

features at a glance



WOMEN AND HEART DISEASE UNDERSTANDING THE LESS UNDERSTOOD RISKS



DIABETES
BOOT CAMP HELPS PATIENTS
TAKE CONTROL



10
GET YOUR COLONOSCOPY
AVOID THE RISK OF COLON CANCER



12
LUNG CANCER
NEW TECHNOLOGY EXPANDS
DIAGNOSIS AND TREATMENT



BARIATRIC & PLASTIC SURGERYHERNIA REPAIR TAKES TWO
SURGICAL SPECIALISTS



16
ORTHOPAEDICS
ACLs RECONSTRUCTED USING
STRONGER TECHNIQUE



CARDIAC SURGERY
3 OPEN-HEART SURGERIES, 1 FAMILY,
1 SYSTEM



PARKINSON'S DISEASE
NEW DRUG STRATEGY FOR
EARLY STAGE



21
UROGYNECOLOGY
QUICK RECOVERY AFTER MINIMALLY
INVASIVE HYSTERECTOMY



22 ELECTROPHYSIOLOGYNEW HEART CATHETER TECHNIQUE
IS A TRUE PATIENT PLEASER

Women Heart Disease Understanding the Less Understood Risks

Cardiovascular disease crosses the gender divide. It's as common in women as in men. Today, one in three women is living with cardiovascular disease, and it causes more deaths than all cancers in women combined.

While traditional risk factors—such as high blood pressure and cholesterol, diabetes, obesity, and smoking—affect both men and women, women face a number of other "risk enhancing factors" as well.

Even as awareness of women's heart disease has grown in the last decade, these risk factors are less well known and understood by the public–and the medical profession.

Risk Enhancers for Women

"For a long time, it was thought that women were at less risk for heart disease," says Harjit Chahal, MD, MedStar Heart & Vascular Institute cardiologist. "But now we know that simply is not true. In fact, we understand that commonly known risks affect women differently and more significantly, and there are a host of risk factors specific to women."

- **♥** Pregnancy complications
- ♥ Cancer treatment, especially breast cancer
- ♥ Menopause, especially early menopause
- Autoimmune disorders, such as lupus and rheumatoid arthritis, which affect women more significantly than men
- **♥** Sudden or severe stress
- ♥ Diabetes and metabolic syndrome (a group of risk factors related to pre-diabetes), which affects women at a younger age
- **♥** HIV
- ♥ Sleep apnea, frequently under-diagnosed in women

"Autoimmune diseases that result in chronic systemic inflammation can cause plaque to form in vessels," says Cardiologist Barbara Srichai, MD. "Women notice how rheumatoid arthritis affects their joints, for example. But they may be unaware of how it can affect other organs."



"For a long time, it was thought that women were at less risk for heart disease. But now we know that simply is not true. In fact, we understand that commonly known risks affect women differently and more significantly, and there are a host of risk factors specific to women."

-HARJIT CHAHAL, MD, CARDIOLOGIST MEDSTAR HEART & VASCULAR INSTITUTE

PATIENT PROFILE

Dawn Amore

As the president of a software company, 49-year-old Dawn Amore is used to being in control. But last summer she was blindsided by a breast cancer diagnosis. "I felt a lump in my left breast and my doctor sent me for a mammogram and biopsy, which confirmed the diagnosis," she says.

Still, the surprises didn't stop there. Further testing indicated something suspicious in her right breast. "So, I talked to my family and discovered that my maternal grandmother, aunt, and cousin had had breast cancer.

Definitely a lesson learned about the importance of understanding your family's medical history."

That's when Ms. Amore took back control.

She decided to have a bilateral mastectomy.
"I didn't want to take any chances," she says.
"And I prepped for surgery, too. I got into physical shape, got my office prepared, and selected the surgical team I wanted.

I breezed through the procedure."

When her MedStar Washington Hospital Center oncologist, Asma Dilawari, MD, recommended an aggressive course of chemotherapy after surgery, Ms. Amore was again blindsided. And yet again, she powered through.

Then she learned the chemotherapy that was such an effective tool against the breast cancer posed a potential risk to her heart. "My mother died of heart disease last year so I was doubly concerned."

Fortunately for Ms. Amore, the Hospital Center's Cardio-Oncology Program is one of the most respected in the nation. It is dedicated to prevention and treatment of heart damage resulting from cancer treatment.

She was referred to Cardio-Oncologist Ian Chang, MD, for testing. So far Ms. Amore's heart appears to have escaped damage. But she will continue to be followed by Dr. Chang.

"I had never heard of the specialty," Ms. Amore says. "But I'm so grateful for the program and all of the doctors' vigilance."

Women Heart Disease

"The same may be true of women who have complications during pregnancy. They may believe that after their child's birth they are out of danger," adds Dr. Chahal. "But adverse effects, such as gestational diabetes or pre-eclampsia, put women at higher risk for developing heart disease later in life. They should be followed by their physicians throughout their lives."

"And while it is clear that risk for heart disease also increases after menopause because estrogen levels decline," Dr. Srichai adds, "the relationship between heart disease and stress and depression in women is less understood. But numbers do show that these too are cardiovascular risk enhancers."

Diabetes is a heart disease risk factor for both men and women, but younger women with type 2 diabetes have a greater cardiovascular risk. In addition, radiation and chemotherapy treatment for cancer, particularly breast cancer, can put a strain on the heart. And sleep apnea, which is under-diagnosed in women, can increase blood pressure and result in heart disease.

Take Action

What can women do to protect themselves? "Being proactive is critical," says Dr. Chahal. She advises women to be their own advocates:

- ♥ Think about heart disease as a possibility.
- ♥ Be aware of risk factors.
- ♥ Don't ignore symptoms.
- ♥ Discuss your risk with your physician—and ask for a referral to a cardiologist if you have concerns.
- ♥ If you have had any adverse pregnancy issues, follow-up with a cardiologist once a year.

"Women don't fit a typical pattern—we're more complex," says Dr. Srichai. "Heart disease affects us differently, and the first-line imaging tools aren't always effective for these problems. Risk evaluation, diagnostic testing, and treatment should be tailored to women," she says.

"That is why we established the Women's Heart Health Program," she explains. "We have a team of 16 doctors in communities throughout the region who have a particular interest in women's cardiovascular disease. Call center operators know to refer women to one of these cardiologists."

"We are also establishing a protocol based on the latest guidelines to ensure that when a woman is seen by any cardiologist or internist in a MedStar Health facility she receives consistent care," continues Dr. Srichai. "By inputting information into the electronic medical record system, doctors receive prompts to evaluate risk-based on medical history, including 'risk enhancers' specific to women."

"Our goal is to provide all women with providers who are more sensitive to their unique heart risks to ensure an accurate diagnosis and the most effective treatment," Dr. Srichai says.

