

Bullet Point Nursing

Analgesia / Pain management pharmacology

Disclaimer: These notes are designed to provide the key points of each topic and may not contain all necessary information. Every effort is made to ensure this content is up to date and accurate at the time of writing. No liability is assumed for the content or its relation to current standards and practices. This should not replace comprehensive nursing educational resources.

Principles of pain management

- Always assess pain before and after medication administration (OPQRST, OLDCARTS)
 - Ensure you are using an appropriate pain scale (Numerical, FACES, FLACC)
- Always include non-pharmacological pain interventions in your treatment
- Pain management generally follows an escalation from non-opioids to weak opioids, and on
- Assess if pain is acute vs chronic. Can be visceral, neuropathic, somatic, superficial, etc.
 - Neuropathic pain is often treated with TCAs, A2 agonists, antiepileptics, SNRIs among other options
- Elderly patients may be at risk of falls and/or confusion with opioids
- Remember pain is subjective!

Drug class: Opioid agonists

- Drugs:
 - Fentanyl
 - Hydromorphone (Dilaudid)
 - Meperidine (Demerol)
 - Morphine
 - Codeine
- MOA: Acts on opioid receptors to depress pain and depress the CNS
- Indications: Pain
 - Codeine (Schedule V) is indicated for cough
- SE/AE: Respiratory depression, constipation, nausea, sedation, hypotension, constricted pupils
- Controlled substance (Schedule II)
- Black Box warnings: Avoid alcohol and other CNS depressants, respiratory depression, risk for abuse and dependency
- Reversed with Naloxone (Narcan)
 - Opioid antagonist
 - Reversal agent in cases of respiratory depression due to opioid toxicity
 - Withdrawal causes anxiety, sweating, tremors, tachycardia, diarrhea, muscle cramps
- Produced in combination medications with acetaminophen
 - Examples are Norco and Vicodin (acetaminophen/hydrocodone), Percocet (acetaminophen/oxycodone)
 - This is intended to lower the overall opioid used and increase relief
 - Risk for acetaminophen harm
 - These are PO and provide a more steady and milder opioid effect VS IV opioids
- Tramadol (Ultram) is considered an opioid by some sources and a non-opioid analgesic in others
- Pain relief should not be withheld due to suspicion of addiction

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- Patient controlled analgesia (PCA) has been shown to provide superior pain relief in appropriate settings
- Educate your patient on the risk vs benefit of opioids
- Methadone is an opioid used for pain but primarily for OUD,
 - Over a dozen black box warnings related to risk of misuse and use with other drugs
- Understand tolerance, versus dependence, versus addiction

Drug class: Opioid agonist-antagonist

- Drug:
 - Buprenorphine-naloxone
- MOA: Partial opioid agonist
- Indications: OUD (and off-label for pain)
- Controlled substance
- Medication assisted therapy (MAT) is the use of partial opioid agonists to treat OUD

Drug class: Central acting antagonist

- Drugs:
 - Acetaminophen (Tylenol)
- MOA: Not fully understood. Inhibits COX in the central nervous system.
- Indications: Analgesia and antipyretic
 - Has no anti-inflammatory properties
- Avoid with alcohol or other hepatotoxic substances
- Black Box warning: Hepatotoxicity
- Preferred in pregnancy over NSAIDS
- Does not have the same risk of GI bleeding as NSAIDS
- Acetaminophen overdose can be reversed with N-Acetylcysteine

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References

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