## Assessing and Treating Childhood coliosis By: Dr. Brandon Crouch

Scoliosis has been shown to affect approximately 3 out of every 100 people. Although 3% seems like a small percentage, if you are one of that 3% your scoliosis can come with life long struggles and difficulties. In this article I want to discuss some of the basics regarding assessing scoliosis in your child and viable treatment options.

What is scoliosis? Scoliosis is derived from a Greek word "skolios" meaning crooked or curved and is used to describe a lateral curvature of the spine. In other words, scoliosis is any curve seen in the spine when standing behind a person looking at their back. A person can have one or more scoliotic curves in their spine. There are three types of scoliosis that affect children: infantile (before the age of three and seen more frequently in boys); juvenile (between the ages of 3 and 10 and seen more frequently in girls); and adolescent (between the ages of 10 and maturity and seen more frequently in girls).

If a person is born with scoliosis, arising from a vertebral (spinal) abnormality then it is known as congenital. If a scoliosis is determined later in life from an unknown cause it is known as idiopathic.



How do you know if your child has scoliosis? Early diagnosis and treatment of scoliosis is crucial. If your family history has a prevalence of scoliosis then your child



should be evaluated by a qualified health professional every few years to rule out scoliosis. Although the exact genetic link has yet to be identified there is overwhelming research to illustrate that on occasion scoliosis does get passed down from parents or grandparents.

There are several physical exam findings and signs your doctor will look for to identify scoliosis. If scoliosis is suspected x-rays are utilized to demonstrate the size and location of the scoliotic curve.

What is the treatment for scoliosis? The treatment for scoliosis is determined by the child's age, amount of scoliosis, curve

pattern, anticipated remaining growth, and anticipated curve growth potential. Radiographs (X-rays) are used to determine the severity of the scoliosis.

**Scoliosis:** Curve <u>up to 20</u> degrees: Treatment for curvatures under 20 degrees occasionally differs between medical doctors and doctors of chiropractic. Comanagement of your child's care among medical doctors and chiropractors is important.

Often medical professionals will choose to "watch and wait" during this time and do occasional follow ups to watch for any change or progression of the scoliosis. On occasion if there is pain they will prescribe medication or they may prescribe physical therapy.

The chiropractic approach to scoliosis during this time is to work to promote spinal health through active and passive care. Chiropractors will often recommend specific spinal adjustments, postural counseling, stretching, exercises, and possible heel lifts. The goal is to reduce muscular tension, promote better alignment and mobility within the spine, and ultimately work to reduce the spinal scoliotic curvature. Both short scale and large scale studies have demonstrated improvements in reducing mild (under 20 degrees) childhood scoliotic curvatures with chiropractic care. A good healthcare team (medical, chiropractic, and physical therapist) will work together to provide the best possible outcomes.

Scoliosis: Curve between 20 to 40 degrees: Once a child's spine has reached 20 degrees of curvature a brace is often recommended to be worn for a select number of hours each day. The brace is then utilized until the spine is considered stable and no further progression is expected. Physical therapy may also be recommended to help with active stretching and spinal strengthening exercises. Chiropractic care is especially important during this time with the same goals as stated previously.



Scoliosis: Curve over 40 degrees: Scoliosis over 40 degrees is of a major health concern for organ malfunction such as cardiopulmonary (heart & lung) or digestive complications. In most cases surgical fusion utilizing rods, bars, wires, or other medical hardware is used to permanently stabilize the spine. Once surgical intervention has been performed the areas above and below the fusion have to work harder to allow the individual to perform regular daily activities. This is why regular stretching, exercising, and spinal adjustments to the areas above and below the surgical fusion area can be beneficial.

How good are school scoliosis screenings and should you rely on them? Any time your child has the opportunity to have a health screening to catch potential

health problems is good. I believe there is a benefit to having these screenings. On another note, you should never rely on these evaluations or any health screening as a "catch all" for your child's health.

You as the parent must take the initiative and be informed on the signs and presentations of scoliosis. No one knows your child like you do. Although a scoliosis screening may catch some children with signs of scoliosis there are inevitably some that go unnoticed.

What should parents look for regarding scoliosis and their children? The best starting point for parents is to check their children's posture while standing.

- 1. **Standing behind your child**: Check for level shoulders, the bottom of the shoulder blades should be level, and level hips.
- 2. **Looking at your child from the side**: Check to see if one shoulder blade protrudes out more than the other.
- 3. **Have your child lie on their stomach on the bed**: With them laying flat and legs together check their feet to see if their legs appear to be the same length.

If your child has any of the above signs they need to be checked by a health professional for scoliosis. Having one or more of these postural problems does not mean your child has scoliosis but it does indicate that scoliosis could be present. A proper spinal evaluation should be done to confirm or rule it out.

Anytime a child has to endure a sickness, injury, or condition it is hard on both the child and the parents. Scoliosis in the majority of cases is not life threatening. With the proper care and guidance your child's scoliosis can have minimal impact on their lives. The best approach to managing childhood scoliosis is early detection and proper care. If you suspect your child has scoliosis or if you have questions I recommend you consult with your health care professional.

About the Author: Brandon Crouch, D.C.

Dr. Brandon Crouch is a Chiropractor with Crouch Family Chiropractic (<a href="www.crouchfamilychiro.com">www.crouchfamilychiro.com</a>). Dr. Crouch can be reached for comments or questions at 270-842-1955 or via email at: <a href="mailto:crouchfamilychiro@hotmail.com">crouchfamilychiro@hotmail.com</a>.