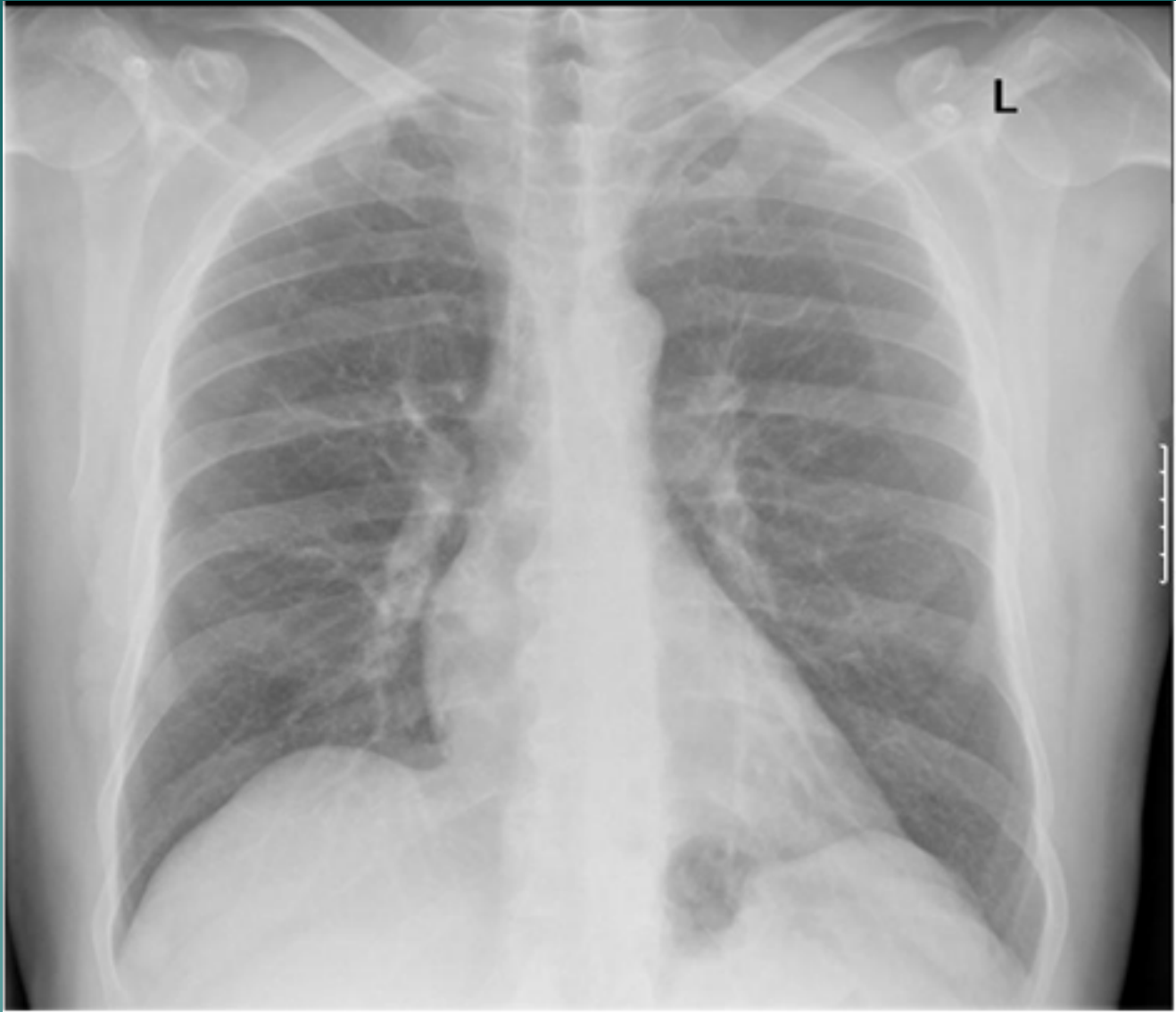


# Friday teaching

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R



LEFT






# Seronegative Arthritides


- ◆ Group of disorders characterised by
  - RF neg
  - HLA B27 associated
  - Inflammatory arthritis +/- spondylitis
  - Peripheral arthritis asymmetrical large Jts
  - Articular features, enthesitis, sacroilitis, dactylitis

