



EDUCATIONAL RESOURCES

Treating Pain: Analgesics 101

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 HOME HEALTH



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Objectives

- Define pain and common etiologies.
- Identify analgesic classes appropriate in the treatment of physical pain.
- Review tips for using analgesic classes safely and effectively in serious illness.

Pain

- Unpleasant sensory and emotional experience
 - Actual or potential tissue damage
- Chronic pain is a common reason for seeking medical attention
- Multifactorial symptom
- Pathophysiology
- Types
- Pain near end-of-life



Pain Assessment

Onset

Location

Duration

Character

Alleviating/
Aggravating

Radiation

Temporal
Pattern

Symptoms
Associated

Medication Appropriateness



Acetaminophen

Class Example

- Acetaminophen

Class Notes

- OTC, inexpensive, antipyretic properties
- Mechanism of action
- Hepatotoxicity precaution

Class Dosing Example

- 650mg PO/PR/IV Q6H PRN

Nonsteroidal Anti-Inflammatory Drugs

Class Examples

- Ibuprofen, Meloxicam, Naproxen

Class Notes

- OTC availability*, antipyretic and anti-inflammatory properties
- Mechanism of action
- GI toxicity, Increased cardiovascular risks, nephrotoxicity

Class Dosing Example

- Ibuprofen 400mg PO Q6H PRN

Glucocorticoids

Class Examples

- Dexamethasone, Methylprednisolone

Class Notes

- Mechanism of action
- Toxicities (glucose intolerance, sodium retention, behavioral changes)

Class Dosing Example

- Dexamethasone 4mg PO QDay to BID

Lidocaine

Class Example

- Lidocaine topical creams, ointments and patches

Class Notes

- Neuropathic, localized pain
- Mechanism of action
- Patches may be cut to size, formulation indications

Class Dosing Example

- Lidocaine 5% patch- Apply 1 patch topically for up to 12 hours per day

Antidepressants

Class Examples

- TCAs, SNRIs, SSRIs

Class Notes*

- Increase in synaptic norepinephrine
- Sedating, anticholinergic potential, nausea, QT prolongation
- Black box warnings

Class Dosing Examples

- TCA: Amitriptyline 25mg PO QHS
- SNRI: Duloxetine 30mg PO QHS

Antiepileptics

Class Examples

- Carbamazepine, Oxcarbazepine, Lamotrigine, Mexiletine

Class Notes

- Sodium and calcium channel blockade
- Wide range of adverse effects
- Significant drug-drug interactions

Class Dosing Example

- Carbamazepine 100mg PO Q12H

Gabapentinoids

Class Example

- Gabapentin

Class Notes

- Mechanism
- Dose tapers
- Renal impairment precaution and adverse effects

Class Dosing Example

- Gabapentin 300mg PO QDay-TID

Opioids

Buprenorphine

Fentanyl

Hydrocodone

Hydromorphone

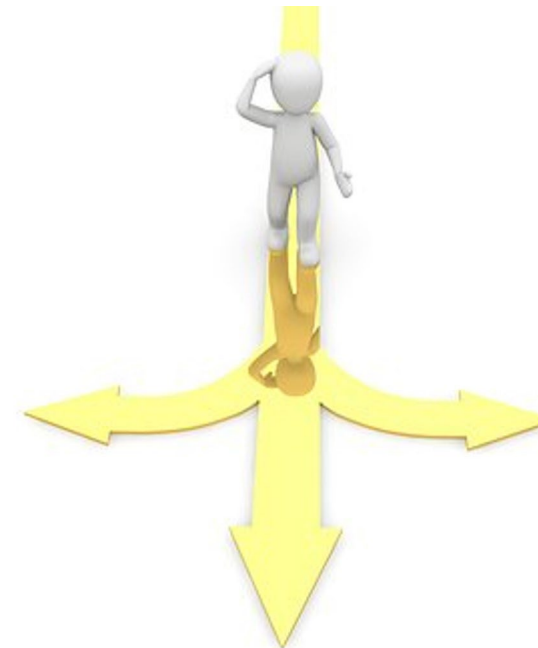
Methadone*

Morphine

Oxycodone

Oxymorphone

Tramadol



Combination Therapy

- Multifactorial approach
 - Non-drug therapy
 - Targeted pharmacologic therapy
- Type of pain
 - Etiology
 - Duration
- Patient status and illness trajectory



Pharmacokinetic Changes

Absorption

- Decreased rate through GI tract

Distribution

- Decreased lean body mass

Metabolism

- Decreased liver blood flow

Elimination

- Decreased GFR (kidneys)

Medication Appropriateness





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Thank you

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References

- Schüchen RH, Mücke M, Marinova M, et al. Systematic review and meta-analysis on non-opioid analgesics in palliative medicine. *J Cachexia Sarcopenia Muscle*. 2018;9(7):1235-1254. doi:10.1002/jcsm.12352.
- Tauben D. Nonopioid medications for pain. *Phys Med Rehabil Clin N Am*. 2015;26(2):219-248. doi:10.1016/j.pmr.2015.01.005
- Yang J, Bauer BA, Wahner-Roedler DL, Chon TY, Xiao L. The Modified WHO Analgesic Ladder: Is It Appropriate for Chronic Non-Cancer Pain?. *J Pain Res*. 2020;13:411-417. Published 2020 Feb 17. doi:10.2147/JPR.S244173.
- Cohen SP, Vase L, Hooten WM. Chronic pain: an update on burden, best practices, and new advances. *Lancet*. 2021;397(10289):2082-2097. doi:10.1016/S0140-6736(21)00393-7.
- [Dowell D](#), Ragan KR, Jones CM, Baldwin GT, Chou R. CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022. *MMWR Recomm Rep* 2022;71(No. RR-3):1–95. DOI: <http://dx.doi.org/10.15585/mmwr.rr7103a1>.
- Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. U.S. Department of Health and Human Services. 2019. Available at: <https://www.hhs.gov/sites/default/files/pmtf-final-report-2019-05-23.pdf>. Accessed January 2023.
- Tauben D, Stacey BR. Pharmacologic management of chronic non-cancer pain in adults. In: Post T, ed. UpToDate. UpToDate; 2023. Accessed January 2023. www.uptodate.com.