PHARMACY VISION 2020

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Disneyland RESORT

Interdisciplinary Approach to Pain Management in an older adult in the midst of an opioid crisis and Covid -19

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DISCLOSURE

Dr. Gurvich has no conflicts of interest

Learning Objectives

- Review the history of the opioid epidemic in the United States.
- Understand the complexities of older adult pain management.
- Review how to build an interprofessional team to manage older adult pain.
- Articulate physical and occupational therapy's role in the interprofessional team treating older adult pain.
- Review of pharmacologic strategies for older adult pain management.
- Participants will be able to develop a customized treatment plan for older adults in pain.

1950's-1980's: A multidisciplinary approach

- John Bonica, MD
- Hospital- and clinic-based programs with physicians, psychologists, PT/OT.
- Narcotics were **used sparingly**
- Problems with insurance coverage emerge…

1990's: Pain is the 5th Vital Sign

- "Pain is whatever the patient says it is"
- "Treatment of Pain is a **Universal Right"** - WHO
- Cancer pain/terminal care pain management guidelines
- Long-acting medicines like Oxycontin emerge…

2000's: DEA's Balanced Policy

- JCAHO mandates pain assessment and treatment

2010-2015: OPIOID CRISIS!!

1. JG, Compton P. (2017)

THE NUMBERS BEHIND THE OPIOID CRISIS

- **20%** of patients with chronic pain have received an opioid Rx from their PCP
- **259 million prescriptions** for opioids written in 2012… **Enough for every adult in the United States to have a bottle of pills**

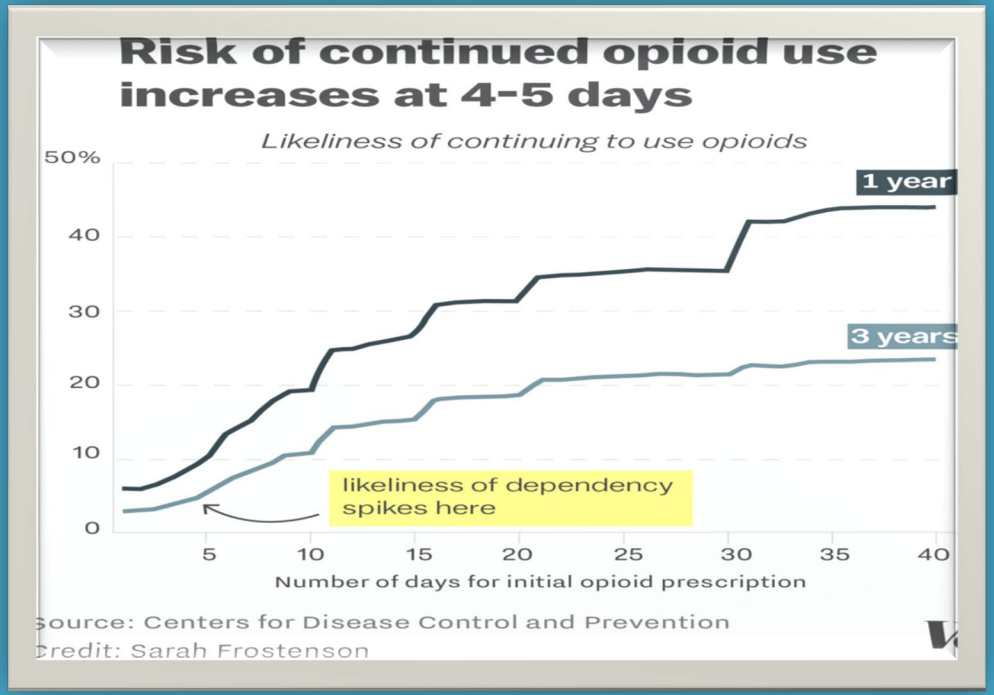
2. Dowell D, Haegerich T, Chou R (2016)

THE OPIOID CRISIS AND SENIORS

- Over **500,000 seniors** received opioids in doses higher than recommended by the manufacturer in 2016

- Older adults who misuse opioids **WILL DOUBLE FROM 2004 TO 2020**

3. Substance Abuse and Mental Health Services Administration (2017)

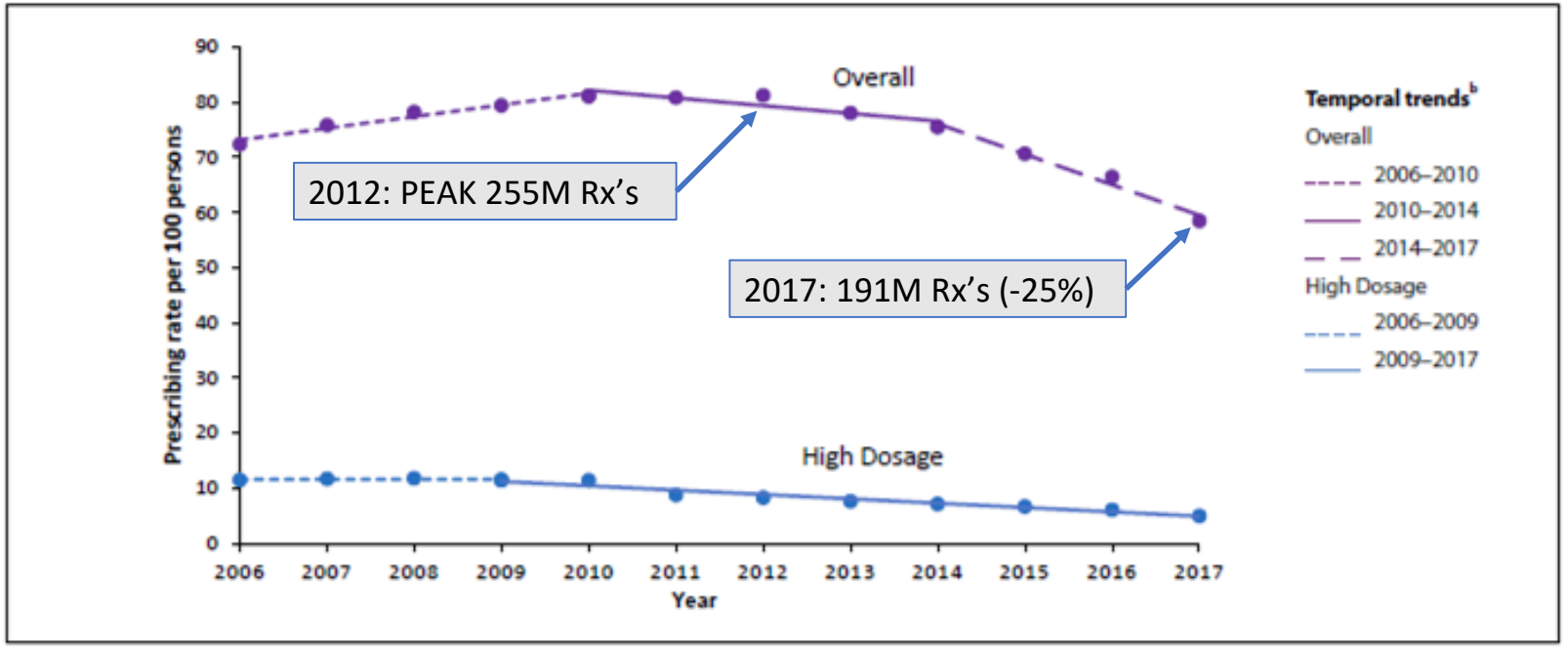


4. S. Frostenson (2017)

How much is too much?

