



Procedure Safely Treats Blood Clots in Lungs

A Medical First for the Fredericksburg Area

Dr. Gustavo Elias, an interventional radiologist with Radiologic Associates of Fredericksburg (RAF), successfully performed a medical first for the Fredericksburg area this summer: a pulmonary embolism (PE) mechanical thrombectomy. The procedure is offered by physicians with Virginia Interventional and Vascular Associates (VIVA), the interventional radiology and vascular surgery division of RAF. It is performed at Mary Washington Hospital using the FlowTrierer device from Inari Medical, which allows for the non-surgical removal of blood clots in the lungs.

PE is primarily caused by blood clots traveling from the veins of the legs to the lungs. The clots prevent oxygen from reaching the tissues of the lungs and are potentially life-threatening. Using the FlowTrierer device, specialists thread a catheter through an incision in either the leg or neck to mechanically separate and remove the clot from the vessel wall - and remove it from the body.

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Regular Screening and Expert Training Are Key to the Fight Against Breast Cancer

One in eight women in the United States will develop invasive breast cancer over the course of her lifetime, according to the American Cancer Society. While the incidence rate of breast cancer in women has increased by about 0.3% annually for the past 10 years, statistics from the National Cancer Institute show that the age-adjusted mortality rate has fallen by 1.5% annually between 2008 and 2017.

With Breast Cancer Awareness Month having been in October, the Fall is a good time to examine one of the keys to bringing that mortality rate down: the annual mammogram.

Radiologic Associates of Fredericksburg's (RAF) Dr. Roni Talukdar urges women to begin having yearly screening mammograms at the age of 40. Of women who get breast cancer during their lifetimes, he said, one in six will get it in her 40s.

"No matter how good your radiologist is, if you don't come in for your mammogram, we can't help you," he said.

Experience and Training Matter

RAF's breast imaging radiologists are board-certified, and the practice includes more fellowship-trained breast imaging specialists than most major academic centers, Dr. Talukdar noted.

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Dr. Gustavo Elias (right) with Tim Dwyer of Inari Medical

NEWS BRIEF

Testing Period Extended for Clinical Decision Support Changes

The Centers for Medicare and Medicaid Services (CMS) has announced that the educational and operations testing period for the Appropriate Use Criteria (AUC) program has been extended through 2021. This gives healthcare providers additional time to test and implement the AUC consultation software required when ordering advanced diagnostic imaging services for Medicare Part B patients starting January 1, 2022.

The Summer 2020 issue of this newsletter explained the changes underway, resulting benefits, and local collaborative efforts by Mary Washington Healthcare and Radiologic Associates of Fredericksburg (RAF) to offer providers resources for a seamless transition. RAF CEO Ed Swager noted that significant progress was being made. Since then, CMS announced that the testing period has been extended another year, from December 31, 2020 through 2021. “We encourage stakeholders to use this period to learn, test and prepare...,” the announcement said.

RAF continues its commitment to providing physicians assistance in meeting the new requirements during the learning phase. For more information, visit www.cms.gov or call our Physician’s Concierge at (855) 723-5463. ■

VASERlipo® Brings New Options to Fredericksburg Area

Procedure Offers Minimally Invasive Body Contouring

Some areas of the body can accumulate fat that defies diet and exercise. Years ago, the only surgical solution to eliminating these stubborn deposits was conventional liposuction. But now an innovative procedure uses advanced technology to readily remove resistant fat and create dramatic body contouring. The procedure, called VASER® Liposuction (VASERlipo), is now being offered through Virginia Interventional and Vascular Associates (VIVA).

“VASER is an acronym for ‘vibration amplification of sound energy at resonance,’” said Dr. Samer Hijaz, a board-certified, fellowship-trained interventional radiologist with Radiologic Associates of Fredericksburg (RAF). Dr. Hijaz performs the procedure locally at VIVA, the interventional radiology and vascular surgery division of RAF. VIVA’s facility is accredited by the Accreditation Association for Ambulatory Health Care.

