

Risk and Benefits of Opioids In the Management of Persistent Pain


Paul Arnstein, RN, PhD, FNP-C, FAAN

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Pain Management
AMERICAN SOCIETY FOR
Nursing


PCSS-O Training
Prescribers' Clinical Support System for Opioid Therapies



Prevalence & Cost of Chronic Pain

- 100 million in U.S. live with Chronic Pain
 - > Diabetes, Heart Disease & Cancer combined
- Costs U.S. >\$600 Billion each year
 - Health care (~\$300 billion)
 - \$100B paid by Gov't programs (CMS, VA, Workers Comp, et al.)
 - Lost productivity (≥ \$300 billion)
- Lost tax revenues compound problem

IOM (2011) Relieving Pain in America



Issue of Opioid Misuse

- 5 million non-medical users
- \$73 billion/year
- Most common:
 - Poisoning type
 - Overdose death
- "Gateway" drugs

SAMHSA, 2011
a

BALANCED APPROACH: RISKS/BENEFITS OF PAIN MEDICINES

Pain reduction

Improved life

Functioning

Healing

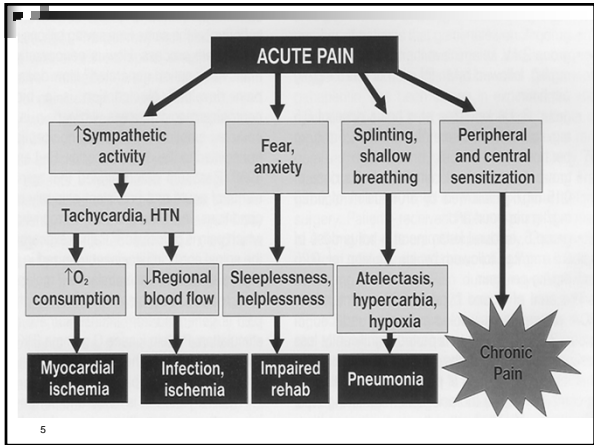
Psychosocial

Side effects

Morbidity

Toxicity

Legal

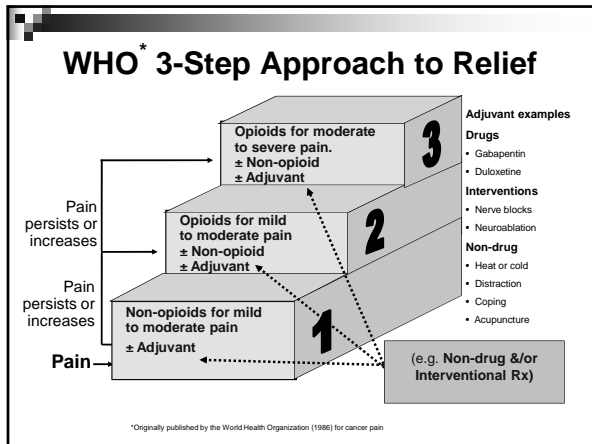


The Meaning & Impact of pain?

- Impact of pain
 - Mind
 - Body
 - Spiritual
 - Social roles and interactions
- Meaning of pain

- Work
- Family
- Recreation
- Self-care
- Community

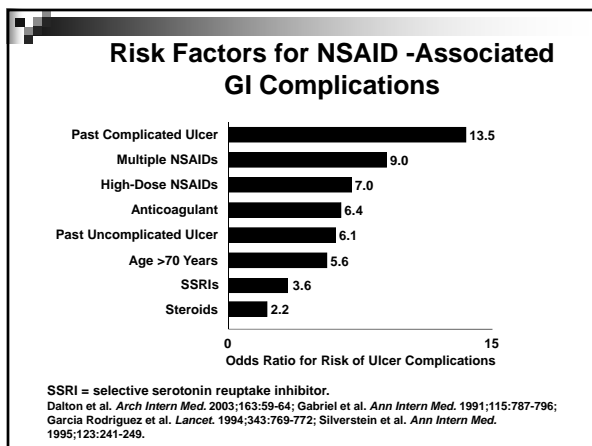
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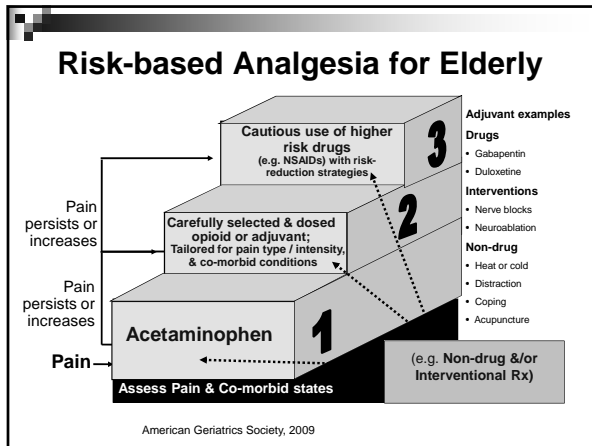


