

Adult Scoliosis

Facts about Adult Scoliosis from Cleveland Clinic



For an appointment with a Cleveland Clinic Center for Spine Health physician, please call **216.636.5860** or toll free **866.588.2264**, Monday through Friday, 8 a.m. to 5 p.m. (Eastern Standard Time).

Please visit us online at clevelandclinic.org/spine

If you have been diagnosed with scoliosis, you probably have a lot of questions. This fact sheet will help you prepare for your visit with a member of our staff.

WHAT IS ADULT SCOLIOSIS?

Your spine is the backbone of your body. It is made up of 33 vertebrae and stretches from your head to your tailbone. Your spine houses your spinal cord, a collection of nerves and cells that connect with your brain, to form the central nervous system. Scoliosis is a curvature of the spine. When the spine curves, functional and cosmetic issues arise. These symptoms can be painful but are rarely dangerous. Although scoliosis is a condition often associated with teenagers, it also commonly affects adults. For adults with worsening or painful curves, treatment may be suggested to improve symptoms and correct the spine's deformity.

WHAT CAUSES SCOLIOSIS?

There are two types of scoliosis seen in adults. One is the type of scoliosis also seen in teenagers called **idiopathic scoliosis**. Its cause is unknown but it has a genetic basis and may be a combination of abnormal development of the bones, soft ligaments or weak muscles, or abnormalities with the inner ear and balance function. In some cases, the

curve progresses or begins to cause symptoms in adulthood. In other cases, it is not diagnosed until adulthood.

The second common type of scoliosis seen in adults is **degenerative scoliosis**. In this case, the normal degenerative processes seen in the low back lead to the development of a curve in the spine. It tends to occur later in life and often does not cause any symptoms.

HOW IS SCOLIOSIS DETECTED?

Your doctor will first examine your back to check the shape of your spine. If you are having symptoms related to your spine, your doctor will likely order X-rays. Treatment in adult scoliosis is generally based on symptoms and not the size of the curve. Treatment is often non-surgical but in some cases surgery may be recommended.

WHAT ARE THE SYMPTOMS?

Most scoliosis causes no physical symptoms. It may cause some cosmetic abnormalities, which include:

- Uneven shoulders or waistline
- One or both shoulder blades sticking out
- Leaning slightly to one side
- A hump on one side of the back

Back pain may occur and is generally muscular in nature, and it will often respond to a therapy program. Adult idiopathic scoliosis and degenerative scoliosis have long been thought to lead to shortness of breath and chest pain. Now this has been shown to be extremely rare, and patients with these symptoms should be investigated for other causes.

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WHAT ARE THE TREATMENT OPTIONS?

As an adult, your spine is no longer growing, but it is important to stabilize your spine and lessen symptoms. The risk of progression is independent of activity, however, more active patients do have fewer and less intense symptoms.

Non-surgical treatments usually are recommended for any magnitude of curve. These include physical therapy, aerobic exercise, stretching and strengthening to improve flexibility. Braces should almost never be used in adults as they lead to loss of muscle tone and eventually will increase symptoms.

Spine stabilization surgery is recommended for patients whose deformity causes pain that interferes with normal daily function and occasionally for those who suffer from a severe cosmetic deformity. Spine stabilization surgery realigns and stabilizes the spine as safely as possible. This is done by fusing the bones of the spine (vertebrae) together using bone grafts. Metallic implants hold everything in place while the fusion matures. The majority of patients experience a quick recovery after surgery and a brace is not usually needed.

WHAT ARE THE RISKS OF SPINE STABILIZATION SURGERY?

Any surgical procedure includes general risks and procedure-specific risks, such as adverse reactions to anesthetic, post-operative pneumonia, blood clots in the legs, infection, and blood loss requiring a blood transfusion. Risks specific to spine stabilization surgery include injury to the nerves or spinal cord that could result in pain or even paralysis (the estimated risk of paralysis for major spinal reconstructions is somewhere around 1 in 10,000), the instrumentation breaking, dislodging or irritating the surrounding tissue and the pain from surgery itself.

Risks of spine stabilization surgery are dependent on the individual. Please discuss your risk level with your surgeon prior to surgery.

This information is for educational purposes only and should not be relied upon as medical advice. It has not been designed to replace a physician's independent judgment about the appropriateness or risks of a procedure for a given patient.

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- All Cleveland Clinic staff radiologists are board-certified or board-eligible in radiology, or have the international equivalent.
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