

Mount Sinai inside



LEFT TO RIGHT: David H. Adams, MD, and Samin K. Sharma, MD, with the CoreValve device.

A New Alternative to Open Heart Surgery

Three physicians at Mount Sinai Heart became the first team in the United States to perform a percutaneous implantation of a new device that replaces a diseased aortic heart valve, an advance that provides a viable treatment for patients too elderly or infirm to undergo open heart surgery. The device, called the Medtronic CoreValve[®] Transcatheter Aortic Valve Prosthesis, treats severe aortic stenosis with a catheter-based technology that does not require an incision in the chest or the use of a heart-lung machine.

David H. Adams, MD, Marie-Josée and Henry R. Kravis Professor and Chair of the Department of Cardiothoracic Surgery; Samin K. Sharma, MD, Zena and Michael A. Wiener Professor and Director of the Cardiac Catheterization Laboratory; and Annapoorna S. Kini, MD, Associate Professor and Associate Director of the Cardiac Catheterization Laboratory, have begun using the CoreValve system as part of the U.S. Food and Drug Administration's pivotal clinical trial. Dr. Adams is the trial's national co-principal investigator.

CONTINUED ON PAGE 3

Look inside

Randall F. Holcombe, MD, Joins Mount Sinai

Twenty-three Years of Fashion, Fun, and Philanthropy

Epic Is Coming

Snow Day

Department of Rehabilitation Medicine Celebrates 100 Years

In December 1910, The Mount Sinai Hospital established one of the nation's first departments devoted to treating patients with disabling injuries and diseases, which, in that era, involved the use of a variety of physical agents. Today, the Department of Rehabilitation Medicine is consistently ranked among the top 20 in the nation by *U.S. News & World Report*. The department commemorated its 100th anniversary in November with a scientific symposium, followed by an event at the South Street Seaport that was attended by 450 people, including staff, faculty, residents, and alumni.

Dennis S. Charney, MD, Anne and Joel Ehrenkranz Dean of Mount Sinai School of Medicine and Executive Vice President for Academic



Kristjan T. Ragnarsson, MD, Lucy G. Moses Professor and Chair, Department of Rehabilitation Medicine

CONTINUED ON PAGE 3

Alternative to Open Heart Surgery (continued from page 1)

“The CoreValve device gives patients who are not eligible for surgery a new lease on life,” says Dr. Sharma. “We think more than 70 percent of patients receiving the CoreValve will survive more than two years.” His estimates are based on the 13,000 devices that have been implanted in patients throughout Europe since 2007. Due to Mount Sinai’s high volume of cases, Dr. Sharma says he expects Mount Sinai will perform more than 125 procedures in 2011, surpassing 39 other institutions around the country that are participating in the clinical trial.

or have lung disease. In the past, physicians have relied on a balloon procedure to open the heart valve, but this has proven to be a temporary fix, with results lasting up to nine months before the symptoms return. Dr. Sharma says the balloon procedure can be performed only four times before it actually begins to weaken the patient’s heart valve.

During implantation of the CoreValve, a self-expanding stent measuring slightly more than three centimeters is guided over a wire and a catheter placed in a peripheral artery through the diseased aortic valve. Once it

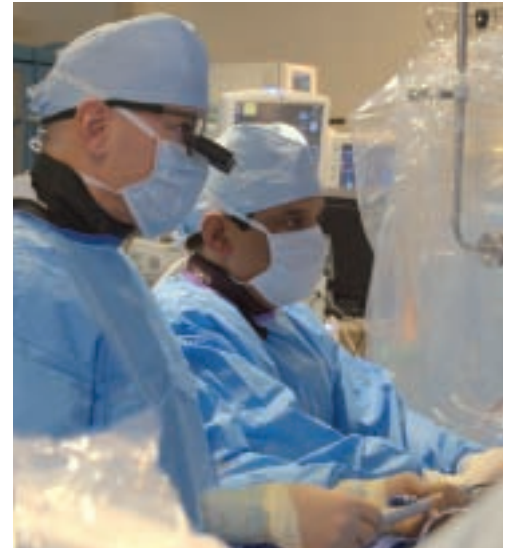
“There is an enormous unmet need in this patient population for a safe and effective treatment,” says Dr. Adams.

“The CoreValve device gives patients who are not eligible for surgery a new lease on life. We think more than 70 percent of patients receiving the CoreValve will survive more than two years.”

—SAMIN K. SHARMA, MD

Approximately 100,000 people in the United States are diagnosed with severe aortic stenosis each year, but one-third of them do not qualify for surgery due to their advanced age, the fact that they have suffered a stroke,

expands in this position, the new aortic valve begins functioning immediately. The procedure, which takes about two hours, requires a small incision in the leg given under local anesthesia.



LEFT TO RIGHT: David H. Adams, MD, and Samin K. Sharma, MD, perform the CoreValve procedure.

Department of Rehabilitation Medicine (continued from page 1)

Affairs at The Mount Sinai Medical Center, addressed the symposium: “Mount Sinai has led the field of physical medicine and rehabilitation medicine for a century now, helping to make significant advances in understanding and treating spinal cord and traumatic brain injuries.”

“Rehabilitation Medicine has become an interdisciplinary effort with a team of professionals working together to help patients regain lost function and resume full lives.”

—KRISTJAN T. RAGNARSSON, MD

Only four physicians have directed the department: Heinrich F. Wolf, MD (1910-1935); William Bierman, MD (1935-1959); Lawrence A. Wisham, MD (1959-1986); and since 1986, Kristjan T. Ragnarsson, MD, the Lucy G. Moses Professor and Chair of the Department of Rehabilitation Medicine.

Throughout the years, the department’s name changed to reflect shifting directions of care. Today, “Rehabilitation Medicine has become an interdisciplinary effort with a team of professionals working together to help patients regain lost function and resume full lives,” says Dr. Ragnarsson. “Our team includes physicians, rehabilitation nurses, and professionals in physical, occupational and speech therapy, nutrition, social work, psychology, vocational counseling, and therapeutic recreation.”

Under Dr. Ragnarsson and Wayne A. Gordon, PhD, Jack Nash Professor of Rehabilitation Medicine and Director of Research, the department has become a world-renowned center of excellence, providing comprehensive rehabilitation for patients with spinal cord injury, brain injury, stroke, limb amputations, multiple traumas, and joint replacement surgery. It houses the only federally designated Model Systems of Care in New York State, one for spinal cord injury and another for traumatic brain injury (TBI). Among its research accomplishments are the development of an assessment tool for diagnosing subtle brain damage, and an intervention to address impairment of executive function, such as goal-setting and problem-solving abilities, in patients with TBI.

With nearly 2,000 inpatient admissions annually, and tens of thousands of outpatient visits, the department has helped many individuals regain optimal function compatible with their disability, says Dr. Ragnarsson.

Among the guests celebrating the centennial anniversary were, LEFT TO RIGHT: Leighton Chan, MD, MPH, Chief, Department of Rehabilitation Medicine, National Institutes of Health Clinical Center; Kristjan T. Ragnarsson, MD; Ross Zafonte, DO, Professor and Chair, Department of Physical Medicine and Rehabilitation, Harvard Medical School; and Marcel Dijkers, PhD, Research Professor, Department of Rehabilitation Medicine, Mount Sinai School of Medicine.

