribing and under prescribing”

E. Karasch, MD, PhD Mayo Clinic Proceedings. July 2009 84(7)
Incidence & Prevalence


- Annual numbers (in millions) of new nonmedical users of pain relievers from 1970-2001 (age>12 yrs)

- Prescription opioid analgesic deaths nationwide 2001-2005

- Nearly 1/3 of the US population has used illicit drugs and an estimated 6-15% have a substance abuse disorder of some type

- In ASIPP 2004 annual meeting in Washington, Patricia Good of the DEA’s Drug Diversion Control stated that the United States, with 4.6% of the world’s population, uses 80% of the world opioids
**Incidence & Prevalence**

**Methadone – the Good**
- Highly effective
- Used for pain
- Used for addiction
- Cost effective
- Long half-life
- Neuropathic advantage

**Methadone – the Bad**
- ADE 1800% increase 1997-2004
- Fatalities 390% increase 1999-2004
- Drug with the greatest increase in fatalities
- 6th most frequently suspected drug in death and serious nonfatal outcomes

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**Neurobiology of Addiction**

- Reward pathway in the brain which is activated by
  - Food, water and sex
  - Nurturing and caring for others
  - Exercise
  - Excitement
- This reward pathway is also activated by
  - Drugs, including alcohol
  - Gambling

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**Neurobiology of Addiction**

- The reward pathway

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**Neurobiology of Addiction**

- This same reward pathway is activated by drugs
The Dilemma for Providers

- Pain as the 5th vital sign
- Decade of pain
- Fundamental human right
- Quality measures/JCAHO
- Provider training now mandatory in California
- Patient awareness of available drugs (commercials)

So, you decided to prescribe opioids?

“C’mon, c’mon — it’s either one or the other.”

Neurobiology of Addiction
Predicting Abuse

1. Obtaining opioids from more than one physician
2. Calling on weekends or after-hours for pain meds
3. Frequent lost or stolen medications
4. Frequent visits without an appointment
5. Frequent telephone calls to the clinic
6. Frequent and rapid escalation of doses
7. Multiple medication intolerances

Dunbar & Katz

Studies on Addiction

• Patients without a history of abuse
  • Boston Collaborative Drug Surveillance Program
    + 11,882 patients
    + Followed for 2 years/broad range of indications for opioids
    + 4 cases of iatrogenic addiction
  • Management of Pain During Debridement Study
    + 10,000 burn patients
    + Followed for extended periods
    + 22 abused but all had previous history
  • Drug Dependency in Patients with Chronic Headache
    + 2369 chronic headache patients
    + 3 abused

(Porter, NEJM 1980)
(Perry, Pain 1982)
(Medina, Headache, 1977)

• Patients with a history of abuse
  • 20 patients with non-cancer pain
    - 7 patients with history of ETOH/PSA and active in AA
    - 4 patients with a history of ETOH and supportive families
    + 9 patients with PSA not in AA

Dunbar & Katz
Journal of Pain and Symptom Management
1996

• Chart documentation should include the 4 A’s of treatment outcome
  • Activity (psychosocial functioning)
  • Analgesia (pain relief)
  • Adverse effects (side effects)
  • Aberrant drug taking (addiction-related outcomes)

Passik & Weinreb 1996
## Protecting Yourself

- Document the 4 A’s and why you are using opioids
- Get additional support – consult pain/addiction
- Don’t give opioids to the “active” addict (+/-)
- Allow 3-7 day supplies in high risk cases
- Use long acting or low street value medications
- Urine toxicology screens/pill counts
- Pain Management Agreements
- Continuously evaluate and reassess

## CURES

<table>
<thead>
<tr>
<th>Basic information</th>
<th>Department of Justice</th>
<th>1-2 week turn around</th>
<th>Reports opioids/benzos</th>
<th>Reports provider</th>
<th>Will be even better soon</th>
</tr>
</thead>
</table>

## Pain Management Agreements

- Terms of treatment
- Prohibited behaviors
- Points of termination
- Patient responsibilities
- Issues about education
- Addiction treatments
- Emergency issues
- Goals
- Prescription limitations
- Legal considerations
- Discouraged behavior
- Responsibilities of staff

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*J Pain Symptom Management 1999; 18:6-8*
Urine Toxicology Screen

- What substances are commonly tested?
- How accurate is the test?
- How long will each drug stay in the urine?
- What may cause a false positives?
- What are some tricks people use to game the system?

- Amphetamines
- Benzodiazepines
- Cannabinoids
- Cocaine
- Opiates
- Methadone
- Oxycodone (rapidone)
Urine Toxicology Screen

- Generally very accurate tests, but not perfect
- Common false negatives
  - UDS does not detect synthetic opioids such as Fentanyl, Demerol, Ultram, and Darvocet
- Common false positives
  - Amphetamine
  - Pseudoephedrine
  - Adderall
  - Dexedrine
  - Ephedra
  - Marijuana
  - Protonix

Gaming the system:

Referrals

- Get a pain consultation along with surgery
- Get an addiction or psychiatry consultation
  - Though self-evident, this is often not done in a timely manner.
  - It also will take some of the pressure off the primary provider if dose escalation or behavior is an issue
  - Before doses get too high, someone can step in and help
DEA

“If a physician is aware that a patient is a drug addict... it is not merely “recommended” that the physician engage in additional monitoring of the patient’s use of narcotics. Rather, as a DEA registrant, the physician has a responsibility to exercise a much greater degree of oversight to prevent diversion in the case of a known or suspected addict than in the case of patient for whom there are no indicators of drug abuse.”

DEA Federal Register, 2004 (now withdrawn)

Summary

• All patients deserve the right to pain management
• Pain management does not mean opioids
• Document the 4 A’s of pain treatment
• If you feel that you are being duped, you are
• The DEA is your friend...well, sort of.
• Get consultation early in areas of concern
• Check urine tox screens randomly
• Pain management agreements are good if you follow them

Resources

• www.ag.ca.gov/bne/trips.php/
• www.regulations.gov/search/
• www.samhsa.gov/
• www.projectcork.com/
• www.asam.com/
• www.ampainsoc.org/
• www.globalrph.com/
• www.painedu.com/