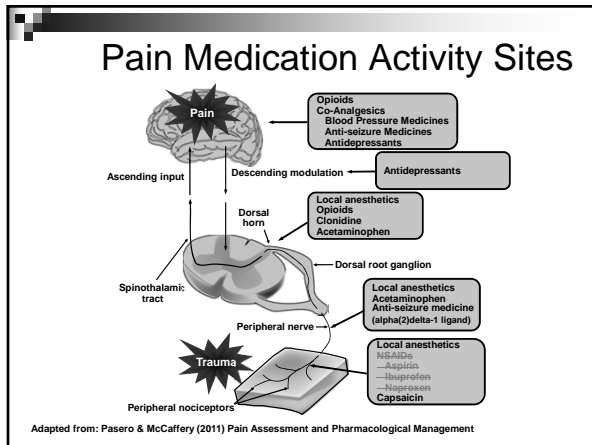
NSAID Toxicity May Limit Use

- #1 prescribed drug class in world
- Causes thousands of deaths & hospitalizations/yr¹
- Ibuprofen has the best efficacy & GI safety²
 - Diclofenac sodium & naproxen (doubles) risk
 - Piroxicam, indomethacin, ketorolac >4X GI risk
- Worsen hypertension, CHF, renal disease
- With cancer ~mask fever or predispose to bleeding

1. Lai & Chan. *Current Opinion in Gastroenterology*. 25(6):544-8, 2009 Nov.
2. Ong CKS et al. *Clin Med Res*. 2007;5(1):19-34.







- ### Approaches to refractory pain
- Individualized approach needed
- Opioids NNT = 2.7
 - Gabapentin/Pregabalin NNT = 3.2
 - TCA / SSNRI NNT = 4
 - Lidoderm 5% NNT = 4.4
 - Capsaicin NNT = 5.3
- McQuay HJ, Moore RA (1997) , *Annals of Internal Medicine* 126:712-720

Are Opioids Indicated for Persistent Pain?

- Pain with life-limiting disease
- Acute on chronic pain
- Chronic pain
 - after other therapy fails

*FDA Indication:
Moderate to severe pain*

- Clinical practice guidelines:

- American Pain Society 2009
 - [http://www.jpain.org/article/S1526-5900\(08\)00831-6/abstract](http://www.jpain.org/article/S1526-5900(08)00831-6/abstract)
- VA – DoD 2010
 - http://www.healthquality.va.gov/Chronic_Opioid_Therapy_COT.asp
- ASA, ASRA, 2011
 - http://journals.lww.com/anesthesiology/Fulltext/2010/04000/Practice_Guidelines_for_Chronic_Pain_Management_13.aspx#

Selection and Initiation of Opioids

- Best medicine for the individual
 - Strength needed
 - Pharmacologic effect
 - Side-effect burden/toxicity
 - Individual vulnerabilities
- Best choice: psychosocial circumstance
 - Role functioning
 - Issues around environmental security
 - History of substance abuse (patient or family)

When are opioids not used?

- Contraindicated
 - Hypersensitivity / anaphylaxis
 - Undiagnosed significant head trauma
 - Respiratory depression & no equipment
 - Severe liver / kidney failure
 - Dose adjusted methadone or fentanyl may be used compassionately in some cases

When are opioids used cautiously?

- Monitoring / specialty support
 - Elevated risk of respiratory depression
 - Active substance abuse disorder
 - Alcoholism
 - Prescription drug abuse &/or addiction disorder
 - Illicit drug use
 - Hepatic/renal impairment; labile hypotension
- Pharmacovigilance **ALWAYS!**

Opioid Pharmacological Points

- Genetic Polymorphisms & Neuroplasticity
 - e.g. Codeine
- Within-class differences seen
 - Which medicine alleviates pain
 - Different side effect burdens
 - Differences in how medications work over time
- Interactions with drugs / diseases
 - e.g. Metabolic pathways CYP450-2DP
 - e.g. Sleep apnea

Opioid Pharmacodynamics

- Periphery
 - Reduce release of inflammatory products
- Spine
 - Prevent presynaptic opening of voltage-sensitive Ca^{++} ion channels
 - Inhibits Na^{+} ion channel activity
 - Lowers the production and release of EAA (e.g. Substance P)
 - Lowers postsynaptic excitability (K^{+} escape)
- Brain
 - Activates descending pain inhibitors
 - Activates Dopaminergic neurons

Undesirable Opioid Effects

- Respiratory depression, bronchospasm
- Sedation, dizziness, ataxia, visual disturbances
- Nausea / vomiting, constipation
- Urinary retention, sexual dysfunction
- Itching, skin rash
- Immune, hormonal or neurological problems
- Psychosocial problems
- Behavioral / existential problems

19

Expected opioid effects

- Analgesia
- Side effects
- Tolerance
 - Diminution of one or more opioid effects
- Physical dependence
 - Abstinence syndrome

Signs/Sx of Withdrawal


- Vomiting, anorexia, yawning
- Tearing, rhinorrhea, congestion
- Erythema, sweating
- Fidgeting, uneasiness
- Pupil dilation, piloerection, crawling skin
- Anxious, scared, depressed, or irritable
- Reports of pain / dysphoria

