These notes are helpful for revision, but you need to Study slides very well , Best of luck ☁️

RA
Female > male , 40s-50s
Chronic **>6weeks** , progressive , inflammatory(**morning stiffness**)disease
Polyarticular
Small joint , only synovial (spare DIP , Spine except cervical)
Symmetric
Triggers : viral, subfertility , postpartum period , smoking , **Chronic periodontitis**, **HLADRB1** >TNF

Extra articular: more in male , with severe active disease , in any age
nodules(firm , non tender , in areas of trauma , mainly in RF+) ,
👁️sjoren , episcleritis , scleritis , Peripheral ulcerative keratitis
🫀atherosclerosis , HF , effusion
🫁nodules , exudative plural effusion , fibrosis
🧠p.neuropathy
Anemia , amilodosis

Felty syndrome: a triad of RA, splenomegaly and neutropenia

<u>Hallmark : synovitis, tenosynovitis</u>

Labs :
RF : IgM against Fc portion of IgG, **66% sensitive and 82 % specific to RA ,** don't repeat it for follow up , high titers >more aggressive , **erosive** disease and extraarticular
ACPA , CCP : 70% sensitive but 95% specific to RA , high titer > more **erosive**

Both RF and ACPA can be found in patients 10 years prior to the onset of RA.

Imaging findings:
Xray ;
early , periarticular osteopenia , erosions , joint space loss (**medial and lateral** vs osteoarthritis from the medial only) ,tissue swelling
Late , osteoarthritis changes , subluxation
MRI : early RA

Spondyloarthropathies
ALL of them
Seronegative (**RF,ANA**)
Polygenetic , the most essential **HLA-B27** : only 5% , 20.1% of AS heritability, prevalence of AS matching It , more with axial
Enthesitis : sites of tendon attachment, achilles tendon , planter fascia
Spondylitis :CD8 invades annulus fibrosis and replaced it by bone
Sacroiliitis :CD8 invade the cartilage and replaced it by bone
Dactylitis
Anterior Uveitis : acute , unilateral , recurrent
IBD
Psoriasis
Back pain Or Peripheral arthritis(asymmetric,oligo)
Respond to NSAID

Ankylosing spondylitis
Men >women, started in early adulthood (16-40) , uncommon Asymmetric oligo
back pain :alternating to the buttocks , **impaired the pt from sleep** , relived by NSAID and **exercise** , age of onset <40 , gradual , with morning stiffness, chronic >3months
Imaging: starting with AP pelvis (sacroilitis :shiny corner , bamboo spine) then MRI if it -
Loss of lordosis>flat back , kyphosis in cervical and thoracic spine , shobar test+
marginal syndesmophytes

Psoriatic arthritis
Onycholysis , nail pitting , swelling of DIP , dactylitis , hyperkeratosis
70% prior , 10-15% after , 10-15% with
5 patterns Distal , Arthritis mutilans (very resistant to tx) ,Polyarticular Oligoarticular ,Axial Asymmetric sacroiliitis
Xray:jaxtaarticular new bone formation , **thick non marginal syndesmophytes**

Reactive arthritis
2-4 weeks after GI or GU infection , cannot be cultured
Asymmetric , oligoarthritis
Associated with oral ulcers , Keratoderma blenorrhagica, **thick non marginal syndesmophytes**

Enteropathic arthritis
More with cronhs colitis , **marginal syndesmophytes**
Type 1 : parallel, type 2 non parallel

Gout
Hyperuricemia >6.8 (Monosodium urate crystal)
Urate purines metabolites
Overproduction 10% , under execration 90%

Triggers Trauma, surgery, starvation, fatty foods, dehydration, and ingestion of drugs affecting (raising or lowering) serum urate concentrations (eg, allopurinol, uricosuric agents, thiazide or loop diuretics, and **low**- dose aspirin).

Men>women , 3rd -6 decade , 1st **MTP** is the most common, can be polyarticular in 10%(ankle or midfoot)
Sudden , local pain mimic infection maximum <24 h , resolution within 14 days and free between attacks , cannot be touched or walking on

Acute attack can be with **normal** uric acid
Aim of treatment : reduce level to < 6 mg/dl

The risk of gout increases with the **degree** and **duration** of hyperuricaemia.
Xray early normal , late : punched out erosions
Crystal identification is the golden standard test
Needle shape , negatively birefringent , yellow parallel, blue perpendicular

+ in previously affected joints in virtually **all** untreated gouty patients and in approximately **70** % of those receiving uric acid-lowering therapy

Treatment
First line : **rest**
NSAIDs, colchicine and steroids
Allopurinol but not in acute attacks

Osteoarthritis
M.C form of arthritis
Women > men
Uncommon before age of 40
Asymmetric ,Most frequently affected are the spine, knees, hips, interphalangeal joints of the hands, (MTP) joints
Hand in Fhx of hand OA
Clinical diagnosis
Morning stiffness <30 min , night symptoms only in advanced cases
Swelling w/Bony deformity
PIP joints (Bouchard nodes) and DIP joints (Heberden nodes), as well as squaring at the base of the thumb (the first carpometacarpal joint).

Plain radiographs poorly correlated with the symptoms ,used to rule out other pathologies

CRP, ESR normal
Lab tests are not needed for diagnosis

The Only way to cure is replacement

Scleroderma

SUBSETS OF SYSTEMIC SCLEROSIS (SSc): LIMITED CUTANEOUS SSc VERSUS DIFFUSE CUTANEOUS SSc

FEATURES	LIMITED CUTANEOUS SSc	DIFFUSE CUTANEOUS SSc
Skin involvement	Limited to fingers, distal to elbows, face; slow progression	Diffuse: fingers, extremities, face, trunk; rapid progression
Raynaud's phenomenon	Precedes skin involvement; associated with critical ischemia	Onset contemporaneous with skin involvement
Pulmonary fibrosis	May occur, moderate	Frequent, early and severe
Pulmonary arterial hypertension	Frequent, late, may be isolated	May occur, associated with pulmonary fibrosis
Scleroderma renal crisis	Very rare	Occurs in 15%; early
Calcinosis cutis	Frequent, prominent	May occur, mild
Characteristic autoantibodies	Anticentromere	Antitopoisomerase I (Scl-70)

Severe Raynaud → Ischemia + Gangrene
So Patient with Scleroderma can Present with acute Amputation due to severe Ischemia.
History alone is not enough to say that this is primary

Raynaud's Phenomenon

	Primary	Secondary
Sex	Female	Male and Female
Age of Onset	Menarche	Mid 20's or later
Finger Edema	No	Frequent
Periungual erythema	Rare	Frequent
Arthritis	No	Frequent
Nail fold capillaroscopy	Normal	Dilated tortuous capillaries
Autoantibodies	Absent ANA ENA	Present