Transradial Catheterization Becoming the New Norm

See page 6

John Wang, MD, MedStar Union Memorial Hospital, Baltimore, Md., and Robert Lager, MD, MedStar Washington Hospital Center, Washington, D.C.
Meeting the Demand for Safety and Quality Despite Crises

THE PERFECT STORM—SNOW EMERGENCY MEETS EXPERTISE & COMMITMENT!
Crises—both natural and man-made—are inevitable. In medicine, we’re trained to intervene and minimize damage from the body’s misadventures. Patients depend on our ability to manage emergencies, no matter what. Even when snow blankets the region, seamless health care, particularly for those patients in the greatest jeopardy, has to remain available with uncompromising safety and quality. When two feet of nature’s wrath paralyzes the rest of a community, we have to continue to do what we are trained to do.

This past January, winter Storm Jonas brought much of the mid-eastern U.S. to a standstill. But cardiovascular care cannot be available at the mercy of cleared roads and sidewalks. We had to be there, and we were.

SNOW EMERGENCY RESPONSE
Dozens of MedStar Heart & Vascular Institute (MHVI) team members at MedStar Washington Hospital Center, MedStar Georgetown University Hospital, MedStar Union Memorial Hospital, and elsewhere in our system, ensured that our patients received uninterrupted care.

Services continued non-stop despite the weather because a dedicated cadre of our nurses, technologists and physicians slept at these facilities for days away from their own families, often having traveled through difficult-to-navigate roads in order to keep all of our services fully staffed. In conjunction with EMS providers across our region, care was delivered to both new arrivals, as well as to those patients already in house.

I am personally very grateful for their dedication and want to take this opportunity to say “thank you” not just for their response during this weather emergency, but also for what they do for us and our patients every day.

The public depends on the MHVI network of care to provide sophisticated services for the most critically ill patients. Our cardiovascular teams are among the most experienced in treating complex cases requiring specialized skill. Ours are the centers with an incredible depth of team-based expertise to perform complex PCIs, endovascular surgeries, and other intricate interventions with lifesaving speed and accuracy.

TREND-SETTING CARE
While the threat of blizzards is now long gone, the need for highly-trained, expert interdisciplinary teams of cardiovascular specialists continues. And the public’s health is best served when these resources are concentrated in centers of excellence, which are part of a system of integrated care.

The prognosticators of trends in the health services have told us that in 2016, providers will continue to consider unconventional, innovative partnerships, and we will see a dramatic increase in the development of clinically integrated networks.

It’s the model we’ve been shaping at MHVI for the last six years, and it represents one of our critical core values. We’ve long understood that patient outcomes drive the economics of care delivery. And the best way to ensure optimal outcomes is by managing patient risk all along the care continuum.

This is an essential component of the development of an integrated cardiovascular care network. Shared protocols, and quality and safety initiatives all across the network help ensure best results.

Patients, physicians and insurers are looking for value. MHVI is achieving it through tactical growth to improve access and outcomes, and to keep costs in check. It allows us to continue to have robust research initiatives, train specialists and bring innovation to cardiovascular practice. This is a strategy that makes it possible for us to meet the demand for specialized services no matter the weather.
Taking Science To Heart

Selma Mohammed, MD, PhD, brings scientific research interest to her clinical practice in heart failure

Selma Mohammed, MD, PhD had already discovered a fascination with cardiology since she was a junior medical student. “I was intrigued by cardiovascular physiology,” she says. A mentor at Mayo Clinic, where she completed her PhD work, convinced her that the burgeoning field of heart failure medicine needed more scientists to analyze data and study the benefits of newly developed therapies.

“My passion for cardiology grew as I learned more about the endless research opportunities and continued discovery of new and exciting drug and device therapies,” she says.

Last October, when Dr. Mohammed joined MedStar Heart & Vascular Institute (MHVI) at MedStar Washington Hospital Center, she came with two goals: treating heart failure and heart transplant patients in the clinic, and generating research to help establish best practices for her patients. “My main research focus is on understanding hemodynamics and vascular changes with heart failure, and mechanisms and therapies for right heart failure,” she says. “And MHVI is at the forefront of testing many new therapies that hold potential for these patients.”

As a scientific lead for the heart failure research team, Dr. Mohammed is now engaged in several projects that span investigator-initiated studies, multicenter clinical trials and national registries. “We are also starting a heart failure registry,” she says. “While I specialize in advanced heart failure and cardiac transplantation, I also see heart failure patients with preserved ejection fraction, infiltrative cardiomyopathies and valvular heart disease.” MHVI, she notes, is well known for its excellence in clinical cardiovascular care and is highly ranked at the national level. She says, “What excited me in particular about coming here is the unique clinical research opportunities afforded. MHVI is well-positioned for a leadership role in the research arena because of the vision of the leadership to promote research endeavors; the enthusiasm of the investigators; and the volume and diversity of the patient population we encounter.”