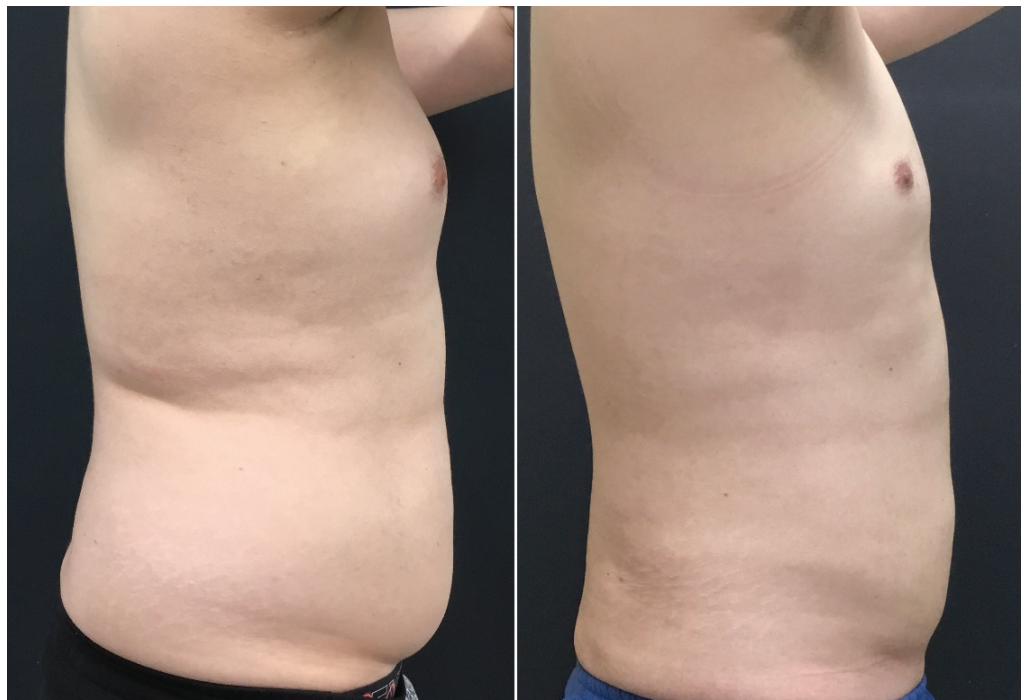
“The VASER ultrasound technology uses powerful waves to break apart fat cells from the adjacent tissues,” he said. “The fat is gently removed from the body through a small tube inserted just underneath the skin.”

According to Dr. Hijaz, surrounding tissues are left intact, resulting in smooth contours with less pain and recovery time than traditional liposuction. Also, with VASERlipo, multiple areas can be treated in a single procedure, from chin and neck to hips, thighs, and ankles. More involved procedures require general anesthesia, while smaller areas can be treated under moderate sedation. Recovery time after surgery averages three to seven days, while the body undergoes a healing and remodeling process of six to nine months.

The ideal candidate for the procedure, he said, is a male or female who is in the 20- to 60-year-old age bracket, who has good skin quality, who is a nonsmoker, and whose body mass index is below 33.

“Although VASERlipo carries the same risk associated with any surgical or cosmetic procedure, such as bleeding, infection, and anesthesia complications, we work under the most sterile conditions and are partnered with board-certified anesthesiologists from Anesthesia Connections to closely monitor any complications,” Dr. Hijaz said.

VIVA conducted its first VASERlipo procedure in June 2020, on a patient who had a full abdomen treatment and gynecomastia, or reduction of enlarged male breasts. The result, according to Dr. Hijaz, was a speedy recovery and a happy outcome. “It’s exactly what I wanted,” the patient said. “At long last, I look great in a T-shirt!” ■



VASERlipo images: before (left) and after treatment (right).



Dr. Roni Talukdar

These physicians bring expertise honed at some of the most respected institutes in the country, including:

- Yale University.
- Stanford University.
- The Ellen Shaw de Paredes Institute of Women's Imaging.
- Virginia Commonwealth University.
- The Moffitt Cancer Center.
- Memorial Sloan-Kettering Cancer Center.

That experience and specialized training can make all the difference when it comes to this regular and important component of preventative health for women.

"Not every radiologist is capable of reading a mammogram," Dr. Talukdar said. "You really do need physicians who are experienced in breast imaging, and who make it their life's passion."

That's because breast imaging involves so much more than looking at an image. It requires experience and judgment to choose the appropriate follow-up imaging should an abnormality appear. It means talking to the patient about the result and moving through the diagnostic process in a way that reduces anxiety and minimizes wait time.

"It's not just a picture we look at," Dr. Talukdar said. "It's a patient experience."

