

Ankylosing Spondylitis Overview - Bombay Spine Clinic

- Ankylosing Spondylitis

What Is It?

- Ankylosing Spondylitis (AS) is a chronic inflammatory disease that primarily affects the spine and sacroiliac joints (joints connecting the spine to the pelvis). Over time, persistent inflammation can lead to stiffness, reduced spinal mobility and, in some patients, fusion of the spinal bones.
- Unlike mechanical back pain, Ankylosing Spondylitis typically affects younger individuals and is characterized by inflammatory back pain, which often improves with exercise and worsens with prolonged rest.
- Early diagnosis and treatment are important to reduce symptoms, maintain mobility and prevent long-term spinal deformity.
- Common Symptoms

Symptoms usually develop gradually over months or years.

- Early Symptoms
- Persistent low back pain
- Buttock pain
- Morning stiffness lasting more than 30 minutes
- Pain that improves with activity
- Pain that worsens after prolonged rest
- Night pain, especially in the second half of the night
- Progressive Symptoms
- Reduced flexibility of the spine
- Difficulty bending forward
- Stiffness of the neck
- Chest wall stiffness
- Reduced ability to take deep breaths
- Associated Symptoms
- Some patients may also develop:
- Hip pain
- Shoulder pain
- Heel pain
- Eye inflammation (Uveitis)

- Fatigue
- Advanced Symptoms
- Fixed stooped posture
- Kyphotic deformity
- Reduced spinal mobility
- Significant functional limitations

Causes & Risk Factors

- The exact cause of Ankylosing Spondylitis is not fully understood.
- It is considered an autoimmune/inflammatory condition in which the body's immune system causes inflammation around the spine and joints.
- Risk Factors
- Family history of Ankylosing Spondylitis
- Presence of HLA-B27 gene
- Male gender
- Young age (typically 15–40 years)
- Other inflammatory disorders
- Not everyone with the HLA-B27 gene develops Ankylosing Spondylitis.
- When Should You Seek Medical Advice?
- Medical evaluation is recommended if:
- Back pain persists for more than 3 months
- Morning stiffness is prolonged

Symptoms improve with exercise but worsen with rest

- Recurrent buttock pain occurs
- Flexibility gradually decreases
- Family history of Ankylosing Spondylitis is present
- Seek Prompt Medical Attention If:
- Significant spinal deformity develops
- Neurological symptoms appear
- Eye pain, redness or blurred vision occurs
- Progressive functional limitation develops
- How Is It Diagnosed?
- Clinical Examination
- Your doctor will evaluate:
- Spinal flexibility
- Posture
- Chest expansion

- Sacroiliac joint tenderness
- Associated joint involvement
- X-Ray
- May demonstrate:
 - Sacroiliitis
 - Syndesmophytes
 - Spinal fusion
 - Bamboo spine appearance (advanced disease)
- MRI
 - MRI is particularly useful in early disease and can detect:
 - Sacroiliac joint inflammation
 - Early spinal inflammation
 - Active disease before X-ray changes appear
- CT Scan
 - Occasionally used for detailed evaluation of structural changes.
- Blood Tests
 - May include:
 - ESR (Erythrocyte Sedimentation Rate)
 - CRP (C-Reactive Protein)
 - HLA-B27 testing
 - These tests help support the diagnosis but are not diagnostic on their own.

Treatment Options

- Non-Surgical Treatment
 - The primary goal is to control inflammation, maintain mobility and prevent deformity.

Treatment may include:

- Regular exercise
- Physiotherapy
- Posture training
- Stretching exercises
- Anti-inflammatory medications
- Disease-modifying medications
- Biologic therapies (in selected patients)
- Lifestyle modifications
 - Daily exercise is one of the most important components of treatment.
- Surgical Treatment

- Surgery is rarely required for Ankylosing Spondylitis itself.
- However, surgery may be considered when:
 - Severe spinal deformity develops
 - Spinal fractures occur
 - Neurological compression develops
 - Significant disability is present
- Possible surgical procedures include:
 - Corrective Deformity Surgery
 - Osteotomy Procedures
 - Spinal Stabilization Surgery
 - Hip Replacement Surgery (when severe hip involvement occurs)
- The choice of surgery depends on the underlying problem and severity.

Frequently Asked Questions

- 1. What is Ankylosing Spondylitis?
 - Ankylosing Spondylitis is a chronic inflammatory disease that affects the spine and sacroiliac joints.
- 2. How is it different from ordinary back pain?
 - Inflammatory back pain typically improves with activity and worsens with rest, unlike mechanical back pain.
- 3. What is the HLA-B27 test?
 - HLA-B27 is a genetic marker that is commonly associated with Ankylosing Spondylitis.
- 4. Can Ankylosing Spondylitis be cured?
 - There is currently no cure, but modern treatments can effectively control symptoms and slow disease progression.
- 5. Is exercise important?
 - Yes. Regular exercise is one of the most important aspects of long-term management.
- 6. Can Ankylosing Spondylitis cause spinal fusion?
 - In advanced cases, inflammation may lead to fusion of spinal segments.
- 7. Can it affect organs outside the spine?
 - Yes. Some patients may develop eye inflammation, bowel disease or other systemic manifestations.
- 8. Is MRI useful?
 - Yes. MRI is particularly valuable for diagnosing early disease before changes become visible on X-rays.
- 9. Can women develop Ankylosing Spondylitis?
 - Yes. Although traditionally considered more common in men, women can also be affected.
- 10. When should I suspect Ankylosing Spondylitis?
 - Persistent back pain before the age of 40, morning stiffness and improvement with exercise should raise suspicion.
- Related Conditions
 - Sacroiliitis

- Kyphosis
- Osteoporosis
- Mechanical Low Back Pain (Lumbago)
- Spinal Fracture
- Scoliosis
- When Should You Consult a Spine Specialist?
- If you have persistent back pain, prolonged morning stiffness, reduced spinal flexibility or symptoms suggestive of inflammatory back pain, early evaluation is recommended.
- Prompt diagnosis and treatment can help maintain mobility, prevent deformity and improve long-term quality of life.
- Need Expert Advice?
- Book a consultation with Dr. Siddharth Katkade or upload your MRI, X-rays or reports for review through our Patient Resource Centre.

Need Clinical Evaluation or Second Opinion?

This educational document was prepared by **Dr. Siddharth Katkade**. For appointments or to share MRI scan reports for clinical review, call **+91 88507 73095** or consult at Byculla (E) / Khar (W) clinics.