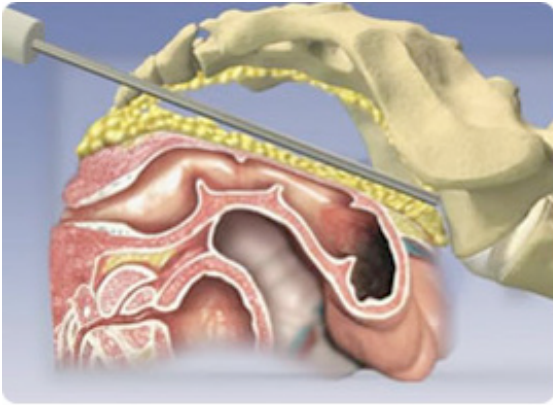


## press releases



Graphic courtesy of TranS1, Inc.

### **Mayfield Clinic Neurosurgeon at Christ Hospital Is First in Cincinnati to Perform Novel Fusion Technique for Treatment of Lower Back Pain**

#### ***AxiaLIF System Minimizes Incision Size and Patient Recovery Time***

CINCINNATI, Ohio – William Tobler, M.D., a neurosurgeon with the Mayfield Clinic, is the first in Cincinnati to perform a novel surgical procedure used to stabilize the lower spine. The procedure, known as Axial Lumbar Interbody Fusion, or AxiaLIF, was performed at Christ Hospital on June 6.

The procedure, Dr. Tobler said, is currently the least invasive approach to the lumbosacral region, an area known as L5-S1, where the fifth vertebra of the lower (lumbar) spinal column meets the first vertebra of the sacrum (tailbone). The procedure, which requires a tiny incision near the top of the buttock and long, narrow instruments, is designed to fixate the lower spine in patients who suffer from spinal stenosis (a narrowing of the spinal canal), spondylolisthesis (a slipping forward of the vertebral body in the spine), or degenerative disc disease.

“What makes this procedure so exciting is that it can be accomplished without cutting through the abdomen and dissecting spinal soft-tissue structures,” Tobler said. “Many spinal fusions are performed by opening up the abdomen, with a vascular surgeon standing by to help protect major blood vessels exposed in that approach. With the AxiaLIF procedure, there is less risk and less cutting. This results in reduced recovery time and discomfort for the patient.”

Fifteen medical centers in the United States are currently prepared to use this approach for lumbar fusions, and the Christ Hospital procedure on June 6 was the 25th such procedure to date.

The AxiaLIF system was developed by TranS1, Inc., a medical device firm based in Wilmington, N.C. The U.S. Food and Drug Administration approved the procedure in December 2004.

Dr. Tobler, director of neurosurgery at Christ Hospital and associate professor of neurosurgery at the University of Cincinnati College of Medicine, performed the first such operation in Cincinnati on a 33-year-old woman, a former soccer player and coach who had been suffering from degenerative disc disease for the last several years and who had experienced debilitating pain for at least two years. Non-surgical treatments had failed to relieve her pain.

“The patient did great,” Dr. Tobler said. “She started eating the day of her surgery, and although she stayed in the hospital two days, she could have gone home the day after surgery. Technically everything looked good. The follow-up scans looked good. She experienced zero blood loss.”

Patients who undergo conventional lumbar fusion, by comparison, typically are discharged three to five days after surgery and do not return to work for one to two months.

Forty to 60 percent of U.S. adults suffer from chronic back pain in a given year, and more than one million spine surgery procedures are performed annually. Medical costs to treat back pain approach \$24 billion per year.

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FOR IMMEDIATE RELEASE**

**CONTACT:** Patty Thelen  
Health Alliance Public Relations  
(513) 585-7200

**CONTACT:** Cindy Starr, MSJ  
Communications Department  
(513) 584-2214  
[starrcm@healthall.com](mailto:starrcm@healthall.com)

## How AxiaLIF Works

A patient undergoing the AxiaLIF lies face down on the operating table. A long, narrow probe is inserted through a three-quarter-inch incision above the buttock and advanced along the inside of the sacral bone to the surgery site. Torn and diseased disc material is removed by tiny scrapers and then suctioned out a narrow rod. That space is then filled with bone graft material via a small tube.

Dr. Tobler made two additional one-inch incisions in the back, through which the stabilizing pedicle screws were inserted into the L5-S1 complex. The entire procedure took about two and a half hours.

Dr. Tobler estimated that a large percentage of all L4 and L5 fusions might potentially be accomplished with this technique. Fusions at the L4 level using AxiaLIF have not yet been performed in the United States. The procedure cannot be used on patients with bowel disease (Crohn's or ulcerative colitis), patients who have previously undergone anterior pelvic surgery, or patients diagnosed with severe spondylolisthesis, severe scoliosis, tumor, or trauma.

For more information about AxiaLIF, go to <http://www.trans1inc.com>.

The Mayfield Clinic is recognized as one of the nation's leading physician organizations for clinical care, education, and research of the spine and brain. Mayfield, which is affiliated with the UC Department of Neurosurgery, includes 18 neurosurgeons and treats 20,000 patients from 35 states and a dozen countries in a typical year. Mayfield's neurosurgeons are active participants in important clinical trials and have pioneered surgical procedures and instrumentation that have revolutionized the medical art of neurosurgery for brain tumors and neurovascular diseases and disorders.

The Christ Hospital is part of the Health Alliance, an integrated health care delivery system that also includes The University Hospital, The St. Luke Hospitals, The Jewish Hospital, The Fort Hamilton Hospital, and the physicians of Alliance Primary Care. To view other Health Alliance news releases, go to [www.health-alliance.com/pressroom](http://www.health-alliance.com/pressroom).

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