To learn more and take a free women's heart risk quiz, visit MedStarHeartInstitute.org/patients/at-risk or call 888-289-2631.

CANCER AND HEART DISEASE

MedStar Heart & Vascular Institute at MedStar Washington Hospital Center is among the nation's leaders in Cardio-Oncology-the field designed to carefully assess the risk of heart disease in cancer patients. The program takes a collaborative approach to care. Oncologists and cardiologists work together to prevent cardiac damage, monitor patients' cardiovascular health during cancer treatment, and provide long-term follow-up cardiac care for survivors. The program is also conducting research to help determine the best treatment options that pose less cardiovascular disease risk.

Learn more at MedStarHeartInstitute.org/programs/cardio-oncology/

Dawn Amore is being followed by Cardio-Oncologist Ian Chang, MD, after chemotherapy increased her risk for heart disease.

KNOW THE FACTS

THE ABCs OF WOMEN'S SYMPTOMS

- ▼ Angina (chest pain) that may also feel like a tightness or pressure in the chest or throat that radiates down the jaw or left shoulder or arm
- **V** Breathlessness
- ♥ Chronic fatigue that lasts several days can also be a heart attack symptom
- ▼ Dizziness can indicate heart valve disease or an irregular heart rhythm
- ▼ Edema, or swelling, particularly in the lower legs and ankles
- ▼ Fluttering or rapid heartbeats that may cause pain or difficulty breathing
- ▼ Gastric upset including nausea or vomiting unrelated to diet
- **♥ H**eartburn

Talk with your doctor about these symptoms, what triggers them, and how long they last.

If you do have sudden chest, shoulder, or arm pain, tightness in your chest, or you have difficulty breathing, call 9-1-1 immediately. Getting treatment quickly could help limit damage to the heart muscle—and it could save your life.

Risk Factors You Can't Control

- ▼ age: As women age, the risk of heart disease increases because of lower estrogen levels and the chances of developing additional health issues that can affect the heart.
- **▼ family history:** You are at greater risk if an immediate family member had heart disease at an early age-65 or younger for a female relative.
- **▼ lace:** African-American and Hispanic women have a higher risk of heart disease than Caucasian women.

Risk Factors You Can Manage



♥ Smoking



♥ High blood pressure



♥ High cholesterol



♥ Weight (For women, a waist measurement of 35" or more indicates an increased risk of heart disease.)

Other Risk Factors to Consider



♥ **Diabetes:** Women with diabetes are at greater risk of heart disease at a younger age than men.



♥ Chemotherapy and radiation treatment: Treatment for cancer, particularly breast cancer, can increase your risk of heart disease.



Pregnancy complications: Gestational diabetes, pre-eclampsia, and eclampsia can increase heart disease risk over a lifetime.



♥ Stress and depression: Both chronic and the sudden onset of stress and depression can increase risk.



▼ Sleep apnea: Sudden stops in breathing during the night can increase blood pressure and put added strain on your heart.



▼ Autoimmune disease: Diseases such as lupus and rheumatoid arthritis cause chronic inflammation, which can cause clots and can affect women more significantly.

PATIENT PROFILE

Lolita Turner

Two words perfectly describe 30-yearold Lolita Turner: Resilient. Grateful. She has faced a series of tough medical challenges in the last several years yet has remained optimistic and strong. And she credits her team of medical experts at MedStar Washington Hospital Center with saving her life.

Ms. Turner's health saga began with flulike symptoms that simply would not go away. Test after test, doctor after doctor, ended with a frightening diagnosis. "It was Valentine's Day 2013," she vividly recalls. "Lupus. I didn't know much about the disease, but I'd soon learn."

Lupus is an autoimmune disorder that causes chronic inflammation and can affect multiple organs. There's no cure, and Ms. Turner's symptoms were treated with a variety of medications. Still the disease caused kidney damage and resulted in removal of one kidney in 2015. In spring 2018, persistent pneumonia was treated at another local hospital, but she continued to feel unwell. "I was struggling to catch my breath and my wife, Erika, insisted that I go to the Hospital Center's Emergency Department," she says.

"That's when they told me I was in heart failure. I was shocked and afraid," she recalls. Cardiac Surgeon Christian Shults, MD, replaced her damaged aortic valve and repaired her mitral and tricuspid valves. Months later a defibrillator was implanted to regulate her heart rhythm. Now Ms. Turner is carefully monitored by Cardiologist Harjit Chahal, MD.

"Since surgery, my heart makes a ticking noise. I call it my wonderful ticking heart," she says, laughing. "I have good days and bad days but I've got my daughters—and Erika. I call her my soldier for holding it all together.

And I'm just so thankful for my doctors."



Lolita Turner enthusiastically displays victory signs despite battling lupus and heart disease.

Diabetes Boot Camp Mixes High-Tech and High-Touch to Help Patients Take Control of Their Disease

As a facilities manager for MedStar Washington Hospital Center, Curtis Reece has the workshop and the teams he needs to fix just about anything to keep the facility running smoothly. So, when his body needed repair because his diabetes was out of control, he knew he needed different tools to get his health in working order.

Mr. Reece, of Bowie, Md., says he had been "doing pretty well" managing his diabetes when he got the diagnosis in 1995. He was in his 30s, watched his diet, and was careful about his weight.

"Then I got complacent, quit checking my numbers, and by about 2006, was back to my old eating habits," says Mr. Reece. He walks five miles a day supervising facilities crews but that wasn't enough to keep his blood sugar under control. "I'm from Trinidad and Tobago where I'm used to eating a lot of rice and starchy vegetables. These are the staples of our diet, which aren't good for my blood sugar. My doctor said, 'If you keep this up, you'll have to go on insulin." And he did.

At the end of 2018, blood work showed that Mr. Reece's hemoglobin A1C, a number that shows your average blood sugar level for the past two to three months, hit 9.1, an indication that his blood sugars were not in a healthy range. "I was on a roller coaster," Mr. Reece recalls.

"If blood sugar levels are not within target range, the person with diabetes is at increased risk for both short- and long-term diabetes complications," says Michelle Magee, MD, director of the MedStar Diabetes Institute. In the short-term, high blood sugars make you feel tired, and you might lose weight, have blurred vision, increased thirst and urination, and be at risk of infections. Long-term complications include heart attack, stroke, blindness, leg amputation, and kidney failure, resulting in dialysis.

Diabetes Boot Camp

At the beginning of 2019, Mr. Reece's endocrinologist referred him to the Diabetes Boot Camp offered by MedStar Health.

"Participants come in person for the first two appointments in the Diabetes Boot Camp," says Gretchen Youssef, RD, CDE, a registered dietitian and diabetes care and education specialist for the Diabetes Boot Camp. "We learn about their barriers to self-care, assess their food plan and how they're

taking their medications. Together we design a diabetes plan they can live with, helps them feel better, and improves their overall health."

