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**Texas Health Plano, Texas Back Institute offer
SpineAssist® surgical robot for spine surgeries**

Internationally renowned Plano surgeon co-invented technology

PLANO, TEXAS, July 20, 2010 – Fifteen-year-old Tressa Scott of Allen hasn't been able to stand up straight for more than a year — until now.

The Allen teenager grew an inch and a half and gained a dramatically straighter spine after undergoing a complex spinal surgery using a new type of surgical robot available at Texas Health Presbyterian Hospital Plano.

The SpineAssist® surgical robot – one of three in the United States and the only one in Texas – is the only surgical robot designed specifically to operate on the spine. Accurate to less than half a millimeter, it enables surgeons to plan the optimal surgery ahead of time using a computed tomography (CT)-based 3D simulation of the patient's spine.

“Like a pilot in a flight simulator, I can map out the patient's spinal anatomy and perform the entire procedure before the patient even arrives for surgery,” said Dr. Isador Lieberman, a fellowship-trained orthopedic and spinal surgeon on the medical staff at the Texas Back Institute and Texas Health Plano. “For highly complicated surgical procedures, it allows me to be more efficient and more precise, and to anticipate potential complications before they occur.”

Robotic spinal surgery is the latest in a variety of advanced spine and orthopedic services that make Texas Health Plano and the Texas Back Institute a consumer- and physician-referred destination for spine and orthopedic services. The Texas Back Institute is the exclusive training center for physicians learning how to use the SpineAssist® device.

Before her surgery, Tressa had a 60 degree curve in her lower back and a 35 degree curve in her upper back. Now, the curves are balanced at just over 12 degrees each.

“It's remarkable how much difference there is just a day after surgery,” said Tressa's mother, Norma Scott. “Her back is so nice and flush.”

Scott said she first noticed that her daughter's scoliosis had worsened last summer after Tressa hit

a growth spurt.

“She was standing up in the kitchen and I said, ‘Tress, why can't you stand up straight?’ And she said, ‘I am standing up straight,’” Scott said. “I went over to her, and even though her legs were straight, her shoulders were off and her shoulder blade was protruding. It didn't look right.”

Scott took Tressa to a Plano physician who referred her to Dr. Lieberman, one of the developers of the SpineAssist[®] surgical robot. The technology came about after a former patient of Dr. Lieberman's proposed donating a matching grant if he came up with an idea for a new technology to assist in spinal surgeries. Dr. Lieberman developed the idea with a professor from the Technion University in Haifa, Israel. Technion also matched the grant.

“The key to what we do is patient safety and optimizing outcomes,” said Dr. Lieberman, who came to Texas Health Plano and the Texas Back Institute from Cleveland Clinic. “That’s what this new technology is all about.”

In addition to increasing precision, it reduces the amount of radiation exposure during surgery. For patients, it means less likelihood of infection, less pain after surgery, fewer complications, shorter hospital stays, and quicker recovery. The technology has been used in just over 1000 cases worldwide with no instances of nerve damage as a result of surgery.

“We are thrilled to be among the pioneers to adopt this leading edge technology,” said Sara Misuraca, program director of the Scoliosis & Spine Tumor Center at Texas Health Plano. “We envision this technology as ushering a new era in spine surgeries, the same way laparoscopies transformed general surgery in the 1990s.”

“The SpineAssist[®] surgical robot is yet another example of Texas Back Institute’s long history of bringing the most advanced medical technologies to the operating room,” said Trish Bowling, chief executive officer, Texas Back Institute. “Beyond treating patients, training surgeons and fostering innovations are cornerstones of our practice.”

Back pain is the leading cause of disability in Americans ages 19-45, affecting 80 percent of Americans at some point during their lifetime. It is the second most common reason that people miss work.

SpineAssist[®] technology has two key components: A workstation that enables surgeons to pre-plan procedures in 3D based on the patient’s individual anatomy, creating a “surgical blueprint,” and a robotic arm that guides the surgeon during the procedure using the preoperative plan.

SpineAssist[®] technology can be used in biopsies, to treat thoracic-lumbar fusion and vertebral compression fractures, and to correct scoliosis. During surgery, the robot’s extension arm guides the surgeon to the pre-planned location with utmost accuracy, allowing the surgeon to operate through small incisions in the skin and underlying muscles in order to reach the exact pre-planned location on the spine.

Most procedures utilizing the robot are minimally invasive. For more information, call 1-877-500-5454.

About Texas Health Presbyterian Hospital Plano

Texas Health Presbyterian Hospital Plano is 366-bed acute care hospital and recognized clinical program leader, providing technologically advanced care to Plano and surrounding areas since 1991. The hospital's services include orthopedics, cardiovascular services, oncology, pediatrics and women's services. An affiliate of the faith-based, nonprofit Texas Health Resources system, Texas Health Plano has more than 1,600 employees and 1,200 physicians on the medical staff. For more information, call 1-877-THR-WELL or visit www.TexasHealth.org.

About Texas Back Institute

Texas Back Institute, one of the largest freestanding multispecialty spine clinics in the United States, was established in 1977 and provides comprehensive medical care for back and neck pain. Texas Back Institute is a back care leader specializing in spinal arthroplasty, minimally invasive spine surgery, degenerative disk disease and spinal deformation. As an academic health care organization, Texas Back Institute has trained hundreds of physicians, scientists and allied health professionals. Its research institution employs state-of-the-art technology and is involved in many clinical trials, including artificial discs. Texas Back Institute's professional staff includes board-certified spine surgeons, general surgeons, internists, physiatrists, pain specialists, exercise physiologists, and a team of physical and occupational therapists. Texas Back Institute has locations in Denton, Fort Worth, Mansfield, McKinney, Plano, Rockwall, Trophy Club and Wichita Falls, Tyler, Odessa, Texas, and Phoenix and Gilbert, Arizona. For more information, visit www.texasback.com.

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