Pain Management During an Opioid Epidemic

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Good News/Bad News

• Good news – more treatments are leading to better survival from a variety of serious illnesses, including cancer
• Bad news – more persistent pain syndromes
• More bad news – opioid abuse epidemic
Drug overdose death rates by state per 100,000 people (2008)

Amount of prescription painkillers sold by state per 10,000 people (2010)

©Center for Disease Control
The number who die each year from...

Drug overdoses 52,404
Car accidents 37,757
Guns 35,763
H.I.V. 6,465
3 Waves of the Rise in Opioid Overdose Deaths

Wave 1: Rise in Prescription Opioid Overdose Deaths

Wave 2: Rise in Heroin Overdose Deaths

Wave 3: Rise in Synthetic Opioids Overdose Deaths


https://www.cdc.gov/drugoverdose/epidemic/index.html
National Overdose Deaths
Number of Deaths Involving Benzodiazepines

Source: National Center for Health Statistics, CDC Wonder
CDC Guideline for Prescribing Opioids for Chronic Pain

Improving the way opioids are prescribed through clinical practice guidelines can ensure patients have access to safer, more effective chronic pain treatment while reducing the number of people who misuse, abuse, or overdose from these drugs.

CDC developed and published the CDC Guideline for Prescribing Opioids for Chronic Pain to provide recommendations for the prescribing of opioid pain medication for patients 18 and older in primary care settings. Recommendations focus on the use of opioids in treating chronic pain (pain lasting longer than 3 months or past the time of normal tissue healing) outside of active cancer treatment, palliative care, and end-of-life care.
5. When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when increasing dosage to 50 morphine milligram equivalents (MME) or more per day, and should avoid increasing dosage to 90 MME or more per day or carefully justify a decision to titrate dosage to 90 MME or more per day.

6. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than 7 days will rarely be needed.
How Do We Achieve Balance?

Pain Control  Opioid Misuse Epidemic
Substance Use Disorder

- Addiction: “chronic disease of brain reward, motivation, memory, and related circuitry,” characterized by “an individual pathologically pursuing reward and/or relief by substance use and other behaviors”
- Addiction is not a choice or a moral failure
- Stigma
  - “Abuser”
  - “Frequent flyer”
- Leads to judgment, punitive beliefs rather than compassion
Substance Use Disorders are Chronic Medical Illnesses

- Drug/alcohol continuous abstinence 1 year post discharge ~40-60%
- Optimal adherence to treatment
  - Diabetes <60%
  - Hypertension <40%
  - Adult onset asthma <40%
- Proportion of patients requiring medical care to re-establish control
  - Adults with type 1 diabetes 30-50%
  - Adults with hypertension or asthma 50-70%

Review

Addiction to opioids in chronic pain patients: A literature review

Jette Højsted *, Per Sjögren

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Received 20 February 2006; received in revised form 28 August 2006; accepted 30 August 2006
Available online 27 October 2006

Abstract

Opioids have proven very useful for treatment of acute pain and cancer pain, and in the developed countries opioids are increasingly used for treatment of chronic non-malignant pain patients as well. This literature review aims at giving an overview of definitions, mechanisms, diagnostic criteria, incidence and prevalence of addiction in opioid treated pain patients, screening tools for assessing opioid addiction in chronic pain patients and recommendations regarding addiction problems in national and international guidelines for opioid treatment in cancer patients and chronic non-malignant pain patients.

The review indicates that the prevalence of addiction varied from 0% up to 50% in chronic non-malignant pain patients, and from 0% to 7.7% in cancer patients depending of the subpopulation studied and the criteria used. The risk of addiction has to be considered when initiating long-term opioid treatment as addiction may result in poor pain control. Several screening tools were identified, but only a few were thoroughly validated with respect to validity and reliability.

Most of the identified guidelines mention addiction as a potential problem. The guidelines in cancer pain management are concerned with the fact that pain may be under treated because of fear of addiction, and the guidelines in management of non-malignant pain patients include warnings of addiction. According to the literature, it seems appropriate and necessary to be aware of the problems associated with addiction during long-term opioid treatment, and specialised treatment facilities for pain management or addiction medicine should be consulted in these cases.

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Keywords: Addiction; Chronic pain; Screening tools; Questionnaires; Incidence; Prevalence
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Keywords: Addiction; Chronic pain; Screening tools; Questionnaires; Incidence; Prevalence
• Similar histories of cancer and SUD (stigma, fear, blame)
• DEA reduced opioid manufacturing 25% in 2017
• 24 states proposed 59 bills during first 6 months/2017
  – Enhanced education, develop guidelines
  – Limit opioids to certain groups, time limits (3-7 day supply, maximum dosage (100 mg OME/day)
  – Some exempt hospice/palliative care, few exempt cancer
Review Article

Cancer Pain Management and the Opioid Crisis in America: How to Preserve Hard-Earned Gains in Improving the Quality of Cancer Pain Management

