University of Colorado Hospital first in region to implant advanced pacemaker

MRI now possible for patients with cardiac pacemakers

AURORA, Colo. (March 23, 2011) – University of Colorado Hospital (UCH) is the first hospital in Colorado and the region to offer a pacemaker designed, tested and approved for use in Magnetic Resonance Imaging (MRI) machines. Physicians at UCH implanted the device in February 2011 – it is the first MRI compatible system implanted in the Rocky Mountain region and only the fourth in the nation.

Before the new pacing system was available, MRI was not possible for patients with implanted pacemakers because of the potential for serious complications - including interference with pacemaker operation and possible damage to device components. A pacemaker monitors the electrical impulses in the heart and delivers electrical pulses to make it beat in a normal rhythm.

“Medical imaging and electronic implantable devices, such as pacemakers, are important technological advances, and are often life-saving,” said William Sauer, MD, director of cardiac electrophysiology at UCH. “MRI conditionally safe pacemakers are an important step towards providing our patients the highest level of care, without compromise. UCH patients now have access to this revolutionary technology. They no longer have to choose between a device to monitor their heart and improve their quality of life or a scan that could ultimately be life-saving.” Sauer served as an advisor and consultant to Medtronic during the development of the device.

The number of patients with pacemakers is growing. Approximately 200,000 pacemakers are implanted annually in the U.S. and the use of MRI is increasing. About 40 million MRI scans are performed annually in the nation. UCH performs approximately 13,800 MRI scans each year. Scans are often preferred by physicians because they provide a level of detail and clarity not offered by other imaging technologies.

“The Cardiac and Vascular Center at UCH is committed to providing the highest quality of care for our patients and the use of this novel pacemaker technology is an important example of this on-going commitment to excellence,” said Peter Buttrick, MD, division head of cardiology at UCH.
There are estimates that as many as 75 percent of pacemaker patients will eventually need an MRI and more than 200,000 patients in the U.S. are not able to have the scan because they have a pacemaker.

The University of Colorado Hospital (UCH) is the Rocky Mountain region's leading academic medical center. It is ranked among the top 10 academic medical centers in the United States by the University HealthSystem Consortium and is ranked as one of the country’s best hospitals by U.S. News & World Report. UCH is best known as an innovator in patient care and often as one of the first hospitals to bring new medicine to patients’ bedsides. The hospital’s physicians are affiliated with the University of Colorado School of Medicine, part of the University of Colorado system. Based on the expansive Anschutz Medical Campus in Aurora, Colo., the hospital is a central part of one of the country’s only true “Health Care Cities” where patient care, research and education converge to establish the future of health care delivery.

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