



# Q & A Scoliosis

## What is scoliosis?

Everyone's spine has natural curves. The normal spine is curved slightly inward in the lower back and hunched slightly over in the upper back. Scoliosis is defined as a curvature of the spine from side to side. Unlike poor posture, this curvature cannot be corrected by changing how a person stands.

## Who gets scoliosis?

Most scoliosis is found in healthy adolescents. It usually develops before puberty and is more common in girls than boys. More rarely, it may occur in infants and children. Occasionally, scoliosis occurs in children with cerebral palsy, muscular dystrophy or other neurologic conditions.

Scoliosis may also develop in adults. These curves may represent conditions which were not discovered or treated during adolescence. In adults, scoliosis can also be caused by degenerative arthritis, disc disease, or osteoporosis.

## What causes scoliosis?

In most cases, the cause of scoliosis is unknown. The term "idiopathic scoliosis" applies in these cases where the true cause is uncertain. Many theories have been suggested but none have been proven. Scoliosis does tend to run in families.

## How is scoliosis detected?

Most schools have instituted screening programs to detect scoliosis. Family doctors also may perform routine examinations in adolescents to detect abnormal curvature. An x-ray is necessary to accurately diagnose scoliosis and to develop a treatment plan.

Scoliosis is rarely painful. If a child has scoliosis, parents may notice:

- Uneven shoulders
- A rib prominence on one side
- Leaning to one side
- Uneven waist

## Can scoliosis be prevented?

Medical research has shown that there is no known method of preventing scoliosis.

## What may happen if the scoliosis is not treated?

If allowed to progress, severe scoliosis may cause chronic back pain, deformity and difficulty breathing.

## Will scoliosis prevent normal child bearing?

Scoliosis will not affect child birth.



# Q & A

## Scoliosis

### Is scoliosis painful?

Many adolescents have occasional back pain. Adolescents with scoliosis do not have more back pain than children with straight spines. Some rare causes of scoliosis may be painful. With a careful medical history and examination, an orthopaedist may determine whether the pain and scoliosis are related.

### How is scoliosis treated?

An orthopaedist must first obtain a detailed medical history and perform a careful physical examination. Unusual causes of spinal curvature may be found during this examination. After obtaining an x-ray, the doctor can measure the amount of curvature, measured in degrees. The Scoliosis Research Society has defined scoliosis as a curvature greater than 10°. Curves smaller than this are considered normal. By considering the size, pattern, and location of the curve, as well as the age, growth and special needs of the patient, the orthopaedist develops a treatment plan.

The vast majority of patients with scoliosis do not require bracing or surgery. During the adolescent growth years, the curve must be carefully followed with x-rays and examinations. Most curves will not increase during this growth period. Therefore, most scoliosis only requires careful following by an orthopaedist.

If scoliosis worsens during adolescence, some patients may benefit from bracing. While a brace will not straighten the spine, it may prevent a curve from getting worse while a child grows. Most braces are worn under normal clothing. Children using braces may continue to participate in the full range of physical and social activities.

For large curves or scoliosis that has worsened despite bracing, surgery may be recommended. Surgery has proven to be highly effective and safe for treating scoliosis.

Modern surgical techniques allow the spine to be straightened and the deformity improved. Bracing or casting is rarely needed after surgery. After a period of recuperation, children treated with surgery can participate in a full range of physical activities.

### Are there any other effective treatments?

Medical research has shown that bracing and surgery are the only effective means to control scoliosis. In the past, many have tried other treatments unsuccessfully including: electrical stimulation, physical therapy, back exercises, chiropractic manipulation, and posture improvement.

### Summary

Scoliosis is a common condition in adolescence. It usually requires examinations by an orthopaedist during the growing years. Early detection is important to assure that the scoliosis does not worsen. For rare cases, bracing and surgical treatment are highly effective.

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