

Ankylosing Spondylitis

A chronic seronegative spondyloarthropathy leading to inflammatory arthritis of the axial skeleton and associated extra-articular features.

Ankylosing spondylitis spine examination signs

- Question mark posture (loss of lumbar lordosis and thoracic kyphosis)
- Sacroiliac joint tenderness
- Shober's test reveals lumbar flexion restriction
- <5cm chest circumference expansion on inspiration

Risk Factors

- HLA-B27 allele (positive in >95%)
- Age: peak onset 15-25 years
- Male gender
- Family history

Clinical features

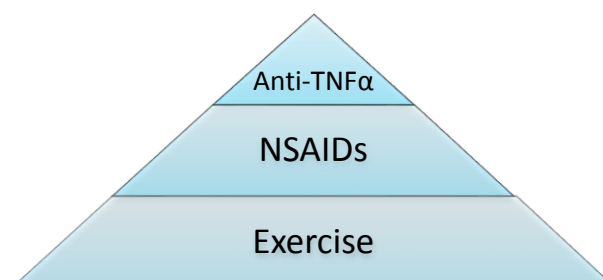
- Low back pain
 - Progressive
 - Relieved by exercise
 - Night pain
 - Radiates to sacroiliac joints (sacroilitis) and hips
- Morning stiffness
- Systemic features: Fever, weight loss, fatigue
- Extra-articular features **A's**:
 - Acute anterior uveitis
 - Aortitis
 - Aortic regurgitation
 - AV node block
 - Apical pulmonary fibrosis
 - Amyloidosis → glomerulonephritis
 - Achilles tendon (and other tendon) enthesitis

Investigations

- Clinical diagnosis
- X-Ray (can be normal, see below)
- MRI: more sensitive than X-Ray
- Bloods: FBC (anaemia), ESR (raised), CRP (raised), HLA B27 +ve

Management

- **Exercise and physiotherapy**: essential!
- **NSAIDs** (eg ibuprofen, naproxen, diclofenac). May need to try 2 or more. Consider a proton pump inhibitor in patients taking long-term NSAIDs (eg omeprazole).
- **TNF- α inhibitors** (e.g. etanercept) may be used when 2 or more NSAIDs failed
- **Other therapies**: steroid injections, short courses of steroids





'Bamboo spine': vertebral body fusion by marginal syndesmophytes



Sacroiliitis: loss of joint space and sclerosis at sacroiliac joints