At the first Boot Camp visit, participants learn how to use a cellular-enabled blood glucose meter that sends their blood glucose readings to a Boot Camp dashboard monitored by diabetes nurse practitioners and diabetes educators.

"After the second in-person visit, the participants graduate to our remote diabetes clinic. They are contacted by phone, email, or text a minimum of once a week for 10 to 12 weeks," says Ms. Youssef. "We wrap our arms around our participants and work with them to achieve their health goals."

"It's a combination of talking to a dietitian, calorie counting, and keeping track of your starches and sugars," Mr. Reece says. "I've eliminated 75 percent of the starches from my meals, and I stay away from fried foods. And when I go on vacation, I know my diabetes doesn't take a holiday, so I'm careful."

Success!

At the end of his 12-week program, Mr. Reece's A1C went from 9.1 to 7.3. He wants to get it even lower, to around 6. He also lost 20 pounds.

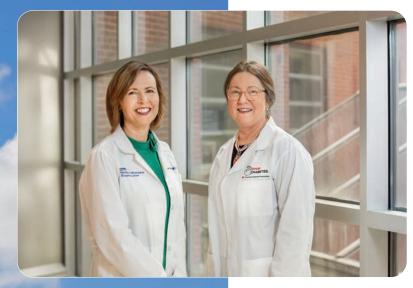
The team now contacts him once a month in continued follow-up. "I just started back fishing three times a week and when I get home from work in the evening, I take a walk with my wife and daughter. In the warmer months, I'll go back to golf," he says.

What would Mr. Reece tell others?

"If you're ready to make a lifestyle change-and you must be ready-this is a life-changing program. You're going to have some good days and some bad days. I'm always a work in progress, but I can say at this moment, it's a success. The success or failure depends on you because you have to be ready to work. The program is you."

To learn more about the Diabetes Boot Camp in both the Washington, D.C., and Baltimore areas, call 202-877-5403.





Gretchen Youssef, RD, CDE, and Michelle Magee, MD



1,400 patients have been through the **Diabetes Boot Camp** with an average of a **3.1** point reduction in their A1C.

Hospitalizations have **decreased** by **78%** at 30 days and **77%** at 90 days.



Curtis Reece



Get Your Colonoscopy!

Chance Conversation Catches an Early Cancer

Like many people, Patty Casey avoided getting a colonoscopy. So much so that she put it off until age 65, two decades beyond the recommendation for initial screening, according to American Cancer Society guidelines.

"I never had any gastrointestinal issues whatsoever, and there is no family history of colon cancer," says Ms. Casey, creative services manager at MedStar Washington Hospital Center. "Aside from some mildly elevated blood pressure, I've been perfectly healthy all my life."

But after delivering new colonoscopy brochures to Gastroenterology, a practice manager asked Ms. Casey if she had ever had one. She said no.

The manager then informed her about a screening colonoscopy event on an upcoming Saturday in March. She jokingly told Ms. Casey that she couldn't leave until she signed up. With a little more arm twisting, Ms. Casey registered for the event, a decision that may have saved her life.

Ms. Casey was the first appointment of that Saturday event for Z. Jennifer Lee, MD, a gastroenterologist at the Hospital Center, who performed her colonoscopy. She found a whopping 19 polyps, including one so large that it had to be removed in portions. In addition, Dr. Lee also discovered a large growth in Ms. Casey's terminal ileum.

"She told me as soon as I woke up from the anesthesia that I would need to get that growth removed," recalls Ms. Casey. "And I also knew that double digits, in regard to the number of polyps, were not good."

Dr. Lee confirmed that 19 polyps was a very high number. "I removed all the polyps, and while I couldn't remove the entire growth, I was able to biopsy it," she says.

Regular colonoscopy screening should begin at 50. However, in 2018, the American Cancer Society lowered its non-colonoscopy screening recommendations for adults to 45 years old with an average risk of developing colorectal cancer, after data showed an uptick in the number of younger people developing cancer. "Average risk" means no personal history of polyps, colorectal cancer, inflammatory bowel disease, or family history of colorectal cancer. Screening can include a high-sensitivity stoolbased test or a visual exam. Any positive results on non-colonoscopy screening tests should be followed up with timely colonoscopy.

"The pathology report showed it was a neuroendocrine tumor, so for two separate reasons, it was a good thing that Patty had the colonoscopy."

Neuroendocrine tumors are a rare and slow-growing tumor that arise from neuroendocrine cells and can develop anywhere in the body, explains Brian Bello, MD, a colorectal surgeon who would operate on Ms. Casey. Most develop in the digestive tract, lungs, pancreas, appendix, and rectum.

After meeting with Dr. Bello, Ms. Casey underwent laparoscopic surgery on April 2, 2019. Dr. Bello removed the tumor, as well as several lymph nodes. He also resected 15 centimeters of Ms. Casey's small intestine and colon. After spending two nights in the hospital, she returned home.

Ms. Casey was then referred to Oncologist David Perry, MD. After reviewing her records, he recommended surveillance. "A neuroendocrine tumor is a cancer," Dr. Perry says, "but it is slow growing, and currently, there is no chemotherapy to prevent it from coming back. So follow up on a regular basis is key."

For Ms. Casey, a PET scan prior to surgery showed no other occurrence of disease. Going forward, she will need yearly scans, as well as more frequent colonoscopies.

"Patty is fortunate that she got her colonoscopy when she did," says Dr. Bello. "Thankfully, this type of tumor doesn't need any other therapy besides surveillance. We all know that colonoscopies are used to prevent colon cancer, but sometimes other things can be found. The bottom line is, people need to get their colonoscopies done."

For Ms. Casey, no more convincing is needed. "I've put my follow-up appointments on my calendar, and I'll be sure to make each and every one," she says, in regard to future colonoscopies.

Ms. Casey offers this advice for those who may still be reluctant to schedule a colonoscopy: "Just pick up the phone and make the appointment. The prep work is not that bad, and the procedure is not painful at all. And, it just may save your life."

For more information about scheduling a colonoscopy, call 202-877-DOCS (3627).



