PAIN MANAGEMENT: THE ACUTE AND CHRONIC PATIENT

BY: HERMAN LEUNG, DO

FINANCIAL DISCLOSURE

- None to disclose

OBJECTIVES

- Describe basic pathophysiology of pain.
- Familiarization with acute and chronic pain treatment/management CDC guidelines.
- Evaluating and assessing pain and developing a safe, effective pain management plan incorporating multimodal approach.

OBJECTIVES (CONT.)

- Understanding and identifying risks and benefits of opioid therapy.
- Managing opioid therapy long-term including monitoring for diversion and possible behaviors suggestive of opioid use disorder.

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Original Investigation | Health Policy

Association of Primary Care Clinic Appointment Time With Opioid Prescribing

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Abstract

IMPORTANCE Time pressure to provide a quick fix is commonly cited as a reason why opioids are frequently prescribed in the United States, but there is little evidence of an association between appointment timing and clinical decision-making. As the workday progresses and appointments run behind schedule, physicians may be more likely to prescribe opioids.

OBJECTIVE To estimate whether characteristics of appointment timing are associated with clinical decision-making about pain treatment.

DESIGN, SETTING, AND PARTICIPANTS This cross-sectional study of physician behavior used data from electronic health record systems in primary care offices in the United States to analyze primary care appointments occurring in 2017 for patients with a new painful condition who had not received an opioid prescription within the past year.

MAIN OUTCOMES AND MEASURES The association between treatment decisions and 2 dimensions of appointment timing (order of appointment occurrence and delay relative to scheduled start time) were assessed. The rates of opioid prescribing were measured and compared with rates of nonopioid pain medication (ie, nonsteroidal anti-inflammatory drugs) prescribing and referral to physical therapy. All rates were estimated within the same physician using physician fixed effects, adjusting for patient, appointment, and seasonal characteristics.

RESULTS Among 678 319 primary care appointments (642 262 patients; 392 422 [61.1%] women) with 5603 primary care physicians, the likelihood that an appointment resulted in an opioid prescription increased by 33% as the workday progressed (1st to 3rd appointment, 4.0% [95% CI, 3.9%-4.1%] vs 19th to 21st appointment, 5.3% [95% CI, 5.1%-5.6%]; *P* < .001) and by 17% as appointments ran behind schedule (0-9 minutes late, 4.4% [95% CI, 4.3%-4.6%] vs ≥60 minutes

Key Points

Question Is the decision to prescribe opioids associated with appointments that are behind schedule or later in the day compared with earlier or on-time appointments?

Findings In this cross-sectional study, opioid prescribing for opioid-naive patients with pain diagnoses was significantly associated with increases as the workday progressed and with appointments that started late, although the effect size was modest. Nonopioid pain treatment orders did not show similar patterns.

Meaning Appointment timing that contributes to time pressure could be adversely associated with physician decision-making and could have widespread relevance for public health and quality improvement efforts, if similar patterns exist in other clinical scenarios.

+ Supplemental content

THE PATIENT…

- The dreaded conversation – "can I get something for pain…?"

QUICK REVIEW - PHYSIOLOGY

- Nociceptors
- Spinal cord transmission
- Supraspinal pain processing
- Descending projections

QUICK REVIEW – PAIN TYPES

- Nociceptive/Inflammatory Pain
- Neuropathic Pain
- Nociplastic Pain
- Mixed Pain

QUICK REVIEW – PATHOLOGICAL PAIN

- Peripheral sensitization
- Peripheral Respecification
- Synaptic Potentiation
- Synaptic Sprouting
- Gate Theory

QUICK REVIEW – ACUTE/SUBACUTE AND CHRONIC

- Acute - duration of < 1 month that is sudden onset, self-limiting, triggered by tissue damage and inflammation, heals itself ideally, has protective value, inflammatory mediation
  - Subacute, pain that continues for 1-3 months, can become chronic
- Chronic - Lasting 3 months or longer, usually steady-state or worsening, persists beyond normal healing period, peripheral and central sensitization

ASSESSMENT

- "What and where?"
- Scales – Unidimensional vs. Multidimensional
- Physical Exam and Diagnostics
- Comorbid conditions

Date: ____ /____ /____ Time: __________

Name: __________ (Last) __________ (First) ______ (Middle initial)

1) Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?

1. Yes 2. No

2) On the diagram, shade in the areas where you feel pain. Put an X on the area that hurts the most.

Right Left Left Right

3) Please rate your pain by circling the one number that best describes your pain at its **worst** in the past 24 hours.

