

Osteoarthritis

- chronic, non inflammatory condition characterized by progressive erosion of articular cartilage
- Weight bearing joints are principal joints involved
- Asymmetric involvement of joints
- Morning stiffness < 15 minutes
- Joint pain (most common symptom) aggravated with movement, relieved by rest
- Palpable coarse crepitus
- Muscle weakness and wasting
- Heberden's nodes - prominent osteophytes at DIP
- Bouchard's nodes - prominent osteophytes at PIP
- Varus deformity in knee OA
- Antalgic gait (jerky, asymmetric) in knee and hip OA
- Hip OA - Pain and restriction of internal rotation with the hip flexed is the earliest and most sensitive sign
- X Ray of affected joint
 - Asymmetric joint space narrowing
 - Osteophytes
 - Subchondral bone
 - Bone cysts
 - No ankylosis i.e no fusion of joints
- Acetaminophen (Paracetamol) is the best initial analgesic
- Most common joint in OA → Knee
- Pathognomonic X-ray feature → Osteophytes
- Disease modifying drugs role (DMARDs) → None

Rheumatoid Arthritis

- most common inflammatory arthritis
- chronic, symmetric, debilitating and destructive inflammatory polyarthritis (> 5 joints)
- Autoimmune disease
- Small joints are affected first
- Morning stiffness (> 1 hour) improves with activity
- Constitutional symptoms - fever, fatigue, anorexia, weight loss
- CD4 T cells play a central role in pathogenesis
- Positive ANA
- Anti CCP
- Rheumatoid factor is an IgM autoantibody that has specificity for Fc portion of IgG. It is positive in 70% patients
- Most important pro inflammatory cytokines are TNF alpha and IL-1
- Pannus - granulation tissue formed within synovial tissue
- Pannus results in ankylosis i.e fusion of joint by scar tissue

- Swan neck deformity - PIP hyperextension, DIP flexion
- Boutonniere deformity - PIP flexion, DIP hyperextension
- Cock up toe deformity - dorsal subluxation of MTP
- Caplan's syndrome - RA + Pneumonoconiosis + lung nodules
- Felty's syndrome - RA + splenomegaly + neutropenia
- X Ray of hand and wrist
 - symmetrical narrowing of joint space
 - peri articular osteopenia
 - bone erosions
 - deformities
- NSAIDs - best initial therapy to relieve pain
- DMARDs - slow the progression of disease (Methotrexate, Sulfasalazine, Hydroxychloroquine, Penicillamine, Gold)

MCQs One Liners

- Hallmark of spondyloarthropathies → Enthesitis
- Heel pain in young male with back pain → think ankylosing spondylitis
- RA → synovitis, NOT enthesitis (common MCQ trap)