Polyp:

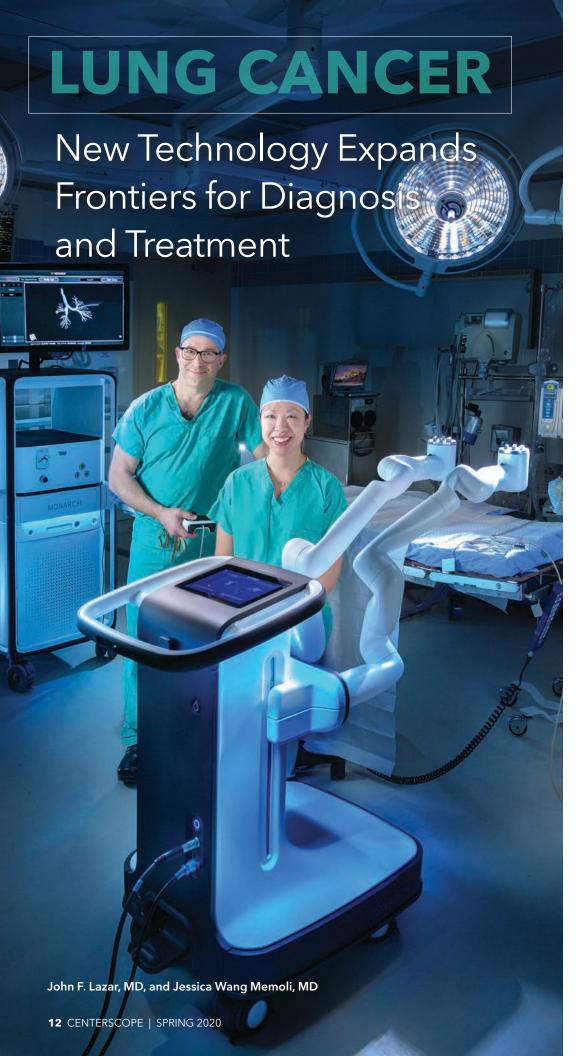
A polyp is a growth on the inner surface of the colon. Polyps are often non-cancerous, but some can develop into cancer. They are removed during a colonoscopy.

What Are the Risk Factors for Colorectal Cancer?

While anyone can get colorectal cancer, it is most common among people over age 50.

Risk factors for colorectal cancer include:

- A personal or family history of colorectal cancer or polyps
- A diet high in red meats and processed meats
- Inflammatory bowel disease (Crohn's disease or ulcerative colitis)
- Inherited conditions such as familial adenomatous polyposis and hereditary non-polyposis colon cancer
- Obesity
- Smoking
- Physical inactivity
- Heavy alcohol use
- Type 2 diabetes
- Being African-American



Staring intently at a large operating room video screen, thoracic surgeon John F.
Lazar, MD, and interventional pulmonologist Jessica S. Wang Memoli, MD, deftly guide a camera-equipped robotic bronchoscope through the right lung of their patient, a middle-aged, lifelong smoker who lies comfortably anesthetized nearby.

"Imagine [in the future] going under anesthesia uncertain about a nodule, and waking up cured. The value of this technology to our patients is virtually unlimited."

-JOHN F. LAZAR, MD

Because CT imaging revealed suspicious shadows in the patient's lungs, the physicians are using the extremely thin, highly flexible device to reach and examine the 2 cm diameter masses, known as peripheral nodules, and test them for cancer. The results will provide valuable information as to whether the disease is present, and help determine the next steps in the patient's treatment.

Although Drs. Lazar and Wang Memoli have performed countless similar procedures using conventional bronchoscopes and other methods, the tool they're using—the MonarchTM Platform from California-based Auris Health—enables them to probe far deeper into the lung's labyrinth of narrow airways and access areas where these extremely small peripheral nodules typically first arise.

MedStar Washington Hospital Center is the first healthcare facility in the Mid-Atlantic to offer the Auris Monarch Platform, and it is already making a difference in evaluating patients for cancer by facilitating earlier, more accurate diagnoses of lung conditions. At the same time, the new Lung Cancer Screening program at Washington Cancer Institute will help streamline the process. (See sidebar.)

Dr. Lazar, the Hospital Center's director of Thoracic Robotic Surgery, calls the technology "a real gamechanger that offers better results than other methods."

Dr. Wang Memoli, the Hospital Center's director of Bronchoscopy & Interventional Pulmonology in the Pulmonary, Critical Care, and Respiratory Services Department, says, "With this new technology, we can safely reach the deepest regions of the lungs where small nodules are typically found with the added benefit of the built-in camera to improve our accuracy. We no longer have to rely on a single technology to guide our diagnosis."

A procedure using the Auris Monarch Platform takes about 60 to 90 minutes, depending on the lesion's size. But the collaboration between Drs. Lazar and Wang Memoli doesn't end there. Applying their combined expertise, the physicians evaluate the biopsy results along with the patient's other health issues. Together, they craft a treatment plan for the patient.

Dr. Lazar says if a more invasive surgical procedure is needed, "we've already established a relationship with the patient, shortening the interval from diagnosis to treatment. And as we all know, time is so precious when it comes to treating cancer."

Dr. Lazar adds that lung cancer testing is just the start of the Auris Monarch Platform's many possible applications. The technology is awaiting FDA approval for use in treating kidney stones, foregut, and colorectal issues.

Dr. Lazar hopes to eventually perform complete lung cancer diagnostic and treatment in a single session. He describes how a patient found to have stage 1 cancer could have the tumor ablated within minutes of being diagnosed.

"Imagine going under anesthesia uncertain about a nodule, and waking up cured," he says. "The value of this technology to our patients is virtually unlimited."



Comprehensive Cancer Screening Services

Lung cancer may be on the decline nationwide, but the disease continues to have a deadly effect. In the District of Columbia, lung cancer is the third most common form of cancer, according to the American Cancer Society and the number one leading cause of cancer death*.

Irina Veytsman, MD, a lung cancer specialist and director of MedStar Washington Hospital Center's Hematology Oncology Department, says the fact that most patients aren't diagnosed until the disease is well-advanced contributes to lung cancer's high mortality rate.

"At that point, treatment options are usually limited," Dr. Veytsman adds, "as are chances for a positive outcome. Low dose CT scans reveal cancer at an early stage and can identify other diseases that patients may not be aware of, including thyroid cancer and renal carcinoma."

Because early detection can substantially improve physicians' ability to treat lung cancer, the Washington Cancer Institute at the Hospital Center has established a lung cancer screening clinic where patients are evaluated to undergo a low-dose screening. The pain-free procedure takes only a few minutes, but in that short time, provides a wealth of valuable information for determining whether cancer is present, and if so, mapping out a treatment strategy.

What sets the Hospital Center's screening clinic apart, says Dr. Veytsman, is its patient-focused approach to expediting diagnosis and treatment, and this will be enhanced, she adds, by the new bronchoscope, Auris.

Andrea D. Shepherd, DNP, a family nurse practitioner, works directly with each patient to set up the screening appointment. Once the CT scan is complete, a multidisciplinary team composed of a radiologist, oncologist, radiation oncologist, pulmonologist, and thoracic surgeon examines the results and prioritizes treatment needs, allowing care to begin right away.

"This approach is particularly valuable for lung cancer patients, because it expedites diagnosis and initiation of treatment," Dr. Veytsman says. Dr. Shepherd also helps with smoking cessation, helping patients reduce their dependence on tobacco products, the number one cause of lung cancer.

If you are concerned, have questions, or would like to be screened, call 202-877-SPOT (7768).

