



Advances in Treating Uterine Fibroids Bring Faster, Nearly Painless Recovery

The bad news: growths that sometimes develop in the wall of the uterus, called uterine fibroids, can cause women severe discomfort, hamper everyday activities and lead to hysterectomy or other surgeries. The good news: they are rarely cancerous, and there is an alternative to hysterectomy for most women.

A procedure called uterine fibroid embolization (UFE) has proven to be a safe, effective, and minimally invasive treatment option. Small particles are delivered into the arteries that supply the uterus, destroying the growths without having to remove them through surgery.

Dr. R. Donald Doherty Jr., a Board Certified, Fellowship Trained Interventional Radiologist who heads Virginia Interventional and Vascular Associates (VIVA), specializes in UFE. The procedure is performed at VIVA's outpatient facility in Spotsylvania, Mary Washington Hospital in Fredericksburg and Stafford Hospital.

VIVA physicians have successfully performed hundreds of UFE procedures over more than 20 years. Yet, according to Dr. Doherty, two advances in pain control, before and after the procedure, have taken the patient experience from good to great.

First, VIVA doctors have introduced what he describes as a "very effective preoperative medication regimen," focused on reducing inflammation. Second, they have added a nerve block to control pain post-procedure. "It interrupts the pain pathway from the uterus to the brain," he explained. "For many years, we admitted patients for an overnight stay and provided an analgesic pump for pain control. They were discharged the next day and prescribed heavy pain medications. But with the pain block, discomfort after the procedure is minimal."

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New CT Technology Arrives in Area

Dual-source scanner produces faster tests, clearer images and new capabilities, at a lower dose

Medical Imaging of Fredericksburg's new dual-source computed tomography (CT) scanner will deliver dramatically faster tests and sharper images, including "motion-free" images for rapid diagnosis of heart disease. It will also open up enticing possibilities for new imaging capabilities—all at a fraction of the standard radiation dose, said Dr. Neil B. Green, physician director of cardiac imaging for Radiologic Associates of Fredericksburg (RAF).

The facility installed a Siemens dual-source CT scanner in June. Where a standard CT scanner uses one x-ray source rotating around the patient, a dual scanner uses two x-ray sources directed at different angles.

"Dual source is an advanced technology that allows a greatly reduced radiation dose compared with standard CT scanners," said Aatif Rahman, Director of Technical Services for Medical Imaging of Fredericksburg. "It's also a much faster scanner and produces higher-quality images for radiologists to interpret."

Dr. Green noted that the dual-source scanner is so fast it can complete a chest CT scan in less than a second and a whole body scan in five seconds, capturing 128 images in just one spin. Its dual-source design increases image quality by more than 50 percent while at the same time reducing the required radiation dose by one-third to one-half, depending on the patient.

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Radiologist Spotlight: Jakob Schutz, MD

Growing up in Tysons Corner, VA, Dr. Jakob Schutz, a board-certified, fellowship-trained Diagnostic Radiologist at Radiology Associates of Fredericksburg (RAF), discovered his academic interests were wide ranging. Science and history resonated with him, as did a subject more unusual: forensic techniques used in crime detection. He thought he may be destined for a career of profiling serial killers.

His father, Benjamin M. Schutz, who was his hero, was a forensic psychologist and also an award-winning author of detective fiction before passing away in 2008. “In his lifetime, he authored seven novels and a short story collection,” Dr. Schutz said. “His writings line my bookshelf.”

At William & Mary (W&M) in Williamsburg, VA, Dr. Schutz continued to follow his trio of interests. He majored in biology, minored in history, and was a licensed private investigator. As a James Monroe Scholar, an academic distinction awarded to just 10 percent of W&M’s undergraduate students, he received a grant to conduct research of his own design during a summer break. He elected to study neuroscience at Arizona State University and found time to volunteer at the Maricopa County Medical Examiner’s Office.

“College was an exploratory time of trying out many options,” he said. “I considered being a lawyer but decided a career in medicine was the best way to bring all my interests together.”

