

When the body is looked at from behind, a normal spine is straight without much deviation from one side to the other. Scoliosis is a disorder that is generally associated with a lateral, or side-to-side, curvature of the spine. The disorder shouldn't be confused with poor posture, even though it often gives the appearance that the individual is leaning to one side. Scoliosis is a troublesome deformity that is defined by both lateral curvature and rotation of the vertebra often causing a symptomatic "rib hump" in the mid or thoracic spine. This is created by the vertebrae in the area of the major curve rotating toward the concavity and pushing their fastened ribs posterior hence producing the characteristic rib hump seen in thoracic scoliosis. The pulmonary and cardiac functions can be obstructed if the thoracic curve and rib rotation exceeds 70 degrees. Often later in life in untreated severe idiopathic infantile and juvenile scoliosis patients, this amount of curve and resulting cardiac and pulmonary changes can be life threatening.

Anatomy

The spine reveals four normal curves: the cervical, thoracic, lumbar, and sacral, all of which are observable from a side view of the trunk. The thoracic, in the chest vicinity, has a normal round curve, "reversed C," called a kyphosis, while in the lower spine there is a healthy "C" curve, known as swayback or lordosis. Increased kyphosis in the thoracic area is called hyper kyphosis, while increased swayback is termed, hyper lordosis. Scoliosis changes regularly accompany diversions from normal on a side view. A few round back deformities are simply due to poor posture and can often be resolved with postural exercises. A small percentage of people with kyphosis have more rigid deformities than the postural type, which are coincidental with vertebral deformity. This kind of deformity, called Scheuermann's kyphosis, is much harder to treat than postural kyphosis, and its cause is unknown.

Even a layman can help to identify a child or fully-grown individual with scoliosis just by viewing the person in a standing position, preferably with no shirt and in shorts, and observing the following:

- One shoulder may be raised higher than the other.
- One scapula (shoulder blade) may be raised or more prominent than the other.
- With the arms hanging loosely at the sides, there may be more area between the arm and the body on one side.
- One hip may look to be raised or more conspicuous than the other.
- The head is not centered over the pelvis.

The child or adult should be sent to a healthcare professional, such as a chiropractor, for further evaluation once scoliosis is suspected. Your chiropractor would be happy to help.

The most prevalent type of scoliosis is, by far, Idiopathic, and though there are various origins and many types, Idiopathic Scoliosis accounts for about 85% of all cases. "Idiopathic" means "no known cause" and is observed with equal prevalence in boys and girls in the mild or low curve magnitudes. Depending on the age of onset, this condition can be sub-classified into infantile, juvenile and adolescent cases. Idiopathic Scoliosis may be linked to genetic or hereditary influences as it commonly runs in families. Though it is unknown why, girls are five to eight times more likely than boys to have their curves increase in size and require treatment. The most general time for the development of Idiopathic Scoliosis is during adolescence when children are finishing the last major growth spurt. Unfortunately, at this age young people are reluctant to allow their body to be looked at by parents and other adults, so it is very important to have this age group examined on a regular basis.

If a scoliotic curve is observed in the growing adolescent, it is very important that the curves be monitored for advancement by periodic examination and from time to time standing X-rays. You may want to see your local [chiropractor](#) first.