*cancerstatisticscenter.cancer.org

Complex Abdominal Condition

Takes Twosome to Untangle

In February 2019, excruciating back pain led Keisha Williams to MedStar Washington Hospital Center's Emergency Department and to the first of two surgical specialists who would finally get her back on the road to health.

Timothy Shope, MD, chief of the Section of Advanced Laparoscopic and Bariatric Surgery, quickly diagnosed the cause of Ms. Williams' pain: a complete bowel blockage, possibly the result of a previous abdominal surgery. Yet it wasn't until he opened up her abdomen that he realized the full extent of her condition.

"I couldn't believe what I was seeing," he says.
"Abdominal surgeries can sometimes cause the
intestine to twist around itself, like one of those old
tangled up, curled telephone cords. And Ms. Williams'
intestine had done just that."

Bowel blockages are serious and, in the extreme, potentially fatal. Severe cases, like Ms. Williams', can also involve intense back pain.

"Fortunately, many obstructions can be addressed using laparoscopy, or minimally invasive surgical techniques, with patients going home in a day or two," Dr. Shope explains. "But for us to successfully untangle Ms. Williams' bowel, we had to perform an open procedure."

Seven days later, Ms. Williams returned home where she continued to recuperate. Both she and Dr. Shope thought that was the end of the story.

But 10 months later, a new and different pain arose, and she returned to Dr. Shope.

Ms. Williams had developed a large incisional hernia, or a weakening in the abdominal wall, near the site of her previous operation. Between 15 and 30 percent of people who undergo open abdominal surgery will develop a hernia, usually within the first year. In Ms. Williams' case, part of her intestine was pushing through her hernia, threatening to cause another bowel obstruction.

This time, her increasingly complex condition would require an interdisciplinary team. Dr. Shope called Kenneth L. Fan, MD, a specialist in plastic, reconstructive, and microvascular surgery. The two collaborate frequently on complicated hernia repairs.



"The first task was to determine if the protruding intestine was still healthy, or if the pressure had restricted blood supply to the organ, leading to possible tissue death," explains Dr. Shope. "Fortunately, Ms. Williams' bowel was still viable, so I freed it from the hernia's grip."

Then it was Dr. Fan's turn.

"Ms. Williams' hernia was likely caused by a combination of scar tissue and stretching of the fascia— the thick, fence-like membrane that holds all the abdominal organs in place," Dr. Fan explains. "The large hernia pushed her gut through and past her 'six-pack' muscles, fat, and other tissue, which distorted some of them in the process. We had to do an abdominal wall reconstruction."

Dr. Fan cut through one of the several layers of fascia to bring the abdominal muscles back to the center, and put Ms. Williams' intestine back in place. He reshaped the covering tissues, fat, and abdominal muscles.

ERAS for Pain Management

Historically, patients recuperating from abdominal wall reconstruction spent more than five days in the hospital, on heavy-duty medications and a pain pump. But that's no longer the case, thanks to an innovative, opioid-sparing approach the hospital now uses. Called Enhanced Recovery After Surgery (ERAS), the protocol uses nerve blocks, along with non-narcotic pain medications and other techniques to manage pain while also avoiding the potential for post-anesthesia nausea and addiction.

ERAS is typically only found in major academic medical centers like the Hospital Center. Its surgical/anesthesia teams can limit the number of narcotics taken after surgery to just a few rescue doses.

Ms. Williams benefitted from the approach, returning to her Waldorf, Md., home a mere two days after surgery, just in time for Thanksgiving. By Christmas, she felt well enough to cook a feast for 10 family members and friends, to everyone's delight, relief, and gratitude.

"I don't know where I'd be today without my doctors and nurses at the Hospital Center," Ms. Williams says. "I've felt totally taken care of, every step of the way, and couldn't be happier with my treatment and results."





"ABDOMINAL SURGERIES CAN SOMETIMES CAUSE THE INTESTINE TO TWIST AROUND ITSELF, LIKE ONE OF THOSE OLD TANGLED UP, CURLED TELEPHONE CORDS. AND MS. WILLIAMS' INTESTINE HAD DONE JUST THAT."

-TIMOTHY SHOPE, MD

Plastic Surgery: More than Skin-Deep

When most people hear the words "plastic surgery," thoughts of nose jobs, face lifts, and tummy tucks probably spring to mind. Yet that's only half of the story.

At a major medical center like MedStar Washington Hospital Center, a sophisticated plastics team can mean the difference between life and death for patients suffering from trauma, burns, cancer, or non-healing wounds.

In fact, that type of sophisticated surgery program is what originally drew Kenneth L. Fan, MD, a plastic surgeon specializing in breast reconstruction, microvascular, and lymphedema surgery, to the field.

"Plastic surgery can restore both form and function, internally and externally," he explains. "And while cosmetic procedures can enhance the lives of many patients; for others, plastic surgery can be life-saving. "That's particularly true for patients with severe wounds, or those who have lost a foot to diabetes."

"After an amputation, up to 70 percent of patients with diabetes die within five years," continues Dr. Fan. "For those with other major non-healing wounds, the death rate is 40 to 50 percent. Yet a specialized plastic surgery approach, the free tissue transfer flap procedure, has been proven to decrease mortality by four to five times."

A free flap involves removing a thick section of tissue—comprising skin, fat, and blood vessels—from one part of the patient's body and transferring it to the open wound. Using microvascular techniques, the plastic surgeon then hooks up the old and new blood vessels, basically creating new channels for blood to deliver its vital cargo of oxygen, essential to healing, to the wound.

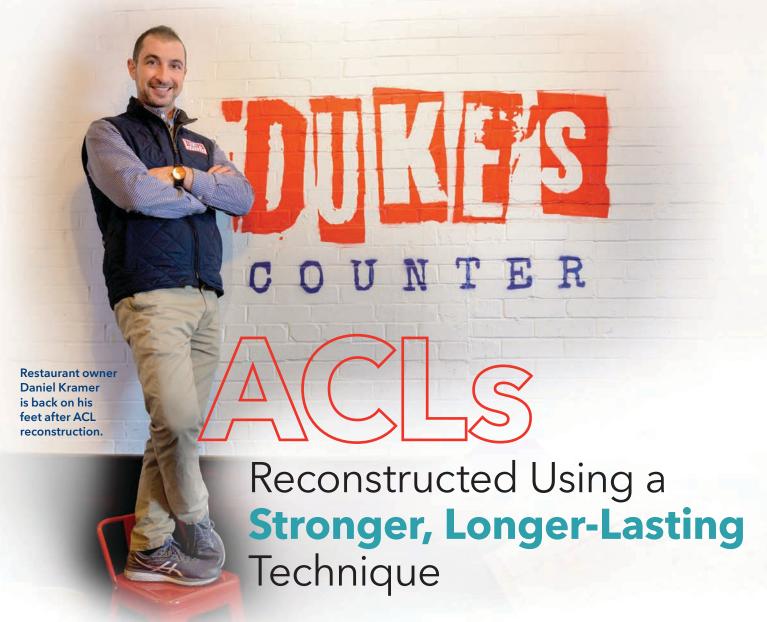
"It's probably the largest and most complicated procedure we do, taking anywhere from five to ten hours to complete," says Dr. Fan. "But the results are worth it."

