Medtronic News

Medtronic Introduces New Procedure for Minimally Invasive Spinal Fusion

MEMPHIS, Tenn., Nov 02, 2011 (BUSINESS WIRE) --

Medtronic, Inc. (NYSE: MDT) the world leader in spinal technology, announced today a pioneering approach to minimally invasive spinal fusion at the 26th annual meeting of the North American Spine Society in Chicago, IL.

The MAST(R) MIDLF(TM)procedure uses a proprietary retractor and cortical bone screw fixation in conjunction with Medtronic's comprehensive surgical platform of interbody, navigation, neuromonitoring and biologic options. Referred to as a midline laminectomy approach, it is unique in that it enables a minimally invasive spinal fusion surgery, accessing the spine in the middle lower back, and eliminates the need for surgeons to work through a tubular retractor.

"This surgical strategy enables a highly efficient, minimally invasive lumbar fusion, while allowing visualization of familiar posterior landmarks," said Dr. Richard Hynes, spine surgeon at The B.A.C.K. Center in Melbourne, FL. "A midline approach offers surgeons a number of benefits in addressing the challenges associated with decompression as well as sacral fixation in the lumbar or lower spine."

The MAST(R) MIDLFTMprocedure may also be used with Medtronic's surgical navigation and imaging systems. This allows for decreased exposure to radiation for hospital staff and physicians, with improved accuracy of device placement to avoid injury to nerves.

The MIDLF(TM) procedure is the latest advancement in a series of integrated procedural solutions that compliments Medtronic Spinal's minimally invasive MAST(R) portfolio to successfully treat patients for a variety of degenerative and deformity spinal conditions. In the United States, over 250,000 individuals undergo spinal fusions annually to treat degenerative changes in the lumbar spine.

About Minimally Invasive Spinal Surgery vs. Traditional Open-Back Surgery

- Minimally invasive surgery requires a smaller incision than traditional open-back surgery, leaving patients with smaller scars.
- Minimally invasive surgery has been reported to minimize injury to muscles, tendons, and other normal tissues that aren't directly involved with the back disorders.1
- Additionally, it has been shown that patients of minimally invasive surgery versus traditional open-back surgery can have shorter hospital stays than traditional open spine surgeries.2

About Medtronic's Spinal Business

Medtronic's spinal business, based in Memphis, Tenn., is the global leader in today's spine market and is committed to advancing the treatment of spinal conditions. Medtronic's spinal business collaborates with world-renowned surgeons, researchers and innovative partners to offer state-of-the-art therapies for spinal, neurological, orthopaedic and oral maxillofacial conditions. Medtronic is committed to developing affordable, minimally invasive procedures that provide lifestyle friendly surgical therapies. More information about the company and its spinal treatments can be found at www.medtronicspinal.com and its patient-education Web site, www.back.com.

About Spinal Navigation and Intra-Operative Imaging

The O-arm(R) Imaging System coupled with the StealthStation(R) Image Guidance System can also be used to navigate pedicle preparation and screw placement. Together, O-arm(R) intra-operative imaging and StealthStation(R) surgical navigation form a unique Medtronic surgical tool, enabling more accurate spinal procedures in a reduced radiation environment for the

surgeon and staff. For more information, please visit: www.medtronicnavigation.com.

About Medtronic

Medtronic, Inc. (www.medtronic.com), headquartered in Minneapolis, is the global leader in medical technology - alleviating pain, restoring health, and extending life for millions of people around the world.

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

1 Isaacs. Minimally invasive microendoscopy-assisted transforaminal lumbar interbody fusion. J. Neruosurg: Spine. 3:98-105, 2005.
2 Park, Won Ha. Comparison of one-level posterior lumbar interbody fusion performed with a minimally invasive approach or a traditional open approach. SPINE 32 (5):537-543, 2007.

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Medtronic, Inc.
Public Relations:
Marybeth Thorsgaard, 612-859-5181
or
Investor Relations:
Jeff Warren, 763-505-2696

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