0 1 2 3 4 5 6 7 8 9 10
No pain — Pain as bad as you can imagine

4) Please rate your pain by circling the one number that best describes your pain at its **least** in the past 24 hours.

0 1 2 3 4 5 6 7 8 9 10
No pain — Pain as bad as you can imagine

5) Please rate your pain by circling the one number that best describes your pain on **average**.

0 1 2 3 4 5 6 7 8 9 10
No pain — Pain as bad as you can imagine

6) Please rate your pain by circling the one number that tells how much pain you have **right now**.

0 1 2 3 4 5 6 7 8 9 10
No pain — Pain as bad as you can imagine

7) What treatments or medications are you receiving for your pain?

8) In the past 24 hours, how much **relief** have pain treatments or medications provided? Please circle the one percentage that most shows how much relief you have received.

0% 10 20 30 40 50 60 70 80 90 100%
No relief — Complete relief

9) Circle the one number that describes how, during the past 24 hours, pain has **interfered** with your:

A. General activity

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

B. Mood

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

C. Walking ability

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

D. Normal work (includes both work outside the home and housework)

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

E. Relations with other people

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

F. Sleep

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

G. Enjoyment of life

0 1 2 3 4 5 6 7 8 9 10
Does not interfere — Completely interferes

- SOCIAL Hx – Employment, cultural background, social network, relationship history, legal history, and other behavioral patterns
- PSYCH Hx - Mental health diagnoses, depression, anxiety, PTSD, current treatments, alcohol, tobacco, and other drug use, Adverse Childhood Experiences (ACES), Family history of substance use disorder and psychiatric disorders

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SCREENING TOOLS

- Opioid Risk Tool (Revised)
- DIRE Score
  - Diagnosis, Intractability, Psychological Risk, Chemical Health Risk, Reliability, Social Support, Efficacy

CDC's Clinical Practice Guideline for Prescribing Opioids for Pain | Guidelines | Healthcare Professionals | Opioids | CDC. (2022, November 2). Www.cdc.gov. https://www.cdc.gov/opioids/healthcare-professionals/prescribing/guideline/index.html

THE FIVE GUIDING PRINCIPLES

- Acute, subacute, and chronic pain needs to be appropriately assessed and treated independent of whether opioids are part of a treatment regimen.
- Recommendations are voluntary and are intended to support, not supplant, individualized, person-centered care. Flexibility to meet the care needs and the clinical circumstances of a specific patient is paramount.

THE FIVE GUIDING PRINCIPLES (CONT.)

- A multimodal and multidisciplinary approach to pain management attending to the physical health, behavioral health, long-term services and supports, and expected health outcomes1 and well-being of each person is critical.
- Special attention should be given to avoid misapplying this clinical practice guideline beyond its intended use or implementing policies purportedly derived from it that might lead to unintended and potentially harmful consequences…

THE FIVE GUIDING PRINCIPLES (CONT.)

- Clinicians, practices, health systems, and payers should vigilantly attend to health inequities; provide culturally and linguistically appropriate communication, including communication that is accessible to persons with disabilities; and ensure access to an appropriate, affordable, diversified, coordinated, and effective nonpharmacologic and pharmacologic pain management regimen for all persons.

POINTS TO TAKEAWAY

- 12 Recommendations
  - 1) "Nonopioid therapies are at least as effective as opioids."
  - 2) "Nonopioid therapies are preferred for subacute and chronic pain."
  - 3) "When starting opioid therapy for acute, subacute, or chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release and long-acting opioids."

- 5) "For patients already receiving opioid therapy, clinicians should carefully weigh benefits and risks and exercise care when changing opioid dosage."
- 6) "When opioids are needed for acute pain, clinicians should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids."

- 7) "Clinicians should evaluate benefits and risks with patients within 1–4 weeks of starting opioid therapy for subacute or chronic pain or of dosage escalation.*"
- 8) "Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk for opioid-related harms and discuss risk with patients…mitigate risk including offering naloxone."

- 9) "…clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or combinations that put the patient at high risk for overdose."
- 10) "…clinicians should consider the benefits and risks of toxicology testing to assess for prescribed medications as well as other prescribed and nonprescribed controlled substances."

