**Analgesic pain relief, non opioid (p)**

**Salicylates**
Lower body temperature by dilating the peripheral blood vessels
Inhibit prostaglandin decreasing pain signals to pain receptors

**Uses**
Relief of moderate to mild pain
Reduces fever
Treats rheumatoid arthritis
**Decrease risk of MI / STROKE**
Helps maintain pregnancy in at risk populations

**Adverse reactions**
GI bleeding
Gastric upset

**Interactions**
Anticoagulants: increase risk of bleeding
NSAIDS: increase serum levels of NSAIDS
Carbonic anhydrase inhibitors (antidiabetic drugs): increase risk of salicylsim

**Nursing Actions**
*Follow up 30 to 45 mins after administration to assess pain relief*
*Call physician if you notice unusual or bloody stools*

**Salicylate drugs**

**Asprin:** bayer
Uses: pain relief and fever
Adverse reactions: bleeding, tinnitus, salicylsim with overuse

**Diflusinal**
Uses: same
Adverse reaction: same

**Magnesium salicylate**
Uses: same
Adverse reactions: same

*Children or teenagers with influenza or chickenpox should not take salicylates, particularly aspirin, because their use appears to be associated with Reye’s syndrome (a life-threatening condition characterized by vomiting and lethargy progressing to coma).*
Non Salicylates

Used when a patient is allergic to Asparin (salicylate drug)

ACTIONS
Moa is unknown, does not cause bleeding or platelet aggregation, ideal for when bleeding is a concern.

USES
Mild to moderate pain
Lowers fever
Relieves pain and discomfort associated with inflammatory disorders (arthritis)

Adverse reactions
Reye's syndrome
Hemolytic anemia
Pancytopenia, hypoglycemia, jaundice

Contraindications/ precautions
Hepatotoxicity can increase with habitual use, avoid alcohol, salicylate and NSAIDS, monitor fever: prolonged fever could indicate serious illness

Interactions
Barbiturates: increase barbiturate levels and decrease effects of acetamenophine
Hydantoins: increase hydantoin effects decrease acetaminophen
Isoniazid and rimphampin: same

NON SALICYLATE DRUGS

Acetaminophen: Tylenol
Uses: analgesic/fever reducer
Adverse reactions: hepatotoxicity, jaundice, hypoglycemia, pancytopenia, rash

Nursing actions
Always ask how long the pt has been taking the acetaminophen.
NSAIDS
Have an anti-inflammatory effect, they do not contain steroids and do not have the same adverse reactions as steroids

Actions
Analgesic/antipyretic
Thought to inhibit prostaglandin syntheses by blocking cox enzyme that is responsible for prostaglandin syntheses

Cox 1: maintains stomach lining
Cox 2: triggers pain and inflammation

Uses
Pain associated with musculoskeletal disorders (arthritis, osteoarthritis, rheumatoid arthritis)
Mild to moderate pain
Primary dysmenorrhea
Fever reduction

Adverse reactions
Dyspnea, GI upset, stomatitis, jaundice, stroke, psychiatric disturbances
Increase or decrease BP, CHF, MI, arrhythmia

Interactions
Anticoagulants: increase bleeding
Lithium: risk of lithium toxicity
Hydantoins: increase hydantoin effect
Diuretic: decrease diuretic effects
Antihypertensives: decrease effects of antihypertensive drugs
Acetaminophen: risk of renal impairment

NSAID DRUGS
Ibuprofen: advil
Uses: pain, rheumatoid disorders, dysmenorrhea
Adverse reactions: duodenal ulcer, GI bleeding, headache, dyspnea

Indomethacin: indocen
Uses: rheumatoid disorder
Adverse reactions: same + hematologic changes

Ketoralac:
Uses: pain
Adverse reactions: same

Meloxicam: Mobic
Uses: osteoarthritis
Adverse reactions: same + somnolence and insomnia
**NSAID COMBOS**

**Ibuprofen/famotidine**: duexis (NSAID + H2 RECEPTOR AGONIST)
Uses: same as Ibprofen plus GI ulcer protection
Adverse Reactions: /

**Naproxen/ esomeprazole**: Vimeo (NSAID + PROTON PUMP INHIBITOR)
Uses: arthritis (all forms) + GI ulcer protection
Adverse reactions: /

**Celecoxib**: celebrex (cox 2 inhibitor)
Uses: acute pain, RA, Dysmenorrhea, ankylosing, spondylitis, reduction of polyps
Adverse Reactions: increased risk of cardiovascular events

**Nursing Actions**
Celecoxib has an increased risk of MI, STROKE, Cardiovascular Thrombosis
Do not give NSAIDS POST OP!
**Migraine medications**
5HT receptor activators

**Mode of action**
Activates 5HT receptors cause vasoconstriction and reduce neurotransmission

**Uses**
Migraine headaches

**Adverse reactions**
Coronary artery spasm
Cardiac arrhythmia
MI

**Contraindications**
Pts known to have selective serotonin agonist
Do not to patients with cardiovascular disease / ischemia
Uncontrolled HTN
On MAOI
Impaired hepatic or renal FX

**Interactions**
Cimetidine: increase 5HT effects
Oral contraceptives: same

**5HT DRUGS**
**Alamotriptan:** axert
Uses: acute migraine
Adverse reactions: chest pain, parenthesis

**Sumatriptan:** imatrex ( sub q @ onset of migraine) no more than 2 injections per 24 hr
Uses: acute or cluster migraines
Adverse reactions: same