

Non-steroidal Anti-inflammatory drugs

Drug	Mechanism of action	Pharmacokinetics	Clinical uses	Adverse effects
ASPIRIN	It is a non-selective inhibitor of cyclo-oxygenase enzymes which leads to decreased formation of .	-----	<p>Analgesic. Antipyretic. Anti-thrombotic.(cardio protective) Anti Inflammatory . Gouty arthritis. (large dose) Colonic cancer.(reduce the incidence)</p>	<p>1- GIT : irritation,vomiting,ulcer&bleeding 2-blocked of platelet aggregation 3-inhibition of uterine motility (prolong labor 4- Hypersensitivity reactions 5- renal AE <u>AE related to therapeutic dose of aspirin :</u> 1- Acute gouty arthritis 2- Reye's syndrome <u>AE related to high dose of aspirin :</u> 1- Salicylism 2- Metabolic acidosis 3- Hyperthermia 4- Gastric ulceration & bleeding <u>Contraindications :</u> - Pregnancy - Hemophilic patient - Peptic ulcer</p>

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PARACETAMOL (ACETAMINOPHEN)	Non-selective Effective as : Analgesic & antipyretic only	-Can be used in : <ul style="list-style-type: none"> • pregnancy • Patient allergic to aspirin • Children with viral infections • Patient with hemophilia & peptic ulcer 	-----	Mainly on liver due to metabolite therapeutic dose elevate liver enzymes High doses cause liver & renal necrosis
DICLOFENAC	non-selective inhibitor of cyclooxygenases	-accumulates in synovial fluid <u>Preparations:</u> <ul style="list-style-type: none"> • Oral tablet with misoprostol • .1% ophthalmic preparation • Topical gel for solar keratoses • Rectal suppository as analgesic or for postoperative pain • Oral mouth wash • Intramuscular 	-Anti inflammatory -Antipyretic - Acute Gouty Arthritis. -locally to treat or prevent postophthalmic inflammation -Topical for solar keratoses	- General adverse effect of NSAIDs

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CELECOXIB	<ul style="list-style-type: none"> - highly selective COX-2 inhibitor Potent anti-inflammatory drug Antipyretic & analgesic Lower incidence of gastric upset It <u>does not</u> affect platelet aggregation 	<ul style="list-style-type: none"> -It's absorption is decreased by food. -T_{1/2} is about 11 hours. -Highly protein-bound. -given twice daily . -highly bounded to plasma protein 	<ul style="list-style-type: none"> - Short time in postoperative patient - Acute Gouty arthritis - Acute musculoskeletal pain - Ankylosing spondylitis 	<ul style="list-style-type: none"> -Dyspepsia, heartburn. - renal toxicity - Allergy -Cardiovascular(do not offer the cardioprotective effect of non selective NSAIDs).