Ankylosing spondylitis

Summary

- Ankylosing spondylitis (AS) is a type of inflammatory arthritis that mainly affects the joints of the spine.
- There is no cure for AS, however it can be effectively managed with medication and lifestyle changes.
- If you have AS, the most important thing you can do is regular exercise, which helps to keep your spine mobile and flexible.

Ankylosing spondylitis (AS) is a type of inflammatory arthritis that mainly affects the spine.
Symptoms of AS include back pain, stiffness and reduced mobility in the spine.
Ankylosing spondylitis commonly affects the sacroiliac joints. These joints connect the base of the spine (sacrum) to your pelvis. Other joints such as the hips and shoulders can also be affected, as can the eyes, skin, bowel and lungs.
Ankylosing spondylitis affects men more often than women. The symptoms usually appear between the ages of 15 and 45 years. While there’s currently no cure for AS, there are many things you can do to help control your symptoms.
Ankylosing spondylitis is an autoimmune disease. That means that it occurs as a result of a faulty immune system. Instead of identifying foreign bodies (such as viruses and bacteria), and attacking them to keep you healthy, your immune system mistakenly attacks healthy tissue in and around your joints causing ongoing inflammation and pain.
As a result of this inflammation, new bone may grow around the joints in the spine. This can lead to permanent stiffness in the back and neck of some people with AS. In severe cases this extra bone can fuse the bones of the spine together; however, this can usually be prevented by starting appropriate treatment as early as possible.
Most people with AS can lead full and active lives, because the condition can be well controlled.

Symptoms of ankylosing spondylitis
The symptoms of AS vary from person to person. The most common symptoms are:
- pain and stiffness in the back, buttocks or neck, especially in the morning. The symptoms are often worse after rest and relieved by exercise.
- pain in tendons (which connect muscles to bones) and ligaments (which connect bones to each other), often felt as pain at the front of the chest, back of the heel or underneath the foot
- fatigue (extreme tiredness).
Symptoms may change from day to day and can become more intense. When this happens it is known as a flare. Flares can be very unpredictable and can come on with little warning.

Causes of ankylosing spondylitis
The cause of AS is unknown, but genes are thought to play a role. You are more likely to get AS if you have a history of it in your family.
Most people with AS have the gene called HLA-B27, however, this gene can also be found in people who don’t have AS. As the presence of this gene doesn’t automatically lead to the development of AS, other factors are thought to be involved.

Diagnosing ankylosing spondylitis
Early diagnosis is important so that treatment can be started as soon as possible.
To be diagnosed with AS there needs to be evidence of changes to your sacroiliac joints, in addition to other clinical criteria.

You may undergo a number of tests including:

- medical history
- physical examination
- scans such as x-ray, CT (computed tomography) or MRI (magnetic resonance imaging)
- blood test
- genetic testing.

These tests are generally organised by your doctor or rheumatologist (a doctor who specialises in conditions that affect muscles, bones and joints, or musculoskeletal conditions). They’ll explain what the tests are looking for and what the results mean.

**Treating ankylosing spondylitis**

There is no cure for AS. Treatment aims to manage your pain, reduce the risk of complications and improve your quality of life. Your rheumatologist will tailor your treatment to your specific symptoms and the severity of your condition. This can involve trialling different medications to find the medication that works best for you.

**Medication**

Medications for the treatment of ankylosing spondylitis include:

- **analgesics (pain-relieving medications)** – for temporary pain relief
- **non-steroidal anti-inflammatory drugs (NSAIDs)** – to help control inflammation and provide temporary pain relief
- **corticosteroids** – to quickly control or reduce inflammation
- **disease-modifying anti-rheumatic drugs (DMARDs)** – to control your overactive immune system
- **biologics or biosimilar medicines** – biological disease-modifying drugs that work to control your immune system, but in a much more targeted way.

**Exercise**

Although exercise is important for general wellbeing, it’s especially important in managing AS. Exercise can be used to relieve pain, but is also important for keeping your spine mobile and flexible.

Specific strengthening exercises help to maintain strength through the spine. Exercises performed in warm water (hydrotherapy) can also be beneficial.

For your overall wellbeing, do general strengthening and aerobic exercises. You may find it helpful to see a physiotherapist or exercise physiologist to have an exercise program designed for your specific needs. Some physiotherapists have a special interest in treating AS.

**Self-management**

There are many things you can do to help yourself, including:

- learn more about your condition – knowing as much as possible about your AS means that you can make informed decisions about your healthcare and play an active role in managing it
- exercise and stay active as much as possible – talk with a physiotherapist or an exercise physiologist for specific advice about a daily exercise and stretching program
- manage your stress – stress can aggravate your symptoms and make you feel worse
- get up and move if you’ve been sitting or standing in one position for long periods at a time (for example at work or while travelling)
- stay involved in your usual home activities, as well as work, leisure and social activities. Social connections are extremely important
- be aware of your posture – when sitting, standing and even lying down. Your body should be in correct alignment but also loose and flexible
- eat a healthy, well balanced diet for overall good health
- manage your stress – it can aggravate your symptoms and make you feel worse
- acknowledge your emotions – it’s natural to feel overwhelmed when you’re diagnosed with AS. You may feel scared, frustrated, sad or angry. It’s important to acknowledge these feelings and get help if they start affecting your daily life. Your doctor can provide you with information about support that's available
- seek support from others – you might find it helpful to contact the Ankylosing Spondylitis Group of Victoria and speak to other people who have AS and know what you’re going through.

Where to get help
- Your **GP (doctor)**
- Physiotherapist
- Exercise physiologist
- **Musculoskeletal Australia** - formerly MOVE Help Line. Tel. **1800 263 265**
- **Ankylosing Spondylitis Victoria**

This page has been produced in consultation with and approved by:
Musculoskeletal Australia - formerly MOVE