

BIOLOGIC TREATMENTS FOR AXIAL SPONDYLOARTHRITIS



WHAT IS AXIAL SPONDYLOARTHRITIS?

Axial spondyloarthritis is a type of **inflammatory arthritis** that causes pain and inflammation in the spine and the joints that connect the bottom of the spine to the pelvis (**sacroiliac joints**). It is a **long-term** condition and symptoms often first appear between 15 and 40 years of age. The cause of axial spondyloarthritis is **unknown**² but having family members with this condition may increase your risk of developing it.

Doctors use **imaging** to assess how much damage has occurred to the bones and joints. Axial spondyloarthritis can be divided into **2 types** depending on whether bone changes can be seen on X-rays:

Ankylosing spondylitis (AS)

• More common in men



 Bone changes can be seen on X-rays



Non-radiographic axial spondyloarthritis (nr-axSpA)

More common in women³



Bone changes **cannot** be seen on X-rays but can be seen on magnetic resonance imaging (MRI)



DID YOU KNOW?

Although nr-axSpA is sometimes considered to be an early stage of AS, for many people, their condition may not progress to where spine and joint changes are seen on x-ray.

SYMPTOMS OF AXIAL SPONDYLOARTHRITIS

The **sacroiliac joints** where the spine

connects to the hip

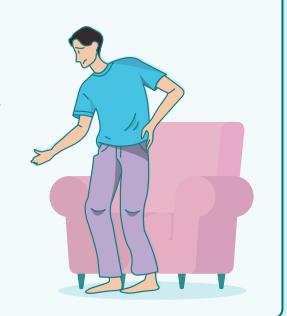
The most common symptoms of axial spondyloarthritis are pain and stiffness in the back, that:

- comes on gradually over weeks or months
- is worse in the second half of the night and can wake you up
- is worse after rest but feels better after activity and exercise
- · may involve pain in the buttocks that shifts between the left and right side

Symptoms **vary** and can come and go. There may be times when you have few or no symptoms (**remission**) and times when symptoms are more active (**flares**).⁴ Symptoms of a flare may include:

- Extreme tiredness (fatigue)
- Frequent diarrhoea
- Pain in the groin, heels, knees or shoulders
- · Pain, stiffness and swelling of other joints
- Sausage-like swelling of toes or fingers
- Scaly skin rashes
- Swelling and redness of the eye

Long-term inflammation can lead to abnormal bone growth, causing the bones in the spine to **fuse** (**ankylosis** or "bamboo spine"). This **reduces** the flexibility of the back and may affect the posture of some people.



HOW IS AXIAL SPONDYLOARTHRITIS TREATED?

Abnormal bone growth from axial spondyloarthritis cannot be reversed, but there are things that you can do to **control** symptoms. Treatments are also available to help you control inflammation and **prevent** damage to your bones and joints.

LEARN ABOUT YOUR CONDITION

Understanding axial spondyloarthritis allows you to make informed decisions about your healthcare and actively manage it.



EXERCISE REGULARLY

Exercising daily can improve symptoms including stiffness, pain, fatigue, breathing capacity and posture. It also helps increase your flexibility and range of movement, so it's easier to do many everyday tasks, and can boost your mood, help with weight control and improve sleep.

TAKE ANTI-INFLAMMATORY DRUGS

Non-steroidal anti-inflammatory drugs (NSAIDs) can alleviate pain, inflammation and stiffness. Some people may need to take them regularly, while others will only take them as needed.



TAKE BIOLOGICS/BIOSIMILARS

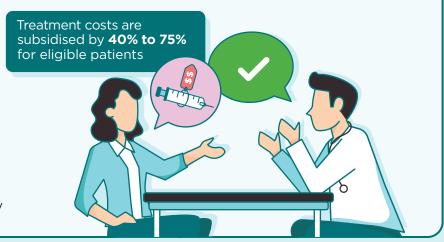
If symptoms do not improve with NSAIDS, doctors may recommend targeted therapies such as biological disease-modifying anti-rheumatic drugs (biologics) or biosimilars.⁵ These treatments "target" parts of the immune system that produce inflammation and slow down the rate of bone damage.



SUBSIDISED BIOLOGICS

Drug name (subsidised brand) 6,7,8,9

- Adalimumab biosimilar (Amgevita)*
- Infliximab biosimilars (Ixifi, Remsima)*
- Ixekizumab (Taltz)*
- Etanercept (Enbrel)**
- Golimumab (Simponi)
- Secukinumab (Cosentyx)
- * for ankylosing spondylitis only
- ** for non-radiographic axial spondyloarthritis only



KEY MESSAGES

Many subsidised biologic treatments are available to manage axial spondyloarthritis. Discuss with your **doctor** which treatment is suitable for you by considering the type of symptoms you have, if your condition has improved with previous treatments, your treatment preferences and any affordability concerns. You can also speak to a **medical social worker** if you need further financial assistance for any treatments, or you can reach out to **local patient support groups**¹⁰ if you want to meet with people with axial spondyloarthritis and share your experiences.

Sources

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 Boonen A et al., The burden of non-radiographic axial spondyloarthritis, 2015
- 4. National Health Service (NHS), UK, Ankylosing Spondylitis Symptoms, 2023
- 5. ACE Patient Factsheet on Biosimilars: A Safe, Effective and More Affordable Option for Patients, 2022
- 6. ACE Technology Guidance on Ixekizumab and secukinumab for treating active non-radiographic axial spondyloarthritis, 2023
- 7. ACE Technology Guidance on Infliximab biosimilar for treating inflammatory conditions, 2022
- 8. ACE Technology Guidance on Golimumab for the treatment of rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and ulcerative colitis, 2021
- $9. \ \ ACE\ Technology\ Guidance\ on\ \textit{Adalimumab for treating inflammatory conditions}, 2020$
- 10. National Arthritis Foundation



The Agency for Care Effectiveness (ACE) was established by the Ministry of Health (Singapore) to drive better decision-making in healthcare through health technology assessment (HTA), clinical guidance and education. It publishes guidances on diagnosing, treating, and preventing different medical conditions based on the latest research information available worldwide. This factsheet is not, and should not be regarded as, a substitute for professional or medical advice. Please seek the advice of a qualified healthcare professional about any medical condition. @Agency for Care Effectiveness, Ministry of Health, Republic of Singapore. All rights reserved. Reproduction of this publication in whole or in part in any material form is prohibited without the prior written permission of the copyright holder.