More common in men than in women, ankylosing spondylitis (AS) is an inflammatory disease that can cause some of the bones in your spine to fuse together. Fusing makes the spine more rigid and less flexible and can result in a hunched-forward posture. Sometimes the ribs are also affected, making it difficult to breathe deeply. There is currently no cure for AS; however, medication therapy can decrease your pain and lessen the symptoms. Also, recent studies show that the current biologic medications can potentially slow or stop the disease progression in some patients.\(^1\)

The exact cause of AS is unknown. The severity of AS varies greatly from one person to the next, and not everyone with AS will experience the most serious complications or even experience a spinal fusion. Pain and stiffness can vary in severity as well. Over time, AS can lead to disability.

Regardless of the severity of your symptoms, it is very important to keep up with your appointments with your rheumatologist, especially when you are taking specialty medications.

Current AS treatments

Medications

AS is an inflammatory condition. Doctors have identified proteins in the inflammation of AS. Many of the biological drugs used in AS target these proteins. Be sure to tell your doctor and your stePS nurse if you develop an infection of any kind.2

Exercise

Even though movement can be painful, exercise actually lessens pain and is considered an integral part of any AS management program. Regular daily exercises can help create better posture and flexibility as well.3 Be sure to review the Exercise section later in this brochure for specific exercises that are recommended for people with AS.

Heat and cold therapy

To help reduce pain and soreness in stiff joints, heat is best. Cold is best for reducing inflammation to certain areas, but not for stiff joints. You may also find some relief in hot baths and showers.

Posture

Did you know that something as simple as practicing good posture techniques can affect the way a person with AS looks and feels?2 People with AS tend to bend over when experiencing pain in the spine, which creates bad posture, which can cause pain. Break the cycle and practice good posture as much as possible. Not everyone with AS will develop bone fusion; however, fusing in a non-upright position is a valid concern. You can influence the pattern of fusion with good postural habits. Here are some tips from the Spondylitis Association of America on how to work on your posture:

Think tall

Hold your head in a balanced manner over the trunk of your body in a sitting or standing position. Your chin should be horizontal and parallel to the floor, drawn back slightly, and centered. Try to stand, walk, and sit “tall” at all times.

Back against the wall

Within view of a full-size mirror, stand against a wall to check your posture. Place your heels about four inches away from the wall. Your buttocks and shoulders should be as close to the wall as possible—even touching lightly. Don’t strain. Hold for five seconds, relax, and do it again. It is important to keep a record of spine alignment (measurement from the back of the head to the wall), and this might be a good time to check for this. Report any changes to your doctor.

Prone lying

This is the best exercise for maintaining erect posture. Lie face down on a firm surface, such as the floor or a firm bed. If you are unable to lie flat in this position, place a pillow under your chest and a folded towel under your forehead. Start slowly; maybe you can only accomplish prone lying for a minute or two at first. It’s often helpful to do this posture training after a warm bath or shower or whenever the body is warmed up. The head may be positioned directly downward, resting on the hands, turned to the left or right, or alternated during the course of 20 minutes.

Other tips

- To maintain a good, non-bent resting posture while you’re sleeping, try sleeping on a firm, but not hard, mattress.
- Restorative sleep is most important; for some people this may mean side sleeping. If so, be sure to still practice prone lying as mentioned below — it is a critical component.
- Splints, braces, and corsets are generally not advised for patients with AS.

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Adherence

When it comes to taking your medication, the most important thing is to take it exactly as your doctor prescribed it. Adhering to this schedule can change the disease’s effect on the body by controlling inflammation. Decreasing the inflammation means less pain.

Nutritional education

Currently, there are no special diets that have been proven to help with AS, and there is no cure. However, some patients have reported that they are sensitive to certain foods, and some foods are known to cause inflammation. Here are a few foods to consider avoiding:

- **Gluten.** Recent studies have identified that people with immune system conditions may also be sensitive to gluten. Gluten is a protein found in wheat, barley, and rye. Avoiding gluten may ease your symptoms.

- **Dairy.** AS is a condition of inflammation, and high-fat dairy is commonly associated with inflammation.

- **Red meats.** Fatty red meats can also cause inflammation. Go for the leaner cuts instead.

- **Sugar, coffee, and alcohol.** These have been reported as worsening symptoms by some people with immune conditions.

But, be sure to pay attention to your body. If you find that certain foods are making your skin worse, then stop eating them and see if your skin improves.

Exercise

It’s not enough to rely on medication. The single most important thing you can do to help yourself is exercise.5 AS is a lifelong condition, but the healthier and more flexible you are, the better you will be able to deal with the pain and stiffness.

Some of the many benefits of exercise for an AS patient include:

- **Increased flexibility.** The more flexible you are, the easier it is to do everyday tasks such as putting on your socks or reaching something on a high shelf.

- **Increased range of movement.** The more mobility you have, the easier it is to do things.

- **Improved posture.** Better posture makes you feel better about yourself and reduces feelings of self-consciousness.

- **Improved sleep.** Exercise is physically tiring, which improves sleep quality, ensuring you wake feeling refreshed.

- **Reduction in stiffness and pain.** Exercise can result in less pain at night, which again can result in improved sleep quality.

The focus for exercise for people with AS is on improving or maintaining:

- Range of movement in joints
- Posture control
- Muscle strength
- Muscle length
- Lung capacity
- Balance
- Cardiovascular fitness

Any exercise you decide to undertake needs to be regular, consistent, and kept up over the long term.6