Mount Sinai is First to Use a New Device for Clearing Calcified Arteries

Interventional cardiologists at The Mount Sinai Hospital in October became the first in the world to use a new device to remove hard calcium buildup in a coronary artery in preparation for the placement of a stent to improve blood flow through the artery. The device, the Diamondback 360° Coronary Orbital Atherectomy System, was approved by the U.S. Food and Drug Administration one day before it was brought to Mount Sinai for use.

Since then, Mount Sinai’s cardiac catheterization team has performed more than 25 procedures under the leadership of Samin K. Sharma, MD, Director of Clinical and Interventional Cardiology at The Mount Sinai Hospital. Dr. Sharma says there have been no complications during or after the procedures.

“This technology allows us to significantly reduce our patients’ heart blockage for more successful stent placement,” says Dr. Sharma, the Zena and Michael A. Wiener Professor.

Pioneers in the Treatment of Lymphedema

Patients with lymphedema—chronic swelling of the limbs or other areas of the body due to the damage or removal of lymph nodes—are benefiting from a unique technique being pioneered by two surgeons at Beth Israel Medical Center in Manhattan, Joseph Dayan, MD, and Mark Smith, MD, Co-Directors of the Gerald J. and Dorothy R. Friedman Center for Lymphedema Research and Treatment.

The technique, called Reverse Lymphatic Mapping, improves a microsurgical procedure, Lymph Node Transfer, in which lymph nodes are transplanted from a non-affected part of the body to the affected part. The lymph nodes then connect with the small vessels that begin filtering waste and draining fluid from the body. The mapping technique enables physicians to use new imaging technology to help
them determine which lymph nodes can be safely transplanted so they do not cause lymphedema in another area of the body.

“Lymph Node Transfer safely restores the physiological function of an extremity and gives us hope for improving the function rather than just managing it,” says Dr. Smith. He and Dr. Dayan have performed 50 procedures to date. They have also consulted with surgeons in Israel and Taiwan, who have started using the technique. In Taiwan, they performed a live surgical demonstration of their technique before an audience of 150 microsurgeons from around the world.

Recently, Drs. Dayan and Smith received top honors for the “Best Presentation,” at the Northeastern Society of Plastic Surgeons Annual Meeting in Washington, D.C.

As many as one-third of all breast cancer patients, and those who have been treated for other cancers such as melanoma, develop lymphedema, which can impair normal activities and predispose people to infections. Traditionally, lymphedema has been managed with massage therapy, or by wearing compression garments that prevent swelling.

Dr. Dayan says the scientific research he and Dr. Smith are gathering about the technique will shed new light on inner workings of the human lymphatic system. “There has been very little research conducted on the lymphatic system because it’s largely invisible,” he says. “But lymph vessels are everywhere, and may have a crucial role in other disease states, as well.”

The surgeons, founding members of the American Society for Lymphatic Surgery, recently published their findings online in the Journal of Reconstructive Microsurgery.

According to Lester Silver, MD, Chief of Plastic Surgery at The Mount Sinai Hospital: “There are many patients whose lymph nodes are absent or not functioning, who will greatly benefit from this procedure. By reducing the swelling in their limbs, patients have less pain, fewer infections, and a more comfortable lifestyle.”

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**A Ball, a Luncheon, and a Festive Reunion**

**Beth Israel’s Second Century Ball**
It was an evening of cocktails, dinner, dancing, and celebration at the Beth Israel 2013 Second Century Ball, held on Wednesday, November 13, at the Waldorf Astoria New York. More than 850 leaders, physicians, nurses, staff, and friends of the Beth Israel Medical Center gathered to support Beth Israel’s innovative clinical, research, and educational programs. The event raised $1.75 million to expand those initiatives and train the next generation of physicians. Beth Israel Medical Center Trustee Frank J. Bisignano and his wife, Tracy, served as this year’s Dinner Chairs.

