Safe and Effective Pain Control

• List factors that place patients at risk for opioid-induced respiratory depression
• Describe universal precautions in the context of pain management
• Discuss strategies to provide for a safe patient, safe prescriber, and safe community

Safe and Effective Pain Control

• Goal – balance
• Balance pain relief, function and safety
  – Pain relief – No pain is no longer the goal
  – Enhanced function
  – Safety
    • Safe patient
    • Safe prescriber
    • Safe community
Adverse Effects of **Opioids**

- Respiratory depression
- Nausea and vomiting
- Constipation
- Cognitive/sedation
- Pruritus
- Urinary retention
- Hormonal changes
- Rigidity
- Seizures (meperidine)
- Miosis
- Diuresis
- Diaphoresis
- Edema
- Myoclonus
- Hyperalgesia

**Acute Effects:**
**Respiratory depression**
Risk Factors for Opioid-Induced Excessive Respiratory Depression

- Older age > 55 years
- OSA
- Obesity
- Snoring
- Daytime napping
- Retrognathia
- Neck circumference > 17.5"
- Pulmonary/cardiac dx
- Smoke > 20 pack year
- Major organ failure
- Thoracic or large abdominal incisions
- Prolonged surgery > 2 hrs
- Concomitant sedating drugs
- High opioid need
Risk Factors for Opioid Induced Respiratory Depression: *iatrogenic*

- Basal infusion with PCA
- Unauthorized staff or family activation of PCA bolus
- Rapid opioid dose escalation
- Co-administration of antihistamines and benzodiazepines
- Lack of aggressive monitoring
  - First 24 hours after surgery
  - Between hours of 2300 and 0700

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Screen for risk
Assess previous history of opioid use
Conduct full body skin assessment
Use individualized, multimodal treatment

Caution with naïve patients
Consult RPh or pain expert when converting
Avoid rapid increases
Caution when transferring
Avoid arbitrary pain rating

Actions Suggested by TJC:
- Effective processes (policies and procedures)
- Safe technology (red flags, tall man, smart PCA)
- Appropriate education and training (prescribers, staff, patients/families)
- Effective tools (e.g. sedation scales)

Adverse Effects of Opioids

Chronic Effects:
Overtreatment
Can pain relief be provided while reducing negative consequences of treatment?

Which patients should be prescribed what medications, in what situations, for what kind of pain, and who should be managing the pain?

Those at Risk for Undertreatment

- Infants and children
- Elderly (> 65 years of age)
- Cognitively impaired
- Nonverbal individuals
- People with mental health disorders
- Minorities
- Female gender
- Good performance status
- Non-English speaking
- Long-term survivors
- Socio-economically disadvantaged
- Uninsured
- Those with current or past substance use disorders

We do not want to lose sight of the need for pain control.

Those at Risk for Overtreatment

- Long term survivors
- Co-morbid mental health conditions
  - Anxiety
  - Depression
  - Sleep disorders
  - “Chemical copers”/limited coping strategies
- Lack of financial resources
  - Limited or no reimbursement for PIVOT, counseling, integrative therapies
- Pre-existing substance use disorders

What are the Risks of Overtreatment?

- Long term benefit – limited data
- Cognitive difficulties
- Depression
- Hypogonadism
  - Fertility/sexual dysfunction, fatigue, osteoporosis, altered wound healing
- Safety
  - Respiratory depression (OSA)
  - Overdose

Drug overdose death rates by state per 100,000 people (2008)

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

Pain and Substance Use Disorders

Clearly Not Addicted  Grey Zone  Clearly Addicted


How Do We Know?
**Differential Diagnosis of Aberrant Drug Taking Behavior**

- **Pseudo-addiction**
  - Amount of drug ordered too low - dose, number of tablets
  - Insurance limits, prior authorizations, pharmacy partial fills due to supply limits
- **Psychiatric disorders**
  - Chemical coping
  - Mood disorders (anxiety, depression)
  - Encephalopathy

**Differential Diagnosis of Aberrant Drug Taking Behavior**

- **Inability to follow a treatment plan**
  - Low literacy
  - Use of pain medication to treat other symptoms (sleep, anxiety, depression)
  - Misunderstanding regarding “prn”
  - Fear of pain returning
- **Addiction**
- **Criminal intent**

**Optimal Management in Medically Ill**

<table>
<thead>
<tr>
<th>Assess</th>
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<tbody>
<tr>
<td>Pain</td>
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<tr>
<td>Function</td>
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<tr>
<td>For addiction/diversion</td>
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<tr>
<td>Abuse of other drugs</td>
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<tr>
<td>– Current/past misuse of prescription or street drugs</td>
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<tr>
<td>– Alcohol/smoking</td>
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<tr>
<td>Environmental/genetic exposure</td>
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<tr>
<td>– Family or friends with substance abuse disorder</td>
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<tr>
<td>Sexual abuse</td>
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<td>– Childhood, preteen</td>
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Optimal Management: Universal Precautions

Opioid management agreements or “contracts” – limited evidence in oncology/palliative care