WE'RE GETTING (*SLIGHTLY*) BETTER

Annual opioid prescribing rates overall and for high-dosage prescriptions (≥ 90 MME/day), USA



5. Centers for Disease Control and Prevention (2018)

DISCLAIMER: TARGET OF THE CDC Guidelines for Pain Management

TARGETED PROVIDERS/PATIENTS

- PCP's and Chronic pain patients
  - **NOT Cancer Pain, Palliative Care, Sickle Cell disease**

UNINTENDED CONSEQUENCES

- Inflexible interpretation of dosage and treatment duration limits
- Inappropriately abrupt tapering leading to withdrawal and drug seeking behavior
- Application of guidelines to the "wrong patients"
- Chronic pain patients already on large doses of narcotics

6. Dowell, Haegerich & Chou (2019)

7. Sinha, Bakshi, Ross & Krishnamurti (2019)

Patients are having problems getting prescriptions filled

- Insurance plans only cover a 7-day supply
  - PA's required for additional amounts
- Pharmacies dispense a 7-day supply
  - Schedule II prescriptions are having to be re-written
- Diagnosis codes are being required on Rx's
- Discrepancies in fill dates causing rejected prescriptions

COVID Pandemic and Opioids Misuse: A Pandemic within a Pandemic

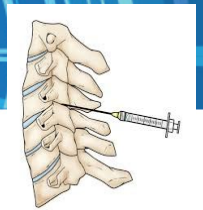
Increased risk for adverse outcomes

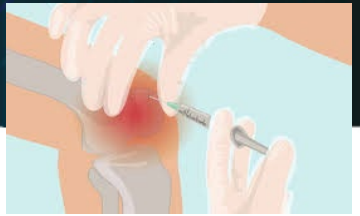
- ✓ Comorbidity with pulmonary vulnerabilities
- ✓ Opioid effect on the brain stem
- ✓ Triage bias
- ✓ Increased risk of spread
- ✓ Comorbidity of mental health disorders
- ✓ Resource reallocation

DEA Response 3/2020

- ✓ Patient centered care
- ✓ Expanded access to Opioid associated services Telehealth
- ✓ Suspended Drug screening
- ✓ Extended supply for Methadone

8. Slat, Thomas & Lagisetty, (2020)





CHRONIC PAIN

- 1 in 7 patients report widespread or localized pain lasting 3 months (2)
- 43% of US adults experience chronic musculoskeletal pain (OA, RA, chronic neck or back pain) and/or frequent severe headaches (2)
- 50% of older Americans suffer from chronic pain due to: (9)
  - Arthritis
  - Fibromyalgia
  - Neuropathic pain
  - Chronic back pain
  - Other chronic musculoskeletal disorders

2. Dowell D, Haegerich T, Chou R (2016)

9. Smith BH, Elliott AM, Chambers WA, Smith WC, Hannaford PC, Penny K (2001)

WHAT KIND OF PAIN DO OLDER ADULTS HAVE?

Postoperative pain
Exercise injuries
Migraine
Postherpetic neuralgia
Polyneuropathy (diabetic, HIV)

Nociceptive Pain
Sharp/dull/aching

Mixed Type

Neuropathic Pain
Burning/tingling/pricking

Mechanical lower back pain
Arthritis
Fibromyalgia
Complex regional pain syndrome
Neuropathic low back pain
Trigeminal neuralgia

11. American Geriatrics Society (AGS) Panel on Persistent Pain in Older Persons (2002)

How Do We Recognize Pain in the Elderly?

- Restlessness, repetitive movements
- Poor sleep or appetite
- Sad or anxious or aggravated
- Change in mood or behavior
- Loss of interest or socialization
- Resisting care
- Change in ADL
- Weight loss
- Change in range of motion or function

Geriatric-specific Considerations

- **Comorbidities**, including pre-existing respiratory disease
- **Polypharmacy**
- Increased risk of **side effects and drug interactions**
- Reduced **renal function**
- Reduced **therapeutic** window
- Increased **fall risk**
- **Elder abuse (taking or withholding medications)**
- Cognitive changes leading to **medication errors**

Team approach to effective Pain Management

Physician	
Psychologist/Social Worker	Help with pain contract/CBT
PT/OT	Improve Daily Function
Clinical Pharmacist	Improve medication management

Effective Non-Pharmacologic Options

Cognitive Behavioral Therapy (2)

- Behavioral techniques modify situational factors/cognitive processes that exacerbate pain
- Positive effects on disability and catastrophic thinking

Exercise, manipulation, massage, acupuncture (2, 12, 13)

- Reduce pain for chronic low back pain, hip and knee OA, and fibromyalgia
- Improve pain severity, physical function, quality of life.
- Acupuncture: chronic musculoskeletal and OA pain, headache
- Treatment effects persist over time

Multidisciplinary therapies (2, 14)

- Reduce pain and improve function more effectively than single modalities

2. Dowell, Haegerich & Chou, (2016) 12. Geneen et al., (2017) 13. Vickers et al., (2018) 14. Kamper et al., (2014)

Building your Team

Early Physical Therapy: (15)

- 88,000 patients, patients with early physical therapy 10% reduction in opioid use

Clinical Pharmacy Intervention: (16)

- 100 patients hospitalized showed improved pain control with clinical pharmacy intervention
- Improved function (sleep, mobility, appetite) seen in 86.6% of patients

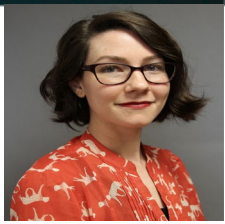
Occupational Therapy Intervention: (17)

- Study of 45 patients shows significant improvements in function, pain, and QOL with Lifestyle Redesign
- Patients w/ chronic LBP receiving multidisciplinary biopsychosocial rehabilitation experience less pain and disability
- Positive influence on work status

15. Sun et al., (2018) 16. Mathew, Chamberlain, Alvarez, Alvarez & Shah, (2016)
17. Uyeshiro Simon & Collins, (2017)

What is *occupational therapy*?

