The Gates Vascular Institute First to Implant World’s Smallest Pacemaker in Western New York

Miniaturized Heart Device Provides Patients with the Most Advanced Pacing Technology Available

Buffalo, NY – June 5, 2017 – The Gates Vascular (GVI) announced that it is one of the first hospitals in New York State and the first in Western New York to offer the world’s smallest pacemaker for patients with bradycardia. The Micra® Transcatheter Pacing System (TPS) is a new type of heart device that provides patients with the most advanced pacing technology at one-tenth the size of a traditional pacemaker, equivalent to the size of a vitamin tablet. The system is approved for Medicare reimbursement.

Bradycardia is a condition characterized by a slow heart rhythm, often lower than 60 beats per minute. At this rate, for some patients, the heart is unable to pump enough oxygen-rich blood to the body during normal activity or exercise, causing dizziness, fatigue, shortness of breath or fainting spells. Pacemakers are the most common way to treat bradycardia to help restore the heart’s normal heart rate and relieve symptoms by sending electrical impulses to the heart to increase the heart rate.

Physicians at the GVI have elected to use Medtronic’s Micra TPS because the device does not require cardiac wires (leads) or a surgical “pocket” under the skin to deliver a pacing therapy unlike the traditional pacemakers. Instead, the device is small enough to be delivered by a catheter and implanted directly into the heart with small tines, providing a safe alternative to conventional pacemakers without the complications associated with leads – all while being cosmetically invisible. The global Micra post-approval registry interim data reported very low number of major complications including extremely low infection rate compared to the traditional pacemakers. The Micra TPS is also designed to automatically adjust pacing therapy based on a patient’s activity levels.

“I am excited to be part of implanting this innovative device with tremendous support from the GVI staff,” said Hiroko Beck, MD, implanting Electrophysiologist at the GVI, UBMD Internal Medicine cardiologist and assistant professor in the Department of Medicine, Jacobs School of Medicine and Biomedical Sciences. “The Micra® TPS is the most advanced pacing technology available to patients via a minimally invasive approach.”

“I feel like a new man,” exclaimed Eugene Massey after having the device implanted. “I felt no pain; the whole experience start to finish has been wonderful.”
The Micra TPS also incorporates a retrieval feature to enable retrieval of the device when possible; however, the device is designed to be left in the body. For patients who need more than one heart device, the miniaturized Micra TPS was designed with a unique feature that enables it to be permanently turned off so it can remain in the body and a new device can be implanted without risk of electrical interaction.

The Micra TPS is the first and only transcatheter pacing system to be approved for both 1.5 and 3 Tesla (T) full-body magnetic resonance imaging (MRI) scans and is designed to allow patients to be followed by their physicians and send data remotely via the Medtronic CareLink® Network.

The Gates Vascular Institute, a part of Kaleida Health, is a combination of the finest researchers, surgeons, physicians, and other clinicians devoted to the study, treatment and prevention of cardiac, stroke and vascular diseases. Designed to promote a collaborative environment, the Gates Vascular Institute brings the brightest medical minds together on behalf of the patients of Western New York.

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