Research is needed because change is coming quickly. “Previously,” she says, “if a patient was very sick with heart failure, the only option was a heart transplant. Nationally, about 250,000 patients have advanced heart failure, yet only about 2,800 hearts were transplanted in 2015, so having new alternatives for circulatory support like VADs means a big change.”

MHVI is now involved in the pivotal MOMENTUM 3 clinical trials, testing two ventricular assist systems for safety and sustainability as long-term support.

In addition, she is applying for grants to study some of the newest medications available for heart failure. (See page 10 for details.)

“I think this is a very exciting time for MHVI,” she says.
Even when mitral valve surgery is successful, sometimes serious complications can develop months later. That’s when the value of a talented group of colleagues really pays off.

H. Brandis Marsh, MD, a cardiologist at MedStar Washington Hospital Center since 1973 and a former director of the cardiac cath lab, had been monitoring for 10 years a 75-year-old Maryland man who had a worsening case of mitral valve regurgitation. When the patient’s ejection fraction dropped to nearly 40 percent, Dr. Marsh finally determined it was time for surgery. Dr. Marsh referred his patient to the experts at MedStar Heart & Vascular Institute (MHVI) for evaluation.

Ammar Bafi, MD, a cardiac surgeon at MHVI, scheduled surgery. He repaired the valve and placed a 34mm annuloplasty ring to stabilize it. The patient tolerated surgery well and returned home to recover.

Several months later, the patient noticed his urine was a deep purple color. Because he had had a kidney stone previously, he attributed his symptoms to another kidney condition, so he first visited his urologist. He also saw Dr. Marsh the same day for a follow-up visit.

The two physicians discussed the case and were puzzled. They examined a urine sample under the microscope and found no red blood cells.

Zuyue Wang, MD, echocardiographer, and Lowell Satler, MD, interventional cardiologist, successfully repaired a mitral valve leak that was destroying the patient’s red blood cells.

An Innovative Solution to a Complex Problem
“This was a tipoff that the patient had hemolytic anemia,” Dr. Marsh says. But what was the cause?

The patient was referred to a hematologist. While doctors analyzed the problem, the patient received blood transfusions to combat his worsening condition.

In a subsequent visit to Dr. Marsh, the patient himself helped point them to the answer. He had done an Internet search and found several case reports of hemolytic anemia related to mitral valve repairs. “I’d never even heard of that,” Dr. Marsh says.

As new red blood cells went through the valve, they slammed into the ring, shearing and breaking up, destroying the cells completely.

Zuyue Wang, MD, an echocardiographer at MHVI, performed a transesophageal echo (TEE), which showed a tiny leak had developed through the valve leaflets directed into a space around the valve ring. “I knew there had to be a leak,” she says. “TEE confirmed my suspicion.” As new red blood cells went through the valve, they slammed into the ring, shearing and breaking up, destroying the cells completely. The leak itself was not significant, but the resulting hemolysis—a very rare occurrence—needed to be resolved.

A group of MHVI experts gathered to evaluate the problem and devise a solution. Surgery would normally be the answer to a problem of this nature, but all agreed that a second surgery was not the best option for this patient.

“We had operated only a few months before, and surgery is much more invasive the second time,” Dr. Bafi says. “If there was an option to solve the problem a different way, it would be much better for the patient.”

Fortunately, interventional cardiology provided a pathway to success. Lowell Satler, MD, director of the Cardiac Cath Lab at MHVI, was called in to review the TEE with Drs. Wang and Bafi. They briefly considered percutaneous placement of a plug in the space under the ring, but determined that the plug would displace a leaflet, and could make the leak worse.

So the team decided that a MitraClip® might be a better option. MHVI is one of the few centers that can place a MitraClip percutaneously, so the patient was in luck.

“I thought that placing a MitraClip was the patient’s best option,” Dr. Satler says. “This is a new treatment pathway for patients with complex problems such as this.”

In a transcatheter procedure, Dr. Satler left the mitral valve ring in place, and placed a clip to seal off the leak. During the procedure, Dr. Wang was in the catheterization lab, using TEE to guide the procedure each step of the way. “TEE draws a road map about how to get into the heart valve without damaging surrounding structures, and showed Dr. Satler where to put the clip,” Dr. Wang says.

