

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME _____

MEDICATION: Acetaminophen REVIEW MODULE CHAPTER _____ CATEGORY CLASS Nonsalicylate, nonopioid analgesic

PURPOSE OF MEDICATION

Expected Pharmacological Action

Inhibits the enzyme cyclooxygenase (pain signaling enzyme), blocking prostaglandin (influence inflammation, pain and fever) production and interfering with pain impulse generation in the peripheral nervous system

Therapeutic Use

To relieve moderate pain; to relieve fever with adjunctive opioid analgesics. Alters the way the body senses pain. Commonly used for pain management since it is a non-opioid option.

Complications

Acetaminophen does not manage inflammation
Those with impaired liver function are more likely to have liver toxicity.

Medication Administration

Regular strength (325mg): Adults and children ages 12 and older – 640 or 650 mg q 4-6 hr prn. Max = 3,250 mg (5 doses) in 24 hr

Extra strength (500 mg): Adults 1,000 mg q 6 hr prn. Max 3,000 in 24 hr.

Children ages 12-23mo 120 mg q 4 hr prn

Contraindications/Precautions

Hypersensitivity to acetaminophen or its components, severe liver disease or impairment

Alcohol consumption increases risk for liver toxicity

Nursing Interventions

Prior to administration the nurse should check the current and past medication history to assess if already taking medications containing acetaminophen or which will interact and to avoid maximum daily intake.

Obtain liver function tests prior to administration (ALT, AST, Bilirubin)

Interactions

Anticholinergics = decreased onset of medication action

Oral Contraceptives = decreased effectiveness of medication

Propranolol (HTN MED) = increased action of medication

Alcohol use = increased risk of hypersensitivity

Client Education

It would be useful to inform the client on the frequency, route, and amount of this medication they are meant to take, the risk of liver damage if overdosing using this medication, and to contact the prescribing physician if going to take other prescription drugs in case they also contain acetaminophen

Evaluation of Medication Effectiveness

The nurse can gauge effectiveness based off a decrease in the client's pain number decreased prior to administration, fever reduction, restoration of function. Client has no signs of liver toxicity (Dark urine, Decreased urine output, Elevated liver enzymes, confusion).