**Mount Sinai Women’s Health Day of Learning and Luncheon**
Arianna Huffington, Chair, President, and Editor-in-Chief of The Huffington Post Media Group, was the keynote speaker at the Mount Sinai Women’s Health Day of Learning and Luncheon on Thursday, November 14, at the Plaza Hotel. The annual event drew more than 450 attendees who came to learn about the latest developments in gastroenterology, gynecology, and cardiology from leading physicians at The Mount Sinai Hospital and the Icahn School of Medicine at Mount Sinai.

**Roosevelt Hospital’s NICU Reunion**
More than 100 “graduates” of Roosevelt Hospital’s Neonatal Intensive Care Unit (NICU) and their families reunited with Farrokh Shahrivar, MD, Director of Neonatology, and the physicians, nurses, and other members of the NICU staff for a costume party and day of fun on Sunday, October 6. Volunteers from nonprofit Project Sunshine helped Nurse Manager Nori Yaun, RN, MA, and others organize the event at Roosevelt Hospital that included music, refreshments, and goodie bags.
Mount Sinai to Adopt New Diagnostic Code System

The Mount Sinai Health System, as well as every health care institution in the United States, will begin to use a more detailed set of codes to notate medical diagnosis and clinical procedures on patient medical records. This is an extraordinary undertaking that will involve several thousand faculty and voluntary physicians, practice managers, and staff in such departments as Clinical Documentation Improvement, Audit, and Compliance, who will need training over the coming months.

All institutions are required to adopt the new code sets by October 1, 2014, a date set by the U.S. federal government. The ultimate goal of the initiative is to help provide better data for evaluating and improving quality of patient care.

“This is one of the top five initiatives that will impact the entire Health System in 2014,” says Don Scanlon, Chief Financial Officer and Chief of Corporate Services, Mount Sinai Health System. “A successful implementation can set us apart from other institutions if we do this well.”

The new coding system, known as ICD-10 (International Statistical Classification of Diseases and Related Health Problems, tenth revision) will require physicians to classify disease and conditions on the patient medical chart to an unprecedented degree of specificity. The number of codes will increase from approximately 15,000, to nearly 70,000. This will also have a major impact on billing and claims and can potentially affect timely and accurate reimbursements for hospital procedures.

The scope of ICD-10 is far-reaching: more than 80 operational systems, including the Electronic Medical Record system Epic, Eagle, IDX, 3M, PRISM, and Meditech will be interacting with ICD-10 across Mount Sinai’s seven campuses, and the need for education and training is paramount.

“Mount Sinai started planning for this project more than two years ago, and today, we have more than 200 physician champions in every department at each of our hospital campuses who are educating their peers about the new codes,” says Jeffrey Farber, MD, MBA. “By the end of March, a documentation review team will have evaluated more than 10,000 patient charts using the current ICD-9 methodology to better understand the kinds of documentation changes we will need to be compliant with ICD-10.”

Dr. Farber, Chief Medical Officer of Mount Sinai Care, LLC, and Associate Professor of Geriatrics and Palliative Medicine, is the project’s Physician Documentation Review sponsor.

Mount Sinai’s Information Technology Program Management Office is heading the transition and working with a team to launch a series of targeted e-learning opportunities and on-site education courses. Staff at each hospital will be notified in upcoming months about the kind of training they will be offered.

To learn more about ICD-10:
» Attend a Town Hall meeting, Tuesday, December 10, from 10 - 11 am, in Hess Center, Davis Auditorium.
» Email icd10.information@mountsinai.org.

Mount Sinai is First to Use a New Device for Clearing Calcified Arteries (continued from page 1)

of Medicine at Icahn School of Medicine at Mount Sinai. “We hope it will lead to improved outcomes for these patients with severely calcified blockages who are challenging to treat.”

According to experts, approximately 15 percent of patients in need of a percutaneous coronary intervention (PCI), or angioplasty, to treat a heart blockage have severe levels of arterial calcium that would benefit from the use of the new device. Until now, there have been limited treatment options. The Diamondback 560 is the first new coronary atherectomy system to be marketed in more than 20 years.