The procedure went perfectly, and, while the patient was still on the table, his urine began to clear. By the next morning it was completely clear, a sure sign of success. He was discharged from the hospital the next day, and his condition has steadily improved. He is now considering a knee replacement.

This case demonstrates the value of a team of experts, all agree. “When you have people who know what they’re doing, they can attack a problem they’ve never seen before,” Dr. Marsh says.

“When you’re tackling structural-based heart disease, interventional cardiology offers innovative approaches,” Dr. Wang adds. “We’re not just fixing the plumbing, we can now fix the whole house.”

The patient, for his part, is very happy with the result. “I knew absolutely I was in the right hands,” he says. “This is a great place.”

In a percutaneous procedure, Lowell Satler, MD, and Zuyue Wang, MD, used a MitraClip to repair a leak that developed after mitral valve replacement in a patient deemed too fragile for a second surgery.
Transradial catheterizations are safe, cost-effective, and low risk.
slides easily into the radial artery. A guidewire is advanced from the radial artery to the ascending aorta, and a tiny catheter is advanced over the wire. Checking for arterial blockages takes just a few minutes, and if the patient’s condition indicates a need for angioplasty or a stent, that can be done through the wrist as well. About a third of transradial catheterizations progress to angioplasty or stent procedures.

New technologies have made the procedure even more effective. One major innovation of the last decade has been the transradial (TR) band, an inexpensive wristband that resembles a watch and uses a Velcro strap. The TR band contains an air diaphragm that can be inflated to put gentle pressure on the access site after a radial procedure. Smaller catheters and more easily steerable wires also have made it easier to maneuver via the small blood vessels in the wrist.

The most likely complication of transradial catheterization is radial artery spasm, which can cause discomfort for the patient and make manipulating the catheter difficult for the physician. Spasms can be reduced by:

- smooth and steady catheter insertion by an expert practitioner
- local anesthesia
- hydrophilic coatings on IVs and sheaths
- anti-spasmodic drugs, such as nicardipine
- blood vessel dilators, such as nitroglycerine

Radial artery occlusion is another occasional complication and is less likely to occur with the newer, smaller sheaths and catheters and with the use of an appropriately dosed anticoagulation agent, such as heparin. In a small percentage of cases, variations in the wrist artery anatomy, the need for larger catheters in complex procedures, or chronic conditions including renal failure can make femoral access a better option for some patients.

Even with these few potential issues, the success rate for the transradial procedure, according to national statistics, is greater than 90 percent, says Robert Lager, MD, an interventional cardiologist at MedStar Washington Hospital Center. Dr. Lager, who performs more than 80 percent of his cases transradially, says some physicians may be less likely to embrace this approach because of a steep learning curve. He and his partner, Robert Gallino, MD, proctor national courses for both practicing interventional cardiologists and cardiology fellows in the transradial method, covering fundamentals, fine-tuning techniques for practitioners and providing information about various options for technologies, such as catheter selection.

“As more cardiology fellowship programs train new doctors to use the transradial approach, we are getting closer to a tipping point of transradial becoming the default for cardiac catheterization,” says Dr. Lager. “Patients are already seeking out physicians who will do this procedure, and the demand is only going to increase.”

Patient demand has prompted the construction of a new radial lounge now in development at Union Memorial. Cheryl Lunnen, vice-president of MedStar Heart & Vascular Institute for the Baltimore region, says, “Instead of having a clinical look with individual bays, the radial lounge will be a large open space with recliners—more relaxing for patients, and easier to navigate for caregivers.” Because those caregivers are able to monitor several patients post-procedure, staffing needs are lower than after traditional femoral catheterization—another cost-efficient measure.

Says Dr. Wang, “I tell my patients that this procedure is easier than going to the dentist—and it’s also a less invasive option that provides better outcomes for them.”

“We are getting closer to a tipping point of transradial becoming the default for cardiac catheterization.”
—Robert Lager, MD
More than 2,200 people gathered in Washington, D.C., for the 19th annual Cardiovascular Research Technologies Conference (CRT 2016), the highest attendance ever for the premier meeting.

A faculty of more than 400 experts and more than 700 presentations focused on the most current information about advanced interventional cardiology research and clinical practices around the globe. The conference offered an array of interactive, live-case demonstrations, hands-on simulations, and lively discussions in and out of the sessions, all with the potential to spur dissemination and use of advanced cardiovascular interventions.

MEETING CHALLENGES

Keynote speaker, the Honorable Mitt Romney, addressed the challenges facing the nation in and out of health care—government debt, education, income inequality, global warming and terrorism.

