

Ankylosing Spondylitis and the Spine

Ankylosing spondylitis is a chronic inflammatory arthritis that particularly affects the spine and the joints where the spine meets the pelvis. Over time it can stiffen and, in some people, fuse the spine. It is led by rheumatology — but from a spinal-surgery point of view there is one overriding message: a fused spine is brittle and can break with minor force, so new pain after any injury needs urgent assessment.

THE BIG PICTURE

Inflammation, stiffening, and a fragile fused spine

Chronic inflammation at the joints and ligament attachments of the spine can, over years, lead to new bone formation that stiffens and may fuse the spine (the bamboo-spine appearance). It usually begins in early adulthood and is linked to the marker HLA-B27. Good treatment can control the inflammation and protect posture.

IN PLAIN TERMS

Ankylosing spondylitis is an inflammatory arthritis of the spine and pelvis that causes stiffness and, over years, can fuse the spine. A fused spine is fragile and needs special care.

1 The most important safety point — fracture risk

A fused spine is rigid and brittle and behaves like a single long bone, so even a minor, low-energy injury can cause a fracture. These fractures are often unstable, carry a high risk of spinal cord injury, and are easily missed. The rule is firm: in anyone with ankylosing spondylitis, new or changed spinal pain after even trivial trauma is a fracture until proven otherwise, and needs urgent **CT** (not just an X-ray, which can be falsely reassuring).

SEEK URGENT / EMERGENCY REVIEW

New or worsening spinal pain after ANY injury, however minor. Emergency review for any new weakness, numbness, walking difficulty, or bladder or bowel disturbance. Same-day eye assessment for a painful, red, light-sensitive eye.

2 Symptoms and diagnosis

The hallmark is inflammatory back pain: gradual onset before forty, marked morning stiffness, easing with exercise rather than rest, and night pain that eases on getting up. Diagnosis, led by rheumatology, uses this pattern with examination, the HLA-B27 test, inflammatory markers, X-rays of the sacroiliac joints, and MRI to detect early inflammation.

3 Treatment

Medical treatment — the foundation

Controlling the inflammation protects the spine. The cornerstone is regular, structured exercise and physiotherapy — rest is not the answer, movement helps. Anti-inflammatory medicines are first-line; modern biologic therapies (such as TNF and IL-17 inhibitors) control active disease and may slow progression. Not smoking and bone-health checks matter too.

Spinal surgery

Reserved for specific problems: urgent stabilisation of fractures in the fused spine; specialised corrective surgery (osteotomy) for a severe, fixed forward stoop to restore an upright posture and forward gaze; and relieving any pressure on the cord. This is major, specialised surgery.

REASSURANCE

With modern medicines and regular exercise, many people maintain good function and a full, active life. Vigilance about the fracture risk is part of staying safe.

THE KEY MESSAGE

Ankylosing spondylitis is an inflammatory arthritis of the spine and pelvis that can stiffen and fuse the spine. It is led by rheumatology, with exercise and anti-inflammatory or biologic medicines as the foundation. The overriding spinal message: a fused spine is brittle and fractures easily, so new pain after any injury needs urgent CT assessment. Surgery has a role in stabilising fractures, correcting severe fixed deformity, and relieving cord pressure.

A NOTE BEFORE YOU START

This information is for general education and does not replace the advice of your clinical team. Please use it to ask better questions, not to make decisions on your own.

READ MORE & GET IN TOUCH

For more on this and other spinal conditions, visit **MohammedMadi.com**.

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