



## Spondyloarthritis (Spondyloarthropathies)

Spondyloarthritis (or spondyloarthropathy) is the overall name for a family of inflammatory rheumatic diseases that can affect the spine and joints, ligaments and tendons. These diseases can cause fatigue and pain or stiffness in the back, neck, hands, knees, and ankles as well as inflammation of the eyes, skin, lungs, and heart valves. While there is no course of prevention at this time, treatment can reduce discomfort and delay the development of spinal deformities.

### Fast facts

- Spondyloarthritis usually strikes young males, particularly family members of those with these diseases.
- Nonsteroidal Anti-inflammatory Drugs (NSAIDs) offer considerable symptom relief.
- A regular regimen of recreational activities and back exercises will improve comfort levels.

### What is spondyloarthritis?

The term *spondyloarthritis* (also known as spondyloarthropathy) covers a group of closely related inflammatory diseases including arthritis of the spine (sacroiliitis or spondylitis) and peripheral joints; as well as inflammation in the area where ligaments and tendons attach to bones (enthesitis or enthesopathy). These diseases can cause pain in the spine, legs and arms as joints, ligaments, and tendons become inflamed and/or predispose patients to spinal vertebral fractures. Skin rashes, eye, and intestinal problems can also occur.

Diseases that fall under spondyloarthritis umbrella can include: 1) ankylosing spondylitis ; 2) [reactive arthritis](#) (known previously as Reiter's syndrome ) 3) [psoriatic arthritis](#) and psoriatic spondylitis, and 4) the arthritis or spondylitis associated with the inflammatory bowel diseases, ulcerative colitis and Crohn's disease. Still other patients may develop undifferentiated spondyloarthritis. This means they have symptoms or signs of one of the illnesses above, but don't develop the full blown disease.



### What causes spondyloarthritis?

The exact cause of spondyloarthritis is unknown. However, researchers point to hereditary factors as playing an important role since these illnesses tend to occur more often in family members of patients who have spondyloarthritis. These patients usually share common genetic markers called HLA-B27, which occurs in about seven percent of the population.

Other infections, such as chlamydia (which can cause urethritis or burning on urination) and bacteria that cause intestinal dysentery (such as types of salmonella, shigella, etc.), can trigger a certain type of reactive arthritis that is a form of spondyloarthritis. Beyond these, no specific infection has been linked to other types of the disease.

### Who gets spondyloarthritis?

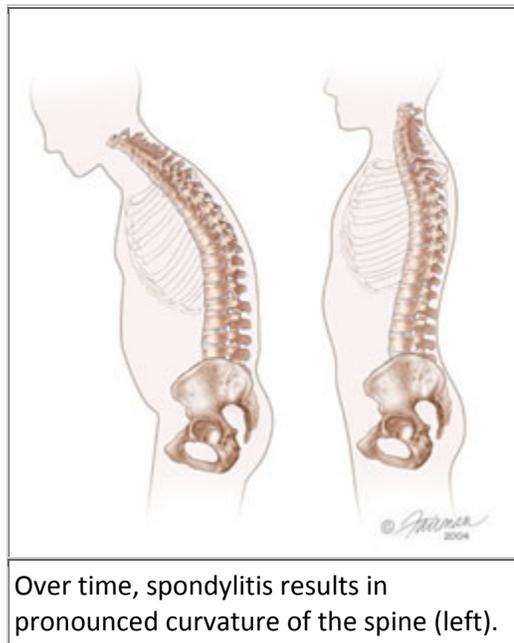
Spondyloarthritis tends to impact those in their teens and 20s, and young men two to three times more frequently than young women. (Psoriatic arthritis does affect young men and women equally). Family members of patients with spondyloarthritis run the highest risk of contracting these diseases, particularly those with HLA genes.

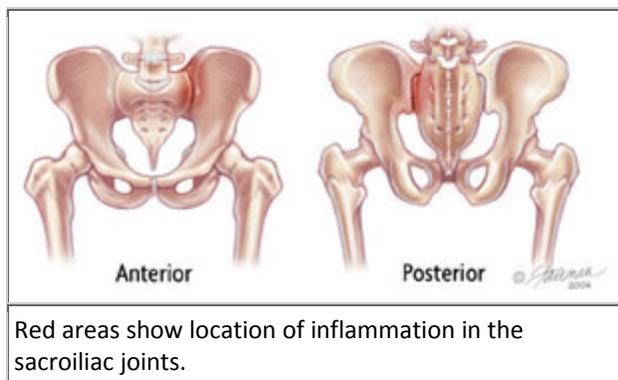
The highest frequency appears in the far north in cultures such as Alaskan and Siberian Eskimos and Scandinavians Lapps (Samis), as well as in certain Native America tribes in the western U.S. and Canada. African-Americans are least frequently affected. About one in 200 Caucasians have spondyloarthritis.

### How is spondyloarthritis diagnosed?

Diagnosis is made following a careful history and physical examination of inflammatory back pain or arthritis of the leg as it differs from other types of arthritis such as [rheumatoid arthritis](#).