A growing number of attendees were women, but despite increased presence in the specialty, women still face inequities in diagnosis, treatment and outcomes. At the Women & Heart Symposium, keynoter cardiologist Holly Atkinson, MD, noted the continuing gender gap in cardiovascular care in the U.S., and the need to educate women about their risks and their unique symptoms of heart attack. She warned female cardiologists about the threat to their own cardiovascular health posed by stress and burnout.

Disparities in cardiovascular care were discussed at the Association of Black Cardiologists symposium. CNN political commentator Donna Brazile, former American College of Cardiology President David Holms, MD, and Society for Cardiac Angiography and Interventions President James Blankenship, MD, discussed the impact of race and socioeconomics on life expectancy from myocardial infarction and the role of government in addressing these inequities.

IN PRAISE OF INNOVATION

First prize for the 2016 CRT Innovations Award was awarded to Scott Lim, MD, for the Trialign Transcatheter Repair for Tricuspid Regurgitation. This exciting technology is the first percutaneous therapy for tricuspid regurgitation under investigation in early clinical studies in the U.S.

Manufacturers, regulators, patients and practitioners gathered at the FDA Town Hall to take a look at the latest medical devices. The Town Hall fostered short discussions, including differing criteria between the U.S. and other countries for device approval and the latest regulations that apply to new cardiovascular technologies. In one session, participants announced the launch of the National Medical Device Evaluation System to develop a master network of data on medical devices.

Other conference highlights included 20 live cases spotlighting new procedures and devices in the U.S. and abroad, including a demonstration of the use of robotic assisted PCI from MedStar Washington Hospital Center. Participants also got hands-on experience in the use of innovative tools in simulations that featured use of robotics and virtual reality in cath labs.

In other presentations, participants debated the future of bioresorbable scaffolds, the use of TAVR in non-surgical risk patients, and future technologies for mitral valve repair and replacement now under investigation.
A new, less invasive option for patients with aortic stenosis may become more widely available, thanks to a new study at MedStar Heart & Vascular Institute (MHVI) at MedStar Washington Hospital Center.

MHVI is the first in the nation to launch a clinical trial evaluating the use of TAVR (transcatheter aortic valve replacement), to replace narrowed heart valves in patients who are considered at low risk for death from surgery. The Food and Drug Administration granted an Investigational Device Exemption, which allows MHVI to use TAVR in a research setting, and to enroll these patients into the study.

“Right now, the procedure is only FDA-approved for patients considered inoperable or too frail to have an open-heart procedure,” notes Paul Corso, MD, chair of cardiac surgery at MHVI. “But TAVR has a faster recovery time and maybe it would be a good option even for those who can tolerate surgery.”

He cautions, “Though the total recovery is faster with TAVR, the prosthesis is more expensive. Also, the surgical mortality and complication rate has decreased to below one percent in good centers. The long-term survival of the prosthesis will need to be competitive with the surgical prosthesis. Traditional surgical prostheses last from ten to 30 years.”

For decades, traditional open-heart surgery to replace the valve has been the gold standard for treating patients with severe aortic stenosis. With TAVR, physicians insert a valve through a catheter threaded into the heart through a small incision in the groin or chest wall.

“We appreciate the FDA’s trust in our ability to conduct this important investigation and its safety and efficacy in the low-risk population,” says Ron Waksman, MD, lead investigator of the study and director of Cardiovascular Research and Advanced Education at MHVI. “We have some of the most experienced TAVR cardiologists and surgeons in the country and know these studies open new possibilities for this technology and for patients.”

The study is expected to enroll up to 200 patients in at least four centers across the U.S.

“We’re using several different types of TAVR technology,” says Dr. Corso. “We are trained in all of them, and we need to actively study them before patients make decisions about major surgery.”

Results from this trial will be released this year, says Dr. Waksman. “It is expected, based on the results, that the FDA will approve TAVR for intermediate risk,” he says. “If it shows equivalent outcomes to surgery, we can offer a much less invasive option to the majority of patients.”

For more information on TAVR, or to request an appointment with a specialist, call 855-546-1056.
New Hope for Treating Heart Failure

Two new medications, the first in years, offer exciting possibilities for mid-stage heart failure patients.

Samer Najjar, MD, begins his presentations on heart failure with a graph showing the growth in heart failure in the U.S. The graph shoots upwards, the sort of skyward trajectory you want to see in the stock market but not in a disease rate chart.