Ashley Halle, OTD, OTR/L
Associate Professor of Clinical Occupational Therapy
Coordinator of Primary Care Residency & Services



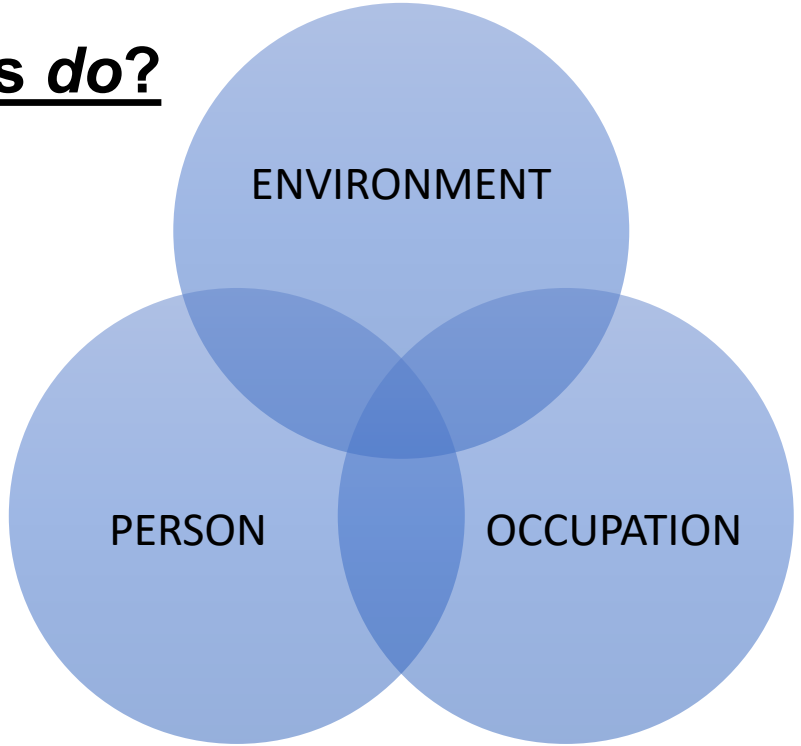
Occupational therapists help people across the lifespan participate in the things they want and need to do through the therapeutic use of everyday activities **(occupations)**. *American Occupational Therapy Association (AOTA)*

"Occupational therapy is the only profession with explicitly focused training on participation in everyday life"
"Healthy everyday activity is an insurance policy against decline" *Florence Clark (19)*

19. Clark, 2011, personal communication.

What do occupational therapists *do*?

- Health promotion and lifestyle modification
- Mental and behavioral health management
- Pain management
- Safety and falls prevention



20. Halle, Mroz, Fogelberg & Leland (2018);
21. Metzler et al., (2012);
23. Devereaux & Walker, (1995)
18. AOTA.org;
22. Law, Cooper, Strong, Stewart, Rigby, & Letts, (1996);

The Extraordinary and the Ordinary

ADL s

- Grooming
- Dressing
- Showering / bathing
- In and out of chairs
- In and out of bed
- Feeding and eating

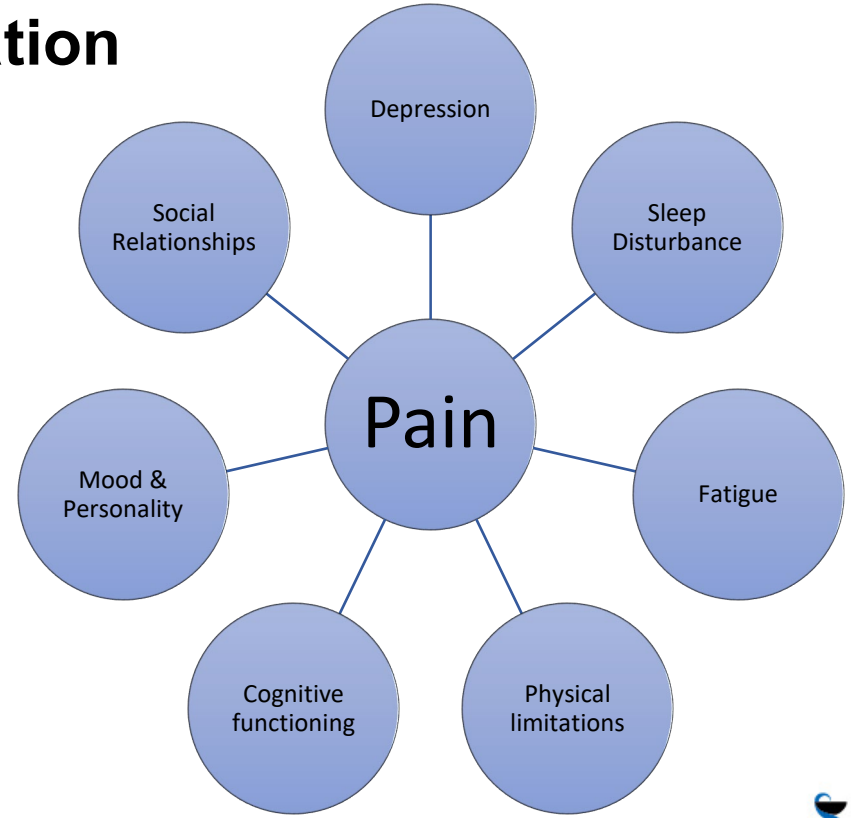
IADLs

- Preparing meals
- Grocery shopping
- Cleaning / yard work
- Driving / community mobility
- Taking medications
- Managing finances

And the FUN things!!

Addressing the Case: Evaluation

- Occupational profile
  - ADLs & IADLs
  - Sleep
  - Education
  - Work
  - Leisure
  - Social participation
- Medical and therapy history
- Development of a plan of care



10. Clark (1999)
24. Phillips (2009)

OT Interventions for Pain Management

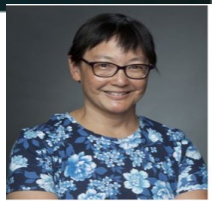
Sleep hygiene & positioning	Eating routines	Exercise routines	Adaptive equipment	Compensatory strategies
Body mechanics training	Ergonomics	Relaxation training	Coping skills	Flare-up planning
Activity pacing	Fatigue mgmt.; energy conservation	Community access	Transportation training	Medication routines
	Work accommodations	Home evaluations	Sensory strategies	

**Slide used with permission from Lindsey Reeves, OTD, OTR/L*

25. Hesselstrand, Samuelsson & Liedberg (2015)

17. Uyeshiro Simon & Collins (2017)

Lydia In, PT, DPT, MSPT
Instructor of Clinical Physical Therapy
APTA Board Certified Geriatric Clinical Specialist
APTA Board Certified Oncologic Clinical Specialist



Who are Physical Therapists?

- Physical Therapists (PTs) are movement experts who improve quality of life through prescribed exercise, hands-on care, and patient education.

- PTs examine, evaluate, and treat patients whose conditions limit their ability to move and function in daily life. The overall goal is to maintain, restore, or improve your mobility and help reduce your pain.

- PTs create personalized treatment plans that help their patients improve mobility, manage pain and other chronic conditions, recover from injury and prevent future injury and chronic disease.

