What is Scoliosis?

The human spine features many natural curvatures which help our bodies to move and be flexible. Scoliosis is a twisting of the spine. It is a condition that affects many children, teenagers and adults.

Examination

The doctor will ask your child to bend forward, to reveal any rotational deformities. This is called the "Adam's forward bend test." He or she will also check for any limb-length discrepancies, abnormal neurological findings, or other potential causes of scoliosis.

Causes

- The cause for scoliosis is unknown. It does however tend to be genetic and may run in some families.
- It usually progresses during puberty.

Who Gets Scoliosis?

Of every one thousand children, three to five will develop spinal curves that are considered significant enough to need treatment.

Anatomy

Understanding your spine and how it works can help you understand your scoliosis.

Your spine is made up of small bones, called vertebrae, which are stacked on top of one another. Muscles, ligaments, nerves, and intervertebral disks are additional parts of your spine.

Vertebrae

- These bones connect to create a canal that protects the spinal cord. The spinal column is made up of three sections that create three natural curves in your back: the curves of the neck area (cervical), chest area (thoracic), and lower back (lumbar). The lower section of your spine (sacrum and coccyx) is made up of vertebrae that are fused together.
- Five lumbar vertebrae connect the twelve thoracic vertebra to the pelvis.

Understanding Your Scoliosis

Treatment Options

Each child is different, and your physician will suggest the best treatment option for the child. These include:

Observation

Continually observing a small curve to check for progression as the child or adolescent grows.

Bracing

Advances in orthotics and prosthetics have led to much more comfortable and lighter weight polypropylene plastic. Besides the foam-lined, body jacket-type TLSO of the Boston type, nighttime only Providence Braces have been shown to be just as effective for certain patterns of scoliosis. Investigation continues to determine the effectiveness of these newer braces in preventing progression of scoliosis. Unfortunately, to date, no brace has been shown to actually improve scoliosis. That desired outcome is only available via surgical treatment.

Surgery

The surgical treatment of idiopathic scoliosis is usually reserved for curves that have progressed beyond 40 to 45 degrees. If left untreated, continued progression of these curves may lead to chronic severe pain, deformity, psychosocial disability and pulmonary dysfunction.
Do you have Idiopathic Scoliosis?

Idiopathic scoliosis, in which the cause is unknown, affects approximately 2% of the population, although only a small number of those with scoliosis require treatment. Treatment of scoliosis is indicated for those who have progressive spinal deformity.

Symptoms
A parent or doctor may suspect scoliosis if one shoulder appears to be higher than the other, or the pelvis appears to be tilted. Untrained observers often do not notice the curving in the earlier stages. Children’s modesty causes them not to undress in front of their parents. When they are in a bathing suit, do you notice a sideways curvature of the spine that looks like an “S” or “C” or that one shoulder or hip appears higher than the other?