








Axial Spondyloarthritis in Women*

axSpA is a painful chronic inflammatory disease that primarily affects the spine and sacroiliac joints (SIJs)^{1,2}

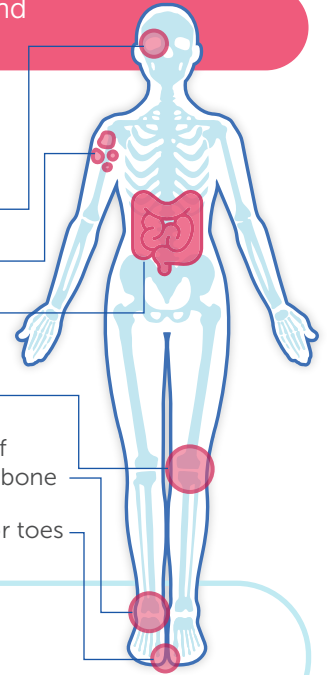
axSpA has two classifications: non-radiographic axSpA (**nr-axSpA**) and radiographic axSpA, also known as ankylosing spondylitis (**AS**)³

Patients with nr-axSpA and AS experience a significant and similar disease burden^{2,4}

-  Inflammatory back pain
-  Severe stiffness and reduced mobility
-  Fatigue
-  Difficulty sleeping
-  Restricted social participation
-  Impaired work and home productivity
-  Decreased quality of life

...and share common clinical features^{2,4-8}...

- Uveitis:** Eye inflammation
- Psoriasis:** Skin disease
- Inflammatory bowel disease:** Chronic inflammation of the digestive tract
- Peripheral arthritis**
- Enthesitis:** Inflammation of the points of insertion of tendons and ligaments into bone
- Dactylitis:** Inflammation of the fingers or toes



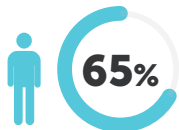
LEADING SYMPTOM:

Chronic inflammatory back pain that improves with exercise, but not with rest, and is accompanied by prolonged morning stiffness^{1,4,8}

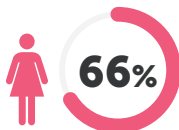
PREVALENCE:

Similar to rheumatoid arthritis, 0.2–1.4% of adults have axSpA⁹⁻¹¹

Why has AS historically been viewed as a male disease?¹²



Overall, women may have less structural damage in both the SIJs and the spine, making **AS more prominent in men.**¹²⁻¹⁴



But... **nr-axSpA is more prevalent in women.**¹²⁻¹⁴

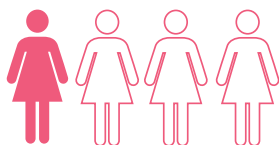
Despite differences in sacroiliac or spinal radiographic progression...

The burden of nr-axSpA and AS on patients is similar¹²

Women may have a greater disease burden than men, regardless of classification¹²

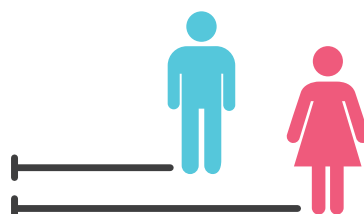
Radiographic sacroiliitis may take years to develop or may never develop in women...

- Diagnosis of axSpA in women is frequently delayed or never made¹²



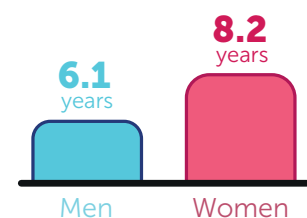
~25%

of women were initially misdiagnosed¹⁵



Women have longer delay to diagnosis than men^{7,13}

Time to diagnosis¹⁶



Women with axSpA present differently to men and may experience:^{15,17}

Greater disease activity^{17,18}
(fatigue, total back pain, and longer duration of morning stiffness)[†]

Greater widespread pain¹⁵

More fatigue¹⁸

Greater peripheral and upper axial involvement^{12,19,20}

Overall poorer quality of life
(depression and anxiety, neuropathic pain, fatigue, functional limitations)^{12,18,19}

Greater impaired work productivity⁸
(worse pain and fatigue; more missed work/less likely to work full time; overall greater work and activity limitations)



More can be done to provide improved long-term outcomes for women with axSpA.



Earlier diagnosis and earlier treatment can help slow radiographic progression.^{2,4,21}



MRI allows for the detection of early inflammatory changes – often several years before the appearance of sacroiliitis on X-ray.^{1,22}



Improvements in **awareness and diagnosis** have reduced the gender gap in axSpA.²³

START BY SCREENING²⁴

Ask your patient:

- Do they have chronic back pain that has lasted 3 or more months?
- Did the pain start before they were 45 years of age?

AND

Does your patient present with one or more of the following?