Judith A. Paice, PhD, RN

Epub March, 2018
**Barriers Related to Patients and Family Members**

- **Reluctance to Report Pain**
  - Anxiety regarding meaning of pain
  - Fear presence of pain will limit treatment options
  - Concerns of being “a bother” to the oncology team
  - Assumptions that pain is to be expected, that team knows they have pain

- **Fear of Addiction**
  - Enhanced by media attention to opioid misuse epidemic and celebrity deaths

- **Inadequate Training in Use of Pain Medications**
  - Reduced adherence due to misunderstandings regarding opioid use and “prn” administration

- **Socioeconomic Limitations to Accessing Treatment**
  - Support to get to clinic for reassessment, cost of transportation, families taking off work

**Cognitive and Affective Factors**

**Barriers Related to Health Care Professionals**

- **Inadequate Knowledge**

- **Insufficient Pain Assessment Due to Inadequate Knowledge, Competing Priorities, Time Limitations**

- **Lack of Awareness of the Biopsychosocial and Spiritual Components of Pain**

- **Reluctance to Prescribe Opioids**
  - Concerns about adverse effects, addiction, tolerance
  - Belief that opioids are to be used only during terminal phase
  - Worry about payment, need for prior authorization, delays in access
  - Fear of regulatory oversight, loss of license

**Barriers Related to Health Care Systems**

- **Inadequate Time**

- **Limited Access to Pain Specialty Care**

- **Limited Reimbursement for Opioid and Non-Opioid Therapies**

- **Limited Payment for and/or Access to Non-Pharmacologic Therapies (e.g., PT/OT, Mental Health, Counseling, Integrative Therapies)**

- **Limited Formularies**

- **Shortages of Opioids in Retail and Hospital Pharmacies**
Educate patients and family members regarding:
- Importance of reporting and treating pain in oncology
- Their individual risk for addiction based upon risk assessment along with strategies that will be employed to prevent misuse
- Appropriate use of ATC and prn opioids and need to follow directions carefully
- Need to use opioids for pain relief only, not to treat anxiety or sadness, or to enhance sleep
- Need to have one prescriber (may be one team in oncology) provide prescriptions
- Safe storage and disposal of medications

Oncology professionals will obtain education regarding:
- Comprehensive pain and addiction risk assessment
- Tolerance, physical dependence, addiction
- Universal precautions
- Regulatory and licensing statues that guide clinical practice and opioid prescribing in their state

Health systems and oncology practices will provide access to:
- Prescription drug monitoring data within the electronic health record
- Laboratory services that provide rapid urine toxicology results
- Pain and palliative care specialists
- Adequate opioid and other pharmacological formularies
- Mental health counseling
- Non-pharmacological and integrative pain therapies
- Addiction resources
Management of Chronic Pain in Survivors of Adult Cancers:
American Society of Clinical Oncology Clinical Practice Guideline

Judith A. Paice, Russell Portenoy, Christina Lacchetti, Toby Campbell, Andrea Cheville, Marc Citron,
Louis S. Constine, Andrea Cooper, Paul Glare, Frank Keefe, Lakshmi Koyyalagunta, Michael Levy,
Christine Misiekowski, Shirley Otis-Green, Paul Sloan, and Eduardo Bruera

What is a Cancer Survivor?

National Coalition for Cancer Survivorship
• Survivor - from the moment of diagnosis through the rest of their life

National Cancer Institute’s Office of Cancer Survivorship
• Survivor is a person with a history of cancer who is beyond the acute diagnosis and treatment phase

• 14 million in the United States
• 2/3 living 5 years or longer
• Prevalence of pain 40% or higher

https://www.canceradvocacy.org/
https://cancercontrol.cancer.gov/ocs/
Key Recommendations

• Screening and Comprehensive Assessment (cancer treatment syndromes)
• Treatment and Care Options
• Risk Assessment, Mitigation and Universal Precautions
Key Recommendations

• Screening and Comprehensive Assessment
  – Screen at each encounter
  – Conduct initial comprehensive pain assessment
  – Be aware of chronic pain syndromes from cancer treatment
  – Evaluate for recurrent disease
### Chronic Pain Syndromes Associated with Cancer Treatment

**Chemotherapy-related pain syndromes**
- Bony complications of long-term corticosteroids
- Avascular necrosis
  - Vertebral compression fractures
  - Carpal tunnel syndrome
- Chemotherapy-induced peripheral neuropathy
- Raynaud’s syndrome

**Hormonal therapy-related pain syndromes**
- Arthralgias
- Dyspareunia
- Gynecomastia
- Myalgias
- Osteoporotic compression fractures

**Radiation-related pain syndromes**
- Chest wall syndrome
- Cystitis
- Enteritis and proctitis
- Fistula formation
- Lymphedema
- Myelopathy
- Osteoporosis
- Osteoradionecrosis and fractures
- Painful secondary malignancies
- Peripheral mononeuropathies
- Plexopathies: brachial, sacral

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Chronic Pain Syndromes Associated with Cancer Treatment

Key Recommendations

• **Treatment and Care Options**
  – Non-pharmacologic interventions
  – Pharmacologic interventions
  – Opioids
    • Promote safe and effective prescribing
    • Assess risks of long term use
### Table 4. Disciplines and Interventions for Chronic Pain