The numbers are stunning: an estimated six million patients, up from 5.1 million just ten years ago. The American Heart Association projects that in 15 years, thanks to the rapid expansion of the older-than-65 population and the improved survival of patients who have heart attacks, the number with heart failure will pass 8 million. Heart failure accounts for several
In the past several decades, including:

- Angiotensin-converting enzyme (ACE) inhibitors, which have been the cornerstone of medical therapy for this condition for a quarter century. They work by having direct effects on the heart and blocking one of the hormones that causes blood vessels to contract, making it easier for the heart to pump.
- Angiotensin II receptor blockers (ARBs), which are cousins of ACE-inhibitors that achieve similar effects by a slightly different mechanism.
- Beta blockers, which slow the heart and probably help it conserve energy by blocking the action of the hormone epinephrine.

The first new drug, ivabradine, is sold as Corlanor® and, like beta blockers, it slows the heart rate but does not have any other known effect on the heart. Ivabradine was shown to lower the rate of hospital readmissions for patients with heart failure. It was approved last April and became available late in the fall of 2015.

The second drug, LCZ696 (marketed as Entresto™), takes an existing ARB (valsartan) and enhances it by combining it with a second medication, sacubitril. There is more excitement over Entresto, explains Dr. Najjar, because in a clinical trial with 8,400 participants published in The New England Journal of Medicine in 2014, “it was shown to reduce the risk of death and hospitalizations by 20 percent compared to an ACE-inhibitor. Its benefit was so strong that the clinical trial had to be stopped early. Entresto outperformed the ACE-inhibitor in almost all the clinical endpoints that were examined. You look at those statistics and just say ‘Wow.’”

Entresto is only effective for a specific heart failure diagnosis known as reduced ejection fraction, yet this includes about half of the heart failure population. While patients have not yet begun asking for the new drug, says heart failure specialist David Majure, MD, “I plan on transitioning most heart failure patients with reduced ejection fraction from the standard ACE-inhibitors and ARBs.”

One of the biggest barriers to these new drugs, says Dr. Najjar, is cost. “ACE inhibitors, ARBs and beta blockers are cheap. These new drugs are not.” Medicare and private insurance companies are now actively working on sorting out their coverage plans.

As with all new drugs, there are also unanswered questions, notes Selma Mohammed, MD, PhD, MHVI heart failure specialist and researcher. “We want to better define the patient population that would benefit the most from these medications and better understand the long-term safety and side-effect profile,” she says. “There is also the possibility of looking at expanded indications for use of these medications to other patient populations.”

For example, she says, in the PARAGON-HF trial, a major multi-center trial is looking at Entresto. “This drug is being tested for treatment of heart failure with preserved ejection fraction,” she says, “for which no specific therapy now exists. If positive, this would represent the first effective therapy to treat heart failure with preserved ejection fraction.”

### STAGES OF HEART FAILURE

#### STAGE A
High risk with no symptoms

- Risk-factor reduction, patient and family education

#### STAGE B
Structural heart disease, no symptoms

- ACE inhibitors or ARBs in all patients; beta blockers in selected patients
- Treat hypertension, diabetes, dyslipidemia; ACE inhibitors or ARBs in some patients

#### STAGE C
Structural disease, previous or current symptoms

- ACE inhibitors and beta-blockers in all patients
- Dietary sodium restriction, diuretics, and digoxin

#### STAGE D
Refractory symptoms requiring special intervention

- Hospice
- VAD, transplantation
- Inotropes
- Aldosterone antagonist, nesiritide
- Consider multidisciplinary team
- Cardiac resynchronization, mitral-valve surgery
- Revascularization if bundle-branch block present

---

Palliative Care and Heart Failure Team Partnership Flourishes

A little more than a year ago, MedStar Washington Hospital Center's Palliative Care team began partnering with the Advanced Heart Failure (AHF) team at MedStar Heart & Vascular Institute. The Palliative Care team supports AHF patients and their families, helping determine goals for care and ways to manage symptoms and implement comfort measures.

Now, as the teams’ relationship has evolved, palliative specialists are brought into the process of developing care plans from the outset—for example, when a patient is being considered for ventricular assist device (VAD) therapy. According to George Ruiz, MD, chief of Cardiology at MedStar Union Memorial Hospital and MedStar Good Samaritan Hospital, the partnership is flourishing. “Palliative Care is also well established at Union Memorial and is developing a strong relationship with the emerging Heart Failure team there,” says Dr. Ruiz.

“When disciplines intersect, you exponentially grow the possibilities and gain a wider perspective,” says Dr. Ruiz. “That’s transformative when we’re making complex decisions about viable alternatives for therapy and what our patients need and want.”

