Treatment of rheumatoid arthritis

Once RA is diagnosed, early treatment is essential to minimize joint damage.

Non-steroidal Anti-Inflammatory Drugs (NSAIDs)

- NSAIDs are typically used for short-term management of RA.
- NSAIDs do not prevent joint damage (do not have disease modifying effect).
- Side effects include cardiovascular events and gastrointestinal (GI) bleeding.

Disease Modifying Anti-Rheumatic Drugs

- DMARDs form the basis of long-term RA management and are the most effective treatment option for altering the natural course of RA and reducing disease severity, disability, mortality, and RA-specific complications (such as cardiovascular events).
- The PCP has an important role in co-monitoring the patient after therapy is started.
- Traditional DMARDs include methotrexate, hydroxychloroquine, leflunomide, sulfasalazine.

Medication	Typical doses	Common side effects	Lab tests
Methotrexate	15-25 mg once a week	Nausea, diarrhea, alopecia; cytopenias, hepatotoxicity	CBC, LFTs every 8 weeks
Leflunomide	10-20 mg daily	Teratogenicity, diarrhea, hepatotoxicity, neuropathy	CBC, LFTs every 8 weeks
Sulfasalazine	2-3 g a day	Nausea, diarrhea, rash, liver toxicity	CBC, LFTs every 8 weeks
Hydroxychloroquine	200-400 mg a day	Nausea, rash, skin discoloration	Regular eye exams (yearly)

Biologic medications

- Biologic DMARDs differ from conventional DMARDs in their ability to target specific components of the immune response involved in the pathophysiology of RA, such as TNF, T lymphocytes, B cells, and interleukin-6 (IL-6)
- Biologics DMARDs reduce immune function; therefore it is important to be vigilant for signs of infection.
- Some biologics raise cholesterol and may require lipid assessments.

Target	Medications	Common side effects	Lab tests
Tumor-necrosis factor blockade (SC or IV)	Adalimumab Certolizumab Etanercept Golimumab Infliximab	Injection site (infusion) reactions, increased risk for infections	TB and Hepatitis screen
T-cell co-stimulation (SC or IV)	Abatacept	Injection site (infusion) reactions, increased risk for infections	TB and hepatitis screen
B-cell depletion (IV)	Rituximab	Infusion reactions, increased risk for infection	TB and hepatitis screen
IL-6 blockade (SC or IV)	Tocilizumab Sarilumab	Infections, increased lupus, elevated LFTs, neutropenia	TB and hepatitis screen, LFTs, lipids
JAK inhibition (oral)	Baracitinib Tofacitinib Upadacitinib	Serious infections, GI perforation, cytopenias, LFT abnormalities	TB and hepatitis screen LFTs, lipids

Corticosteroids

- Steroids, at low doses, can be used as bridge therapy until DMARDs begin to demonstrate efficacy.
- A short-term course of corticosteroids has minimal side effects in most patients, but long-term low-dose corticosteroids have significant side effects, including osteoporosis, cataracts, and immunosuppression.