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Examples of Possible Interventions</th>
<th>Strength of Evidence and Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical medicine and rehabilitation</td>
<td>Physical therapy, occupational therapy, recreational therapy, individualized exercise program, orthotics, ultrasound, heat/cold</td>
<td>Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate</td>
</tr>
<tr>
<td>Integrative therapies</td>
<td>Massage, acupuncture, music</td>
<td>Evidence-based; benefits outweigh harms; evidence quality: low; strength of recommendation: weak</td>
</tr>
<tr>
<td>Interventional therapies</td>
<td>Nerve blocks, neuraxial infusion (epidural/intrathecal), vertebroplasty/kyphoplasty</td>
<td>Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate</td>
</tr>
<tr>
<td>Psychological approaches</td>
<td>Cognitive behavioral therapy, distraction, mindfulness, relaxation, guided imagery</td>
<td>Evidence-based; benefits outweigh harms; evidence quality: intermediate; strength of recommendation: moderate</td>
</tr>
<tr>
<td>Neurostimulatory therapies</td>
<td>TENS, spinal cord stimulation, peripheral nerve stimulation, transcranial stimulation</td>
<td>Evidence-based; benefits outweigh harms; evidence quality: low; strength of recommendation: weak</td>
</tr>
</tbody>
</table>

Abbreviation: TENS, transcutaneous electrical nerve stimulation.

### Adverse Effects Associated with Long-Term Opioid Use

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<thead>
<tr>
<th>Persistent common adverse effects</th>
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<tbody>
<tr>
<td>Constipation</td>
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<tr>
<td>Mental clouding</td>
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<tr>
<td>Upper GI symptoms (pyrosis, nausea, bloating)</td>
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<table>
<thead>
<tr>
<th>Endocrinopathy (hypogonadism/hyperprolactinemia)</th>
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<tr>
<td>Fatigue</td>
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<tr>
<td>Infertility</td>
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<tr>
<td>Osteoporosis/osteopenia</td>
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<tr>
<td>Reduced libido</td>
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<tr>
<td>Reduced frequency/duration or absence of menses</td>
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<thead>
<tr>
<th>Neurotoxicity</th>
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<tr>
<td>Myoclonus</td>
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<tr>
<td>Other changes in mental status (including mood effects, memory problems, increased risk of falls in the elderly)</td>
</tr>
<tr>
<td>Risk of opioid-induced hyperalgesia (incidence and phenomenology uncertain, but escalating pain in tandem with dose escalation raises concern)</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Sleep-disordered breathing</th>
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<tr>
<td>Increased risk of concurrent benzodiazepine in patients predisposed to sleep apnea</td>
</tr>
<tr>
<td>New-onset sleep apnea</td>
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<tr>
<td>Worsening of sleep apnea syndromes</td>
</tr>
</tbody>
</table>

Key Recommendations

• **Risk Assessment, Mitigation and Universal Precautions**
  – Understand tolerance, dependence, abuse and addiction
  – Incorporate “universal precautions” to minimize abuse, addiction and adverse effects
  – Understand pertinent laws and regulations
  – Taper dose when no longer needed
Risk Assessment

- Pain
- Function
- Misuse/abuse of drugs
  - Current/past misuse of prescription or illicit drugs
  - Alcohol, smoking, gambling
- Environmental/genetic exposure
  - Family, friends with substance misuse disorder
- Sexual abuse

Universal Precautions

- Prescription Drug Monitoring Programs
- Pill counts
- Urine toxicology
- Agreements/contracts

Universal Precautions

- Assess and stratify risk of opioid misuse
- Decide whether or not to prescribe
- Minimize risk
  - Optimize adjuvant analgesics, non-pharmacologic therapies, integrative approaches
  - Psychological support for treatment of mental illness, anxiety, depression, sleep disorders
- Monitor drug-related behaviors
- Respond to aberrant behaviors
When Opioids are No Longer Beneficial: Weaning

- Slow downward titration – 10% reduction/week
- Offer psychosocial support
- Optimize nonopioids and adjuvant analgesics
- Use antidepressants rather than benzodiazepines to treat irritability and sleep disturbances
- Provide a clear verbal and written plan


Safe Storage & Disposal

• Educate patients/families regarding safe medication practices
  – Don’t leave medications out
  – Lock boxes

• Safe disposal
  – Take back programs – pharmacies, police depts
  – Mix drug in wet coffee grounds or kitty litter until dissolved, then dispose in garbage – do not flush down toilet (except opioids)

National Take Back Day
October 27, 2018

www.deadiversion.usdoj.gov
Summary

• All patients should have thorough assessment
  – Pain, function, risk factors
• Multimodal therapy
  – Pharmacologic and nonpharmacologic interventions
• Employ universal precautions when using opioids
  – Ongoing assessment
  – Urine toxicology, pill counts, PDMPs
• Wean gradually when opioids no longer effective
• Safe storage and disposal
“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has”.

Margaret Mead