Adherence monitoring
– Urine drug testing (UDT)
– Pill counts
– Prescription drug monitoring programs

Benefits of PDMPs

• Screen for aberrant behaviors
• Verify medication, dose, next refill date when patient uncertain/did not bring in pill bottles
  – “I take the blue pill”
• Safety

Case

• Patient to receive chemotherapy. Patient reports significant pain, did not bring pill bottles, requesting injection. Clinic nurse pages APN to request assistance.
  – Patient reports taking OxyContin 80 mg q 8 and oxycodone ir 30 mg 3-4 per day.
  – 24 hour OME approximately 500 mg or 165 iv morphine ÷ 24 = 6.9 mg/hour iv morphine
  – Breakthrough dose 50 – 100% of hourly rate
  – Would administer 3.5-7 mg iv morphine
Case (cont.)

• Review of IL PMP reveals patient last obtained OxyContin and oxycodone 3 months prior. On additional questioning patient admits she saves pain medications only for days when pain “bad”.
  – English as second language
  – Regimen was correct, but was not adherent
  – No insurance/Medicaid rarely pays for OxyContin
  – Cultural belief that injections best
  – Does not have to pay for medications given in clinic

Case (cont.)

• Discussed short action of parenteral opioids
  – Parenteral peak effect 15 minutes; duration 1-2 hours
  – Oral peak effect 1 hour; duration 3-4 hours
• Emphasized concerns regarding safety
• Administered morphine ir 15 mg tablets; repeated in 3 hours

Finding Balance:
Aggressive Pain Management

Advanced Disease

– Escalation of opioids, adjuvant analgesics
– Referral for interventional therapies, PT/OT, CBT, integrative therapies

Long Term Survivors

– Minimal use of pharmacological therapies
– Referral for multidisciplinary care

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

Pain and Substance Use Disorder

- Ongoing compassionate assessment
- Differentiate misuse/abuse behaviors from undertreatment
- Openly discuss concerns:
  - “We have to balance pain control, function and safety; we do not want to jeopardize your health”
  - “I am worried about your relationship with the pain medications”
  - “Using these medicines to help you sleep is dangerous. Let’s try other strategies.”

Risk Factors for Substance Abuse

- Past/current use
- Genetics/family history
- Sexual abuse
- Legal problems
- Mental health problems
- Multiple motor vehicle accidents
- Cigarette smoking
- Fewer side effects – no hangover
- High opioid dose

## Risk Stratification

### Low Risk
- No past/current history of SUD
- No family history of SUD
- No major untreated psychiatric disorder
- Presence of social support system

- May be safely managed in primary care settings
- Adherence monitoring at least annually

### Moderate Risk
- History of treated SUD
- Significant family history of SUD
- Younger than 25 years old
- Current pharmacotherapy for addiction
- Younger than 25 years old

- May be in consultation with appropriate specialty support
- Adherence monitoring at least every 6 months

### High Risk
- Active SUD or aberrant behavior
- Major untreated psychiatric disorder

- Recommended management by pain management and addiction specialists as needed, because these patients pose significant risk to themselves and others
- Frequent adherence monitoring: weekly or monthly

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## Pain and Substance Use Disorder

### Set realistic goals

### Treat concomitant psychiatric disorders

### Consider tolerance - patients with opioid misuse history usually require higher doses

### Multidisciplinary approach - one prescriber

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## Pain and Substance Use Disorder

- Limit the amount of medication given at any one time
  - Weekly prescriptions ("may fill xx/xx/xx")

- Utilize pill counts
  - Assess for independent dose escalation and shortages

- Maximize nonopioid, nonpharmacological and interventional pain control methods

- Do not substitute benzodiazepines, antihistamines or other sedating medications for analgesics

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Adopted from Gouday et al. 2005
Pain and Substance Use Disorder

More frequent outpatient visits
Solicit family/significant other for assistance
Consider formulations less likely to be abused *
Consider inpatient treatment for addiction

For patients in recovery:
- Assess length and stability of recovery
- Encourage ongoing participation in recovery efforts
- Identify stressors for relapse
- Encourage open communication
- If in methadone maintenance or buprenorphine program, review drug – drug interactions, consult with addiction specialist

Measures that Enhance Recovery

- Active in recovery-related support systems (aftercare, 12 step programs)
- Active sponsor
- Stability in workplace, home
- Medical and psychiatric support
- Avoid sleep deprivation
- Exercise program

Safe Community

- Educate patients/families regarding safe medication practices
  - Don’t leave medications out
  - Lock boxes
- Primary sources of diversion
  - Thefts from pharmacies, drug distribution centers
  - Thefts from medicine cabinets
  - Internet
  - Smuggling
  - “Pill mills”

Safe Community

- 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)

www.deadiversion.usdoj.gov
Summary

Achieving balance in the appropriate use of opioids in the treatment of pain requires skill and compassion.

How “aggressive” pain management is defined and implemented may vary.

Universal precautions protect the patient, the prescriber and the community.

Care of the patient with substance use disorder requires a multimodal, multidisciplinary approach.

“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*