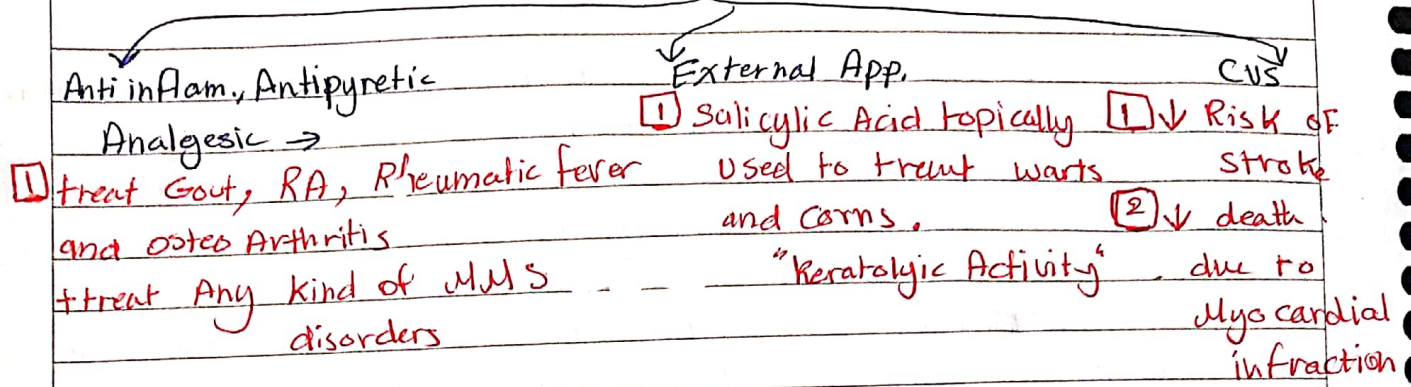
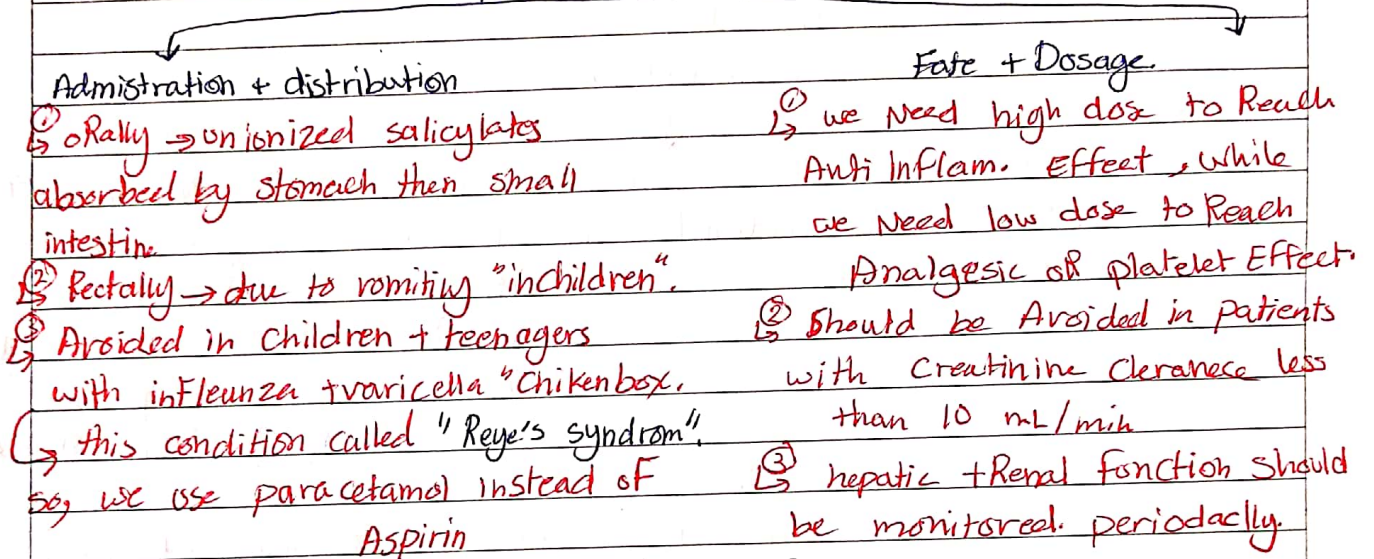


