

Medtronic Launches Quick-to-Dough Bone Cement in the United States

Kyphon(R) Xpede(TM) Bone Cement Is the Latest Offering from Medtronic for Treatment of Spinal Fractures

MINNEAPOLIS, May 16, 2011 (BUSINESS WIRE) --

Medtronic, Inc. (NYSE:MDT) today announced the U.S. launch of Kyphon Xpede Bone Cement, a quick-to-dough polymethylmethacrylate (PMMA) bone cement for use in the treatment of spinal fractures with minimally invasive [Kyphon\(R\) Balloon Kyphoplasty](#).

Xpede Bone Cement reaches the doughy state more than twice as fast compared with Kyphon(R) HV-R(R) Bone Cement and Kyphon(R) ActivOs(TM) 10 Bone Cement. This latest innovative bone cement from Medtronic's Kyphon Products Division helps streamline the Kyphon Balloon Kyphoplasty procedure, while providing sufficient time for careful surgical introduction and controlled delivery.

"Xpede Bone Cement not only is quick to dough, but also provides all of the handling characteristics that physicians have grown to expect from the Kyphon Products Division, which pioneered balloon kyphoplasty. These include a long working time and radiopacity for easy visualization during minimally invasive and image-guided procedures," said Alex DiNello, general manager and vice president of the Kyphon Products Division. "With this product, Medtronic continues to leverage our leadership position in balloon kyphoplasty for the treatment of vertebral compression fractures. Since we began marketing this treatment in 2000, an estimated 900,000 fractures have been treated worldwide with Kyphon Balloon Kyphoplasty by approximately 14,000 trained spine specialists."

Xpede Bone Cement further expands Medtronic's portfolio of bone cements for treatment of patients with vertebral compression fractures caused by osteoporosis or cancer. Xpede Bone Cement joins the Kyphon bone cement product family in the U.S. that also includes:

- Kyphon ActivOs 10 Bone Cement, a PMMA-based bone cement formulated with 10 percent hydroxyapatite by weight in the powder. Hydroxyapatite is chemically and structurally similar to the mineral component of bone, has been widely studied¹, and has a long history of use in dental and orthopedic implants.²
- Kyphon HV-R Bone Cement, the first PMMA bone cement for use in kyphoplasty.

"I find that Xpede Bone Cement streamlines the balloon kyphoplasty procedure," said Dr. Wade Wong*, professor of clinical radiology and anesthesiology at the University of California, San Diego and chief of neurointerventional spine. "It is quick to dough and has a long working time, which provides me with increased control and ease of handling."

Xpede Bone Cement is expected to be available in Europe in the near future. For more information on Kyphon Balloon Kyphoplasty, go to www.balloonkyphoplasty.com.

About Kyphon Balloon Kyphoplasty

During the minimally invasive Kyphon Balloon Kyphoplasty procedure, working tubes are used to create small pathways into the fractured bone, generally on both sides of the vertebral body. Orthopedic balloons are inserted and then inflated inside the fractured bone in an attempt to return it to its correct position. Inflation and removal of the balloons create cavities in the vertebral body that are filled with bone cement, forming an "internal cast."

Balloon kyphoplasty differs from other surgical therapies for vertebral compression fractures such as vertebroplasty, which is designed to stabilize the fracture without correcting vertebral body deformity or providing a controlled fill and distribution of bone

cement. With balloon kyphoplasty, inflation of the balloons compacts the cancellous bone, which may fill fracture lines. The presence of the space also allows a more viscous bone cement to be injected under manual pressure.

Kyphon(R) Balloon Kyphoplasty incorporates technology developed by Gary K. Michelson, M.D.

Important Safety Information

The complication rate with Kyphon Balloon Kyphoplasty has been demonstrated to be low.³ There are risks associated with the procedure (e.g., cement leakage), including serious complications, and though rare, some of which may be fatal. This procedure is not for everyone. A prescription is required. Please consult a qualified physician for a complete list of indications, contraindications, benefits, and risks. Only a patient and his or her physician can determine whether this procedure is appropriate for individual cases.

About the Spinal and Biologics Business at Medtronic

The Spinal and Biologics business is based in Memphis, Tenn. It is the global leader in today's spine market and is committed to advancing the treatment of spinal conditions. The Spinal and Biologics business works with world-renowned surgeons, researchers and innovative partners to offer state-of-the-art products and technologies for neurological, orthopedic, dental and spinal conditions. Medtronic is committed to developing affordable, minimally invasive procedures that provide lifestyle-friendly surgical therapies. More information about the company and its treatment therapies can be found at www.medtronic.com and its patient-education Web sites, www.back.com, www.iscoliosis.com, www.maturespine.com and www.necksurgery.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 LeGeros RZ. Legeros. Properties of Osteoconductive Biomaterials: Calcium Phosphates. Clinical Orthopaedics and Related Research. 2002; 395:81-98.

2 ibid

3 Based on analysis of 93 published studies with 5,690 Kyphon Balloon Kyphoplasty patients through April 4, 2010. Cement related symptomatic adverse events were 0.21 percent. Data on file as of June 21, 2010.

* Consultant to Medtronic

SOURCE: Medtronic, Inc.

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