Beyond free flap procedures—and complicated hernia repairs and abdominal wall reconstructions like Keisha Williams'—other specialty plastic procedures include:

- Craniofacial reconstructions
- Hand reconstructions
- Breast reconstruction following lumpectomy or mastectomy
- Microsurgical treatment for lymphedema
- Specialized techniques for burn victims

14 CENTERSCOPE | SPRING 2020

MEDSTARWASHINGTON.ORG 15



If you have to go through a painful surgery and lengthy recovery to repair a knee injury, you want to do everything you can to make sure the surgery corrects the problem. The most important thing you can do is pick the right surgeon and the right hospital for the repair.

That's what led D.C. resident Daniel Kramer to MedStar Washington Hospital Center's orthopaedic surgeon Evan Argintar, MD. When Mr. Kramer, 38, injured his knee while playing soccer, he knew he needed medical attention. The first doctor he saw diagnosed a tear in his anterior cruciate ligament (ACL), which stabilizes the knee.

Torn ACLs are the most common knee injuries, caused by sports that involve sudden stops, jumps, or changes in direction. An estimated 200,000 ACL

injuries occur nationwide each year, and about half require surgery.

Mr. Kramer knew it was important to seek a second opinion. Fortunately, he also knew Dr. Argintar-they had been fraternity brothers and fellow lacrosse players at Tufts University near Boston. Dr. Argintar examined him, confirmed the diagnosis of a torn ACL, and also determined that he had a torn meniscus.

"I don't usually operate on friends," Dr. Argintar says, "but I use a different technique than many other surgeons, and I thought this technique would help him recover faster and lead to

a more predictable recovery than conventional surgery, so I made an exception." The surgery was performed in November 2017.

Dr. Argintar, along with MedStar Orthpaedic Institute surgeons Wiemi Douoquih, MD, William Postma, MD, and Daniel Hampton, MD, are among the few surgeons nationally who use this special technique to repair torn ACLs and other ligaments in the knee, shoulder, elbow, and ankle.

When reconstructing the ACL, surgeons use a ligament from the patient's own body or from a deceased donor to replace the damaged ACL.

200,000

ACL injuries occur nationwide

That repair can take up to a year to fully heal and become part of the body. It is most likely to fail at two to three months after surgery, when physical therapy often is most intense.

Dr. Argintar adds a piece of polyethylene-it looks like a shoestring-alongside the new ligament to strengthen the repair. "It's an internal brace that acts to stabilize the healing ligament during recovery," he explains.

Study Demonstrates the Technique's Superiority

Until recently, he had only anecdotal evidence that the internal brace made a difference to recovery. Then he conducted a study of 30 patients who had the internal brace compared to 30 patients who had the traditional surgery, two years after their surgery. Those who had the internal brace reported lower pain scores and faster recovery. A higher percentage returned to their pre-injury level faster, a key indicator of success to Dr. Argintar.

His findings were published in the Journal of Arthroscopy's July 2019 issue, the first study that demonstrates the superiority of this technique. "The internal brace is a small change that brings a big improvement," he says. "More predictable, better outcomes lead to happier patients."

Mr. Kramer is very satisfied with his results. He continues to be athletic, and recently completed a 10-mile race. He is on his feet constantly, managing the four restaurants he owns: two Duke's Grocery, Duke's Counter and Gogi Yogi Korean Barbecue, all in Northwest D.C.

"I'm grateful to be able to be all the way back on my feet," Mr. Kramer concludes. "I'm grateful for the attention I received from Dr. Argintar and his team."

For more information, call 202-877-DOCS (3627). Or visit https://blog.medstarwashington. org/2018/04/17/internal-bracingacl-repair/.

(left) Evan Argintar, MD, with Daniel Kramer at Duke's Counter: (right) Daniel Kramer running the **Army TEN-MILER**



THE INTERNAL BRACE IS A SMALL CHANGE THAT BRINGS A BIG **IMPROVEMENT. MORE** PREDICTABLE, BETTER **OUTCOMES LEAD TO** HAPPIER PATIENTS.

-EVAN ARGINTAR, MD



Two years post-surgery



60 Patients

30 internal brace patients versus 30 traditional surgery patients



Lower Pain Scores

Patients with internal brace reported lower pain scores



Faster Recovery

Patients with internal brace reported faster recovery



Pre-Injury Return

Higher percentage of internal brace patients returned to their pre-injury level faster





Open-Heart Surgeries. One Family. One System.



It's not uncommon for some physicians to treat members of the same family, but surgeons don't typically perform open heart surgery on three, first-degree relatives, all within a six-month time span. That is, however, exactly what Cardiac Surgeon Christian Shults, MD, did after meeting the Miller family.

TIM MILLER

Dr. Shults met Tim Miller after Annapolis-based MedStar Cardiologist Scott Katzen, MD, part of MedStar Heart and Vascular Institute, referred him for surgical care. Dr. Katzen told Tim, 57, a technical sales leader who works out of Northern Virginia, that he had an ascending aortic aneurysm, or bulging of the wall of his aorta, the largest artery in the body.

In the spring of 2018, Tim's aneurysm was at risk of rupture, a potentially life-threatening complication. He was also told he would need repair or replacement of his aortic valve. Tim scheduled surgery for Aug. 15, 2018. He also told his family of his diagnosis and the upcoming surgical intervention.

JEFF MILLER

No one was more surprised than Jeff Miller, Tim's younger brother, when he learned his elder sibling needed heart surgery.

Jeff, 53, had always known about his own heart murmur, a sometimes abnormal sound often caused by underlying disease. The Ellicott City, Md., resident was diagnosed with an abnormality in the aortic valve in his heart when he was in high school and had yearly check-ups since he was a teenager. Jeff was looking for a new cardiologist, and Tim recommended Dr. Katzen.

Dr. Katzen ordered a CT scan, or imaging of the heart, which confirmed Jeff also had an ascending aortic aneurysm in almost the exact same location as his brother's. Dr. Katzen called Dr. Shults about Jeff's case and surgery was set for Oct. 3, 2018.

CAROLYN MILLER

Tim and Jeff's mother, Carolyn Miller, 81, had a known heart murmur, but over the years it had grown louder. Based on her sons' recommendation and praise of Dr. Katzen, along with his proximity to her home in Kent Island, Md., she sought his care as well. It was on the day of Jeff's surgery that she learned she had severe narrowing of her heart's mitral valve. Once again, Dr. Katzen made a referral to Dr. Shults.