- Inflammatory back pain (including morning stiffness that lasts longer than 30 minutes⁴)[†]
- Human leucocyte antigen-B27 positivity
- Sacroiliitis on imaging, if available (on X-rays or MRI)[‡]
- Peripheral manifestations (in particular arthritis, enthesitis and/or dactylitis)[‡]
- EAMs (psoriasis, inflammatory bowel disease and/or uveitis)[‡]
- Positive family history for SpA[‡]
- Good response to NSAIDs[‡]
- Elevated acute phase reactants[#]



If your patient has had chronic back pain that has lasted 3 or more months that started before the age of 45 **AND** they have at least one of these features, consider referring them to a rheumatologist.

Abbreviations: AS=ankylosing spondylitis; axSpA=axial spondyloarthritis; EAM=extra-articular manifestation; MRI=magnetic resonance imaging; nr-axSpA=non-radiographic axSpA; NSAIDs=non-steroidal anti-inflammatory drugs; SIJs=sacroiliac joints.

* For the purposes of this tool, "women" refers to people of the female sex.

† As measured by BASDAI (Bath Ankylosing Spondylitis Disease Activity Index).¹⁷

‡ Any set of criteria, preferably ASAS definition of inflammatory back pain: at least four out of five parameters present: (1) age at onset ≤ 40 years; (2) insidious onset; (3) improvement with exercise; (4) no improvement with rest; and (5) pain at night (with improvement upon getting up).²⁴

§ Only if imaging available, not recommended as a routine screening parameter.²⁴

¶ According to the definition applied in the classification criteria for axial spondyloarthritis.²⁴

Arthritis: past or present active synovitis diagnosed by a physician.

Enthesitis (heel): past or present spontaneous pain or tenderness at examination of the site of the insertion of the Achilles tendon or plantar fascia at the calcaneus.

Dactylitis: past or present dactylitis, diagnosed by a physician.

Extra-articular manifestation: past or present psoriasis, inflammatory bowel disease and/or uveitis anterior, confirmed by a physician.

Good response NSAIDs: 24–48 h after a full dose of a NSAID the back pain is not present any more or is much better.

Family history of SpA: presence in first-degree (mother, father, sisters, brothers, children) or second-degree (maternal and paternal grandparents, aunts, uncles, nieces and nephews) relatives of any of the following: (1) ankylosing spondylitis; (2) psoriasis; (3) acute uveitis; (4) reactive arthritis; and (5) inflammatory bowel disease.

C-reactive protein serum concentration or erythrocyte sedimentation rate above upper normal limit after exclusion of other causes for elevation.²⁴

References: 1. Sieper J and van der Heijde D. *Arthritis Rheum* 2013;65(3):543–51. 2. Deodhar A, et al. *Arthritis Rheumatol* 2016;68(7):1669–76. 3. Deodhar A, et al. *Ann Rheum Dis* 2016;75(5):791–94. 4. Strand V and Singh J. *Mayo Clin Proc* 2017;92(4):555–64. 5. Sieper J, et al. *Nat Rev Dis Prim* 2015;9(1):15013. 6. Wallman J, et al. *Arthritis Res Ther* 2015;17:378. 7. de Winter J, et al. *Arthritis Res Ther* 2016;18:196. 8. Mease PJ, et al. *J Rheumatol* 2021;48:1528–36. 9. Reveille J, et al. *Arthritis Care Res* 2012;64(6):905–10. 10. Hamilton L, et al. *BMC Musculoskelet Disord* 2015;21(16):392. 11. Spector T. *Rheum Dis Clin North Am* 1990;16(3):513–37. 12. Wright GC, et al. *Semin Arthritis Rheu* 2020;50:687–94. 13. Baraliakos X and Braun J. *RMD Open* 2015;1:e000053. 14. Boonen A, et al. *Semin Arthritis Rheum* 2015;44(5):556–62. 15. Slobodin G, et al. *Clin Rheumatol* 2011;30(8):1075–80. 16. Gossec L, et al. *Arthritis Rheumatol* 2018;70(Suppl 10). Abstract 638. 17. Rusman T, et al. *Curr Rheumatol* 2018;20(6):35. 18. Tournadre A, et al. *Arthritis Care & Research* 2013;65(9):1482–89. 19. Lee W, et al. *Ann Rheum Dis* 2007;66:633–38. 20. Neuweschwander R, et al. *Arthritis Research & Therapy* 2020;22:233. 21. Haroon N, et al. *Arthritis Rheum* 2013;65(10):2645–54. 22. Rudwaleit M, et al. *Ann Rheum Dis* 2009;68(6):777–83. 23. Mease P and Khan M. Elsevier Health Sciences, 2019. ISBN 0323568017. 24. Poddubnyy D, et al. *Ann Rheum Dis* 2015;74:1483–87.