# Topic of the Week

# WE CARE ABOUT YOUR HEALTH

# Scoliosis: How Chiropractic Helps a Twisted Spine Presented by: Dr. Kolbi Brost

Scoliosis comes from the Greek word that means crookedness.<sup>1</sup> When you have scoliosis, your spine's straight position begins to bend sideways. It can take the form of a single curve (C-shaped) or as a double curve (S-shaped). The most commonly affected area is the mid spine, followed by the lower spine. Double curves usually involve both these areas.

This condition most commonly occurs in the young, between 10 and 15 years old. Females are much more likely to have scoliosis than males.

Your chiropractor is concerned about the appearance of these curvatures in your spine. Although most cases are quite mild, if the scoliosis curves progress, they can represent a major health threat. The key is to take care of the spine before this happens..

Advanced scoliosis curvatures can contribute to chronic back pain, compression of lung and heart tissue, and a multitude of different nerve disorders. In addition, pronounced scoliosis can create a negative selfimage.<sup>2</sup>

## What Causes Scoliosis?

Why scoliosis occurs in the spine is often a mystery. In fact, the most common form of this disorder is called adolescent *idiopathic* scoliosis (*of unknown cause*).<sup>3</sup>

In some people, scoliosis curves can be traced to structural abnormalities, such as incorrectly formed vertebrae or disc derangements. Other times, these curves can be linked to imbalances in spinal musculature, nervous system disorders or leg-length differences.

If the lateral curve occurs in your mid spine, your rib position shifts in relation to their connections with this spinal area. Ribs that are on the convex side of the scoliotic curve will protrude more than the ribs on the other side.



#### Presented by: Brost Chiropractic & Wellness Centre 120, 817 - 19 St NE Calgary, AB 403.520.5265 www.brostchiro.com

#### **Exercise of the Week**

Crunches on Exercise Ball with Oblique Twist Difficulty: Beginner to Moderate (Consult your chiropractor before engaging in this or any other exercise.)

Start: Lie on back over exercise ball so that lower portion of ribcage is positioned over center of ball. Let head rest on ball and relax hips. Keep knees wide apart and position arms across chest (easy), hands behind head with elbows out (moderate), or arms stretched out overhead (difficult).

Exercise: Engage inner abdominals first by bringing belly button inwards. Then, curl body forward on ball, keeping lower back in contact with ball at all times. As you curl forward, bring one shoulder/elbow across body in the direction of the opposite knee. Return to starting position. Alternate sides. Repeat 5-10 times each side.



Chiropractors use this information when performing the Adams test to screen children and adolescents for scoliosis. During this test, a person bends forward to touch their toes, and the chiropractor observes the ribs on either side of the spine. If one side of the ribs sits higher than the other, the chiropractor will suspect scoliosis.

This same test may be used to determine the specific causes of this condition. Most functional scoliosis curves tend to disappear as the spine is stretched. Structural curves are not as affected by bending forward.

Scoliosis is typically classified as mild, moderate or severe. If the spine is bent less than 20 degrees from vertical, it's considered mild. Moderate scoliosis is measured between 20 and 55 degrees, and a severe case is considered a lateral bend of more than 70 degrees.<sup>3</sup>

## Can Scoliosis be Fixed?

For mild scoliosis curves, the patient is usually only monitored for progression. Most people with mild curvatures don't experience bouts of back pain any more than the normal population. However, if the curve shows signs of rapid progression, or increases beyond 30 degrees, treatment is recommended.

In every individual with scoliosis there are bound to be areas of spinal subluxation. This can contribute to spinal pain or nervous system disturbances. Fortunately, chiropractors are specially trained to locate and correct areas of spinal subluxation. If you suspect scoliosis, the first thing you should do is visit your chiropractor. Not only do they work hard to reduce the symptoms caused by altered spinal mechanics, chiropractors do their best to reduce the curve angle. Large studies on the effects of chiropractic for scoliosis have not yet been conducted. But numerous case reports show chiropractic adjustments can significantly reduce the angle of the scoliosis curve.<sup>4, 5, 6</sup>

In situations where conservative treatments are ineffective, such that the scoliotic curve continues to progress past 70 degrees, surgical correction is usually the only remaining choice to prevent the condition from affecting heart and lung function.

Because of the dangerous nature of a scoliosis curve, parents are advised to watch for signs their child's spine is starting to bend. The symptoms include uneven hips or shoulders, or the body leaning to one side. If it can be treated early, scoliosis damage may be minimized. Chiropractors are alignment specialists. Be sure to have your child's spine checked regularly to prevent the incidence of abnormal spinal curves.



### Quote of the Week

"It is health that is real wealth and not pieces of gold and silver." - Gandh

#### **References and Sources:**

1. Etymology Online

2. Asher MA, Burton DC. Adolescent idiopathic scoliosis: natural history and long term treatment effects. Scoliosis. 2006 March 31; 1(1):2

3. Nykoliation JW, Cassidy JD, Arthur BE, et al. An Algorithm for the Management of Scoliosis. J. Manipulative Physiol Ther. 1986 Mar; 9(1): 1-14.

4. Morningstar MW, Woggon D & Lawrence G. Scoliosis Treatment Using a Combination of Manipulative and Rehabilitative Therapy: A Retrospective Case Series. BMC Musculoskeletal Disorders. 2004 Sep 14; 5: 32.

5. Tarola GA. Manipulation for the Control of Back Pain and Curve Progression in Patients with Skeletally Mature Idiopathic Scoliosis: Two Cases. J Manipulative Physiol Ther. 1994 May; 17(4): 253-257.

6. Chen KC & Chiu EH. Adolescent idiopathic scoliosis treated by spinal manipulation: a case study. J Altern Complement Med. 2008 Jul; 14(6): 749-751.

## Topic of the Week

newsletters are written and designed by Mediadoc exclusively for its chiropractic clients. Writer/Editor: David Coyne Writer: Dr. Christian Guenette, DC Design: Elena Zhukova Photos: Fred Goldstein

Disclaimer: Information contained in this Topic of the Week<sup>™</sup> Newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.



Copyright 2009 Mediadoc™