Carolyn, who in addition to her five children, has 14 grandchildren and 12 great-grandchildren, admitted to experiencing increasing fatigue and lightheadedness. She met with Dr. Shults who told her a new mitral valve would help with that. Carolyn set a surgery date of Jan. 16, 2019.



Dr. Shults is well versed in the surgical treatment of complex aortic, coronary artery, and valvular heart diseases. Even so, open heart surgery on three immediate family members was a first for him.



After reviewing the pictures of Tim's heart, Dr. Shults recommended replacement of his valve and aneurysm. Tim's operation took three hours, and was successful.

A few months later, Dr. Shults performed the same surgery on Jeff. "Jeff's aneurysm was in the exact same spot at Tim's," says Dr. Shults. "But his valve was in good shape and did not need replacing." Jeff, however, had 80 percent blockage in a different artery which required bypass.

In January, the Miller family was back at the Hospital Center when Dr. Shults replaced Carolyn's mitral valve. Carolyn had so much calcification in her mitral valve that standard surgery was not an option. In a novel approach, Dr. Shults opened the left atrium of her heart and

implanted a new valve, delivered via catheter. The three-hour surgery was a success.

Tim, Jeff and Carolyn still continue to see Dr. Katzen on a regular basis. "I have seen all three of them and they are all doing great," he says.

"Dr. Shults told me I would feel better and he was right," Carolyn says. "I feel 100 times better since my heart surgery."

Jeff and Tim agree. "We were amazed at the care we received at both MedStar Washington Hospital Center and MedStar Cardiology Associates."



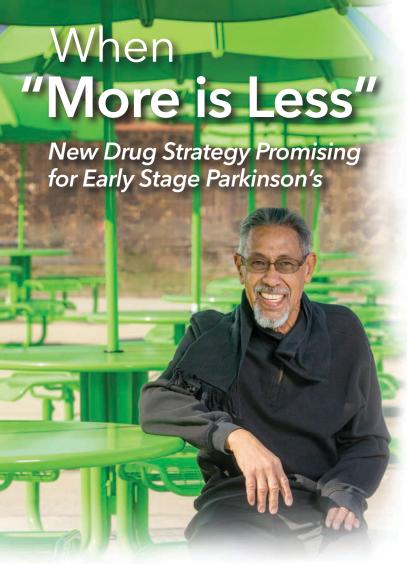
Strength in the System

The strong relationships between cardiologists and surgeons within the MedStar Heart & Vascular Institute (MHVI) system contribute to seamless continuity of patient care, before and after their surgeries. Patients are able to access premier surgical services at an MHVI hospital and then receive their ongoing care close to home.

Particularly for the Miller family, who continue to see Dr. Katzen on a regular basis, the collaborative nature of this system provides convenience and connection.

MHVI has more than 35 years of history caring for patients in the Annapolis area. Dr. Katzen is among the 200 cardiovascular physicians and Advanced Practice Providers who practice at MHVI sites throughout the mid-Atlantic region.

Scott Katzen, MD MedStar Health Cardiology Associates, Annapolis, Md.



After a change in the dosage of his Parkinson's medication, Peter Leesam says people don't believe he has the disease.

It's one of the ironies of modern medicine. Levodopa, today's most common and effective drug for Parkinson's disease, can actually cause side effects similar to the symptom it's designed to treat.

But a simple change in how often it's taken seems to reduce those drug-induced complications.

Neurologist Mark Lin, MD, PhD, director of Movement Disorders at MedStar Washington Hospital Center, has spent his career caring for patients with Parkinson's and other movement disorders. His recent research may improve treatment and quality of life for patients in the earlier stages of Parkinson's.

Dr. Lin's approach certainly worked for Peter Leesam, whose disease–like that of many other Parkinson's patients–began slowly and insidiously.

"The first problem I noticed was with my hands," says the retired special education teacher. "I had trouble buttoning my shirts and tying my shoes. Then my handwriting began to go downhill."

Always active and independent-in his younger years, he used to run track and play volleyball-Mr. Leesam admits

he was "in denial" despite the severe protestations of his wife and grown children. "It wasn't until I started having some potentially serious falls that I went to the doctor."

Mr. Leesam was diagnosed with early stage Parkinson's disease in 2017 and started taking levodopa three times a day, the standard dosage for the past 50 years. The drug helps control unwanted movement, such as hand tremors, or an inability to move.

But despite its success, levodopa sometimes backfires, causing side effects that actually mimic Parkinson's symptoms. "After four to five years, up to 40 percent of patients taking the drug will start to develop dyskinesia, or involuntary movements, which is associated with prolonged use of the short-acting levodopa," Dr. Lin says. "Typically, neurologists then increase the frequency and decrease each dose of levodopa to lessen complications."

But Dr. Lin wondered: What if altering the number of levodopa dosages right at the start of treatment could avoid drug-induced side effects later on?

For the last decade, Dr. Lin has been pursuing the answer, starting early stage Parkinson's patients with the six-times-a-day levodopa regimen. The total daily amount of the dosage remains the same; patients just take the drug more often. Results are promising, earning publication in peer-reviewed, scientific journals.

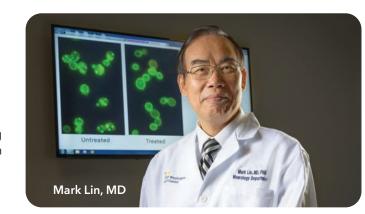
Mr. Leesam was one of those who benefitted from Dr. Lin's approach, after his original dosing failed to produce the desired results. His physician had referred him to Dr. Lin, who immediately upped Mr. Leesam's drug-taking schedule.

"The change was dramatic and almost immediate," Mr. Leesam, now 73, says. "My balance is back; I've got a steady hand again. I can get around on my own, without having to rely on others to take me places."

His experience has turned him into a disciple of sorts, quietly advocating for other patients.

"I'd encourage anyone with early stage disease to see if this approach might work for them, as well," Mr. Leesam concludes. "In fact, when I tell people today that I have Parkinson's, they don't believe it!"

For more information, call 202-877-DOCS (3627).



Quick Return to Activity

After Minimally Invasive Hysterectomy

Gwen Sutherland called her surgery "perfect" and her surgeon "amazing."

Ms. Sutherland's medical history included thalassemia, a ruptured ectopic pregnancy, and some internal adhesions, so she wanted to make sure that her uterine prolapse repair and vaginal hysterectomy were done by someone who presented her with the lowest risk of surgical complications.

The 69-year-old Virginia resident's original concerns took her to MedStar Health Urgent Care, where she was referred to the National Center for Advanced Pelvic Surgery at MedStar Washington Hospital Center. There, she found Andrew Sokol, MD, Urogynecology, an expert in minimally invasive pelvic reconstructive surgery.

