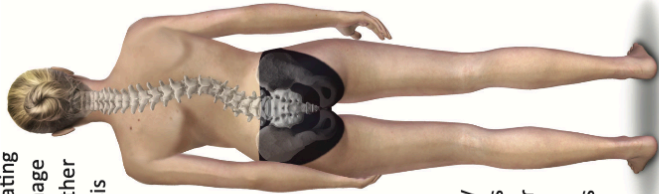


New treatment options provide hope to children & teens with spinal curves & deformities

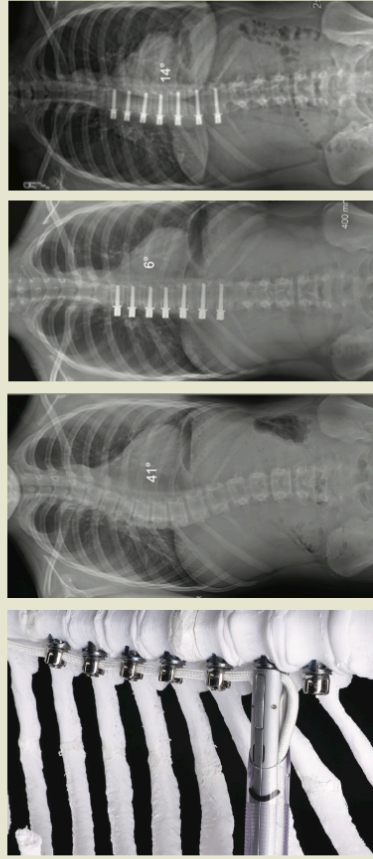
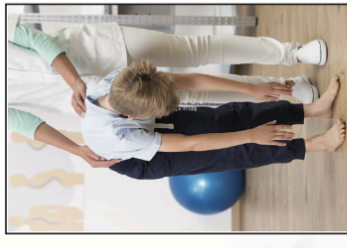
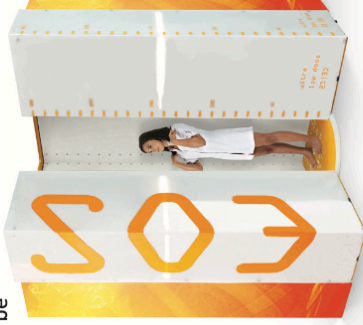
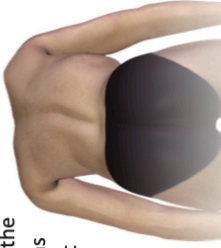
Spinal curves associated with scoliosis when left untreated can be debilitating to a person's life. A spinal curve can progress to cause pressure and damage to internal organs like the lungs or heart, shortening one's lifespan. Other times, the curve can create painful back pain symptoms. The key to scoliosis treatment lies in early detection. Unfortunately, most of the time parents are unaware of the curvature in the child's spine until it is detected through a school nurse screening or a routine visit to the pediatrician. Other signs and symptoms of scoliosis begin in adolescence when boys and girls hit their growth spurt. Boys and girls develop mild scoliosis around the same rate, but girls have an increased risk of the scoliosis worsening. Other spinal problems in teen years can be spondylolisthesis associated with gymnastics or cheer leading. Scoliosis treatment involves observation, bracing, and in cases where the curve is worsening, surgery. A back brace may prevent worsening of the spinal curve which may make any necessary corrective surgery less complex. The good news is that the majority of children diagnosed with scoliosis may not need any treatment. Only about one in seven adolescents diagnosed with scoliosis will need bracing or surgery. Early detection is key to prevent a surgery, or make correction surgery less complex.

This brochure provides an overview of the current advances in scoliosis treatment options specific to children and teens that are provided at Texas Spine and Scoliosis spine center in Austin, Texas.



DETECTING A SPINAL CURVE EARLY

For pediatric scoliosis the earlier the diagnosis, the more effective the treatment. Accordingly, we provide scoliosis screening clinics. Texas Spine and Scoliosis is one of few spine centers in Texas with an EOS slot scanner, which cuts the radiation from a spine X-ray by 90%. School nurses often use Adam's Forward Bend Test which has the child bend over and touch their toes revealing an abnormal spinal curve. Initial treatment for a spinal curve may be a brace which can prevent the curve from worsening. In other cases, scoliosis surgery may be necessary to untwist and correct the spinal curve before it compromises internal organs and causes back symptoms. The key is to detect an abnormal spinal curve early before it worsens and requires more aggressive surgery to correct it.



Vertebral Tethering provides a minimally invasive treatment option for teens in their growth years

Vertebral Body Tethering (VBT) uses a cable attached to one side of the vertebrae to correct and then control the curve. The X-ray series shown above documents a 41 degree scoliosis curve that was corrected to 6 degrees. After 7 years of normal growth and development the patient maintains satisfactory results and curve stabilization of only 14 degrees. Dr. Geck's patient success stories are featured at ScoliosisTexas.com.

PHYSICIAN BIO

MATTHEW GECK, MD

Board-certified Orthopedic Surgeon • Fellowship-Trained in Adult and Pediatric Spine Surgery
Co-Chief, Ascension Texas Spine and Scoliosis Center • Chief, Scoliosis and Complex Spine Program
Co-Founder, Co-Medical Director of SpineHope

Matthew J. Geck MD is a board-certified, fellowship-trained scoliosis surgeon. Dr. Geck's practice is focused 100% on scoliosis, spondylolisthesis and spinal deformity surgery with an emphasis on pediatric/adolescent scoliosis. His scoliosis practice has been based in Austin since 2002. Over the past 22 years, Dr. Geck has performed over 4,000 scoliosis and deformity surgeries, half of which were pediatric/adolescent patients. His scoliosis practice receives patients from across the United States and Central & South America.

Dr. Geck was raised in Wisconsin. He performed his undergraduate work at the University of Wisconsin in the Medical Scholars program and graduated Phi Beta Kappa. He attended medical school at the University of Wisconsin School of Medicine and graduated Alpha Omega Alpha. Dr. Geck performed his orthopedic surgery residency at UCLA Medical Center. He then performed two spine fellowships in adult and pediatric spine surgery, the first at Jackson Memorial Hospital and a second in pediatric scoliosis and kyphosis surgery at Miami Children's Hospital.

Dr. Geck has authored more than 80 scientific papers, book chapters, and abstracts. Dr. Geck was certified by the American Board of Orthopaedic Surgery in 2004 and is a Fellow of the American Orthopedic Association, Scoliosis Research Society, North American Spine Society, and American Academy of Orthopedic Surgeons, Society for Minimally Invasive Surgery of the Spine, and the Cervical Spine Research Society. Dr. Geck provides free scoliosis surgery as Medical Director for SpineHope for children in poverty-stricken countries across South America. He has traveled to more than 10 international locations. He has supervised or performed over 200 spine surgeries in these locales, and has seen over 1,000 children with severe or neglected spinal deformities. Through SpineHope, Dr. Geck provides advanced training to local spine surgeons at these hospitals in the specialty of spinal deformity and scoliosis. To learn more about this charitable foundation, visit SpineHope.org.

