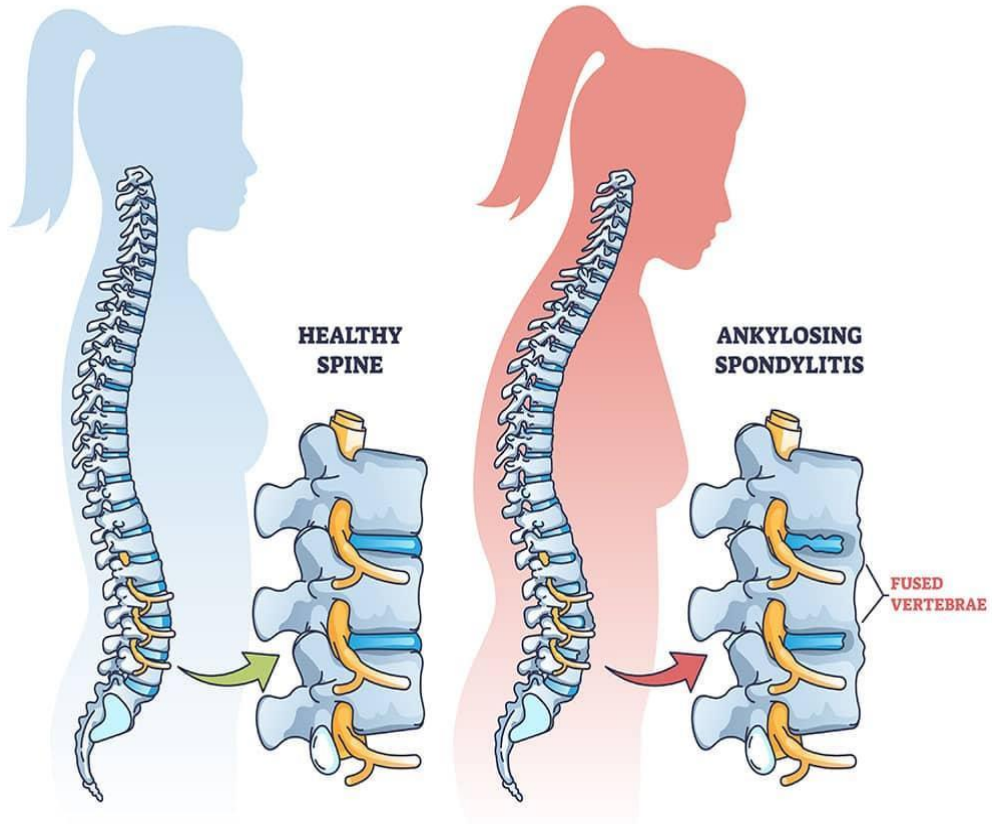


ANKYLOSING SPONDYLITIS



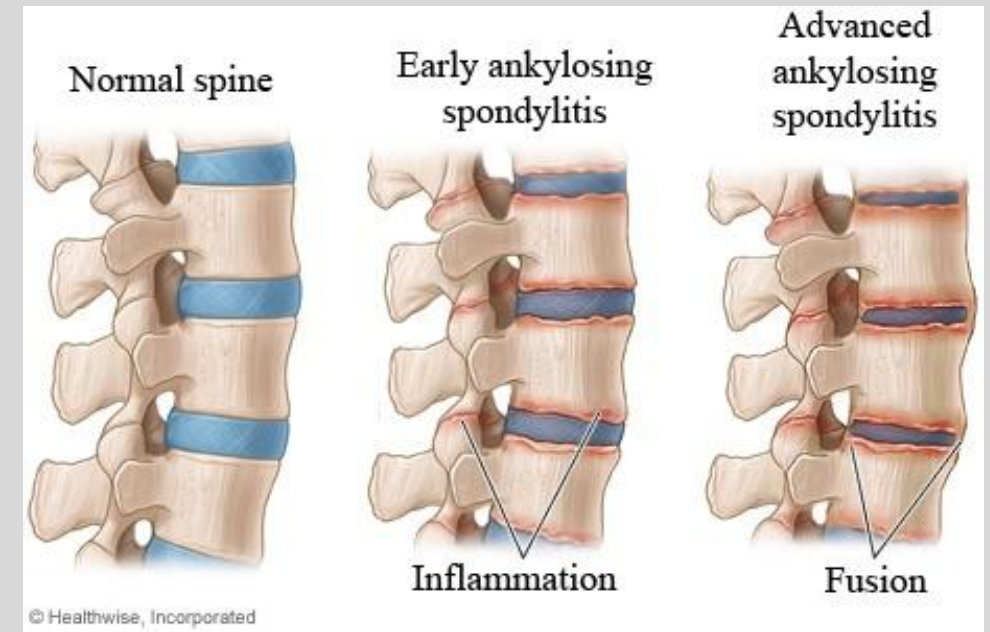
SPONDYLITIS

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Spondylitis is an inflammation of the vertebrae. It is a clinical syndrome resulting from degeneration of intervertebral discs and facet joints.

Ankylosing spondylitis is a chronic inflammatory disease of the joints of the axial skeleton, manifested clinically by pain and progressive stiffening of the spine.