Unexpected opioid effects

- Neurotoxicity / OIH
- Nonmedical use
- Drug abuse and diversion
- Pseudoaddiction
- Addiction
 - Craving, lost control, compulsive use

Universal Precautions: Pain and Addiction

1. Make a diagnosis
 - appropriate tests
 - Differential dx
2. Psychological assessment
 - mental illness
 - risk of addiction disorder
3. Informed consent



Screening

- Current drug abuse / addiction
 - COMM, CAGE-AID
 - "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?"
- Risk of developing aberrant behaviors
 - ORT
 - SOAPP_R

Opioid Risk Tool (ORT)

Mark each box that applies:

	Female	Male
1. Family history of substance abuse		
Alcohol	<input type="checkbox"/> 1	<input type="checkbox"/> 3
Illegal drugs	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Prescription drugs	<input type="checkbox"/> 4	<input type="checkbox"/> 4
2. Personal history of substance abuse		
Alcohol	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Illegal drugs	<input type="checkbox"/> 4	<input type="checkbox"/> 4
Prescription drugs	<input type="checkbox"/> 5	<input type="checkbox"/> 5
3. Age (mark box if between 16-45 years)	<input type="checkbox"/> 1	<input type="checkbox"/> 1
4. History of preadolescent sexual abuse	<input type="checkbox"/> 3	<input type="checkbox"/> 0
5. Psychological disease		
ADO, OCD, bipolar, schizophrenia	<input type="checkbox"/> 2	<input type="checkbox"/> 2
Depression	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Scoring totals: ___ ___		

Webster, et al. *Pain Med.* 2005;6:432.

Administration

- On initial visit
- Prior to opioid therapy

Scoring

- 0-3: low risk (6%)
- 4-7: moderate risk (28%)
- ≥ 8: high risk (> 90%)

COMM

■ **For patients on chronic opioid therapy to screen for problematic medication behavior**

- Signs and Symptoms of intoxication,
- Emotional volatility,
- Evidence of poor response to medications or addiction,
- healthcare use patterns,

Not used prior to initiation of opioid therapy

Meltzer et al. *Pain*, 152 (2011) 397–402

Universal Precautions (continued):

4. Treatment agreement
 - Adherence to treatment plan
 - Legal risk management
 - Practice efficiency
5. Baseline and post-intervention assessment
6. Appropriate trial of opioid therapy
 - level pain, function, adverse effects
 - ± adjunctive medication

Universal Precautions (continued):

7. Regularly assess "Four A's"

- Analgesia
 - Change on 0–10 scale, or
 - Reduction (percentage) in pain
- Activity level
- Adverse reactions
- Aberrant behavior
 - Emergence of problematic behaviors

Gourlay HA, Heit DL. *Pain Med Sup.* 2009;2 :S115.
Fishman SM. *Responsible Opioid Prescribing: A Physician's Guide.* Federation of State Medical Boards Foundation; 2007.

Is It Relief-Seeking?

- Titrating pain-relieving medication
 - Improves functioning
 - Improves quality of life
 - Helps focus on disease, rehab, Rx plan
- Drug seeking behavior subsides
- ~Express concern re: expected effects
 - Side effects, tolerance, dependence

Is Drug Misuse or Addiction?

- Wants more drug despite:
 - Increased dose
 - Decreases quality of life & functioning
 - More side effects
 - Abandoning other aspects of Rx plan
- Drug seeking behavior escalates
 - Lost Rx, early refill, unauthorized dose change
- Excessive craving / focus
- Neglects responsibilities ... to get drugs

WHENEVER DRUG-SEEKING IS SUSPECTED Screen for both pain / addiction ... treat &/or refer

■ Group I: "My patient"
 ■ Group II: "Specialty patient"
 ■ Group III: "My patient with specialist support needed"

In a patient with pain and addictive disorder, it is important to treat both conditions.
 Doing nothing for either pain &/or addiction represents substandard care.

**Universal Precautions:
Pain and Addiction**

8. Periodically review treatment plan

- Pain diagnosis and
- Co-morbidities including addictive disorders
- Are opioids helping more than hurting?

9. DOCUMENT

- DOCUMENT
- DOCUMENT

© Gourlay HA, Heit DL. Pain Med Sup. 2009;2:S115.
 Fishman SM. Responsible Opioid Prescribing: A Physician's Guide. Federation of State Medical Boards Foundation; 2007.

Key points to teach patients

- Protecting the prescription
- Safe medication storage
- Safe use
- Travel precautions
- Exit strategy

Patient, Family & Community Safety
(needed education continued)

- Lock up opioids
- Don't keep unused drugs
 - Properly dispose of any leftover medicine
- Never sell or give opioids to another person

Thank you!

Please save the date for our next webinar!

Tuesday, May 22, 2012 1:00-2:00pm ET

Topic: Managing Chronic Pain in the Patient with Addictive Disorders

Speaker: *Paul Arnstein, RN, PhD, ACNS-BC, FNP-C, FAAN, Clinical Nurse Specialist for Pain Relief, Mass General Hospital*

For More Information

Contact: aspmn@goamp.com