At Medical Imaging of Fredericksburg's four breast-imaging facilities, RAF physicians place a priority on reducing the time a woman has to wait for answers, which can

be a source of anxiety. Turnaround times on mammogram reports, and on getting patients with a detected abnormality in for a diagnostic workup or biopsy, have been reported by surveyors to be the fastest in the state of Virginia.

"We know that reducing that anxiety is incredibly important," Dr. Talukdar said. "With us, you never feel as a patient that you don't know what the next step is."

Catching it Smaller Boosts Survival

When breast cancers are detected at a size of 10 millimeters (the diameter of a Cheerio) or smaller, they respond better to therapy, and women have a five-year survival rate of about 99%.

RAF physicians can detect cancers as small as 4 millimeters (smaller than the hole inside the Cheerio) using 3D mammography, also known as tomosynthesis. While self breast exams are a recommended practice, they typically detect tumors that are 2.5 cm or larger.

3D mammography also leads to a 35% higher ability to detect cancer than traditional mammography, meaning reduced callbacks, reduced cost and reduced anxiety for women. About 95% of insurance companies provide coverage for 3D mammography. Patients whose insurance does not cover it can still access 3D mammography by paying a small, affordable supplemental fee.

Catching cancers earlier makes consistent annual screenings even more important, so that physicians can catch a tumor not only while it is still small, but also before it has spread to the lymph nodes or other parts of the body.

It's also a reminder that women should not put off regular screening mammograms during the COVID-19 pandemic. All locations where RAF provides breast imaging are going above and beyond to provide a clean, safe and healthy environment for women to maintain this important health practice.

RAF provides breast imaging through Medical Imaging of Fredericksburg, a partnership with Mary Washington Healthcare that is Virginia's only Diagnostic Imaging Center of Excellence, as designated by the American College of Radiology.

To schedule a mammogram or for more information, call 540-741-XRAY (9729). ■



Medical Imaging of Fredericksburg has added breast imaging locations in recent years, making its services more accessible than ever to women in the Fredericksburg and surrounding region. Medical Imaging of King George opened in late 2019, and the Imaging Center for Women at North Stafford began serving patients in 2017.

Breast imaging services are now available at the following locations:

Imaging Center for Women – Fredericksburg

1300 Hospital Drive, Suite 100
Fredericksburg, VA 22401

Imaging Center for Women – North Stafford

125 Woodstream Blvd., Suite 101
Stafford VA 22556

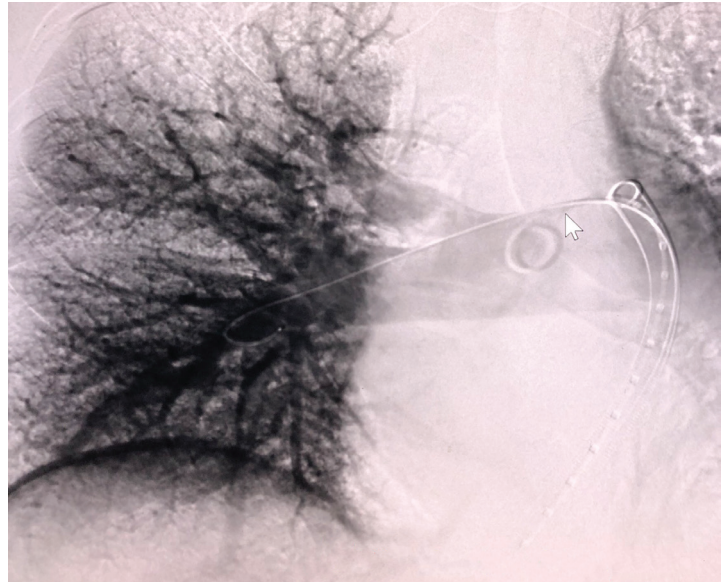
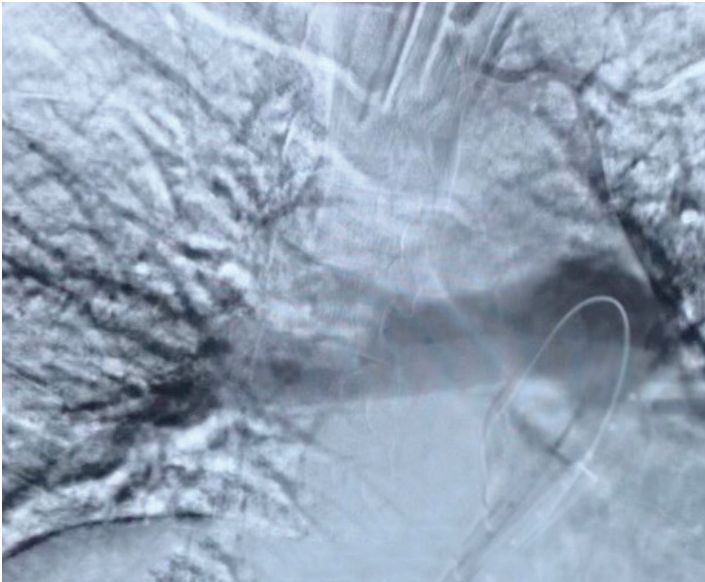
Medical Imaging of King George

