

DISEASE MODIFYING ANTIRHEUMATIC DRUGS (DMARDs)

I Non Biologics.

(i) Methotrexate

- preferred DMARD in treatment of rheumatoid arthritis.
- Relatively more rapid onset of action.
- Dose is lesser than that required for chemotherapy.
- exerts antiinflammatory effects.
- inhibits chemotaxis of neutrophils & production of proinflammatory cytokines by activated T cells.
- Used in psoriasis, polymyositis, giant cell arteritis, dermatomyositis.
- Adv effects: nausea, vomiting, mucosal ulcers & dose dependent hepatotoxicity.
- Adv effects minimised by administration of folic acid or folinic acid.
- contraindicated in pregnancy, liver disease & peptic ulcer.

(ii) Chloroquine & Hydroxychloroquine.

- antimalarial drugs also used in rheumatoid arthritis.
- decrease release of lysosomal enzymes & scavenge free radicals.
- prolonged administration may cause corneal opacity & retinal damage.
- Side effects: nausea, vomiting, skin rashes.
- relatively safe in pregnancy.
- Used alone/in combination with methotrexate.

of sulphasalazine.

(iii) Sulphasalazine

- side effects are nausea, vomiting, diarrhoea, headache, skin rashes & leukopenia.

(iv) Eszopiclone

- orally for short & long term treatment of insomnia.

SELECTIVE SEROTONIN REUPTAKE INHIBITORS
SSRI.

Sulfasalazine.

↓
Sulphapyridine.

↓
absorbed into circulation
↓
inhibits production of
superoxide & inflammatory
cytokines
↓

Beneficial effect in
Rheumatoid
Arthritis

↓
5 Amino salicylic acid.

↓
Produces local
anti-inflammatory
activity in gut
↓

used in ulcerative
colitis.

(iv)

Leflunomide

- metabolite inhibits dihydroorotate dehydrogenase; thus ↓ pyrimidine synthesis
- inhibits T cell proliferation.
- Used alone/in combination with methotrexate.
- Adv effects: loose stools, loss of hair, liver toxicity, leucopenia & skin rashes.
- contraindicated in children, in pregnant women & lactating mothers.

(v)

Gold compounds

- administered parenterally & orally
- gold acts by altering morphology & function of macrophages suppresses CM
- Adv effects: dermatitis, itching, stomatitis, mouth ulcers, proteinuria, blood dyscrasias, hepatitis

II

Biological DMARDs.

(i) Etanercept, Infliximab, Adalimumab

- SC route.
- TNF α antagonist.
- Adv effects: opportunistic infections including TB.
- Uses: Rheumatoid arthritis, psoriasis, Crohn's disease

(ii)

Anakinra

- SC route
- IL-1 antagonist
- Adv effects: opportunistic mainly respiratory
- Uses: Rheumatoid arthritis

(iii)

Abatacept-

- IV infusion
- Inhibits T cell activation
- Adverse effects: opportunistic infections
- Uses Rheumatoid arthritis

(iv)

Rituximab

- IV infusion
- depletes peripheral B lymphocytes
- adverse effects: skin rashes.
- Used with methotrexate in resistant cases of rheumatoid arthritis