26. American Physical Therapy Association (2020)

Myths about Physical Therapy

- “I need a referral to see a physical therapist.”
- “Physical therapy is painful.”
- “Physical therapy is only for injuries and accidents.”
- “Any healthcare professional can perform physical therapy.”
- “Physical therapy isn’t covered by insurance.”
- “Surgery is my only option.”
- “I can do physical therapy myself.”

27. APTA.org

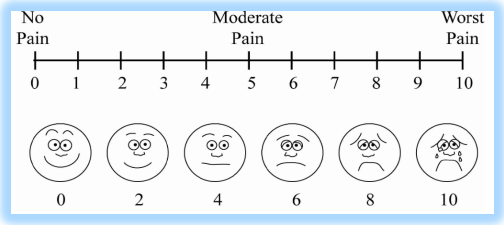
PATIENTS SHOULD CHOOSE PHYSICAL THERAPY WHEN…

- Patients want to do more than mask the pain.
- Pain/function problems due to low back pain, knee OA or fibromyalgia.
- Synergistic approach is needed with pharmacotherapy.
- Pain lasts 90 days.

27. APTA.org

30. American Physical Therapy Association (2019)

PT Pain Assessment and management



Assess:

- Goals of the patient
- Patient's pain state (e.g., using standard forms (31))
- Gait evaluation and Gait speed
- Functional activities: Getting up from a lying position or in/out of a chair, 5 rep sit to stand, grip strength, Time to Up and Go (TUG), Balance
- Body Mechanics: Bending and lifting
- Home/work environment, health habits and activity level

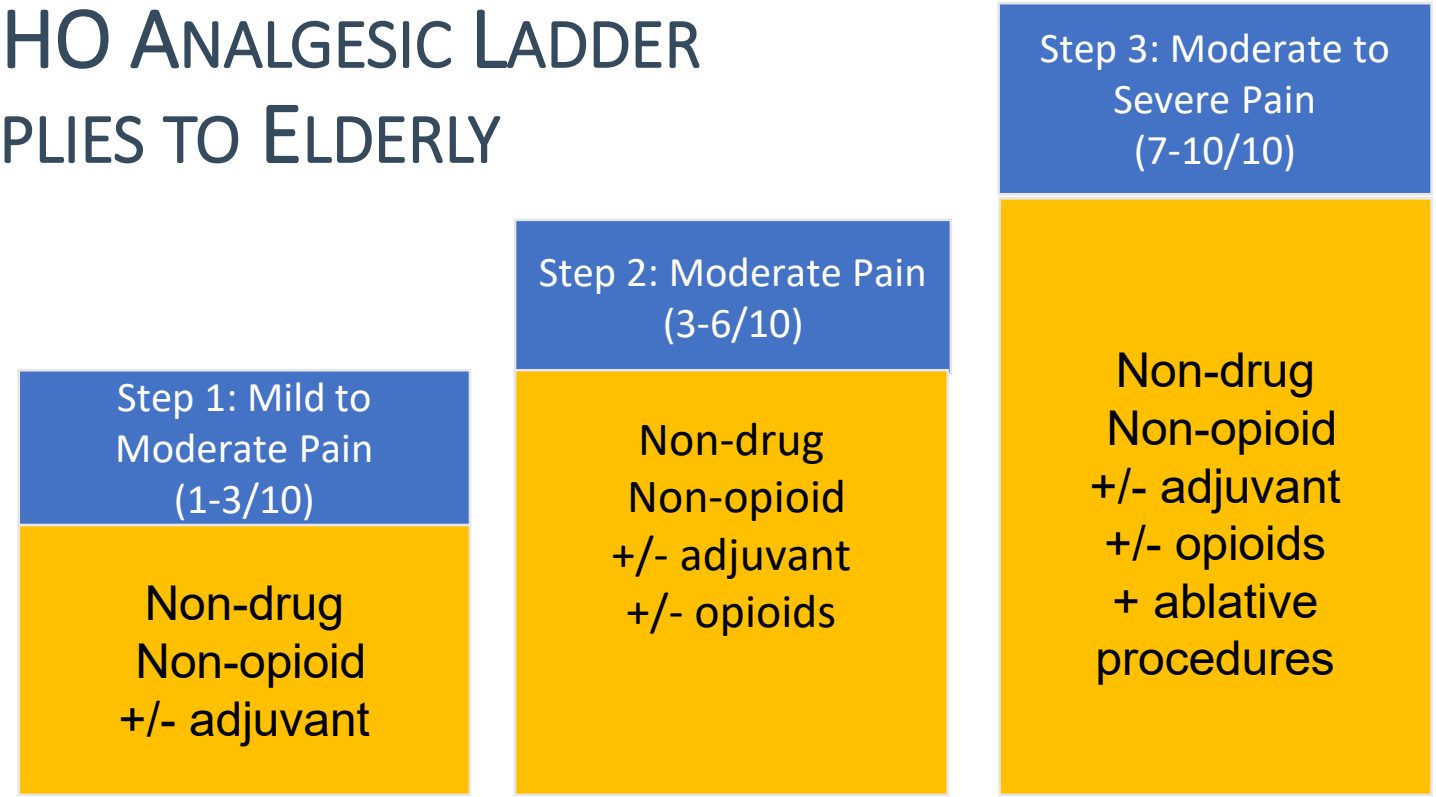
Develop and Prescribe:

- Exercise program (29)
- Special equipment requirements

28. Middleton & Fritz (2013)
29. "Hep2go" (2020)
31. Bijur, Silver & Gallagher (2001)

Pharmacotherapy Options

WHO Analgesic Ladder applies to Elderly



46. Kaye, Baluch, Scott (2010)

2019 AGS Beers Criteria: Concerns with Adjuvants

- **All NSAIDs** are on the Beers list due to GI/CV risk
- Avoid NSAIDs in patients with symptomatic CHF and use cautiously in patients with asymptomatic CHF
- Other potential risk:
  - Increase blood pressure
  - Cause acute kidney injury
  - Increase risk of GI bleeding/PUD in those >75 y.o. with prolonged use
    - Be mindful of concomitant use of anti-platelet drugs/steroids/anticoagulants
- Indomethacin and Ketorolac (Special Mention)

32. American Geriatrics Society 2019 Beers Criteria

2019 AGS Beers Criteria: Concerns with Adjuvants

- **TCAs:**
  - Amitriptyline, Imipramine, Nortriptyline, Desipramine, Doxepin
  - Anticholinergic side effects: risk of confusion, orthostasis, excessive sedation
- **Muscle relaxants:**
  - Anticholinergic SE/dizziness/fall risk
  - Unclear efficacy at lower doses
- **SSRIs and SNRIs:**
  - Increased risk of falls/fractures/hyponatremia
  - More side effects at Clcr < 30ml/min
- **Gabapentin and Pregabalin:**
  - Sedation, dizziness, falls, edema
  - CNS side effects more likely with Clcr < 60ml/min

