Rebalance^{MD}

Rheumatoid Arthritis

Population

- Higher prevalence in Indigenous populations
- Female>Male 2-3:1
- Avg age of onset 40-60 in women, older in men

Risk Factors:

• Genetics, Smoking, Oral hygiene, infections (EBV, Parvo)

History and Physical:

- Symmetric joint swelling usually hands (excluding DIPs) and feet, AM stiffness (>45 min), Improvement with activity, good response to NSAIDs, Symptoms >6 weeks
- Multiple phenotypes
 - Typical RA -- Vast majority, often insidious
 - Palindromic Episodic, migratory, erythematous joints
 - Monoarthritis usually large joint, trauma can trigger, can evolve to poly
 - PMR phenotype >65yo, hip and shoulder girdle, diffuse swelling of hands, often seronegative
- Extra-Articular Manifestations
 - General Constitutional Sx, Lymphadenopathy
 - Derm RA nodules, Vasculitic lesions,
 - Resp ILD (UIP), Nodules, pleuritis
 - Cardiac Peri/Myocarditis, Nodules
 - Ocular Corneal melt, scleritis, episcleritis
 - Heme Felty's syndrome (Fever, splenomegaly, Neutropenia, infections)
 - Other Sjogren's syndrome overlap/Sicca symptoms, tenosynovitis
- Deformities Swan neck, Boutonniere's, Fusiform swelling, Ulnar deviation at MCPs, Radial deviation at wrist, piano key sign

Investigations:

- Labs: CBC+dif, Cr, GFR, ALT, Albumin, CRP, Rheumatoid Factor, Anti CCP*, Hep B/C, HIV
 - $\circ~$ RF Non-specific, positive in ~70% of RA cases
 - CCP ~60% Sensitive, Very specific (95%)
 - RF and CCP titres predict severity

• Seronegative disease - 20-25%, typically milder, less damaging, good response to treatment

• Imaging:

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- \circ X Rays \rightarrow Marginal erosions
- $\circ \quad \text{Synovitis} \rightarrow \text{MRI or MSK US*}$

Treatment: Almost all take 6-12 weeks to work

- Prednisone 15-25mg daily with taper as bridge*
 - Methotrexate Once weekly*. SC preferred better tolerated. Given with Folic Acid daily
 - SE: Nausea 24-48 hrs after dose, non-serious infections, LE ↑, marrow suppression, hair loss
 - Monitoring labs q3mo when stable
- Sulfasalazine SE: GI upset, Rash
- Hydroxychloroquine 5mg/kg/day SE: Ocular toxicity with prolonged use
- Others: Leflunomide, Biologics TNF inhibitors typically first line
 - TNFi SE: Infection, TB reactivation, Injection site reaction, worsens heart failure

