

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME RDH

MEDICATION Acetaminophen (Feverall, Mapap, Ofirmev, Tylenol)

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Nonnarcotic Analgesic; Antipyretic

PURPOSE OF MEDICATION

Expected Pharmacological Action

Antipyretic: Inhibits hypothalamic heat-regulating center.
Analgesic: Activates descending serotonergic inhibitory pathways with CNS.

Therapeutic Use

Temporary reduction of fever.
Management of mild to moderate pain in pts greater than or equal to 2 yrs of age; management of moderate to severe pain when combined with an opioid in pts greater than or equal to 2 yrs.

Complications

Side Effects: Hypersensitivity
Adverse Effects: Anorexia, nausea, diaphoresis, fatigue with the first 12-24 hours; Vomiting, right upper quadrant tenderness, elevated LFTs within 48-72 hours after ingestion.
Antidote: Acetylcysteine

Medication Administration

IV >50kg: 1,000 mg Q6h or 650 mg Q4h.
Max Single Dose: 1,000 mg
Max Daily Dose: 4,000 mg
IV <50 kg: 15 mg/kg Q6h or 12.5 mg/kg Q4h
Max Single Dose: 750 mg
Max Daily Dose: 75 mg/kg/day
PO regular strength: 325-650 mg Q4-6h.
Maximum: 3,250 mg/day
*PO dosages and max amt vary by strength

Contraindications/Precautions

Contraindications: Hypersensitivity to acetaminophen, severe hepatic impairment or severe active liver disease.
Cautions: Sensitivity to acetaminophen; severe renal impairment; alcohol dependency, hepatic impairment, or active hepatic disease; chronic malnutrition and hypovolemia; G6PD deficiency. Limit dose to less than 4 g/day.

Nursing Interventions

Assessment: Assess pain onset, type, location, and duration. Effect of medication is reduced in full pain response recurs prior to next dose. Assess for fever and LFT in pts w chronic usage of Hx of hepatic impairment, alcohol abuse.
Intervention: Assess for clinical improvement and relief of pain or fever. Observe therapeutic serum level and toxic serum level.

Interactions

Drugs: Chronic alcohol use, hepatotoxic medications, and strong CYP3A4 inducers may increase risk of hepatotoxicity with prolonged high dose or single toxic dose. Desatinib and probenecid may increase concentration/effect.
Lab Values: May increase serum ALT, AST, bilirubin; prothrombin levels (may indicate hepatotoxicity).

Client Education

Educate to consult physician for: oral use greater than 10 days or for a fever lasting longer than 3 days, and severe/recurrent pain or high/continuous fever may indicate serious illness. Educate to not take more than 4 g/day (3 g/day for OTC), and to avoid alcohol.

Evaluation of Medication Effectiveness

Relief of pain; reduction of fever.