

SCOLIOSIS: DON'T WAIT TO GET IT STRAIGHT!

Stop slouching, put your shoulders back, stand up straight and pay attention because after all of those years of badgering, guess what? Your mother was right- Posture does matter!

To fully appreciate the profound effects that posture has on the entire body, we must consider the body's master control system- the brain and nervous system. Medical textbooks confirm that the purpose of the brain and nervous system is to control and coordinate all other systems, organs and tissues of the body. Research shows that abnormal posture increases stress and strain on the nervous system. According to medical periodicals *Spine* and the *Journal of Neurosurgery*, these increased stresses deteriorate the normal ability of the brain and nervous system to send messages to, or receive information from, the rest of the body. This causes a decrease in the body's ability to function normally and it then results in "disease". And, scientific research has shown that if these stresses are present for more than 14 days without being corrected, degenerative and arthritic changes begin to occur which can have lifelong consequences. Additionally, Alf Breig, M.D., neurosurgeon and researcher, determined that abnormal postural patterns interfere with the natural healing ability of the central nervous system. In fact, leading physicians and researchers have recently reported that "Posture affects and moderates every physiologic function from breathing to hormonal production."

So, is it enough then to just stop slouching and stand up straight? Certainly, it is important to be conscientious of posture in our daily activities. However, the postural faults which are most harmful are those that we are unaware of and those we can't control. Irregular spinal alignment causes these involuntary postural abnormalities. Such damaging spinal changes may result from traumatic events (i.e. slips and falls, athletic injuries, automobile accidents), or the spinal changes may develop gradually as a result of many micro-traumas and the use of inefficient body mechanics in the performance

of daily routines (i.e. slouching at the computer, holding the phone between your shoulder and ear).

Believe it or not, proper posture actually starts to develop before birth. When still inside the womb, babies are generally in the fetal position curled up so that there is rearward convexity to the spine when viewed from the side. After delivery, as we develop and learn to hold our heads up and sit up, this curvature changes so that there are also gentle convex forward curvatures in the neck and low back. So, proper posture requires that, when viewed from the front on X-ray, the bones of the spine should appear as a very straight column. When viewed from the side on X-ray, it is very important that gentle forward curvatures appear in the neck and lower back regions while a rearward curvature is expected in the mid-back. These normal curvatures provide the body with a natural suspension system, reducing stress on muscles and bones. Most importantly, it allows the vital information that travels from our brain and spinal cord to get to the cells, tissues and organs of our body without interference so we can stay healthy.

One of the spinal conditions that often develops in childhood is scoliosis which refers to a lateral curvature of the spine. In other words, when you look at somebody from the back there appears to be an "S" shape to their spine rather than the bones being stacked straight one on top of the other.

The prevalence of scoliosis among school-age children is 3-5% and most commonly it is diagnosed during adolescence, around the onset of puberty. This type of scoliosis is known as adolescent idiopathic (having no known cause) scoliosis and it is more common in females, especially if there is a family history. Progression of this curvature most frequently occurs between 12-16 years of age and can be especially rapid during a growth spurt. In addition, it has been found that there is a significant correlation between vestibular and

balance problems in adolescents with idiopathic scoliosis and these patients are at a greater risk of developing osteoporosis compared to the general population.

A detailed postural examination is critical in determining the existence of scoliosis. This should be performed by a trained physician who specializes in spinal conditions. One needs to evaluate the positioning of the skull, neck, shoulders and shoulder blades, the rib cage, the waist, the pelvis, the knees and feet not only for positional symmetry from right side to left side but also for their relationship to one another. For example, does the head appear to be tilted so one ear looks higher than the other, does one shoulder look higher or one hand hang lower, do the legs appear to be the same length when lying down?

Doctors of chiropractic specialize in the detection and correction of spinal irregularities that produce harmful involuntary postural imbalances such as scoliosis. Chiropractors who focus on postural correction typically begin with a thorough physical exam and standing spinal X-rays to identify abnormal spinal patterns. When diagnosing scoliosis, one needs to identify the exact site and the degree and flexibility of the curvature and assess for bone maturity to determine the likelihood of progression.

The goal of all scoliosis treatment is to stop the progression of the curvature so as to avoid the possibility of bracing or spinal surgery. It is never too early to begin correcting a curvature—even if it is less than 10 degrees! “Watching the curvature” to see if it progresses or to see how quickly it progresses is a completely reactive approach in dealing with scoliosis and, likely, it is wasting precious time when effective stabilization and corrective treatment could be occurring. If scoliosis is allowed to progress, not only will it produce a structural, cosmetic deformity that will likely promote arthritic changes as time progresses, but with advanced curvatures, compromises to the function of organs such as the heart and lungs may actually have severe, life-altering consequences.

There is a new and exciting treatment protocol for scoliosis that has been very effective in not only stabilizing scoliosis in children and adults, but also improving the curvature often with dramatic results. The treatment is a global approach based on “Scoliosis Systems” and the “SpineCor System”. It involves specific chiropractic treatment procedures coupled with detailed corrective physiotherapy exercises and, at times, the possibility of using a state-of-the-art soft brace. This brace has huge advantages over the more traditional hard braces because it is worn under a patient’s clothes, it is not visible, and it is easy to wear during all activities including sports so there are no physical limitations or self-esteem issues! Recent research studies using this type of treatment approach has shown an overall correction/stabilization for 93% of the patients. In addition, another advanced method of scoliosis diagnostic evaluation and non-invasive treatment utilizes the methods of the CLEAR Institute.

There is an old saying “As the twig is bent, so grows the tree.” It is never too early to begin scoliosis treatment. Being proactive instead of reactive is likely to pay off so please, don’t wait to get it straight!

Dr. Risa Sloves is 1 of 7 Chiropractic Physicians in Connecticut with Board Certification in Pediatric and Maternity Care. She is also one of the only Chiropractic Physicians in Connecticut with certification in “Scoliosis Systems” utilizing the “SpineCor Technology” as well as certification from the CLEAR Institute for scoliosis treatment. She practices with her husband, Dr. Mark Joachim at their office Associates In Family Chiropractic and Natural Health Care, P.C. 156 East Avenue in Norwalk, CT. She can be reached at (203) 838-1555. For further information on scoliosis, please also refer to THE SCOLIOSIS CARE FOUNDATION at (800) 391-8837 or www.scoliosiscare.org or [Clear-Institute .com](http://Clear-Institute.com).