

AXIAL SPONDYLOARTHRITIS (Axial SpA)

- an uncommon cause of a common symptom

Key practice points:

- Axial SpA is an umbrella term for a group of inflammatory conditions that primarily affect the spine and sacroiliac joints. There are two main subtypes that exist on a continuum of disease:
 - 1. **Non-radiographic axial SpA** where inflammation is affecting soft tissue, causing pain, but has yet not caused direct damage to the axial joints; and
 - 2. Ankylosing spondyloarthritis where there are significant radiographic abnormalities in the axial joints
 - Despite differences in radiographic features between these subtypes, the symptoms, signs and disability experienced by patients can be the same, and the radiographic distinction does not change the initial approach to management
- Chronic low back pain is a common presenting feature in primary care; however, axial SpA is likely to be the cause in a very small number of these patients it affects less than 1% of the population overall
 - Distinguishing features that should increase suspicion of an inflammatory cause of back pain include: family history (particularly if
 other family members have been diagnosed with an HLA-B27-related condition, e.g. inflammatory bowel disease [IBD] or psoriatic
 arthritis), younger age of onset, raised CRP, nocturnal pain, morning stiffness lasting >30 minutes, improvement with exercise and
 response to NSAIDs
 - Important differential diagnoses of chronic back pain to consider based on the patient's history include physical conditions such
 as muscle pain, fracture, herniated disc, spinal stenosis, as well as biopsychosocial factors that may contribute to the perception of
 pain
- The sacroiliac joint stress test (Figure 1) and the Schober test (Figure 2) are useful approaches to assess the patient's pain localisation and spinal mobility, respectively; the physical assessment should also look for features of systemic or extra-articular conditions, as these are often present, e.g. enthesitis, peripheral arthritis, dactylitis, uveitis, psoriasis, IBD
- Laboratory testing typically includes CRP and HLA-B27 genetic testing; stool culture and chlamydia PCR may be considered
 if reactive arthritis is a possible differential diagnosis, or testing for autoantibodies may be useful if there is suspicion of other
 rheumatic conditions
 - Imaging can be informative, but this is usually co-ordinated in secondary care
- If there is a high clinical suspicion of axial SpA, the patient should be referred to a rheumatologist who will confirm the diagnosis, establish a treatment plan, and inform on subsequent monitoring requirements (e.g. disease activity scoring with a tool such as BASDAI, medicine-specific monitoring, cardiovascular risk assessment)
 - A NSAID should be prescribed while awaiting a rheumatology appointment, e.g. naproxen; when used alongside regular exercise
 and other lifestyle interventions, NSAIDs are effective for controlling disease activity and improving the quality of life in many
 patients
 - Biologics, e.g. TNF-inhibitors, may be considered in a limited number of patients if at least two different NSAIDs have been trialled and are ineffective
- Although the disease course is highly variable for patients with axial SpA, early treatment is associated with better outcomes, e.g. reduced skeletal damage and maintenance of mobility

Abbreviations: BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; CRP, C-reactive protein; HLA-B27, human leukocyte antigen B27; NSAID, non-steroidal anti-inflammatory drug; TNF, tumour necrosis factor.

UPDATE SERIES www.bpac.org.nz





Sacroiliac joint stress test

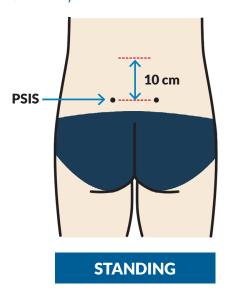


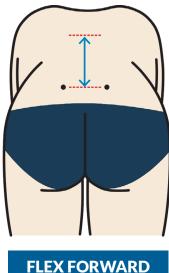
- 1. Patient lies supine
- 2. Examiner applies downwards force to the anterior superior iliac spines (ASIS)
- 3. Initially apply force continuously for up to 30 seconds in an attempt to reproduce the patient's reported symptoms (a positive test)
- 4. If negative, apply a repeated vigorous force in an attempt to reproduce the patient's pain

Figure 1. The sacroiliac joint stress test.

Schober test

- assessing spinal mobility





FLEX FORWARD

- 1. Patient is standing
- 2. Examiner marks both the posterior superior iliac spines (PSIS) and then draws a horizontal line at the centre of the marks
- 3. A line is marked 10 cm above this line
- 4. The patient then flexes forward (as if attempting to touch their toes), and the examiner re-measures the distance between the top and bottom line
- 5. An increase of less than 4.5 cm is a positive test and may indicate axial SpA (although for some people this could be their normal range of motion)

Figure 2. The Schober test.