An active grandmother who helps care for her grandson, Ms. Sutherland did not want an external incision, and she hoped for a quick return to her daily routine after surgery.

Ms. Sutherland's day of surgery started first thing in the morning, and she was on her way home around 4 p.m. "I had not one bit of pain, and only needed minor pain control" for the first week she was home. "I didn't really bleed after I left the hospital, and the post-operative discharge I had was minimal," she added. "The only 'can't' I heard was, 'You can't do any heavy lifting for four to six weeks,' and that was okay with me."

"Ms. Sutherland's quality of life after her prolapse repair was terrific, with a quick return to activity," reports Dr. Sokol. "She didn't have to stay in the hospital and could recuperate with the help of her adult daughter, at her home."

Cheryl Iglesia, MD, section director, Female Pelvic Medicine and Reconstructive Surgery, says of the half-million hysterectomies performed each year in America, only 20 percent are done vaginally, even though a vaginal hysterectomy has the fewest reported complications, the least amount of pain, and generally presents the fastest recovery for the patient. Approximately 60 percent of hysterectomies are still done as traditional open surgeries, and 20 percent are laparoscopic and robotic.

At the Hospital Center, explains Dr. Iglesia, "patients can take advantage of seven surgeons with expertise in minimally invasive gynecologic surgery and female pelvic medicine and reconstructive surgery. We also have an active teaching program, with six fellows."

Ms. Sutherland was happy that she could tap into that expertise. "I can't imagine having a hysterectomy, or any other type of pelvic repair, done any other way than the way that Dr. Sokol took care of me. I would recommend this to any woman who needs the expertise he and his colleagues offer."

For more information, call 202-877-DOCS (3627).



Gwen Sutherland returned home the same day after uterine prolapse repair and a vaginal hysterectomy.



Andrew Sokol, MD



Cheryl Iglesia, MD

Heart Catheter Procedures Get a Big Boost from New Technique



Cyrus Hadadi, MD, and Zayd Eldadah, MD, PhD

VASCADE® STUDY

MedStar Washington Hospital Center has been selected to lead a nationwide study of how the VASCADE device can help patients go home on the same day as their atrial fibrillation procedure, rather than spend the night in the hospital."We are honored by this recognition of our caregiving team's enormous experience and commitment to patient safety, comfort, and excellent outcomes," says Zayd Eldadah, MD, PhD.

James Walker, MD, has always lived life to the fullest. A graduate of the U.S. Military Academy at West Point, he undertook Airborne and Jumpmaster training at Ft. Benning, Ga. After fulfilling his duty in the Air Cavalry in Hawaii, he attended medical school in Honolulu, with internship and residency in Baltimore. During his 30 years as an Emergency Room physician, Dr. Walker chose opportunities that returned him to Hawaii before coming back to the mainland. In Albania, he and his wife Linda, an Emergency Room nurse, cared for patients from the war-torn Kosovo crisis. While practicing in Yuma, Ariz., he attended the local police academy and became a reserve officer SWAT physician.

In his retirement in Martinsburg, W. Va., Dr. Walker continues to enjoy varied activities: playing the cello in the Charles Washington Symphony Orchestra; rebuilding an ultralight aircraft; and planning trips in his new RV. So when he felt symptoms of atrial fibrillation last year that included an elevated heart rate and extreme tiredness, the condition definitely impacted his active lifestyle.

"I was checking my heart rate regularly and modifying activity to keep it out of the dangerous range," he recalls. "I really did not want to have a stroke."

In January, Dr. Walker underwent a cardiac ablation procedure at MedStar Washington Hospital Center. The surgery, performed by Cyrus Hadadi, MD, a heart rhythm specialist at the MedStar Heart & Vascular Institute (MHVI), successfully treated his disorder. And because the procedure used the VASCADE Vascular Closure System, at the catheter site, Dr. Walker's recovery was also streamlined and comfortable.

Before the VASCADE device was available, patients undergoing many types of heart catheterization procedures were required to spend up to six hours flat on their backs in recovery, explains Zayd Eldadah, MD, PhD, director of Cardiac Electrophysiology at MHVI.

"In the past, applying direct pressure to the patient's groin was our only option to seal puncture sites after catheters were removed from femoral veins. The patient would then be forced to remain still and flat to minimize the risk of bleeding and other complications," says Dr. Eldadah.

The recently FDA-approved VASCADE device has revolutionized this recovery process, he continues. "With VASCADE, the holes are plugged by natural collagen, which the body absorbs, and manual compression is often not required at all. Patients can move around and be up and about in less time, and most leave the hospital the same day."

As an ER physician, Dr. Walker had occasionally assisted in surgeries that involved the placement of vascular catheters, so he was well aware of the post-procedure recovery. He says that he was delighted with the experience at the Hospital Center. "After the procedure, I could move around comfortably, and I was up and walking within a few hours. When it was time to go home, Dr. Hadadi barely caught me as I was escaping," he says with a laugh.

Dr. Eldadah says that VASCADE is a win-win. Patients are much more comfortable, and they can leave the hospital earlier. For the hospital, it means that hospital beds are kept free for others who need them.

Dr. Walker is grateful for his smooth procedure and for the ability to resume his favorite activities. "I didn't realize how much my AFib was affecting me until it was gone," he says. "As we used to say in the ER, you can't believe in miracles, you have to rely on them."





Washington

Hospital Center



110 Irving Street, NW Washington, DC 20010

Keep Your Germs to Yourself!

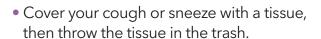
The Centers for Disease Control and Prevention (CDC) recommends several everyday preventative steps that can help avoid the spread of disease. These are safe practices you should always follow.

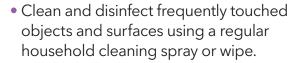


 Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60 percent alcohol. Always wash hands with soap and water if hands are visibly dirty.



- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Stay home when you are sick.







CENTERSCOPE

CenterScope is produced by the Washington Hospital Center 110 Irving St., NW Washington, DC 20010.

MedStar Washington Hospital MedStar Health, is committed to focus on providing high-quality, safe care with compassion for all.

MedStar Washington Hospital Center, a private, not-for-profit hospital, does not discriminate on grounds of race, religion, color, gender, gender identity, physical handicap, national origin or sexual preference.

Gregory J. Argyros, MD, MedStar Washington Hospital Center

Matt Kelly, Chair MedStar Washington Hospital Center

Kenneth A. Samet, FACHE President and CEO MedStar Health

Charles M. Gill Senior Director, Marketing MedStar Heart & Vascular Institute

Matthew T. Parsons Senior Marketing Specialist MedStar Washington Hospital Center

Norma Babington Managing Editor, Marketing MedStar Washington Hospital Center

Tammi Bricker Designer & Art Director MedStar Washington Hospital Center

Gary Landsman Photographer

MedStarWashington.org