! NB: Not to be confused with RF –ve RA (symmetrical small joint arthritis)

# Seronegative Arthritides

- ◆ Ankylosing Spondylitis
  - ◆ Reactive arthritis (Reiters syndrome)
  - ◆ Psoriatic arthritis
  - ◆ Enteropathic arthritis (IBD)
  - ◆ Undifferentiated spondyloarthropathy
- 

# Ankylosing Spondylitis

- ◆ Young men (15-40)
  - ◆ Prevalence 0.1%
  - ◆ Strong HLA B27 (95%)
  - ◆ Low back pain, stiffness
  - ◆ Predilection axial skeleton (SI/Spinal facets)
  - ◆ Good prognosis
  - ◆ Life expectancy unchanged
- 



# Pathogenesis

- ◆ Pathological lesion occurs entheses
  - (Sites ligamentous/tendon attachment to bone)
  - Calcification and ossification around entheses
  - Erosion of subligamentous bone
  - SI/ iliac crest/ischial tuberosity/greater trochanter/calcaneum
- ◆ Proliferative chronic synovitis (indistinguishable RA)
  - Subchondral bone/cartilage invaded, capsular fibrosis occurs; bony bridges syndesmophytes

# Clinical Features

## ◆ Articular

Sacroilitis

Thoracolumbar/  
lumbosacral junctions

Spondylitis (100%)

Peripheral Jt (35%)

## Extra articular

Apical lung Fibrosis

Anterior Uveitis (25%)

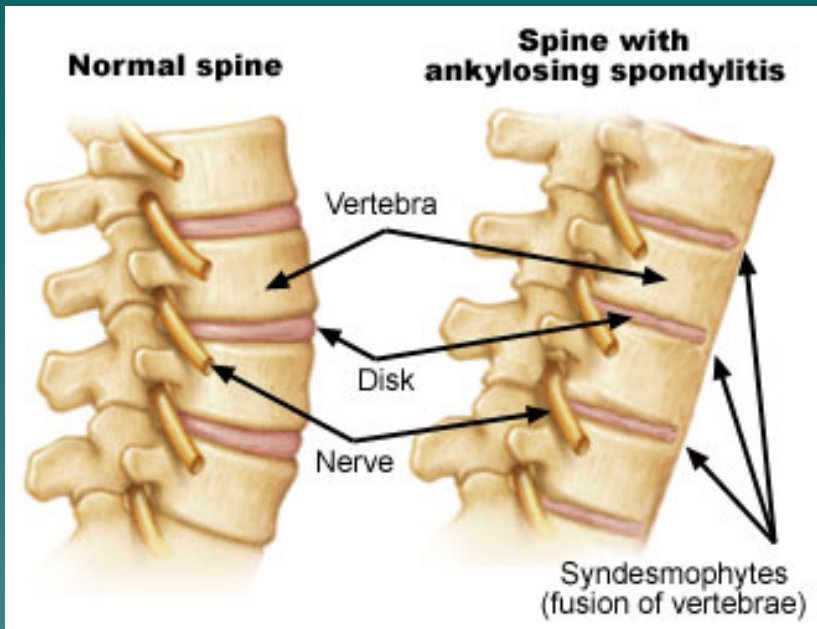
Aortic incompetence

Amyloidosis

# Radiological features

## ◆ Sacroilitis

- Earliest sign indistinct joint line
- Subchondral erosions → sclerosis → bony proliferation → Fusion
- Symmetrical