32. American Geriatrics Society 2019 Beers Criteria

COMPARISON OF NSAIDS

Agent	Cox -2 Selectivity	GI risk	CV risk
Celecoxib	High	Low	Moderate – High
Etodolac	High	Low	Moderate – High
Meloxicam	High	Low	Moderate
Ibuprofen	Moderate	Low	Moderate – High
Nabumetone	Moderate	Low	Data NA
Salsalate	Data NA	Low	Data NA
Aspirin	Low	Moderate	Low
Naproxen	Low	Moderate - High	Low
Piroxicam	Moderate	High	Low

- **GI** = inflammation, ulceration, bleeding, perforation
- **CV** = ↑ BP, MI, stroke, sodium & fluid retention, CHF exacerbation
- **Renal** = AKI, toxicity
- **All NSAIDs have differences in efficacy and tolerability**

Selected Adjuvant Therapies

Drug	Start Dose	Max Dose	Concerns
APAP (Tylenol)	325-500mg Q4H or 500-1000mg Q6H	2-3g/day	Hepatic insufficiency Hx of alcohol abuse Multiple sources
Naproxen (Aleve)	220mg BID	variable	CV risk, HNT, Renal, Antiplatelet, GI
Ibuprofen (Motrin)	200mg BID	variable	
Celecoxib (Celebrex)	100mg QDay	variable	
Meloxicam (Mobic)	7.5mg QDay	variable	

49. Lexicomp(2020)

SELECTED TOPICAL ADJUVANT THERAPIES

Drug		Start Dose	Max Dose	Concerns
Lidocaine	4% Patch	1-3 patches for 12 hrs/day		Rash, skin irritation
	4% Gel/ Cream	Apply to affected area 3-4x/day		
	5% Ointment & Patch	Single application NTE 5g (~6 inches)	17-20 grams/day	
Diclofenac 1% Gel		2-4 grams topically 4x/day (2g = ~1.25 inches)	8 grams/day (upper extremities) 16 grams/day (lower extremities)	Application site reactions
Capsaicin Cream		Thin film to affected area 3-4x/day	No MAX dose	Burning sensation
Misc agents: Camphor oil/ Menthol		Apply liberally		Generally well tolerated

49. Lexicomp(2020)

SELECTED ADJUVANT THERAPIES

Drug	Start Dose	Renal adjustment (based on Clcr)	Concerns
Duloxetine (Cymbalta)	20mg QDay	Avoid Clcr < 30	Increased BP, DDIs Hyponatremia, fall risk
Venlafaxine (Effexor)	37.5mg QDay	Clcr < 30 50% of max dose	
Gabapentin (Neurontin)	100mg QHS	Clcr < 60 Adjust dosage – (see 49)	Tolerability varies; Sedation, dizziness, falls, edema
Pregabalin (Lyrica)	25mg QHS	Clcr < 60 Adjust dosage – (see 49)	

49. Lexicomp(2020)

What about Cannabis?

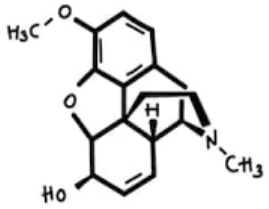
CANNABIS: OBJECTIVE SCIENTIFIC EVIDENCE

To date, objective scientific research is limited

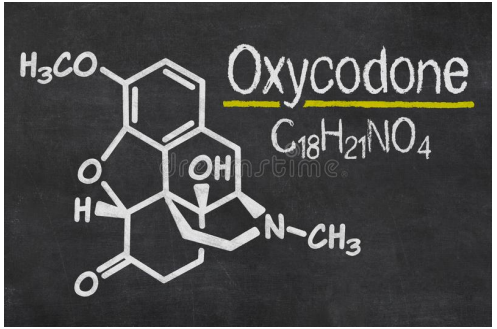
- **(JAMA 2015) ... Systematic Review and Meta-analysis:**
  - **Moderate-quality evidence supporting** cannabinoids for chronic pain and spasticity
  - Cannabinoids associated with **increased risk** of short-term AEs
- **(Schmerz 2016) Efficacy, Tolerability and Safety... among Adults with Chronic Pain...**
  - **Insufficient evidence** for recommendation for **any** cannabinoid preparations for symptom management in patients with chronic pain associated with rheumatic diseases
- **(Annals Int Med 2017) Effects of Cannabis Among Adults with Chronic Pain...**
  - **Few** methodologically rigorous trials
  - Formulations **may not reflect commercially available product**
  - **Limited applicability** to older, chronically ill populations

33. JAMA 2015 34. Annals of Internal Medicine 2017 35. Schmerz 2016

Morphine



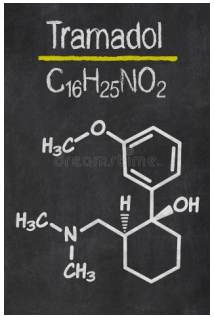
Codeine.



