

### What is Ankylosing spondylitis?

- Ankylosing spondylitis (AS) is a complex, immune-mediated disease characterized by lower back pain, stiffness and fatigue
- AS start prior to age 4 year in 90-95% of those affected
- Patients with AS have axial and entheseal inflammation, new bone formation and spinal fusion
- Extra articular manifestations are common and include psoriasis, anterior uveitis and inflammatory bowel disease
- Diagnosis is often delayed by up to 10 years

### What are the most common symptoms of AS?

- Inflammatory back pain (if 4 of 5 are present)
  - Onset of symptoms prior to age 40 years
  - Insidious onset (and present for more than 3 months)
  - · Improves with physical activity/ exercises
  - No improvement with rest
  - Pain at night/ early mornings
- **Peripheral enthesitis** (seen in one third of patients)
  - Achilles tendonitis, plantar fasciitis, tenderness over tibial tuberosity
- Peripheral arthritis
  - May be asymmetric
  - Can involve hips, shoulders, costo-sternal and costo-vertebral joints

#### What are the most common signs of AS?

- Limited flexion of lumbar spine- Schober/ modified Schober test (see image)
- **Sacroilitis** positive Patrick's or Faber test (see image)
- Chest expansion decreased in severe, long standing disease
- Synovitis, enthesitis or dactylitis may be seen in peripheral joints
- Psoriasis seen in about 9%
- Uveitis seen in up to 25%

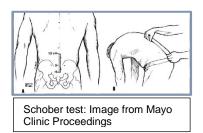




Image from Dr. Donald Corenman-Colorado spine doctor; www.neckandback. com



Enthesitis – image from alamy.com

## Who is at risk for AS?

- No one is sure what causes AS
- Genetic risk factors play a role HLA B27 antigen is most important.
- Commonly begins between age 20 and 30 years
- Men are twice as likely as women to have AS

# **Diagnostic criteria for AS**

Sacroilitis on imaging

plus

≥ 1 Spondyloarthropathy (SpA) features

SpA features

- Inflammatory back pain
- Arthritis, Enthesitis, Dactylitis
- Uveitis
- Psoriasis
- Crohn's / colitis
- Good response to NSAIDs
- Family history of SpA
- HLA B27
- Elevated CRP

≥ 2 other SpA features

HLA-B27

plus

Sacroilitis on imaging

• Active (acute) inflammation on MRI suggestive for of sacroilitis associated with SpA

• Definite radiographic sacrolitis according to modified New York criteria