Solving the Mysteries

Dr. Schutz graduated from Philadelphia’s Perelman School of Medicine at the University of Pennsylvania in 2004. He completed his internship at Crozer-Chester Medical Center in Upland, PA; his residency in radiology at the Mallinckrodt Institute of Radiology at Barnes-Jewish Hospital in St. Louis, MO; and his fellowship in magnetic resonance imaging (MRI) at the Johns Hopkins Hospital in Baltimore, MD.

“The part of medicine I enjoy most is solving the mysteries—figuring out what’s going on with patients,” he said. “Descriptions of the presenting problem are typically generic, for example, ‘abdominal pain.’ I like looking for clues in the images and assembling them logically to come to specific conclusions.”



Dr. Schutz with his wife and children.

Photo Courtesy of Sean Quinn/Stafford Living Publication

Expanding Expertise

Dr. Schutz’s fellowship at Johns Hopkins focused on body MRI, primarily of the abdomen and pelvis. He also developed an interest in musculoskeletal (MSK) MRI, as well as expertise in cardiac MRI— a skill much sought after by RAF when he joined the group in 2010. At RAF, he expanded his expertise to become part of the nuclear cardiology team and reading positron emission tomography (PET) scans to look for heart problems.

Still drawn to forensics, he serves as the director of Mary Washington Healthcare’s Post-mortem Imaging Program. “We’re one of just a few facilities in Virginia that conducts post-mortem computerized tomography (CT) scans on patients who have died in the hospital trauma bay,” he explained. “With the scans, trauma surgeons can see the true extent of a patient’s injuries so they can understand if anything else could have been done for that patient or if

the patient’s injuries were so severe that they were likely to die no matter the intervention.”

Dr. Schutz has also lectured on this topic at the Federal Bureau of Investigation’s Behavioral Analysis Unit, which investigates complex crimes.

Growing the Family

Dr. Schutz met his wife, Amanda, at W&M. Friendship blossomed into romance a year after they graduated from college, and they married in 2001. The couple has three children: Charlotte, 12; Xavier, 10; and Anabelle, 7.

All members of the Schutz family are exercise and sports enthusiasts. Dr. Schutz coaches his son’s soccer team. Amanda, who has a PhD in health care management and biostatistics, teaches yoga and shepherds their daughters to regular dance classes. Favorite family activities include outdoor excursions, from hiking to skiing, along with travel. A trip to Belize is planned for November. ■



DIAGNOSTIC IMAGING
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Only six medical imaging centers in Virginia gain top certification

Search the American College of Radiology website for medical imaging centers in the state that have achieved the highest level of certification – recognition as a Diagnostic Imaging Center of Excellence (DICOE) – and their names will sound familiar. All are in the Fredericksburg region and part of Medical Imaging of Fredericksburg, a partnership of Radiologic Associates of Fredericksburg (RAF) and Mary Washington Healthcare. The centers are:

- Medical Imaging of Fredericksburg
- Imaging Center for Women
- Medical Imaging at Lee's Hill
- Medical Imaging of North Stafford
- Imaging Center for Women at North Stafford
- Medical Imaging of King George

In a news release, officials with the American College of Radiology described the DICOE program as “the pinnacle of medical imaging care,” an achievement that goes beyond accreditation to recognize best-quality imaging practices. Attaining DICOE certification requires a comprehensive assessment of the center’s entire medical imaging enterprise, including its structure and outcomes. It recognizes the excellence of the center’s professional staff, technology, and policies and procedures, as well as superior patient care.

“American College of Radiology accreditation is the gold standard, and designation as a Diagnostic Imaging Center of Excellence is definitely the next level up for facilities that have shown above and beyond dedication to superior service,” said Aatif Rahman, director of technical services for Medical Imaging. He noted that the local DICOEs were recently notified that their certification had been renewed for another three years.