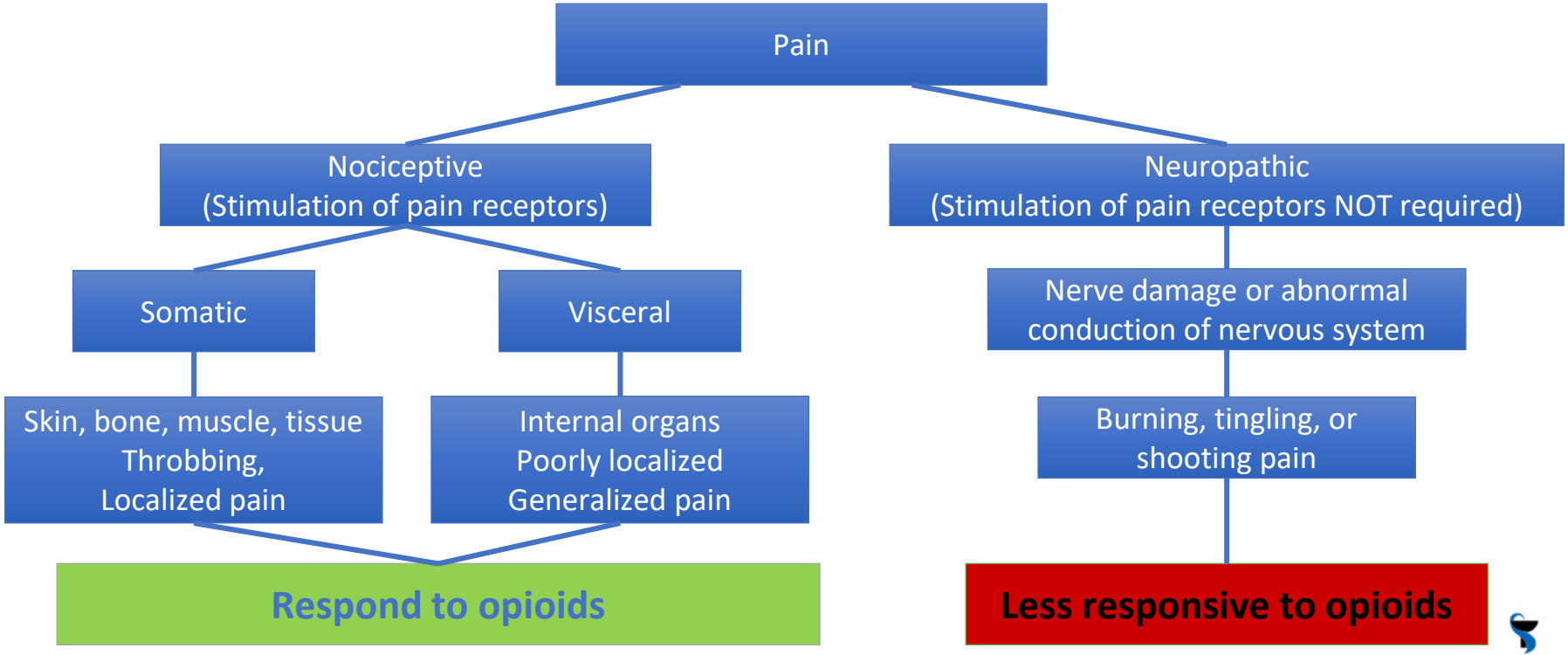
hydrocodone

Opioids: Moderate –Severe Pain

Hydromorphone



Types of Pain and Opioid Use



Opioid Prescribing Guidelines

Determining when to initiate or continue opioids for chronic pain

Establishment of treatment goals; Discussion of risks and benefits of therapy with patients

Non-pharmacologic therapy → nonopioid therapy → opioid therapy

Opioid selection, dosage, duration, follow-up, and discontinuation

Selection of immediate-release vs. extended-release and long-acting opioids

Dosage considerations; Duration of treatment

Considerations for follow-up and discontinuation of opioid therapy

Assessing risk and addressing harms of opioid use

Evaluation of risk factors for opioid-related harms and ways to mitigate patient risk (38)

Review of prescription drug monitoring program (PDMP) data ; Use of urine drug testing

Considerations for co-prescribing benzodiazepines

Arrangement of treatment for opioid use disorder

36. Lehmann SW, Fingerhood M (2018)
37. Kirschner N, Ginsburg J, Sulmasy LS (2014)
2. Dowell D, Haegerich TM, Chou R (2016)
38. Webster LR, Webster RM (2003)
39. https://www.cdc.gov/drugoverdose/prescribing/guideline.html

2019 AGS Beers Criteria: Concerns with Opioids

Avoid opioids:

History of falls/fractures

With Benzodiazepines or Gabapentinoids

Increased risk of **ataxia, impaired psychomotor function, syncope, & additional falls.**

If opioids are used:

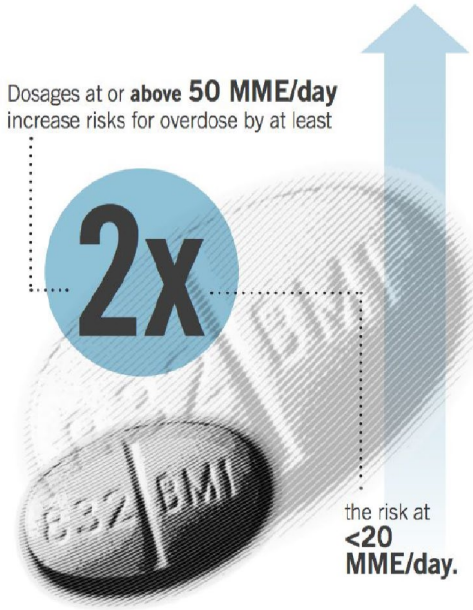
Consider reducing use of other **CNS-active medications** that increase risk of falls and/or overdose

Avoid using the opioid with **more than 2** other CNS-active drugs

Implement strategies to reduce fall risk

40. https://qioprogram.org/sites/default/files/2019BeersCriteria_JAGS.pdf

Opioid Equivalency Table

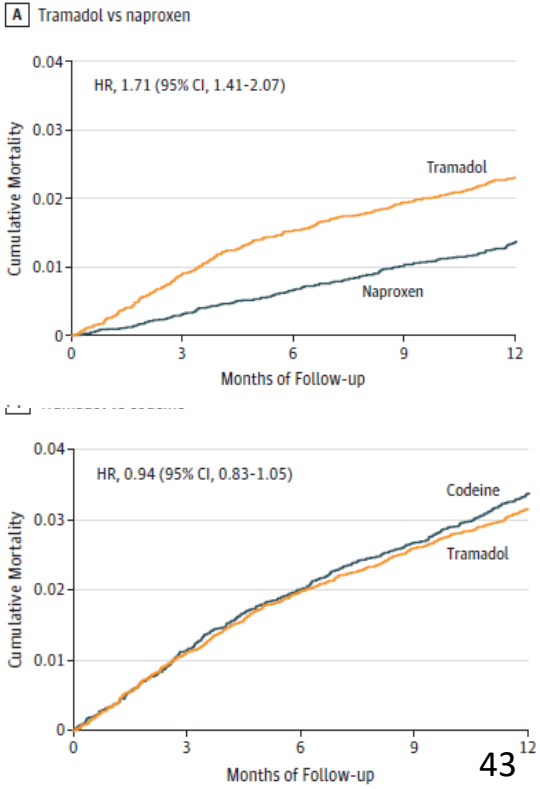


Opioid Agent	Milligrams of Opioid per Day Equaling 50 Morphine Equivalents (MEM)	Morphine Equivalents (MEM)	Ratio of Morphine to Other Opioids
Fentanyl transdermal	25 mcg/hr = 0.6 mg/day	50 mg	80:100:1
Hydromorphone/Dilaudid	10 mg	50 mg	5:1
Oxymorphone/Opana	17 mg	50 mg	3:1
Oxycodone/Roxicodone	33 mg	50 mg	1.5:1
Hydrocodone	50 mg	50 mg	1:1
Tramadol/Ultram	500 mg	50 mg	1:10
Codeine	500 mg	50 mg	1:10

CDC provides an opioid conversion app, with guidelines and other information:
41. https://www.cdc.gov/drugoverdose/prescribing/app.html

What About Tramadol?