Fully integrating the Palliative Care team into the care of patients with chronic conditions and end-of-life planning is extremely rare, says Hunter Groninger, MD, director of the section of Palliative Care at MedStar Washington Hospital Center. “I do think we’re at the forefront, but as the benefits of palliative medicine become clearer, this model is gaining ground,” Dr. Groninger explains. “Not only are we changing culture but we’re changing the actual process of talking about whole-person care.”

The teams also are working together on outreach efforts. Last spring, they hosted a summit for clinical leaders of hospice organizations, and another is scheduled in late May for this year. “We want to share what we’re learning from our collaboration as patients move beyond hospital care,” explains Dr. Groninger. “For example, some ongoing treatments currently prevent people from getting into hospice, and we’d like to begin a conversation about how they might be managed.”

Members of the Palliative Care team include palliative care specialist Brian Murphy, MD; nurse practitioner Joan Panke, NP; social workers Anne Kelemen, LICSW, and Regina Tosca; palliative care-trained pharmacist Renée Holder, PharmD; and chaplain Linda Fischer. In addition, Evan DeRenzo, PhD, interim director, Center for Ethics, collaborates with the team.

Dr. Ruiz adds that the teams are grateful for the support from physician leadership: Gregory Argyros, MD, senior vice president, Medical Affairs, and chief medical officer at the Hospital Center; and Stephen Evans, MD, executive vice president, Medical Affairs, and chief medical officer, MedStar Health. “They had the vision; we just made it work,” Dr. Ruiz explains.

Next steps include developing systems so other disciplines in MedStar can replicate the teams’ successful partnership, says Dr. Ruiz. “Working together has opened our thought processes as we assess risks and benefits and learn more about each patient’s goals,” he explains. Says Dr. Groninger, “We’ve worked hard to get here in a year. If our experience can prove to be a model for newer integrated services, that would be a real win.”
New Service, Staff and Space for Venous Disorders at MedStar Chevy Chase

In an effort to expand its services and patient base, MedStar Heart & Vascular Institute (MHVI) now offers both therapeutic and cosmetic outpatient treatment for select venous disorders at the new MedStar Health in Chevy Chase. The move is designed to appeal to those who want expert care for venous insufficiency, all delivered by a specialty-trained physician, but in a more inviting, non-hospital-based setting.

The Chevy Chase site, which also houses primary care, fits the bill. Located in the Barlow Building on Wisconsin Avenue, the 4,000 square foot space is across from Saks Fifth Avenue and other upscale shopping and dining. Parking is available on-site and validated for one hour; the Friendship Heights Metro stop is a short walk away.

In addition to primary care and the vein center, an abundance of other MedStar Washington Hospital Center services are also at the Barlow Building, making it easy and convenient for patients to consolidate several appointments in one day. Some are even on the same floor, including Neurology, Urogynecology, Endocrinology and spine care.

Currently offering appointments one day a week, the outpatient vein center has two dedicated exam rooms with diagnostic ultrasound, compression therapy, sclerotherapy and radiofrequency ablation performed on site. Typically, individuals will have a diagnostic study performed first, in order to define the appropriate therapeutic option. Many procedures can be completed within a single, hour-long session.

“Today’s improved, minimally invasive outpatient techniques are as effective as traditional vein ligation at relieving pain, addressing the root cause of the problem and improving appearances for many people,” says vascular surgeon Misaki Kiguchi, MD, MBA, MSc, who joined MedStar Heart & Vascular Institute (MHVI) last year from the University of Pittsburgh Medical Center. “Radiofrequency ablation and sclerotherapy are both well tolerated, with less pain and a faster return to normal activities than vein stripping. In fact, most patients are surprised by how safe and effective current treatments are.”

Dr. Kiguchi heads up the new MHVI outpatient vein program, with offices at MedStar Washington Hospital Center, MedStar Georgetown University Hospital and Chevy Chase. Later this year, the vein program will expand to include new locations at the Lafayette Centre downtown and in McLean, Virginia.

In addition to varicose veins, deep vein thrombosis, pelvic congestion syndrome and other venous disorders, Dr. Kigushi is experienced in managing all aspects of peripheral arterial problems, including aortic aneurysm and carotid disease, as well as hemodialysis access.

Whether a patient has a life-threatening vascular condition or a worrisome cosmetic concern, Dr. Kiguchi finds caring for both equally satisfying.

Patients can schedule an appointment with Dr. Kiguchi by calling 202-877-DOCS (3627) or visiting MedStarHeartInstitute.org/HealthyVeins.

