References

1. Byrd JA. Current theories on the etiology of idiopathic scoliosis. *Clincial Orthopaedics and Related Research*. 1988;229:114-119.

2. Betz RR et al. Scoliosis and pregnancy. *Journal of Bone and Joint Surgery*. 1987;69-A:90-96.

Morrissy R. School screening for scoliosis. *Spine*. 1988;13(10):1195-1197.
Clayson D et al. Long-term psychological sequelae of surgically versus nonsurgically treated scoliosis. *Spine*. 1987;12:983-986.

5. Reinshaw T. Screening school children for scoliosis. *Clinical Orthopaedics and Related Research*. 1988;26-33.

 Focarile FA, Bonaldi A, Giarolo MA et al. Effectiveness of nonsurgical treatment for idiopathic scoliosis. *Spine*. 1991;6(4):395-401.
DiRaimondo CV, Green NE. Brace-ware compliance in patients with adolescent idiopathic scoliosis. *Journal of Pediatric Orthopaedics*. 1988;8:143-146.
Mendelsohn R. How to Raise a Healthy Child...In Spite of Your Doctor. Chicago:

Contemporary Books. 1984.

9. Cook SD et al. Upper extremity proprioception in idiopathic scoliosis. *Clinical Orthaepedics and Related Research*. 1986;213:118-123.

10. Wyatt MP et al. Vibratory response in idiopathic scoliosis. *The Journal of Bone and Joint Surgery*. 1986;68-B:714-718.

11. Dretakis E et al. Electroencephalographic study of school-children with adolescent idiopathic scoliosis. *Spine*. 1988;13:143-145.

12. Byrd JA. Current theories on the etiology of idiopathic scoliosis. *Clincial Orthopaedics and Related Research*. 1988;229:114-119.

13. Herman R et al. Idiopathic scoliosis and the central nervous system: a motor control problem. *Spine*. 1985;10:1-14.

 Barge G. Scoliosis correction. European Journal of Chiropractic. 1985;33:77-91.
Barge FH. Ideopathic Scoliosis: Identifiable Causes, Detection and Correction. Davenport, IA: Bawden Bros. Inc, 1986.

Webster L. First report on ADD study. *ICPA Newsletter.* Jan. 1994.
Correction of juvenile idiopathic scoliosis after primary upper cervical chiropractic care: a case study. Abstracts from the 13th annual upper cervical spine conference, Nov 16-17, 1996 Life College, Marietta, Georgia. *Chiropractic*

Research Journal. 1997;IV(1):29. 18. Simpson S. The palliative care of a post-polio syndrome patient. *Clinical*

18. Simpson S. The patiative care of a post-polio syndrome patient. *Clinical Chiropractic*. 2006;9(2):81-87.

19. Ressel O, Rudy R. Biovertebral subluxation correlated with somatic, visceral and immune complaints: an analysis of 650 children under chiropractic care. *JVSR*. October 18, 2004;1-23.

20. Morningstar M, Joy T. Scoliosis treatment using spinal manipulation and the Pettibon weighting system: a summary of 3 atypical presentations. *Chiropractic & Osteopathy.* 2006;14:1.

21. Morningstar M. Integrative treatment using chiropractic and conventional techniques for adolescent idiopathic scoliosis: outcomes in four patients. *JVSR*. July 9, 2007;1-7.

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Spinal Curves

Your spine is made up of 24 bones called vertebrae that stack up one on top of the other to form a straight line when viewed from front to back. Spines are not perfectly straight and that's normal; but when the spine curves or twists excessively it can be abnormal and it is called scoliosis (Greek for "crooked").



bont accept surgical procedures or even bracing without first exploring less radical alternatives.

-R. Mendelsohn, MD



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What Causes Scoliosis?