11131 Journal Parkway, Suite B
King George, VA 22485

Medical Imaging of Fredericksburg – Lee's Hill

10401 Spotsylvania Ave.,
Suite 101
Fredericksburg, VA 22408

Visit [mifimaging.com](https://www.mifimaging.com) for a listing of all our locations.



Before treatment X-ray image (left) demonstrates blood clot blocking blood flow to the lung. The after treatment picture (right) shows much improved blood flow to the lung after blood clot removal.

“This new procedure offers distinct benefits for patients who are good candidates for it,” Dr. Elias said. “It provides an alternative to more conventional pulmonary embolism treatments requiring a clot-busting medication called tissue plasminogen activator, or tPA, a drug that is necessary in some cases but also presents risk. The use of tPA can result in major bleeding complications and is also costly and labor intensive, requiring a patient to be monitored in the intensive care unit (ICU) for several days.

“With the FlowTriever method, tPA is not needed. Patients typically receive intravenous pain medication, along with local anesthesia. Blood clots are removed on the operating table, where we see almost immediate improvement in patients’ respiratory and cardiovascular health. They may need just one night in the ICU or may go directly to a regular hospital bed, delivering a greatly improved patient experience.”

After coronary artery disease and stroke, acute PE ranks third among the most common types of cardiovascular diseases, according to the National Center

for Biotechnology Information. “It can strike people of any age and any physical condition,” Dr. Elias said. “Some but not all are emergency cases, requiring intervention within 60 to 90 minutes.”

Dr. Elias was trained in the FlowTriever method through his clinical fellowship at Yale University. Over the past months, he has championed the procedure with his colleagues at VIVA with consistent success. “We are proud to bring this life-changing technology to our local region and look forward to its widespread adoption,” he added. ■

Visit Our Convenient Stafford Location



Dr. Victor D'Addio and Katrina Stotts, PA-C, of VIVA. Pre-2020 photo.

Virginia Interventional and Vascular Associates – Stafford

125 Hospital Center Blvd., Suite 315
Stafford, VA 22554
(540) 654-9118

Interventional Radiology and Vascular Surgery
Accredited by AAAHC



Radiologist Spotlight: Neil B. Green, M.D.

Dr. Neil Green was drawn to radiology because of his fascination with technology and appreciation for the specialty's role in diagnosing a broad spectrum of medical conditions. But it was family that inspired his medical career choice – and his most gratifying patient case to date.

Medical Inspiration

Growing up, the South Florida native was especially close with his grandfather, a rural physician who made house calls and handled everything from delivering babies, to learning how to administer electrocardiograms (EKGs).

“He was just an incredible physician, and there was an outpouring of grief in the community when he passed away,” Dr. Green recalls.

With another physician in the family, his great uncle, also steering him toward the healing arts, he pursued his degree at Baylor College of Medicine. A computer enthusiast who had once owned a Franklin, an early Apple clone, Dr. Green was equally intrigued by anatomy. So, radiology seemed a natural fit. But it was the discipline's interplay with other specialties that was especially compelling.

“While working with the director of radiology, on reorganizing teaching files as a medical student, I was astounded by all the pathology that is seen in radiology. I was fascinated by the fact that almost every specialty coalesced into radiology, and that 75% of diagnoses are made through medical imaging,” Dr. Green notes.

After graduation he completed his residency and fellowship at the University of Miami/Jackson Memorial. The school offered a cutting-edge program, one of very few at that time that combined radiology and nuclear medicine.

“I saw an opportunity to blend two fields – radiology, which may use X-rays and CT (computed tomography) to visualize the anatomy; and nuclear medicine, which looks at function, the underlying processes taking place. You need to understand both of these – anatomy and function – to get the full picture in medical imaging,” he explains.

