New Research Confirms That Bracing Due to Early Detection Can Avoid Painful Surgery

Scoliosis is an abnormal curvature of the spine, and it has no known cause (idiopathic). The medical community has learned much over the past few years regarding the importance of early detection.

A major Level 1 NIH-funded study published in a September 2013 edition of the New England Journal of Medicine provided the most compelling evidence to date regarding the importance of early detection and the efficacy of brace treatment in adolescent idiopathic scoliosis. It showed that bracing significantly decreases the progression of high-risk curves to the threshold of surgery, and that the benefits of bracing increases with longer hours of brace wear. [Weinstein, et al, NEJM-2013]

Researchers at Texas Scottish Rite Hospital for Children in Dallas recently conducted two award-winning studies that show brace treatment is effective in preventing the need for surgery, and that patients who use a monitor to document brace-wear patterns, and who are counseled accordingly, are significantly more likely to be successfully treated. [“Brace Treatment Controls Progression in Adolescent Idiopathic Scoliosis” (Katz, et al, JBJS-2010), and “Effect of Compliance Counseling on Brace Use and Success in Patients with Adolescent Idiopathic Scoliosis” (Karol, et al, JBJS-2016)]

As a result of these groundbreaking studies, organizations that represent scoliosis experts - such as the Scoliosis Research Society and the Pediatric Orthopaedic Society of North America - are recommending that children be screened for early detection.

Scoliosis by the Numbers

2 to 4% The percentage of the U.S. population affected by scoliosis. This is an estimated 7 million people.

1 in 6 One in six of the children who are diagnosed with some form of scoliosis will eventually need active medical treatment. One million scoliosis patients will utilize medical services each year.

10 and 15 The primary age for detecting scoliosis at its earliest and most treatable stage is between 10- and 15-years-old. Females are five times more likely to progress to a curve magnitude that requires treatment.

Texas Lawmakers Must Make Changes in 2017 to Help Texas Children

The medical community has identified avenues for making the screening more effective in Texas, which requires the 2017 Texas Legislature to update the screening standards. We know that males and females develop at different ages, and we have learned much from science since the scoliosis screening requirements were first created in the 1980s.

The Texas School Nurses Organization, Texas Pediatric Society, Texas Medical Association, and Texas Orthopaedic Association support bills by Sen. Don Huffines (SB 850), Rep. Tom Oliverson (HB 1076), and Rep. Cesar Blanco (HB 1044) to update the state’s scoliosis screening standards. The organizations believe that it is important to give the Department of State Health Services the authority to update the screening standards based on recommendations made by the American Academy of Orthopaedic Surgeons, American Academy of Pediatrics, Scoliosis Research Society, and Pediatric Orthopaedic Society of North America.

The organizations recommend that females should be screened twice (ages 10 and 12) and males once at 13 or 14.

The state’s current screenings, which are set by statute, result in school children being screened at ages that may be too late for effective early detection. The organizations strongly encourage lawmakers to pass HB 1076 and SB 850, which would direct DSHS to update the screening standards.

The Importance of Spinal Screening:
Early Detection Can Deter Scoliosis Surgery; Scoliosis Affects 2 to 4 percent of the Population

2 to 4 % The percentage of the U.S. population affected by scoliosis. This is an estimated 7 million people.

1 in 6 One in six of the children who are diagnosed with some form of scoliosis will eventually need active medical treatment. One million scoliosis patients will utilize medical services each year.

10 and 15 The primary age for detecting scoliosis at its earliest and most treatable stage is between 10- and 15-years-old. Females are five times more likely to progress to a curve magnitude that requires treatment.