Additional tests such as X-rays of the sacroiliac joints and spine can confirm the presence of spondylitis. (Researchers are currently developing MRI scans that will also diagnose the disease). If symptoms and signs indicate, the physician will also check for the presence of the HLA-B27 gene.





### How is spondyloarthritis treated?

Like many forms of arthritis, physical therapy and recreational exercise at least 30 minutes per day can significantly improve pain and stiffness. Additional back exercises at least five days per week will also improve pain and function in patients with ankylosing spondylitis.

There is also a vast array of drug treatment options for spondyloarthropathy, starting with nonsteroidal anti-inflammatory drugs

([NSAIDs](#)), such as naproxen, ibuprofen, diclofenac or indomethacin given at the outset of the disease symptoms. No one specific NSAID is considered superior to another for spondyloarthritis patients. These in and of themselves will generate considerable relief for patients.

Disease modifying anti-rheumatic drugs (DMARDs) such as [sulfasalazine](#) and [methotrexate](#) have proven effective in treating accompanying arthritis in the arms or legs, but not for arthritis of the spine or sacroiliac joints.

Corticosteroids taken by mouth also can be effective. However, given their side effects, particularly osteoporosis and infections, and new agents now available (see below), these medications are not recommended unless the more effective treatments cannot be used. Injections of depo-steroid medications into joints or tendon sheaths are frequently used by clinicians for symptomatic relief of local flares.

Antibiotics such as ciprofloxacin, given over a three-month course soon after disease onset, may have a beneficial effect on the prognosis of reactive arthritis, especially when triggered by *Chlamydia trachomatis*, but not in other types of spondyloarthritis.

[TNF alpha blockers](#) (also known as biologics) have been shown to be quite effective in treating both the spinal and peripheral joint symptoms of spondyloarthritis, as well as other problems such as psoriasis and intestinal inflammation. There are three types currently available:

- infliximab (Remicade), which is used at a dose of 5 mg/kg given intravenously every six to eight weeks;
- etanercept (Enbrel), given 25 mg under the skin twice weekly; and
- adalimumab (Humira), injected at a dose of 40 mg, every other week under the skin.

However, anti-TNF treatment is expensive and not without complications, including an increased risk for infections, especially tuberculosis. Therefore, [NSAID](#) and DMARD therapy are tried first.

Some patients require surgical treatment. For those with ankylosing spondylitis, a total hip replacement is the most common. However, because patients with spondylitis are at increased risk for vertebral



fracture, they may experience often spinal cord damage. Typically, these patients must wear a kind of brace called a “halo vest.” Surgical spinal fusion may be necessary when spinal cord or nerve function is compromised.

Some patients seek surgical correction of the spinal deformities that can occur with ankylosing spondylitis, called osteotomy. Given the extensive complication rates, patients considering this procedure should consult surgeons experienced with this type of operation.

### Broader health impacts

Patients with spondyloarthritis can develop additional complications which should be discussed with their physician. These can include:

- [Osteoporosis](#) which occurs in up to half of patients with ankylosing spondylitis, especially in those whose spines have fused, and can predispose to spinal fracture. Treatments include calcium supplements, bisphosphonates and other standard treatments for osteoporosis.
- Eye inflammation, called uveitis, which occurs in about 40 percent of those with spondyloarthritis. Usually steroid eye drops are effective, though more severe cases may require stronger treatments by an ophthalmologist.
- Inflammation of the aortic valve in the heart which can occur over times in patients with spondylitis. This should be monitored with the physician.
- Psoriasis and intestinal inflammation which may be so severe as to require more specialized treatment by a dermatologist or gastroenterologist.

### Living with spondyloarthritis

Despite the pain, fatigue and stiffness that characterize these diseases, most patients with spondyloarthritis can have long and productive lives, particularly with the newer treatments available. Regular physical exercise is essential to reduce spinal fusion and deformities and to maintain joint and cardiovascular health.

Patient support groups are also available through the Spondylitis Association of America, the Psoriasis Foundation or the Arthritis Foundation. (see links below). These individuals and medical practitioners can be provide valuable information and support.

### Points to remember

- Spondyloarthritis is a type of arthritis that occurs in the spine and peripheral joints (hands, knees, ankles, etc.) that can also involve the skin, intestines, and eyes.
- Those in their teens and 20s, particularly males, are affected most often. Family members of spondyloarthritis patients are at the highest risk.
- Newer treatments have helped a great deal in controlling the symptoms and signs.

### To find a rheumatologist

For a listing of rheumatologists in your area, [click here](#). Learn more about [rheumatologists](#) and [rheumatology health professionals](#).



**For more information**

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these Web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.

Spondylitis Association of America

[www.spondylitis.org](http://www.spondylitis.org)

The Psoriasis Foundation

[www.psoriasis.org](http://www.psoriasis.org)

The Arthritis Foundation

[www.arthritis.org](http://www.arthritis.org)

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