Scoliosis *A closer look*

By Brian Beise

Structural vs. Non-Structural

Marked by a sideways curvature in the spine, scoliosis falls into two categories: structural and non-structural (functional).

Structural scoliosis, the more common kind, is when the bones of the spine grow in an irregular S or C shape with rotation. Most cases of structural scoliosis first appear in adolescence (the growth spurt between the ages of 10 and 15). The cause is usually unknown (idiopathic).

Non-structural scoliosis involves the same irregular spinal shapes, but is caused by problems unrelated to the spine, such as unequal leg length or chronic pain or muscle spasms.

Treatment

Non-structural scoliosis is often reversible through physical therapy and stretching. If the issue causing the scoliosis is treated, the spine will flex back to its proper position.

Structural scoliosis, however, is more complicated to treat. A back brace may be used to stop the curve from increasing, but the only way to correct structural scoliosis is a surgical operation called a spinal fusion.

About one in every 50 people has some form of scoliosis. Untreated, the condition becomes worse with time. This makes prompt diagnosis and treatment vital. If the patient is a child and still growing, the physician will have to determine if the spine is likely to continue curving before recommending treatment.

EXPERT ADVICE

Diagnosing Adolescents

Adolescent idiopathic scoliosis (AIS) is usually first identified by a family member, school screening, or pediatric or family physician. Because AIS is usually painless, a fullness or prominence of the back is noted especially with bending forward. This prominence or rib hump can be measured using a scoliometer (a leveling device placed over the spine). Once the patient is referred to a scoliosis specialist and after a thorough history and physical examination, radiographs or X-ray images are taken.

Source: North American Spine Society

Other spine curvature disorders:

Lordosis – an increased curve in the lower back

Kyphosis - an increased forward hunch in the upper back

Both are commonly treated through physical therapy and postural changes.