In most cases of scoliosis the cause is unknown; the vertebrae and spinal structures—discs, ligaments, tendons and muscles—all appear normal.¹ In the rest of the cases the scoliosis is caused by conditions such as a tumor, infection, cerebral palsy, muscular dystrophy, a birth deformity or disc problems.

Further deepening the mystery of scoliosis is the fact that no one knows why some minor curves get worse whereas about 90% do not. However, it is not true, as commonly thought, that poor posture is a cause of scoliosis or that women with scoliosis have more problems carrying babies to term.² In fact, most people with scoliosis can lead normal lives, never even knowing that they have the condition. No one dies from scoliosis, but in severe cases scoliosis sufferers can have breathing or heart problems if the curve is very severe.³

Unknown Controlling Factor

There appears to be some unknown controlling factor in scoliosis that causes a healthy spine to assume an unusual shape. Is there a genetic

> component? An emotional factor? Is it the nervous system? If there is anything that all scoliosis researchers can agree on, it's that few of them agree.⁴



Keep your child's spine and nervous system healthy with chiropractic care.

Bracing & Other Treatments

Does bracing help? Initial studies showed that curves straighten an average of 50% of the time with braces. But when bracing was followed in the long term, a gradual loss of correction was observed.⁵ Electrical stimulation also appears to be "ineffectual"⁶ and plaster casts have often been found to be emotionally scarring.⁷

Overtreatment?

According to Robert Mendelsohn, MD: "Scoliosis is not serious unless the curvature of the spine is severe, but it is overtreated almost as often as it is overdiagnosed. If your child is diagnosed as a victim of scoliosis, don't accept surgical procedures or even bracing without first exploring all of the less radical treatment alternatives.

"Epidemiological studies on scoliosis are so scanty that we know next to nothing. There are no prospective controlled studies regarding the effects of orthotic treatment on the natural history of idiopathic scoliosis.... Is anything actually prevented or is progression merely delayed until a later period of life? The answers simply are not known."⁸

Neurological Disturbance

New research on scoliosis shows the cause or important contributing factor to be a disturbance or defect in the area of the nervous system that controls posture, body balance and positioning.⁹⁻¹³

The Chiropractic Approach

Chiropractic is not a treatment for individual diseases, scoliosis included. Its purpose is to correct the vertebral subluxation complex—a condition that interferes with the proper functioning of the nervous system and the body as a whole. Recent research suggesting that scoliosis may be caused by a neurological defect reinforces the validity of the chiropractic approach.

Fred Barge, DC, in *Ideopathic Scoliosis: Identifiable Causes, Detection and Correction*,¹⁴ gives 22 examples

"Scoliosis is not serious unless the **curvature** of the spine is **severe**, but it is **overtreated** almost as often as it is **overdiagnosed**." —R. Mendelsohn, MD of cases of adolescent idiopathic scoliosis with significant improvement with chiropractic. One report of 100 chiropractic patients revealed 84% improved. In 6.8% the correction was total; in 35.6% there was significant correction; in 41.2% there was a small correction, while 16.4% showed no change or worsening of curves.¹⁵

Case Studies

Individual cases abound. For example, a ten-yearold girl with a severe scoliosis of 48 degrees began chiropractic care. After ten adjustments her mother reported a happier child, with greater resistance to disease and her scoliosis reduced to 12 degrees.¹⁶

Another case is that of a nine-year-old boy with juvenile idiopathic scoliosis (and intermittent back pain) who received chiropractic care. His posture began to balance immediately after the first adjustment. He had an 88% overall reduction in the scoliosis after five months of chiropractic care.¹⁷ These cases are not unusual and are not just confined to the young; individuals from all age groups with scoliosis have been helped by chiropractic care.¹⁸⁻²¹

Only a doctor of chiropractic is specially trained to locate and correct vertebral subluxations—spinal abnormalities that can affect not only the spine, but the entire body. Every scoliosis sufferer should be under chiropractic care. A body without subluxations is in a better position to resist abnormalities and diseases of all kinds, including scoliosis.