Dr. Sharma’s expertise in performing PCI—particularly in hard-to-treat cases—led the Diamondback 560’s manufacturer, Cardiovascular Systems, Inc. (CSI), based in St. Paul, Minnesota, to choose him as the first to use the device. The Diamondback 560 is now being rolled out at other leading cardiology centers in the United States. Mount Sinai will serve as the company’s main training center for educating physicians and other cardiovascular professionals on how to use the device.

Mount Sinai’s Cardiac Catheterization Laboratory has repeatedly been awarded New York State’s highest two-star safety rating in overall and nonemergency cases. It also performs the highest number of PCI procedures in New York State—a total of 14,414 over three years, from 2008 to 2010, and is a referral center for some of the most difficult cases.
### Events

#### Nursing Research Day

The Mount Sinai Hospital Department of Nursing’s Center for Nursing Research and Education is hosting a Nursing Research Day and Poster Session that will feature abstracts on research and evidence-based practice projects. For more information, email Medel Paguirigan, EdD, RN, at medel.paguirigan@mountsinai.org.

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<tr>
<th>Date</th>
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<td>Wednesday, December 11</td>
<td>10 am – Noon</td>
<td>Poster Session: Noon – 2 pm, Guggenheim Atrium</td>
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<td>Wednesday, November 27</td>
<td>8 – 9 am</td>
<td>Grand Rounds Neurology: Josef Machac, MD, Clinical Professor, Radiology, and Associate Professor, Medicine (Cardiology), presents “New Developments in Radionuclide Brain Imaging.” The Mount Sinai Hospital Campus, Hess Center, Davis Auditorium</td>
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<td>Tuesday, December 3</td>
<td>4 – 5 pm</td>
<td>Frontiers in Oncology Seminar: Michael A. Caligiuri, MD, CEO, James Cancer Hospital, The Ohio State University, presents “Natural Killer Cells: Biology and Translation to the Clinic.” The Mount Sinai Hospital Campus, Annenberg, Hatch Auditorium</td>
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<td>Tuesday, November 26</td>
<td>8:30 – 9:30 am</td>
<td>Grand Rounds Department of Medicine: Jay Portnoy, MD, Professor of Pediatrics, University of Missouri–Kansas City School of Medicine, presents “Environmental Assessment and Interventions to Manage Allergic Conditions.” Beth Israel Medical Center Campus, Podell Auditorium</td>
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<tr>
<td>Thursday, December 5</td>
<td>Noon – 2 pm</td>
<td>Grand Rounds Pulmonary, Critical Care And Sleep Medicine: Kenneth Rosenzweig, MD, Professor and Chair, Department of Radiation Oncology, presents “Stereotactic Body Radiation Therapy for Early Stage Lung Cancer.” The Roosevelt Hotel, New York City</td>
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#### Influenza Vaccinations for Staff

The New York State Department of Health requires that all hospital personnel either receive the influenza vaccination or wear masks in areas where there is potential for patient contact. To comply with State regulations, beginning Monday, December 2, all Mount Sinai Health System faculty, staff, students, and volunteers who do not have a vaccination sticker on their ID badges must wear a mask while working or walking through public areas in any of the buildings on The Mount Sinai Hospital campus, including Icahn School of Medicine at Mount Sinai, or in any of the system hospitals. Vaccinations are free of charge and available immediately at each hospital’s Employee Health Service. Each hospital will also offer vaccination at a variety of convenient campus locations.

Those individuals who receive or have received the vaccination elsewhere must submit written documentation of when, where, and from whom they received it, information that should be given to the respective Employee Health Service.

### Education

#### 5th Annual Meeting on Laparoscopic, Robotic, and Vaginal Hysterectomy

This CME-accredited two-day conference will also include hands-on workshops on laparoscopic suturing and knot-tying. General Chair of the conference is Farr R. Nezhat, MD, Director of Minimally Invasive Gynecologic Surgery at St. Luke’s and Roosevelt Hospitals. Sponsored by the American Association of Gynecologic Laparoscopists. To learn more or to register, visit www.aagl.org.

**Thursday, December 5**
- Friday, December 6
- The Roosevelt Hotel, New York City