Medtronic News

Medtronic Hydrodebrider(TM) System Wins Medical Device Excellence Award

Hydrodebrider System Offers Innovative Treatment for Chronic Sinusitis

MINNEAPOLIS, Apr 09, 2010 (BUSINESS WIRE) --Medtronic (NYSE: MDT) announced today that the company was named a 2010 Medical Device Excellence Award (MDEA) winner for excellence in medical device design for its Hydrodebrider(TM) System, manufactured by the company's Ear Nose and Throat (ENT) business unit. The Hydrodebrider System is the first and only powered endoscopic irrigation system for removing bacteria from the paranasal sinuses. It is used for the treatment of chronic sinusitis, a disease that affects nearly 30 million US adults.1

Chronic sinusitis is defined as inflammation of the tissues in the paranasal sinuses for at least 12 consecutive weeks in duration. Some patients experience recurring bouts of chronic sinusitis, despite medical management and sinus surgery. Research increasingly indicates that bacterial infections are intimately associated with chronic sinusitis.2,3 Several studies have concluded that mechanical disruption and removal of these bacterial infections is necessary to eradicate disease in patients with recurrent sinusitis.2,3

The Hydrodebrider System helps surgeons remove the bacteria that cause chronic sinus infections. With a Hydrodebrider powered handpiece, surgeons can deliver a rotating spray of pressurized saline at 5 mL/sec for direct irrigation and fluid removal from sinus mucosal surfaces. The Hydrodebrider's innovative design enables surgeons to remove bacteria from anatomical locations that traditionally have been difficult to reach, such as the medial wall and floor of the maxillary sinuses. Desrosiers et al found that the Hydrodebrider System was more effective at disrupting and removing bacteria than traditional saline lavage.4 *In vitro* research demonstrated a 99% reduction in bacterial coverage in chronic sinusitis specimens treated with the Hydrodebrider System.4

For additional versatility, the Hydrodebrider System is available with two handpieces. The Standard Handpiece features an innovative Flex-Tip with 270° articulation and suction, and is ideal for accessing the maxillary, ethmoid, and sphenoid sinuses. A new Frontal Handpiece is designed for the frontal sinuses with a 2.2 mm diameter and fixed 80° articulation.

Winning products of the 2010 Medical Design Excellence Awards (MDEA) competition will receive their recognition at a ceremony held June 9 during the Medical Design and Manufacturing (MD&M) East 2010 Conference and Exposition in New York City.

MDEA, a worldwide competition, is the premier awards program for the medical technology community. Winning entries are chosen based on innovative use of materials or processes and design and engineering features that enhance the ability of medical professionals to provide healthcare, improved patient benefits, and better overall delivery of care.

About Medtronic's ENT Business Unit

Located in Jacksonville, Florida, the Ear Nose and Throat (ENT) division of Medtronic develops and manufactures products designed to treat ENT diseases. As the market leader in ENT, Medtronic is changing the way ENT surgery is performed with innovative, minimally invasive products and techniques that benefit both patients and surgeons. Main products include powered tissue-removal systems and other microendoscopy instruments, nerve monitoring systems, image-guided surgery systems, sleep-disordered breathing therapies, dissolvable nasal packing and a Ménière's disease therapy device. Learn more about the ENT business on the web at www.MedtronicENT.com. Learn more about the Hydrodebrider System at www.Hydrodebrider.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. Benninger MS, et al. Adult chronic rhinosinusitis: definitions, diagnosis, epidemiology, and pathophysiology.*Otolaryngol Head Neck Surg* 2003; 129(3 Suppl): S1-32.

2. Jervis-Bardy J, Foreman A, Field J, Wormald PJ. Impaired mucosal healing and infection associated with Staphylococcus aureus after endoscopic sinus surgery. *Am J Rhinol Allergy* 2009; 23(5):549.

3. el-Fiky LM, Khamis N, Mostafa Bel D, Adly AM. Staphylococcal infection and toxin production in chronic rhinosinusitis.*Am J Rhinol Allergy* 2009; 23(3):264-7.

4. Desrosiers M, Myntti M, James G. Methods for removing bacterial biofilms: in vitro study using clinical chronic rhinosinusitis specimens. *Am J Rhinol* 2007; 21(5):527-32.

SOURCE: Medtronic, Inc.

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