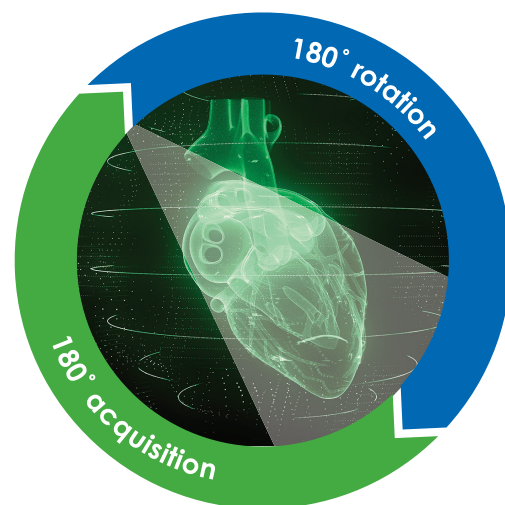
“Attaining DICOE certification is part of our commitment to providing high-quality medical services at the lowest possible cost in the region,” added Lori Szweda, executive director of technical and clinical services for RAF. “This recognition was made possible by the hard work and expertise of our board-certified, fellowship-trained radiologists and the centers’ staff, as well as the advanced technology and procedures offered at each facility.” ■

Dual-source scanner continued from page 1

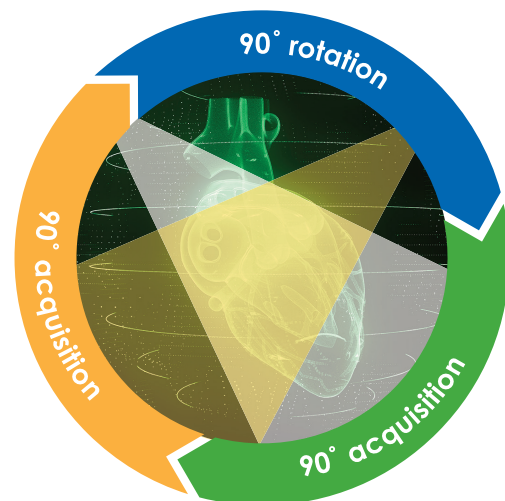
As a result, “low-dose, rapid CT scanning improves quality of care diagnostically as well as patient safety and comfort,” he said.

The dual-source scanner can be used for a variety of studies, including pulmonary imaging, but one strength is its cardiac testing capabilities, especially for coronary CT angiography, he added. Referring providers typically order coronary CT angiography for patients suspected of having plaque buildup that has narrowed the arteries supplying blood to the heart. The test can determine the presence and extent of plaque buildup, or other possible reasons for the patient’s symptoms.

Equipped with the dual-source CT scanner, Medical Imaging of Fredericksburg can also add other procedures in the future that leverage this technology. Look for more news in upcoming issues of our *Imaging Advances* newsletter. ■



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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.

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Now, all UFE procedures are same-day, he explained, and pain is treated through over-the-counter medication. Recovery time is just three to seven days after the



UFE by an interventional radiologist

procedure, depending on the size of the fibroids—compared with eight to 12 days before the pain block was introduced.

“With these two ways of dealing with pain, we have ‘cracked the code’ on discomfort,” Dr. Doherty said. “Before these new pain-control measures, patients almost always reported complete satisfaction after six to eight weeks, once the fibroids had shrunk. Now, in the first office visit after two weeks, patient satisfaction has gone through the roof!”

UFE is effective for multiple fibroids, and the recurrence of treated fibroids is rare, he noted. Most women with symptomatic fibroids are candidates for UFE, regardless of fibroid size.

VIVA's Interventional Radiologists are board certified and fellowship trained, and their outpatient facility in Spotsylvania is accredited by the Accreditation Association for Ambulatory Health Care. They also have offices in Stafford.

For more information, call 540-654-9118 or visit vivassociates.com. ■

Benefits of Uterine Fibroid Embolization

Uterus preserved. Because hysterectomy surgery removes the uterus, it also removes the option of future fertility. UFE leaves the uterus intact, making it a good choice for women who may want to bear children in the future.

Less risk. Unlike hysterectomy, UFE does not involve general anesthesia or being completely unconscious during the procedure. Also, compared to hysterectomy, risk of major bleeding or pelvic infection is minimal.

Shorter recovery. After undergoing a hysterectomy, a patient may remain at the hospital two or three days. Once she is home, her recovery time is typically from six to eight weeks. After a UFE procedure, patients can go home the same day as their procedure, and most are back to normal activities within one to two weeks.

No stitches or scarring. A hysterectomy requires stitches and leaves a scar. In a UFE procedure, the Interventional Radiologist makes a small nick in the patient's upper thigh to place a tiny catheter. The small cut is covered by a bandage, no stitches are needed, and no scar is left.