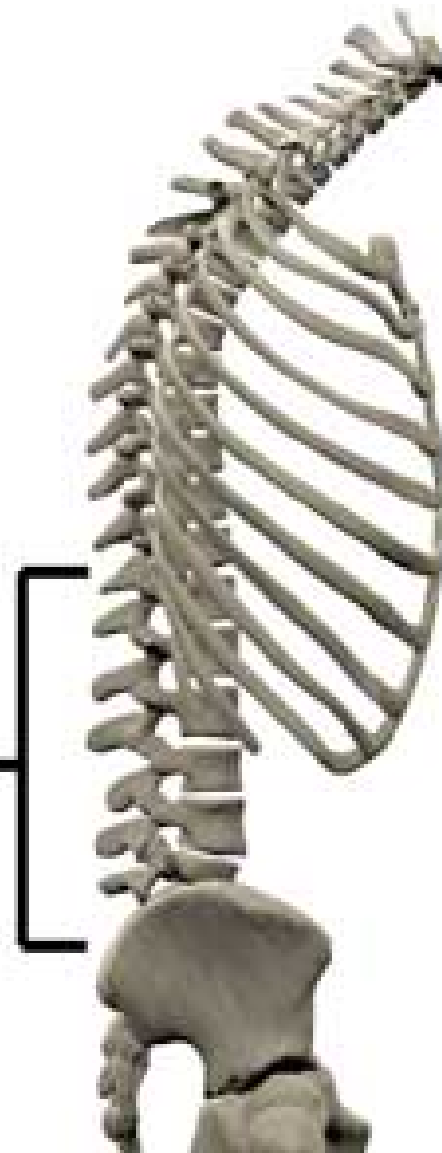
- Corner erosions/reactive sclerosis = **Squaring vertebrae**
- Ossification posterior interspinous lig (solid midline)
- **Syndesmophyte** (ossification outer fibres annulus fibrosus, bridge VB)
- **Bamboo spine** (fusion vertebral bodies)



**Normal  
S - Curve  
of Spine**



**Flattened  
Area of  
Lower  
Back**




# Radiological features

- ◆ Lungs
  - Upper lobe fibrosis (1%)
- ◆ Hands (30%)
  - MCP/PIP/DIP, joint space narrowing, osteopenia
  - Less striking RA
- ◆ DDX
  - Reiter syndrome/ Psoriatic arthritis (unilateral SI)

# Psoriatic Arthritis

- ◆ Occurs in 23% psoriasis typically 10yrs later
- ◆ 1 in 6 people PA precedes psoriasis
- ◆ Rare to have PA without psoriasis
- ◆ 1:1 M:F
- ◆ 30-50yrs

# Patterns

- ◆ Commonest;
    - Symmetrical polyarthritis small jts (RA)
    - DIPs
  - ◆ Asymmetric oligoarthritis  
upper/lower extremity
  - ◆ Sacroilitis, spondylitis
  - ◆ Arthritis mutilans (<5%)
- 



# Characteristic

- ◆ Nail pitting and onycholysis
  - ◆ Dactylitis (sausage shaped digits)
  - ◆ DIP joint arthritis
  - ◆ Telescoping
  - ◆ Enthesopathy
- 
- ◆ Systemic: ocular (30%) epi,conj,scl

# Radiological features

- ◆ Erosive arthropathy (DIP, PIP, MCP)
- ◆ Characteristic; Pencil in cup deformity
- ◆ Bony ankylosis
- ◆ Pathognomonic: Destruction of IP jt 1<sup>st</sup> toe + periosteal reaction
- ◆ Axial skeleton; sacroilitis, syndesmophytes, squaring VB (rare)
- ◆ DDX; RA (bilateral well defined symmetrical erosions, juxta-articular OP, MCP, PIP)



# Reiters Syndrome

- ◆ Form of reactive arthritis
- ◆ Arthritis 1-3wks post infection
- ◆ Post urethritis (chlamydia 50%)
- ◆ Post dysenteric (salmonella, campylo, shigella)
- ◆ Classic triad: Arthritis  
Conjunctivitis  
Urethritis
- ◆ 5:1 M:F
- ◆ Complete resolution 75%


# Features

- ◆ Asymmetric mono/polyarthrititis
- ◆ Lower extremities
- ◆ joint space narrowing particularly knees (50%)
- ◆ Distinctive 'fluffy' perisoteal reaction metatarsal necks, prox phalanges, ankle

# Enteropathic spondylitis

- ◆ 20% of people with IBD (Crohns > UC)
- ◆ Of those, 20% have spondylitis indistinguishable from idiopathic ankylosing spondylitis

# Undifferentiated Spondyloarthritis

- ◆ Not defined by set criteria
  - ◆ Low back pain, enthesitis, dactylitis
- 

# Summary

Ank Spond	PA	RA	Reiters
Axial Skeleton  Bilateral/symmetrical	DIP Bony ankylosis  Minimal Juxta-articular osteopenia  Upper/ Lower Extremities	MCP/PIP No Ankylosis  Juxta-articular osteopenia	Lower extremity