“Most patients are surprised by how safe and effective current treatments are.”
—Misaki Kiguchi, MD
Medical technology has made tremendous strides in recent decades, revolutionizing health care and vastly improving and extending lives of millions. Are we in danger of relying too much on these technologies at the expense of traditional face-to-face interaction between doctor and patient?

In *Learning Cardiac Auscultation: From Essentials to Expert Clinical Interpretation*, editor Allen Taylor, MD, FACC, FAHA, chief of Cardiology at MedStar Washington Hospital Center and MedStar Georgetown University Hospital, uses a case-based approach to explore the search for diagnostic clues within patients’ heart sounds. Stuart Seides, MD, physician executive director, MedStar Heart & Vascular Institute, comments, “Relying on tests alone is like flying a plane solely on instruments; often accurate, but when misleading can be fatal. The physical examination is like looking out the cockpit window—a direct connection between the doctor’s senses and the patient’s heart and circulation.”

The 320-page book represents a three-year collaboration between the Georgetown University School of Medicine and MHVI. Published last fall, Dr. Taylor and a team of 62 medical students compiled 26 lectures, taking a case-based approach to auscultation, centered on the clinical application (diagnosis, management and prognosis) of auscultation findings.

David Pearle, MD, professor of Medicine (Cardiology), MedStar Georgetown University Hospital, says, “Under the leadership of master clinician Dr. W. Proctor Harvey, MedStar Georgetown University Hospital has been synonymous with excellence in the teaching of cardiac auscultation. As one who worked closely with Dr. Harvey, I know he would be pleased that this tradition is continued with this fine book edited by Dr. Taylor. This book is especially valuable as stethoscope skills have eroded in the face of new technologies, and a valuable clinical tool is increasingly underused.”

In his 20-year United States military career at Walter Reed Army Medical Center, Dr. Taylor served as director of cardiovascular research, director of the Cardiovascular Disease Training Program and chief of the Cardiology service.

Miriam L. Cohen, MD, a cardiologist at MedStar Heart & Vascular Institute at MedStar Union Memorial Hospital, has been named a Trailblazer in Healthcare by The Center Club’s Women in Business. As the first trained female cardiologist in the state of Maryland, and among the first five in the United States, this award honors Dr. Cohen’s contributions and leadership as a pioneer in the health care industry.

“Dr. Cohen is an extraordinary clinician, physician and person,” said Stuart Bell, MD, vice president of Medical Affairs at MedStar Union Memorial. “There is no one more respected by her colleagues or more beloved by her patients, many of whom consider her a friend.”

With more than 47 years of experience, Dr. Cohen began her career as a cardiologist at Union Memorial in 1969 when the discipline was highly dominated by men. Overcoming discrimination and adversity, Dr. Cohen excelled and was involved in some of the very first trials and research on anti-arrhythmic drugs, beta blockers, and pacemakers. Along the way, Dr. Cohen has paved the way for future female cardiologists, helped thousands of patients, and has had an instrumental role in training the next generation of cardiovascular specialists. Today, she continues her role as a notable cardiologist in the career she began almost half a century ago.
An international audience of cardiovascular professionals gathered in April in Chicago for the 65th Annual Scientific Conference of the American College of Cardiology. The conference, Impact Innovation, focused on “cutting-edge advances and practice-changing updates in cardiovascular care.”

At a special dinner symposium, more than 350 attendees joined panel members from MedStar Heart & Vascular Institute (MHVI), Cleveland Clinic and Baylor Heart and Vascular Hospital to discuss state-of-the-art management of valve and structural heart disease, and to put standard guidelines for evaluation, diagnosis and treatment in perspective.

Because of the abundance of research conducted since the 2014 guidelines were established for valvular heart disease, evaluating risk requires thinking out of the box, explains Paul Corso, MD, chair of cardiac surgery at MHVI, who served on the panel faculty.

“Clinicians need to factor in more than the guidelines in their clinical decision making,” he says. “Understanding which patient should be treated medically, and who is a candidate for surgical intervention, and when intervention should take place, is more grey than it is black and white. I told participants at the symposium that you have to know your own practice, know your data, understand your patient, and always consider quality of life.”

“We've learned from experience in conducting hundreds of TAVR procedures that standard risk scores don’t apply,” he adds. “This isn’t cookbook medicine. With new technology under development for both aortic and mitral valve replacement, it's a rapidly changing landscape. That's why it's important to have centers of cardiovascular excellence like MHVI, Cleveland Clinic and Baylor continue to develop, define and disseminate best practices,” Dr. Corso adds.

