Preventing Scoliosis

By John Ferguson, DC

Just as the twig is bent, the tree's inclined.

—Alexander Pope

Your child has just come home from school with a note from the public health nurse stating that he might have scoliosis. The recommendation is that he be checked further.

Your initial reaction is one of panic, followed by a good measure of guilt. After all, you should have noticed this first. You're the parent. This seems to be a very common scenario. Most parents do not know what scoliosis is, how to detect it in their children or what to do about it.

Scoliosis is a curvature of the spine. When examined from the back it is bent laterally (sideways), compared to a normal spine, which should be straight. It can damage a child's health in a number of ways.

In advanced cases scoliosis tends to place pressure on the heart and lungs. It can also lead to the development of advanced arthritis in the areas of the spine under maximum stress. Posture becomes affected. Clothing doesn't hang properly and this could lead to problems with your child's self-esteem. Athletic ability can be compromised as well. Other complications of scoliosis are too numerous to mention; ultimately, it is a situation best avoided.

Postural Patterns

Most medical literature has placed scoliosis in an 80/20 split between girls and boys, respectively. In my practice, I have noticed that the percentage of scoliosis is roughly 50/50 between boys and girls.

There are essentially two types of scoliosis:

- **Fixed**—This is caused primarily by certain genetic malformations of the spine and is very rigid. In other words, a child with this type of curvature always has it no matter what position he or she tends to assume. Although very difficult to deal with, this type is extremely rare.
- **Functional**—This is by far the most common. This spinal curvature can "unwind" or "straighten" when a child assumes certain postures or positions. It is most often labeled by family doctors and/or specialists as "idiopathic" which simply means "no known cause."

Historically, medicine adopted a wait-and-see attitude towards scoliosis, much to the frustration of parents and children alike.

Over the years, there have been a number of "breakthroughs," but they have all proven relatively unsuccessful: body casts, corsets, physiotherapy. Even Dr Bobechko's muscle stimulator implants of the late 70s all have relatively dismal success rates. Those curvatures which progressed rapidly were eventually scheduled for spinal surgery where any number of steel Harrington rods were screwed into the spine in the hope of straightening it: a barbaric ritual.

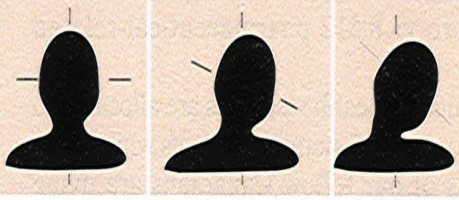
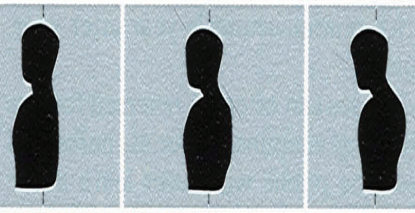
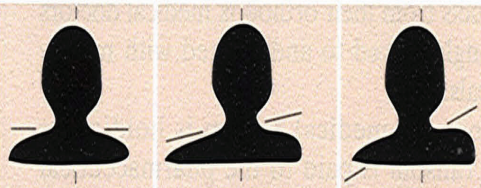
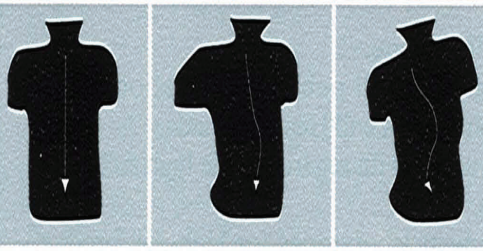
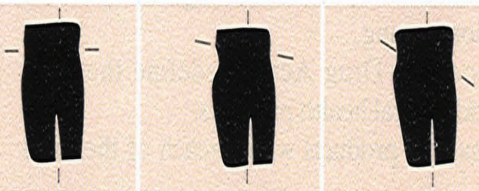
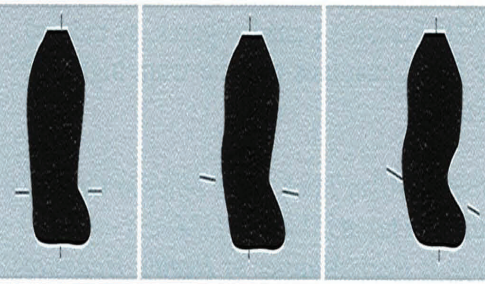
Adaptive Responses

As parents you need to be aware that scoliosis does have a cause. It doesn't descend upon your child out of the blue. It will eventually cause other postural changes to which many parents have responded in a predictable manner: "stand up straighter," "pull your shoulders back," "hold your chin up." These strange postures children assume are not to annoy parents. The child is most likely unaware of the problem.

A child's development of upright posture, walking, sitting and other complex movements is a critical period of time. The young developing nervous system assimilates, differentiates and adapts to internal and external signals and data. By these processes, this young nervous system learns new postural patterns and new future habits and reactions by responding to repetitive stimuli. Such a developing nervous system, is not always able to distinguish between proper and improper data.

Posture Test

Have your child stand still (that may be a feat in itself) with his/her back to you. Match the posture of the various body areas to the chart and place the appropriate score on the right side of the form. Add up the score. Ideally, it should not be over five. If it is, I suggest that a chiropractic consultation is in order.

Area	Normal - 0	Fair - 5	Poor -10	Score
Head				
Neck				
Shoulder Level				
Spine				
Hips				
Lower Back				
Normal Total = 0			Your Total	

It responds to both.

The response of this young nervous system is again neither "good" nor "bad," but rather adaptive to the data that it is continually being conditioned for future response. This process of neurological "learning or programming" of the nervous system with respect to movement, posture and body function, starts a few short months after birth and continues through the preteen years and adolescence. What this means is that the nervous system causes some muscles of the spine to become very tight and others to relax. This simple example will tend to produce a curvature of the spine. If the nervous system produces a different command, a different form of adaptation will take place. I see this as a learned response.

Subluxation

Dr Fred Barge, past president of the International Chiropractors Association, wrote a wonderful book on scoliosis and he attributes this phenomenon to vertebral subluxation. In other words, a misaligned vertebra affecting the way the nervous system transmits and processes information about its internal and external environment. I very much agree. The misalignment causes the input data flowing to a child's nervous system to be erroneous. The nervous system responds to this faulty input by abnormal muscle function, thereby producing a curvature in the spine as a means of best dealing with the data.

So you see, scoliosis is rarely the problem. It is most often simply the result of a longstanding vertebral subluxation the nervous system is attempting to adapt to.

The possibility of the number of effects upon normal development by improper nervous system response and faulty programming are vast and far reaching—scoliosis is only one such result. In the care of children, a pediatric chiropractor is mainly concerned with the constant, chronic faulty data that disturbs normal nervous system function. It then becomes of paramount importance to prevent and eliminate this faulty programming before improper and inefficient habits are learned. I see vertebral subluxations as a major threat to a child's health and well being. All children should be checked by a chiropractor with pediatric experience. ■

Dr. John Ferguson is a family wellness Chiropractor in Clifton Park with years of experience in pediatrics and scoliosis cases. 518.383.5595
www.ForLifetimeWellness.com