

ACTIVE LEARNING TEMPLATE: Medication

STUDENT NAME Francesca Heller

MEDICATION Oxycodone

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Opioid analgesic/agonists (Schedule 2)

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds to CNS opioid receptors → alters pain perception → generalized CNS depression

Therapeutic Use

- analgesic (decreases pain)
- acute pain
- chronic pain
- neuropathic pain

Complications

CV: orthostatic HTN **Derm:** flushing, sweating
EEENT: blurred vision, diplopia **Endo:** adrenal insufficiency **GI:** constipation, dry mouth, N/V, GI obstruction, choking **GU:** urinary retention
Neuro: dizziness, confusion, euphoria/dysphoria, hallucinations, headache **Resp:** Resp. depression (including sleep apnea)

Contraindications/Precautions

- C:** • significant respiratory depression
 • Paralytic ileus • acute/severe bronchial asthma • ER: acute or post op pain
- P:** • Hx of substance abuse • renal/hepatic impairment
 • hypothyroidism/adrenal insufficiency/seizures
 • GI obstruction risks, prostatic hyperplasia, dysphasia
 • OB/lactation • Pedi: 2/1y • Geri: ↑ Resp dep. ↓ dose

Interactions

• **MAO inhibitors:** use caution (↓ initial dose by 25%)
 • **Mixed/partial agonists:** ↓ analgesia
 • **CYP3A4 inducers:** ↓ oxycodone levels/analgesia
 • **CYP2D6 inhibitors:** ↑ oxycodone lvs. = ↑ toxicity
 • **Serotonergic drugs (SSRIs, SNRIs...)** ↑ risk serotonin syndrome

Evaluation of Medication Effectiveness

• decreased severity of pain w/o a significant alteration in LOC or respiratory status

Medication Administration

Route/Dosage:

- PO adults: 5-10mg q3-4hr PRN; may convert to ER q 12hr (titrate q3-4d)
 - PO children (≥ 11y): 0.05-0.15mg/kg
 - IR: q4-6h PRN
 - Rectal (adults): 10-40mg 3/4 x daily
 - Hepatic impairment: ↓ dose 50-66%
- Implementation**
- high alert: overdose can = fatal
 - give before severe pain; PRN
 - taper gradually after long term use

Nursing Interventions

- assess pain type, loc., intensity before and 1hr after dose
- titrate dose: ↑ 25-50% until pain ↓ 50%; repeat at peak PRN
- monitor gen/peidi closely (risk of respiratory depression)
- monitor tolerance/dependence
- assess bowel function: encourage fluids, fiber, consider laxatives
- Labs: amylase, lipase (may ↑)
- Toxicity/OP: Naloxone = antidote

Client Education

- encourage ↑ fluids + fiber
- consider laxative
- explain purpose, proper use/side effects
- recognize respiratory depression
- may cause drowsiness/dizzy
- ER tablets: empty matrix may appear in stool
- avoid alcohol/CNS depressants
- encourage deep breathing

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Francesca Heller

MEDICATION Guaifenesin

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Allergy, cold, & cough remedies; expectorant

PURPOSE OF MEDICATION

Expected Pharmacological Action

- ↓ viscosity of secretions by ↑ respiratory fluid

Therapeutic Use

- Mobilization & expectoration of mucus

Complications

Derm: Rash, urticaria **GI:** diarrhea, nausea, stomach pain, vomiting **Neuro:** dizziness, headache

Medication Administration

Route/Dosage:

PO adults: IR: 100-200 mg q4h
ER: 600-1200 mg q12h (2400 mg/day MAX)

PO children:

6-12 yr: IR: 100-200 mg q4h
ER: 600 mg q12h (1200 mg/day MAX)
4-6 yr: IR: 50-100 mg q4h (max: 600 mg)

Implementation:

- admin w/ full glass water
- ER: swallow whole: don't crush, chew, spit

Contraindications/Precautions

Contraindications:

- alcohol intolerance (some contain alcohol)
- some contain aspartame → avoid if phenylketonuria

Precautions:

- cough, fever, rash, headache ≥ 1 week
- diabetes (sugar containing)
- OB / Lactation / Pediatrics

Nursing Interventions

- encourage/ implement high fluid intake (1500-2000 mL/day) (↓ viscosity of secretions)
- assess lung sounds & sputa
- assess cough frequency & type of cough
- ↓ bronchial secretions

Interactions

- none (no drug-drug reported)
- do not confuse w: guanfacine

Client Education

- encourage high fluid intake
- Teach effective coughing: sit upright, deep breaths before coughing
- avoid OTC in children < 4 yr
- may cause dizziness
- Notify HCP if: cough, fever, rash, headache, sore throat (≥ 1 week)
- Notify if pregnant / breastfeeding

Evaluation of Medication Effectiveness

- easier mobilization and expectoration of mucus from cough associated w/ upper respiratory infection
- (↓ viscosity of mucus secretions)