His choice ended up being a smart move. Later, hybrid scanners would be developed that combined positron



emission tomography (PET) or single photon computed tomography (SPECT) with CT imaging, offering capabilities not possible before - creating a three dimensional nuclear medicine.

Community Practice

After completing his medical education and training, Dr. Green and his wife decided to relocate so he could join a physician-owned practice in Virginia. He joined RAF in 1998, impressed with its radiologists and their close collaboration with other clinicians in the community.

Today, Dr. Green is helping physicians and patients in our community and beyond in his work with RAF at Mary Washington Healthcare's hospitals, and at local imaging centers owned jointly by Mary Washington and RAF. He serves as:

- Physician Director of nuclear medicine and PET imaging,
- Physician Director of cardiac imaging, having launched the practice's cardiac CT and magnetic resonance imaging (MRI) program, including life-saving coronary calcium scoring scans,
- Chief Medical Informatics Officer (CMIO),
- RAF Compliance Officer,
- Past President of the Maryland/Virginia/Washington, D.C., and Delaware delegation of the Mid-Eastern Chapter of the Society of Nuclear Medicine

- Member of the Virginia Medicare Carrier Advisory Committee

He is board-certified in diagnostic radiology, nuclear medicine, cardiac CT and nuclear cardiology.

Gratifying Results

Dr. Green recalls a number of cases over the years where radiology findings improved patient outcomes, but his most gratifying to date involved his father.

His father was in his 70s, physically fit, with no signs of cardiac disease, but Dr. Green encouraged him to get a CT calcium scoring scan anyway. A high calcium score can be a strong predictor of a future heart attack, and can even be found in otherwise-fit individuals without any symptoms. Dr. Green's father scored high, and further testing showed serious heart disease, requiring a triple bypass in 2016.

“If I hadn't insisted he have a calcium scoring scan, he might not be here because he would not have had the bypass,” Dr. Green says.

Family Time

When Dr. Green is off duty, he enjoys vacations with his wife, Cindy, and their three children. He has fond memories of vacations hiking in national parks, Colorado, Mexico, Nevada, Washington State and Oregon.

Dr. Green is also a tennis and running enthusiast. This past January, he and his younger brother completed a half marathon with their parents.

“I'm tickled my parents are in such great shape,” Dr. Green adds. “At the end of the half marathon, my brother and I were limping, with ice packs, and my 80-year-old father and 77-year-old mother were just fine.” ■



www.rafimaging.com
www.vivassociates.com
 (540) 361-1000

Ed Swager, Chief Executive Officer

Radiologic Associates of Fredericksburg (RAF) is the largest provider of medical imaging services in the Fredericksburg, Stafford and Spotsylvania area. RAF's interventional radiology and vascular surgery group, Virginia Interventional & Vascular Associates (VIVA), performs minimally invasive procedures, vascular lab studies and vascular surgery.

RAF publishes *Imaging Advances* periodically for referring physicians and the greater medical community.

For more information, please contact Tammy Gressly, Director of Administrative Operations, tgressly@rafadmin.com, (540) 361-1000.

Radiologic Associates of Fredericksburg
 10401 Spotsylvania Avenue, Suite 200
 Fredericksburg, VA 22408

RAF Welcomes Three New Physicians to the Community



Dr. Paul Mathew

Radiologic Associates of Fredericksburg (RAF) welcomes three new radiologists to the practice: Drs. Paul Mathew, Jacqueline Alvarez, and Alex Skidmore. All three are board eligible in diagnostic radiology.

Dr. Mathew completed his fellowship training in musculoskeletal imaging at the University of Virginia Health System. He will be serving patients at Medical Imaging of Fredericksburg and hospital locations.



Dr. Jacqueline Alvarez

Dr. Alvarez completed her fellowship training in breast imaging at the Moffitt Cancer Center. She will continue her dedicated service to women's imaging at the Imaging Center for Women.

Dr. Skidmore completed his fellowship training in vascular and interventional radiology at the University of North Carolina Health System. He is an interventional radiologist who will be serving patients at Medical Imaging of Fredericksburg, Virginia Interventional &



Dr. Alex Skidmore

Vascular Associates, and hospital locations.

"Drs. Mathew, Alvarez, and Skidmore are exceptional physicians and it is my pleasure to welcome them to the RAF team. RAF is committed to providing the highest level of medical care to those we serve, and this includes ensuring our staffing levels continue to meet the needs of our referring clinicians and community," said Dr. Chris Meyer, RAF president. ■