

D News & Notes

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Revolutionary Artificial Disc Reduces Back Pain, Restores Function, Keeps Motion Danbury Hospital Offers First Artificial Disc Ever Available In U.S.



Orthopedic surgeon **David L. Kramer, MD**, pictured at right, with **Pierre F. Saldinger, MD**, Chairman, Dept. of Surgery, has introduced artificial disc surgery at Danbury Hospital. Using the first artificial disc available in the U.S., the procedure offers an alternative to spinal fusion surgery for selected patients with chronic low back pain.

For many people suffering from chronic back pain, even walking can be a struggle. Many have benefited from spinal fusion surgery -- a common treatment for chronic low back pain caused by degenerative disc disease -- whereby the surgeon joins vertebrae together using bone grafts and metal implants so that motion no longer occurs between them.

While most patients report relief from pain after spinal fusion surgery, the surgery often robs them of flexibility and range of motion.

Instead of fusion, spine surgeon **David L. Kramer, MD**, an attending orthopedic surgeon at Danbury Hospital, now offers artificial disc replacement. The procedure involves removing the damaged disc and replacing it with the new CHARITÉ™ Artificial Disc, a high-tech device made of two metallic endplates and a movable high-density plastic center. The surgery has been performed in Europe since the mid-1980s.

In clinical trials comparing artificial disc replacement to spinal fusion surgery, artificial disc patients maintained or improved their range of motion and experienced improvements in pain. There were no significant differences in complications.

The CHARITÉ™ Artificial Disc was recently approved by the U.S. Food and Drug Administration (FDA), making it the first artificial disc on the U.S. market.

Within several days, patients undergoing this procedure can expect to be walking and approaching a return to normal activities. In fact, bending and moving are typically no longer a painful chore or impossibility, said Dr. Kramer.

"The artificial disc presents an opportunity to give carefully selected patients pain reduction and restored function for activities that most people take for granted. For patients with this problem, even carrying a bag of groceries may be impossible," said Dr. Kramer.



Typically, two surgeons work together in the operation. A general surgeon approaches the spine through an incision in the abdomen and carefully moves blood vessels and internal organs out of the way to provide access to the spine. A spine surgeon then uses special tools to remove the damaged disc and creates a space between two vertebrae for the implantation of the artificial disc. The procedure generally takes approximately two hours. While artificial replacements are commonly used

in hips and knees, this is the first FDA approval of such a device for spinal discs.

Artificial disc replacement is not for everyone. As with any major surgery, there are possible complications that can occur including unresolved pain, allergic reactions, bladder problems and/or infection. Patients should ask their doctors to see if artificial disc replacement is appropriate for them.

"Danbury Hospital has developed a reputation as an orthopedic teaching center for spine surgeons from New York, Connecticut and New Jersey, helping them to improve their capabilities with minimally invasive orthopedic procedures," Dr. Kramer said.

About 65 million Americans suffer from low back pain every year, according to the American Association of Neurological Surgeons. Americans spend about \$50 billion each year on low back pain, the most common cause of job-related disability and lost workdays. More than 12 million people are reported to have degenerative disc disease.

Board certified in orthopedic surgery, Dr. Kramer joined the Danbury Hospital medical staff in the Department of Surgery, Section of Orthopedic Surgery, in 1996. An honors graduate of Dartmouth Medical School, he completed a fellowship in spine surgery at Thomas Jefferson University Hospital, Rothman Institute at Pennsylvania Hospital, Philadelphia, and the M.E. Muller Foundation European Fellowship in Adult Reconstruction, Bern, Switzerland, in 1995-96. Prior to

1995, he served as chief of the Orthopedic Trauma Service and completed a surgery internship at Beth Israel Hospital, Harvard Medical School, Boston, and then completed an orthopedic surgery residency at Massachusetts General Hospital, as part of the Harvard Combined Orthopedic Residency Program. Dr. Kramer graduated from Dartmouth College, Hanover, New Hampshire, with a bachelor's degree in biochemistry in 1985. From 1989-1994, he was a clinical fellow and instructor in surgery and orthopedic surgery at Harvard Medical School, Boston. Dr. Kramer is the recipient of numerous awards for orthopedic research and as an academic scholar.

Dr. Kramer maintains his practice, Connecticut Neck and Back Specialists, LLC, at 20 Germantown Road, Danbury. To make an appointment, call 203-744-9700.