- 11) "… use particular caution when prescribing opioid pain medication and benzodiazepines concurrently and consider whether benefits outweigh risks of concurrent prescribing of opioids and other central nervous system depressants."
- 12) "Clinicians should offer or arrange treatment with evidence-based medications to treat patients with opioid use disorder…Detoxification on its own, without medications for opioid use disorder, is not recommended…"

DIFFERENCES BETWEEN 2016 AND 2022 CDC GUIDELINES

- The 2016 Guideline recommended that clinicians reassess evidence of benefits and risk when considering increasing opioid dosage to ≥50 morphine milligram equivalents (MME)/day, and either avoid increasing dosage to ≥90 MME/day or carefully justify a decision to titrate dosage to ≥90 MME/day.
- Also recommendation that clinicians evaluate benefits and risks of continued opioid therapy with chronic pain patients at least every 3 months.

DIFFERENCES BETWEEN 2016 AND 2022 CDC GUIDELINES

- 2016 – recommendation that clinicians use urine drug testing before starting opioid therapy and consider using it at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs for patients with chronic pain, specifically.

DIFFERENCES BETWEEN 2016 AND 2022 CDC GUIDELINES

- 2022 – focus on multidisciplinary approach and expands to include advanced practitioners and other allied health professionals.
- Calls for improved payment of multimodal treatments
- Emphasis on joint decision making
- No recommended dosage ceilings and again voluntary!!!

ACUTE/SUBACUTE

- Non-opioids
  - Tylenol
  - Ibuprofen
  - Lidocaine Patches
  - Creams/Ointments

ACUTE/SUBACUTE

- Nonpharmacologic
  - PT
  - OMT
  - Acupuncture
  - RICE

ACUTE/SUBACUTE

- Opioids
  - Lowest dose possible for expected duration of therapy
  - Emphasize as needed use rather than scheduled
  - Immediate release preference in this case

GENERAL TIPS

- Nociceptive Pain – can use IR opioids, nerve blocks, NSAIDs, topicals
- Nocioplastic Pain – TCAs, SNRI/SSRI, anticonvulsants = generally, NO OPIOIDS!!!
- Neuropathic Pain – Anticonvulsants, IR and ER/LA opioids, Gabapentinoids, Nerve blocks, TCAs and SNRIs, Transdermal opioids

STARTING OPIOIDS

- Benefits outweigh risks?
- Documented moderate to severe nociceptive and/or neuropathic pain?
- Patient already failed other nonpharmacologic and nonopioid interventions

Table 12.1. Types of Opioid Drugs

	NATURAL	SEMISYNTHETIC	SYNTHETIC
Source	Naturally occurring	Derived from natural opioids	Synthesized independently
Chemical Structure	Typical	Similar	Dissimilar
Examples	Morphine Codeine	Hydromorphone Oxymorphone Hydrocodone Oxycodone Heroin	Methadone Fentanyl Meperidine Tramadol

https://opentext.wsu.edu/biopsychological-effects-alcohol-drugs/chapter/chapter-12-opioids/

ACUTE ON CHRONIC

- Nonopioid medications should be used when possible
  - If additional opioids are required, they should be continued only for the duration of pain severe enough to require additional opioids, returning to the patient's baseline opioid dosage ASAP, including a tapering back down to baseline opioid requirements.

CHRONIC PATIENT

- Antidepressants
  - SNRI/SSRIs/TCAs
  - Calcium Channel Blockers (e.g. Gabapentin)
  - Anticonvulsants
  - Neuroleptics

CHRONIC PATIENT

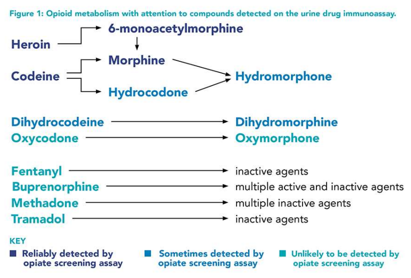
- Opioids
  - Preference for long-acting vs. short acting
  - Why?

CHRONIC PATIENT

- Strategies
  - Incomplete Cross Tolerance – Opioid rotation

OTHER TIDBITS

- Referral
- Monitoring
- Contract



POSSIBLE DIVERSION

- One or two episodes of increasing dose without prescriber knowledge
- Sharing medications
- Unapproved opioid use to treat another symptom (e.g., insomnia)

- Use of illicit drugs or unprescribed opioids
- Repeatedly obtaining opioids from multiple outside sources
- Prescription forgery
- Multiple episodes of prescription loss

FINAL THOUGHTS

- These are recommendations/guidelines.
- Weigh risks and benefits with patients
- Document and assess and monitoring
- Treat non-pharmacologically and nonopioid options

WRAPPING UP

- Questions or comments?