- ACR and AAOS recommend Tramadol for OA (47, 48)
  - Weak Mu agonist/5HT-NE reuptake inhibitor
  - SE: Hyponatremia, CNS side effects, seizures with CrCl < 30ml/min, risk of serotonin syndrome
- But… March 2019 JAMA study shows increased all-cause mortality with Tramadol vs. NSAIDs at 1-year follow-up on 11.1M pts over 15 years (42)
  - Risk was not statistically significantly different than codeine



47. Kolasinski SL, et. Al (2020) 48. American Academy of Orthopaedic Surgeons (2013)
42. Zeng, Dubreuil, LaRochelle, et al. (2019)

METHADONE: NOT RECOMMENDED

Associated with disproportionate numbers of overdose deaths relative to prescribing frequency

Risk of QT prolongation

Methadone: The only naturally long-acting opioid

Difficult to dose: Conversion ratios are dose dependent

2. Dowell D, Haegerich T, Chou R (2016)

Methadone Conversion Table

CURRENT DAILY ORAL MORPHINE EQUIVALENT DOSE	*CONVERSION RATIO (MORPHINE TO METHADONE)*	*CONVERSION FACTOR (APPROXIMATE PERCENTAGE OF MORPHINE DOSE)*
≤ 100 mg	3 to 1	33.3
101 to 300 mg	5 to 1	20.0
301 to 600 mg	10 to 1	10.0
601 to 800 mg	12 to 1	8.3
801 to 1,000 mg	15 to 1	6.7
≥1,001 mg	20 to 1	5.0

43. Toombs JD, Kral LA, (2005)

Morphine Equivalent Conversion

Methadone	Conversion factor
1-20mg	4
21-40mg	8
41-60mg	10
61-80mg	12

44. www.cdc.gov (2020)

Original Investigation (JAMA, June 2016)

Prescription of Long-Acting Opioids and Mortality in Patients With Chronic Noncancer Pain

Wayne A. Ray, PhD; Cecilia P. Chung, MD, MPH; Katherine T. Murray, MD; Kathi Hall, BS; C. Michael Stein, MB, ChB

- Prescription of LA opioids for chronic noncancer pain vs. alternative medications increased risk of all-cause mortality
  - **1.64x greater risk of mortality** of LA opioids than adjunctive analgesic anticonvulsant (gabapentin) or low-dose tricyclic antidepressant (amitriptyline)
  - 1.90x greater risk of **out-of-hospital deaths** (most being cardiovascular deaths)
  - Increased risk confined to **first 180 days** of prescribed therapy (even for LA opioid doses of ≤ 60 MME)
- **Study excluded patients ≥ 75 years old**

45. Wayne A. Ray, Ph.D. et al (2016)

USING LONG-ACTING WITH SHORT-ACTING NARCOTICS

May be necessary in certain situations when ATC analgesia is necessary when alternatives are ineffective or not tolerated

Long acting agents are used on a schedule

- SR or ER formulations BID-TID schedule
- Patch 72-48 hrs

Short acting are used for breakthrough

- Breakthrough dose is 10-20% of the total daily dose of the ER formulation

When switching between narcotics, back-off by at least 20%

2. Dowell D, Haegerich T, Chou R (2016)

Safe Prescribing Practices

START	ADJUST	STOP
• Start at ~25% to 50% adult dose • **IR** NOT **ER** • Limit duration of therapy for acute pain to ≤ 3 days	• Reassess 1-4 weeks after start/dose change or every 3 months for continued therapy • Benefits vs. risks when ≥50 MME/day • Avoid ≥90 MME/day if possible	• Taper down dose by 10% • Every week - every month • Once at lowest dose possible → extend interval

2. Dowell D, Haegerich T, Chou R. (2016)

Side Effects & How to Mitigate

Side Effect	How to Mitigate
Constipation	Chronic Stimulant laxatives + ↑ fiber intake & hydration, ↑ physical activity, stool softeners
Dry Mouth	Chronic Practice regular dental hygiene, have regular dental visits May recommend oral rinses, ice cubes, drinking water
Nausea/Vomiting	Usually transient (2-3 days) Antiemetic can be used as necessary Consider switching to another opioid
Drowsiness	Usually transient following opioid initiation/dose ↑ Avoid drinking alcohol, operating heavy machinery, or driving
Confusion	Usually transient following opioid initiation/dose ↑

Risks Associated with Opioid Use

Highlighted items are especially important for geriatrics

- **Physical side effects** : Mood changes, drowsiness, **confusion,** nausea, constipation, **urination difficulties**, depressed breathing, itching, osteoporosis
- **Sexual difficulties:** Men and women
- **Physical dependence and risk of withdrawal:** Abdominal cramping, pain, diarrhea, sweating, irritability
- **Tolerance:** Medication changed/DC
- **Addiction** common with personal/family history but can occur in anyone. Drug craving, loss of control, and poor outcomes of use
- **Hyperalgesia:** Increased sensitivity to pain requires change or DC.
- **Overdose or** using with alcohol or other drugs resultS in respiratory depression, coma, brain damage, death
- **Sleep apnea** caused or worsened by opioids.
- **Victimization:** Risk of theft, deceit, assault, or abuse by persons seeking to obtain opioids for purposes of misuse.
- **Life-threatening irregular heartbeat** with methadone, EKG monitoring required
- **Driving under the influence of drugs:** Opioids at initiation of therapy or with changes in dose

2. Dowell D, Haegerich T, Chou R (2016)

Risk of Opioid Overdose

- History of substance/ polysubstance abuse
- Comorbid mental disorders
- Higher prescribed doses of opioid medications (**>50MME/day**)
- Methadone use
- BZD co-prescribing
- Antidepressant co-prescribing
- Opioid naivety
- Recent opioid abstinence
- Sleep apnea
- Heart or pulmonary complications

2. Dowell D, Haegerich T, Chou R (2016)

Tools for Prescribing Opioids

- **SET GOALS:** For pain relief and function
- **PLAN:** For stopping opioids if treatment is unsuccessful/ineffective
- **EVALUATE:** Continue opioids only if meaningful improvement in *both* pain AND function is documented

- **TRUST:** A pain contract should be signed by the patient and provider
  - Risks and realistic benefits of opioid therapy
  - Patient AND provider responsibilities for managing this therapy
- **VERIFY:**
  - A pain diary may be helpful in assessing use of short-acting opioids
  - Be aware of "Red Flag" behaviors
  - Run a CURES report when refilling
  - Urine drug testing when suspicion arises
  - Naloxone use

Red Flag Behaviors: Consistent and Predictable

- Hx of self-medication with rx and illicit drugs
- Altering opioid dosage w/out physician approval
- Requesting refills before scheduled refill date
- Medications lost or stolen
- Using multiple prescribers and pharmacies
- Requesting particular meds claiming others are ineffective
- Using meds to induce somnolence, sedation or euphoria
- Displaying a decrease in functional capacity despite improvements in pain
- Acting entitled, belligerent or victimized
- Circular answers to questions about daily use of narcotics
- Consistently pushing boundaries of Chronic Pain Protocol structure

At Risk Patients Indicated for Prescribing Naloxone

1. Higher-dose (>50mg MME/day) opiate rx
2. Any opioid prescription for pain PLUS:
   a. Rotated from one opioid to another due to possible incomplete cross-tolerance
   b. Smoker, COPD, emphysema, asthma, sleep apnea, respiratory infection
   c. Renal dysfunction, hepatic disease, cardiac illness, HIV/AIDS
   d. Known or suspected concurrent alcohol use
   e. Concurrent benzodiazepine or other sedative prescription
   f. Concurrent antidepressant prescription
3. Voluntary request from patient or caregiver
4. Difficulty accessing emergency medical services (distance, remoteness)
5. Receiving emergency medical care involving opioid intoxicant or overdose
6. Suspected history of substance abuse or nonmedical opioid use
7. Methadone or buprenorphine for addiction

2. Dowell D, Haegerich T, Chou R (2016)

Carolyn Kaloostian MD MPH
Associate Professor of Clinical Family Medicine/Geriatrics
Keck School of Medicine of USC

Case Presentation: Ms J.

