

What Is Ankylosing Spondylitis?

Fast Facts: An Easy-to-Read Series of Publications for the Public

Ankylosing spondylitis (AS) is a form of arthritis that affects the joints in the spine. Its name comes from the Greek words *ankylos*, meaning stiffening of a joint, and *spondylo*, meaning vertebra. Spondylitis causes inflammation (redness, heat, swelling, and pain) in the spine or vertebrae. AS often involves an inflamed sacroiliac (SI) joint, where the spine joins the pelvis.

In some people, the condition can affect other joints. The shoulders, ribs, hips, knees, and feet can be affected. It can also affect places where the tendons and ligaments attach to the bones. Sometimes it can affect other organs such as the eyes, bowel, and very rarely, the heart and lungs.

Many people who have AS have mild back pain that comes and goes. Others have severe, ongoing pain. Sometimes they lose flexibility in the spine. In the most severe cases, the swelling can cause two or more bones of the spine to fuse. This may stiffen the rib cage, restricting lung capacity.

Who Gets Ankylosing Spondylitis?

AS usually begins in the teen or young adult years. Most people who have the disease get symptoms before age 30. Only five percent get symptoms after age 45. It affects people for the rest of their lives. And it affects about twice as many men as women.

What Causes Ankylosing Spondylitis?

The cause of AS is unknown. It's likely that genes (passed from parents to children) and the environment both play a role. The main gene associated with the risk for AS is called *HLA-B27*. Having the gene doesn't mean you will get AS. Fewer than 1 of 20 people with *HLA-B27* gets AS. Scientists recently discovered two more genes (*IL23R* and *ERAP1*) that, along with *HLA-B27*, carry a genetic risk for AS.

How Is Ankylosing Spondylitis Diagnosed?

To diagnose AS, your doctor will need:

- A medical history
- A physical exam
- X rays or MRIs
- Blood tests.

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What Type of Doctor Diagnoses and Treats Ankylosing Spondylitis?

Often, a rheumatologist will diagnose AS. This is a doctor trained to treat arthritis and related conditions. Because AS can affect different parts of your body, you may need to see more than one doctor. Some other types of doctors who treat the symptoms of AS are:

- An ophthalmologist, who treats eye disease.
- A gastroenterologist, who treats bowel disease.
- A physiatrist, who specializes in physical medicine and rehabilitation.
- A physical therapist, who provides stretching and exercise regimens.

Can Ankylosing Spondylitis Be Cured?

There is no cure for AS. Some treatments relieve symptoms and may keep the disease from getting worse. In most cases, treatment involves medicine, exercise, and self-help measures. In some cases, surgery can repair some joint damage.

What Medicines Are Used to Treat Ankylosing Spondylitis?

Several types of medicines are used to treat AS. It is important to work with your doctor to find the safest and most effective medication for you. Medicines for AS include:

- Nonsteroidal anti-inflammatory drugs (NSAIDs). These drugs relieve pain and swelling. Aspirin, ibuprofen, and naproxen are examples of NSAIDs.
- Corticosteroids. These strong drugs are similar to the cortisone made by your body. They fight inflammation.
- Disease-modifying antirheumatic drugs (DMARDs). These drugs work in different ways to reduce inflammation in AS.
- Biologic agents. These are relatively new types of medicine. They block proteins involved with inflammation in the body.

Will Diet and Exercise Help?

A healthy diet and exercise are good for everyone, and they may be very helpful if you have AS. There is no specific diet for people with AS, but keeping a healthy weight is important. It reduces stress on painful joints. Omega-3 fatty acids, found in coldwater fish (such as tuna and salmon), flax seeds, and walnuts, might reduce disease activity. This is still being studied.

Exercise and stretching may help painful, stiff joints. It should be done carefully and increased gradually. Before beginning an exercise program, it's important to speak with a doctor who

can tailor exercises to your needs. Two types of exercises may help:

- Strengthening exercises
- Range-of-motion exercises.

Many people with AS find it helpful to exercise in water.

Will Surgery Be Necessary?

If AS causes joint damage that makes daily activities difficult, joint replacement may be an option. The most commonly replaced joints are the knee and hip.

In very rare cases, surgery to straighten the spine may be recommended. This can only be done by a surgeon with quite a lot of experience in the procedure.

What Can I Do to Help Myself?

These are important things you can do:

- See your doctor regularly.
- Follow your prescribed treatment plan.
- Stay active with regular exercise.
- Practice good posture.
- Don't smoke.

What Research Is Being Done on Ankylosing Spondylitis?

Researchers are seeking a better understanding of AS. They are studying:

- Lifestyle and other factors that lead to better or worse outcomes.
- Genes associated with AS risk.
- Development of blood tests to predict AS risk or to aid in early diagnosis.
- New drug therapies for AS.

For More Information About Ankylosing Spondylitis and Other Related Conditions:

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) Information Clearinghouse

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The information in this fact sheet was summarized in easy-to-read format from information in a more detailed NIAMS publication. To order the Ankylosing Spondylitis Q&A full-text version, please contact the NIAMS using the contact information above. To view the complete text or to order online, visit www.niams.nih.gov.

For Your Information

This fact sheet may contain information about medications used to treat the health condition discussed here. When this fact sheet was printed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration toll free at 888–INFO–FDA (888–463–6332) or visit its Web site at www.fda.gov.