- The age at onset is usually in the late teens or early 20s.
- The incidence is greater in males than in females.
- Low back pain due to mechanical causes, disk disease, and degenerative arthritis is very common.
- Onset of back pain prior to age 30 and an “inflammatory” quality of the back pain (ie, profound morning stiffness and pain that improve with activity) should raise the possibility of ankylosing spondylitis.



Symptoms and Signs

- The onset is usually gradual, with intermittent bouts of back pain that may radiate into the buttocks.
- Pain and stiffness with decreased range of movement of gradual onset.
- Neck pain may radiate to occiput, scapular area and down to one or both arms (may be associated with paraesthesias).
- Back pain is usually diffuse and may radiate up to knees through back of thighs.
- The back pain is worse in the morning and associated with stiffness that lasts hours, Pain and stiffness improve with activity.
- As the disease advances, symptoms progress back motion becomes limited, with the normal lumbar curve flattened and the thoracic curvature exaggerated.
- In advanced cases, the entire spine becomes fused, allowing no motion in any direction.
- Enthesopathy, a hallmark of the spondyloarthropathies, can manifest as swelling of the Achilles tendon at its insertion, plantar fasciitis (producing heel pain), or dactylitis, which is fusiform “sausage” swelling of a finger or toe.

Diagnosis

- The ESR is elevated, but serologic tests for RA factor and anti-CCP antibodies are negative.
- Radiological narrowing of one or more intervertebral spaces, osteophytes and subchondral sclerosis are the hallmark.
- The earliest radiographic changes are usually in the sacroiliac joints. In the first 2 years of the disease, sacroiliac changes may be detectable only by MRI.
- Patients who have symptoms and findings of ankylosing spondylitis and sacroiliitis evident by MRI but not by conventional radiographs are classified as having nonradiographic axial spondyloarthritis.
- With disease progression, erosion and sclerosis of the sacroiliac joints become evident on plain radiographs.
- The sacroiliitis of ankylosing spondylitis is bilateral and symmetric.
- Inflammation where the annulus fibrosus attaches to the vertebral bodies initially causes sclerosis (“the shiny corner sign”) and then characteristic squaring of the vertebral bodies.
- The term “bamboo spine” describes the late radiographic appearance of the spinal column in which the vertebral bodies are fused by vertically oriented, bridging syndesmophytes formed by the ossification of the annulus fibrosus and calcification of the anterior and lateral spinal ligaments.

Treatment

Non- pharmacological treatment

- In acute painful situation rest, moist heat in cold weather and light massage (improves tone, circulation and elasticity) to paraspinal muscles.
- Cervical traction in the position of maximum comfort to neck for 10-15 minutes.
- Ultrasonic exposure on painful trigger points in cervical and shoulder muscles.
- Inter ferential therapy (IFT) for acute neck and back pain.
- Removable soft cervical collar/back corset/ back belt for symptomatic relief.
- In chronic pain mobilization and strengthening exercises, moist heat and cervical traction.
- All patients should be referred to a physical therapist for instruction in postural exercises and a safe exercise program.

Pharmacological treatment

- NSAIDs remain first-line treatment of ankylosing spondylitis and may slow radiographic progression of spinal disease.
- TNF inhibitors have established efficacy for NSAID-resistant axial disease; responses are often substantial and durable.
- Secukinumab and ixekizumab inhibit the proinflammatory cytokine IL-17A and are also highly effective and FDA approved for the treatment of ankylosing spondylitis.
- Corticosteroids have minimal impact on the arthritis—particularly the spondylitis—of ankylosing spondylitis and can worsen osteopenia.

Patient Education

- ❑ In cervical spondylosis avoid prolonged desk work, if must, then intermittent rest is required and proper writing, typing, sitting posture and care of the neck.
- ❑ In lumbar spondylosis explain the patient how to manage weight since extra weight puts greater stress on the back muscles and to maintain proper body alignment while standing with feet slightly apart.
- ❑ When standing for long periods, use a small stool to keep one foot up with knee bent. Do not tense up or concentrate on standing up straight, just stand naturally. Try to avoid carrying heavy bags on shoulders.
- ❑ Care of back while sitting by using well designed fully adjustable chair to provide plenty of support to the lower back. If chair is uncomfortable use a rolled up towel or small pillow to support the back.
- ❑ When sitting for long periods rest your feet on low stool and use arm rests to support weight of your body. Try not to sit in the same position for long periods. If prolonged sitting is must take rest for a minute or two every hour.

- ❑ To lift weight cautiously by keeping the back as much upright (vertical) and straight (not hunched over) as one can. Not to bend over at waist to pick up the object, instead squat, get under or next to object not on top of it. Lift with your leg muscles rather than back or abdominal muscles. Hold the object close to your body while lifting and carrying and do not twist your body.
- ❑ To sleep safely on a firm bed. While sleeping supine legs should be supported with pillows. Not to sleep on your stomach. Sleeping on your side with knees bent and hips tilted forward is probably the best.
- ❑ Refer to a higher centre in case of severe pain that disturbs sleep/not responding to conservative treatment for more than 2 weeks/associated with severe restriction of neck or back movements or torticollis or sciatic pain or constitutional symptoms/neurological symptoms with back or neck pain.

thank you