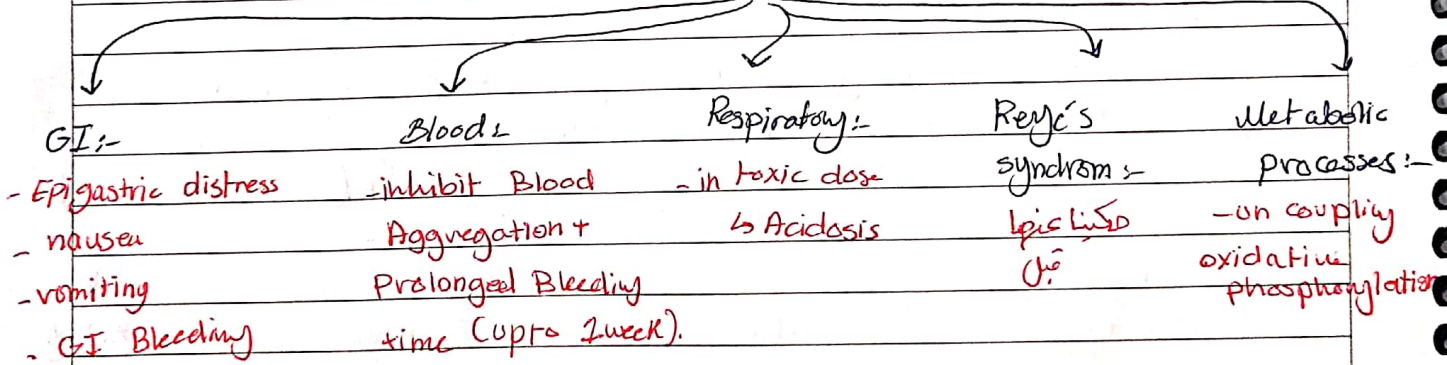
* Therapeutic uses of Aspirin *



* pharmacokinetics of Aspirin *



* Adverse Effect of Aspirin *



* Drug interaction -> Salicylate can be displaced from its binding site -> Result in increase conc. of Free salicylate.

~~For pregnant woman -> we give her Asp~~
 ↳ who has experienced miscarriage due to Rejection of the fetus because of the formation of Abs against him. we encourage them to take low dose of Aspirin.

↑
 * Aspirin is a weak acid, its pKa is 3.5, and its ionization constant is 10^{-3.5}.

Pharma - 5 - final - Summary.

* toxicity → Mild Form of it "Salicylism".

↳ Present :- Nausea, vomiting, tinnitus, headache, dizziness.

* Propionic Acid derivatives :-

Ex:- Ibuprofen, Naproxen, Fenoprofen, Ketoprofen, Flurbiprofen.

- Reversibly inhibitors of Cox, Functions like other NSAIDs

- less Effect in GI compare to Aspirin

- orally → bound to Albumin - Metabolism in hepato, Excreted by kidney.

- Adverse Effect → GI irritation, Bleeding, dyspepsia, headache, tinnitus.

* Warning * Avoid Give it to Asthmatic patient.

* Acetic Acid derivatives :- → سليسينات ☺

Ex:- indomethacin, Sulindac, Etoricoxib → سولون ☺

- indomethacin → limited usage due to its toxicity → used to treat Acute Gouty Arthritis + Ankylosing spondylitis.

* Oxamic derivatives :-

Ex:- piroxicam, meloxicam → (Per/ml سليسينات سولون) ☺

- treat → RA, ankylosing Arthritis, osteoarthritis

- long $\frac{1}{2}$ life, take once daily. - Renally Excreted

- Meloxicam → selective to Cox2, less irritation than piroxicam.

* Fenamates :- → سليسينات → Ma Fe Name. ☺

Ex:- Mefenamic Acid

- cause diarrhea → can be severe → inflam. in bowel + haemolytic Anemia associated with

* Heterocyclic derivatives :- → سليسينات ☺

Ex:- diclofenac, tolmetin, ketorolac

- treat :- RA, osteo Arthritis, more potent than indomethacin + Naproxen.

- ophthalmic preparation → diclofenac accumulate in synovial Fluid.

- diclofenac sodium → delayed Release. - Excret by Urine

- diclofenac potassium → quickly Release.

* Warning * Avoid Give it to Asthmatic patients + who has history with peptic ulcer.

* Selective Cox2 inhibitors *

Ex:- celecoxib, Rofecoxib, Meloxicam / to Avoid GI side Effect of Non-

- Rofecoxib → withdrawn from market "cause death, thromboembolic" selective Cox.

- Celecoxib → Available to chronic inflammatory like (RA).

- Side Effect → thromboembolic.

Pharma - Final - 5 - Summary.

* Acetaminophen "paracetamol" *

- inhibit PG synthesis in CNS. / Anti-Inflam, Antipyretic, Analgesic
- less Effect in PNS to COX.

- No Function Related to platelets Aggregation.

* Therapeutic Effect → is A choice For children with viral infection or Chicken Pox.

* Pharmacokinetics → absorbed by GIT, pass through First pass meta.
intestine + ~~liver~~ in hepatocyte ← ~~liver~~ in luminal cells

* Excreted by urine

* Adverse Effect → Renal tubular Neurosis + hypoglycaemic coma (Rare)
↳ large doses → hepatic Neurosis.