Chief Complaint: Neck and back pain

History of Present Illness: Ms. J. is a 78-year old AAF via telemedicine to establish primary care during the COVID-19 pandemic. Recent ER visit due to disorientation when stopped by CHP who noticed she was asleep at the wheel at a stop sign. After an evaluation, she was discharged home and told to follow-up with PCP. **At discharge no medication changes were made.**
Today she reports a few **falls** in her garden and often **forgetting whether she took her medications**. Her medications do not relieve her chronic neck and low back pain and endorses 11/10 pain. She exclaims **"It hurts all over!"**

Past Medical History: Chronic low back pain, obesity, HTN, CAD, **MDD, mild dementia, insomnia**, osteoarthritis, asthma, **benzodiazepine dependence, opioid dependence, cannabis use**
Past Surgical History: Prior orthopedic and dental procedures. Bilateral cataract surgery.
Family History: Father with Alcoholism. Mother with h/o Depression.
Social History: Recently widowed, she is a smoker, no h/o IV drug use, consumes MJ edibles.

Case presentation (Cont'd)

Telemedicine Physical Exam: Vitals unable to obtain due to COVID -19.

General: Obese female, no acute distress, **flexed forward due to pain, unable to sit for extended period**

Neurologic: Alert & Oriented X 4, sensation and strength grossly intact and symmetric, extraocular movements intact.

Psychologic: Pressured speech, normal volume, circumferential, tearful, **mood depressed**, denies suicidal ideation.

Musculoskeletal: *Inspection*: no skin changes overlying cervical thoracic or lumbar spine, no blisters or ecchymosis.

Palpation: + ttp over paraspinal muscles with palpable lump over right scapula which is firm mobile and slightly tender to touch (performed by patient).

Range Of Motion: decreased at neck and bilateral shoulders with pain on exam.

Extremities: 1+ lower extremity peripheral edema.

Emergency Room Records:

Vitals:

- HR: 65 → 52 → 61 → 73
- BP: 113/77 → 132/63 → 110/53mmHg
- Temp: 98.6 → 98.1
- RR: 11 → 18 → 20
- SpO2: **Hypoxic on admission** (90% → 100% → 93%)

Renal Function:

- **Clcr: 60 ml/min**

CT Head w/o Contrast: No acute ischemia, noted age related changes

Urinalysis: (-) for bacteria, clear, (-) nitrites

CXR: no infiltrates, effusion, cardiomegaly, or pneumothorax, low lung volumes

Urine Toxicology: (+) BZD, Opiates, THC

Case: Medication List

- Albuterol 90 mcg; 2 puffs Q6H prn wheezing
- APAP 325 mg; 2 tabs Q4H prn pain/fever
- Metoprolol 50 mg; 1 tab BID
- Omeprazole 20 mg; 1 cap BID
- Simvastatin 40 mg; 1 tab QHS

CNS-Active

- Clonazepam 0.5 mg; 1 tab QDay
- Donepezil 10 mg; 1 tab QHS
- Escitalopram 20 mg; 1 tab QDay
- Hydroxyzine 10 mg; 1 tab BID
- Oxycodone/APAP 5-325 mg; 1 tab TID
- Pregabalin 100 mg; 1 cap BID
- Trazodone 150 mg; 1 tab QHS
- Zolpidem 10 mg; 1 tab QHS prn insomnia
- Cannabis THC 10mg nightly prn insomnia

Recommendations for Optimizing Therapy

Pain Management	Depression/ Anxiety	Insomnia	Pruritus
• Utilize topical regimens (Lidocaine 4% ointment, Voltaren 1% gel) • Add low dose PO NSAID	• Cross-taper escitalopram to either: – Mirtazapine (if insomnia is more significant) • Duloxetine (if pain is more significant) • D/C clonazepam	• Maximize use of concurrent antidepressants to address insomnia • Re-evaluate use/dose of cannabis • If trazodone is effective, continue at same dose • If not effective, start melatonin • D/C zolpidem	• D/C hydroxyzine • Use 2nd generation antihistamine

Case: Follow Up

Routine redesign
Sleep hygiene
Ergonomics
Energy conservation
Flare up plan

Mental Health
Social relationships
Medication management help
PT intervention
Pain/weight management

Summary: We are making Progress!

- Opioid use is down
- Adjuvants are being used more
  - Dose adjustments are critical
  - Minimize adjuvants poorly tolerated in older adults
- Framework for opioid prescribing can help
- Patient education is critical

- Using a team approach is one way of providing better wholistic care and alleviating provider and patient stress

ASSESSMENT QUESTION 1

- Which of the following statements is true about the CDC guidelines and Opioid Epidemic?
  a) The 2016 CDC guidelines target all patients receiving opioid prescriptions including palliative care and sickle cell patients
  b) Because older adults are frail and medically complicated, they were spared from over-prescribing of opioids by their primary care providers
  c) Team based pain management has been successfully used in the past in the US and is not a novel concept
  d) Despite efforts to curb opioid prescribing there has been no decline in the use of this class of medications

ANSWER TO QUESTION # 1

c) Team based pain management has been successfully used in the past in the US and is not a novel concept

ASSESSMENT QUESTION #2

- An 88 yo patient comes into your clinic for a pain assessment. He is accompanied by his son. Pt looks timid, disheveled and smells. When you are interviewing this patient about his pain, you notice that patient isn't able to answer questions easily and often looks towards to son to provide answers. Which of the following is NOT a reasonable assumption:
  a) Pt may be suffering for cognitive decline and unable to answer questions
  b) Because this patient is on multiple medications, he may be confused about all the medicines he is taking
  c) Patient may be overmedicated because he is not able to take care of himself based on his appearance and your interaction with him.
  d) Patient abuse is NOT an issue because his son took the time to bring him to the office for an assessment

ANSWER TO QUESTION #2

d) Patient abuse is NOT an issue because his son took the time to bring him to the office for an assessment

ASSESSMENT: QUESTION #3

- Which of the following statements is false?
  a) OT's help with mental and behavioral health management
  b) OT's help with medication routine
  c) Physical Therapists (PTs) are movement experts who improve quality of life through prescribed exercise, hands-on care, and patient education
  d) A geriatric patient in pain with moderate to severe OA would not be a candidate for PT

ANSWER TO QUESTION # 3

d) A geriatric patient in pain with moderate to severe OA would not be a candidate for PT

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