

# Hospital Pain Management

## Drug dependence, Surgery and Implementing a Team

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# Learning Objectives

- Review obstacles in drug dependent patients
- Principles of treating pain in opioid dependence
- Review risk factors for development of dependence in peri-operative care
- Evaluate effective strategies for creating hospital pain control policies

# Opioid Dependent Patient

- **Common area of discomfort for providers**
  - Transference and Countertransference
  
- **What is important to assess**
  - Medications, OTCs, Illicit substances
    - Opioid substitution therapy
    - Improper use of prescription
  - Infections
  - Social and Support Systems

# Opioid Dependent Patient

- **Approximate Detection Potential of Urine Drug Screen**
  - Buprenorphine and metabolites: 8 days
  - Methadone maintenance: 7-8 days
  - Cocaine metabolite: 48-72hrs
  - Heroin (morphine, codeine, dihydrocodeine and propoxyphene): 48hrs
  
  - Cannabinoids, single use: 3-4d
  - Cannabinoids, heavy or chronic use: up to 45days
  
  - Amphetamines: 48 hrs
  
  - Benzodiazepine (Midazolam): 12hr
  - Benzodiazepine (Diazepam): over 7 days

# Opioid Dependent Patient

## Treatment decision model

- Environment
  - Perspective is important
- Establish misuse
  - Injecting oral forms
- Analgesic plan
  - Optimize non-opioids, continue outpatient therapy
  - Opioid substitution therapy (OST)
- Withdrawal Management
- Multidisciplinary discharge planning

# Opioid Dependent Patient

- **3 Obstacles to Effective Pain Therapy**
  - Opioid-induced hyperalgesia
    - Multiple risk factors
    - Ketamine attenuates
    - May last several months
  - Opioid Tolerance
    - Confirm doses
    - May require higher doses

# Opioid Dependent Patient

- **3 Obstacles to Effective Pain Therapy-Continued**
  - Opioid Withdrawal
    - Heightened stress response
    - Sympathetic Stimulation
    - #1 treatment is prevention
      - Early reduction of IV opioids
      - Subcutaneous or oral therapy

# Opioid Dependent Patient

- **Discharge planning**
  - Early planning
  - Clear communication
  - Outpatient providers



# Chronic Pain

- **Chronic Post-Surgical Pain Syndrome**
  - Surgery dependent
    - Amputation, Inguinal herniotomy, Mastectomy, Cesarean Section
  - Risk Tools are inconsistent
  - Identify risk factors pre-operatively
    - Younger, female, chronic pain, surgery type
      - Post-operative Pain Severity also high risk

# Chronic Pain

- **Post-surgical period**
  - Endocrine changes
    - High dose Milligram morphine equivalents
    - Ketamine may not change this
  - Anti-inflammatory response
    - Studied in specific surgeries
    - Multimodal treatment maximizes effect
  - Immunosuppression
    - Temporary
    - Metastatic cancer risk

# Implementing Pain Management

- **Develop a team**

- Champion
- Experts, Nursing, Pharmacy, Physicians

- **Set goals**

- Develop Vision
- Set plan to achieve Vision
  - PDCA
- Obtain support from stakeholders
  - Getting to Yes, Roger Fisher and William Ury
  - True North: Discover Your Authentic Leadership, Bill George

# Implementing Pain Management

- **Write policies to support the change**
  - After extended review
  - Create a safe environment for comment and criticism
  - Plan reevaluation

# Implementing Pain Management

- **Top 3 Goals**

- Keep patient safe

- Reduce ADEs
- Reduce dependence

- Provide comfort

- Provide pain relief
- Treat underlying psychiatric disease

- Include multiple lines of treatment

- Broaden your treatment options
- Delineate how to access care

# Citations

- Quinlan J, Cox F. Acute pain management in patients with drug dependence syndrome. *Pain Reports*. 2017;2(4):e611. doi:10.1097/PR9.0000000000000611.
- Vadivelu N, Singh-Gill H, Kodumudi G, Kaye AJ, Urman RD, Kaye AD. Practical guide to the management of acute and chronic pain in the presence of drug tolerance for the healthcare practitioner. *Ochsner J* 2014;14:426–33.
- Schug SA, Bruce J. Risk stratification for the development of chronic postsurgical pain. *Pain Reports*. 2017;2(6):e627. doi:10.1097/PR9.0000000000000627.
- McGreevy K, Bottros MM, Raja SN. Preventing Chronic Pain following Acute Pain: Risk Factors, Preventive Strategies, and their Efficacy. *European journal of pain supplements*. 2011;5(2):365-372. doi:10.1016/j.eujps.2011.08.013.
- Anderson W, Liao S. Improving Pain management for hospitalized medical patients. A SHM implementation guide. 2018.