

NSAIDs- Analgesics, Antipyretics and Anti-inflammatory

Many drugs that are not steroids can cure or prevent inflammation.

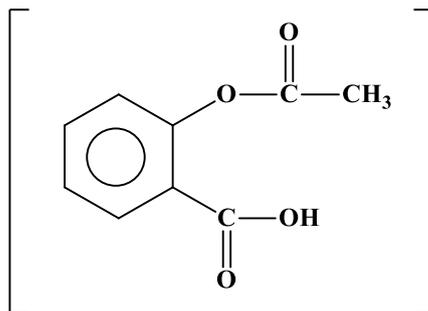
Classification:

These agents can be divided chemically into the following groups:

A. Carboxylic acids:

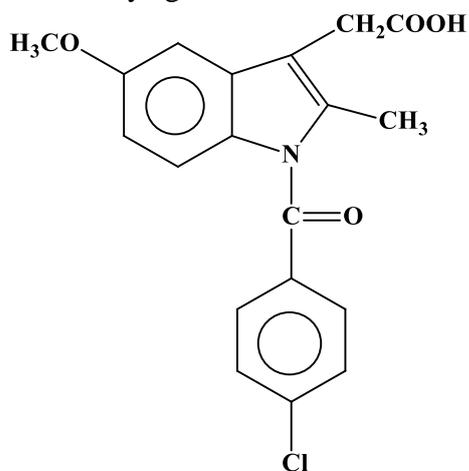
1. Salicylates: Analgesic-Antipyretic.

Eg.- Acetylsalicylic acid (Aspirin).

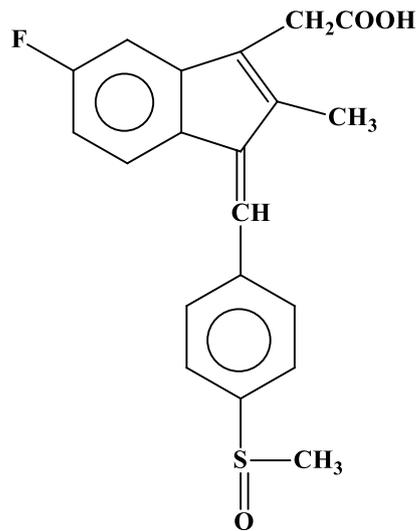


2. Acetic acid:

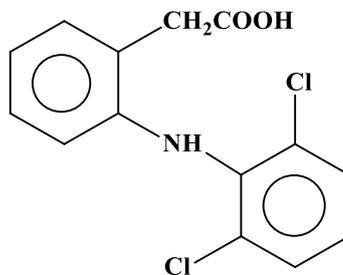
Indomethacin: Anti-inflammatory agent.



Sulindac:

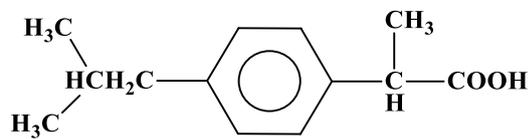


Diclofenac sodium:

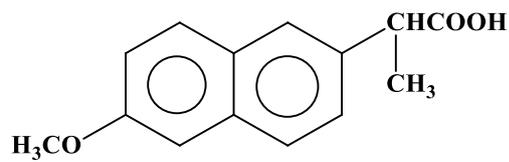


3. Propionic acid: Profen- Phenylpropionic acid.

Eg.- Ibuprofen



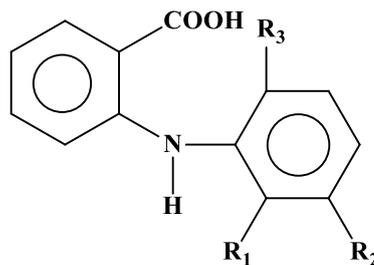
Naproxan:



4. Fumarates: Analgesic + Anti-inflammatory.

Fenac: Phenylacetic acid

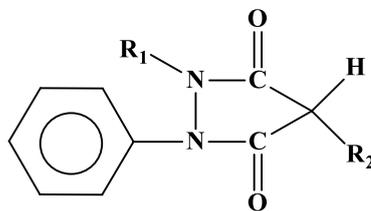
Anthranilic acid derivatives.



	R ₁	R ₂	R ₃
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Mefenamic acid	CH ₃	CH ₃	H
Flufenamic acid	H	CF ₃	H
Meclofenamic acid	Cl	CH ₃	Cl

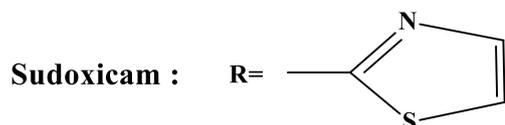
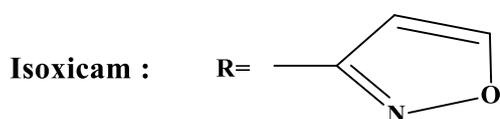
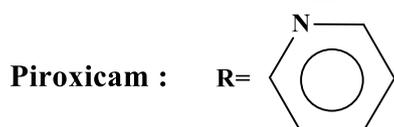
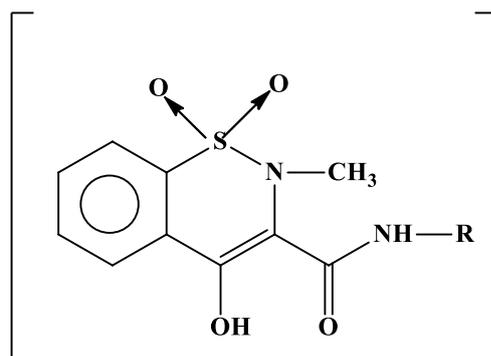
B. Pyrazoles: 3,5-Pyrazolidinedione derivatives.



	R ₁	R ₂
Phenylbutazone	C ₆ H ₅	n C ₄ H ₉
Oxyphenbutazone	p- OHC ₆ H ₄	n C ₄ H ₉
Sulfinpyrazone	C ₆ H ₅	-CH ₂ -CH ₂ -S-C ₆ H ₅

C. Oxicams: Anti-inflammatory (very potent).

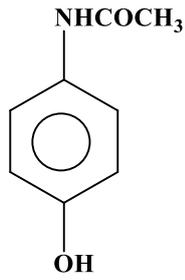
(Enolic acids)



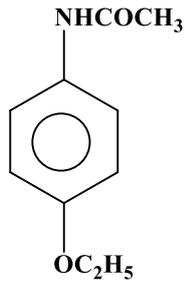
Analgesic-Antipyretics can be divided into following chemical classes:

A. Para-aminophenol derivatives:

Eg.- Paracetamol

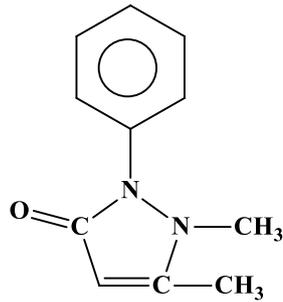


Phenacetin

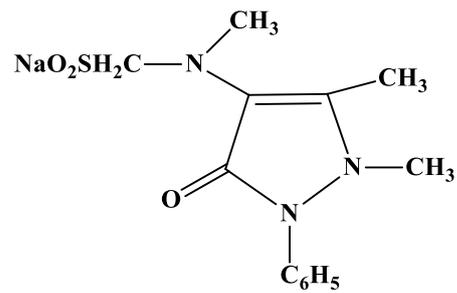


B. 5- Pyrazolone derivatives:

Eg.- Antipyrine



Analgin



Sulphinpyrazone

C. Miscellaneous agents:

**Antigout:
Inhibits uric acid synthesis**

Colchicine

Probenecid

Allopurinol