Structural Heart Disease Symposium

In January, MedStar Montgomery Medical Center opened its non-invasive vascular lab, the third for MedStar Heart & Vascular Institute; labs opened last year at MedStar Southern Maryland Hospital Center and MedStar St. Mary’s Hospital. The MedStar Montgomery lab is open Tuesday and Thursday from 8 a.m. to 4 p.m., where vascular surgeons Steven Abramowitz, MD, and Tareq Massimi, MD, see patients. Call 301-774-8962.

Diagnostic evaluations at the lab include:

- Ankle-brachial indices
- Bypass graft interrogation
- Carotid, aortic and renal artery duplex scanning
- Mesenteric/Celiac arterial duplex scanning
- Peripheral arterial duplex scanning
- Segmental pressures and waveforms analysis
- Venous insufficiency assessment
- Venous duplex evaluation
- Venous mapping

Ya-Hawnia Williams,
office manager,
MedStar
Multispecialty
Physician Office
in the newly constructed vascular lab at MedStar Montgomery Medical Center.
Cardiovascular Physician is a publication of MedStar Heart & Vascular Institute. It is a forum to share clinical, research and teaching information in cardiology, cardiac surgery and vascular care.

Please submit editorial comments to Norma Babington, at norma.babington@medstar.net, or 202-877-0201.

Visit our website, at medstarheartinstitute.org.

U.S. News & World Report lists MedStar Washington Hospital Center as the only hospital with a nationally ranked Cardiology & Heart Surgery program in the Washington, D.C., region.

MEDSTAR HEART & VASCULAR INSTITUTE
Stuart F. Seides, MD
Physician Executive Director
Paul Corso, MD
Chairman, Cardiac Surgery
Mun K. Hong, MD
Chief, Cardiology
MedStar Southern Maryland Hospital Center
Augusto Pichard, MD
Senior Consultant, Cardiac Innovation and Structural Heart Disease
Jeffrey Quartner, MD
Associate Medical Director
George Ruiz, MD
Chief, Cardiology
MedStar Union Memorial Hospital
MedStar Good Samaritan Hospital
Allen Taylor, MD
Chief, Cardiology
MedStar Washington Hospital Center
MedStar Georgetown University Hospital
Ron Waksman, MD
Director of Cardiovascular Research and Advanced Education
Edward Y. Woo, MD
Director, MedStar Vascular Program
Catherine Monge
Senior Vice President
Chief Administrative Officer
Cheryl Lunnen, RN, BS
Vice President
Wendy Penny, RN, BS, MBA
Vice President

MEDSTAR HEALTH LEADERSHIP
Kenneth A. Samet, FACHE
President & CEO
M. Joy Drass, MD
Executive Vice President & Chief Operating Officer
Bradley S. Chambers
President, MedStar Union Memorial Hospital
President, MedStar Good Samaritan Hospital
Senior Vice President
John Sullivan
President, MedStar Washington Hospital Center
Senior Vice President

DEPARTMENT OF CONTINUING MEDICAL EDUCATION & QUALITY TRAINING

Please visit http://cme.medstarwashington.org for updated conference information, or call 202-877-8220. CME Transcripts are available online. You can now download, print or e-mail your CME transcript. Visit http://cme.medstarwashington.org and click on “View Your CME Transcript” for complete instructions.

UPCOMING CME CONFERENCES

CONTROVERSIES IN CARDIAC ARRHYTHMIAS
September 16
The Cosmos Club, Washington, D.C.
Course Director: Edward Platia, MD

2016 UPDATE ON THE TREATMENT OF HEART AND VASCULAR DISEASE
October 1
Gaylord National Resort and Convention Center, National Harbor, MD

Course Directors: Frederick Beavers, MD and Mun K. Hong, MD

TRANSCATHETER CARDIOVASCULAR THERAPEUTICS
October 29-November 2
Walter E. Washington Convention Center
Washington, D.C.

REGULARLY SCHEDULED SERIES—AMA PRA Category 1 Credit(s)™

CARDIOLOGY/CARDIOVASCULAR
Cardiac Catheterization Conference
Weekly, Wednesdays, 7:30 a.m.
CTEC Conference Theater
1 AMA PRA Category 1 Credit™
202-877-7808

Cardiac Surgery Grand Rounds
Weekly, Tuesdays, 7:15 a.m.
CTEC Conference Theater
2 AMA PRA Category 1 Credits™
202-877-3510

Cardiology Grand Rounds
Weekly, Tuesdays, 12:30 p.m.

MedStar Heart & Vascular Institute | Spring 2016