Navigating Near-Fatal Burn Patient into Safe Waters
Jeff Davis started his 40-year career working on merchant ships all over the world. He worked up to tugboat captain, safely steering barges as big as football fields through the treacherous waters along every U.S. coast. But it was an ordinary motorcycle ride on a summer day in southern Maryland that proved the most dangerous voyage of his life.

When his cycle collided with a larger vehicle, gas spilled and flames erupted. Within seconds, Capt. Davis’s body was ablaze. Passersby helped smother the fire, and a state police helicopter loaded Capt. Davis aboard for the trip to MedStar Washington Hospital Center—and its renowned Burn Center, where he would stay 17 months.

The Burn Center, the only adult burn treatment facility in the Washington area, serves the District, southern Maryland, northern Virginia and eastern West Virginia. Every year, more than 1,000 patients are treated at the center by a multidisciplinary team of experts including surgeons, nurses, nutritionists, pharmacists, rehabilitation therapists, and many other allied health professionals.

The Threat of Poly-Trauma

When Capt. Davis arrived at the hospital he was in critical condition. “He had multiple traumatic injuries including broken bones and very deep burns covering more than 50 percent of his body,” explains Jeffrey Shupp, MD, Burn Center director. Working collaboratively, the Trauma, Interventional Radiology and Orthopedic Surgery teams gathered to manage his complex care.

Among his serious fractures was a broken pelvis—an injury that can lead to difficult-to-control bleeding. So Capt. Davis was first rushed to Interventional Radiology for a procedure to block bleeding vessels. Once this threat was thwarted, the Burn team turned to tackle the third danger of his life: the underlying bones, muscles, tendons, and nerve endings.

“With a burn of this degree, burn shock can be lethal,” Dr. Shupp says. “But the therapists took good care of me and helped get me stronger. Everyone at the hospital was wonderful, and I know it’s a miracle I’m alive. They are great people who became my friends.”

“Capt. Davis’s recovery is a testament to the multidisciplinary team taking care of him,” says Dr. Johnson. “Everyone collaborated with his recovery. He and his wife are minor celebrities every time they come for a visit.”

Homecoming

On December 3, 2016, more than 17 months after he first arrived, Capt. Davis was discharged. “A van picked me up and took me home to St. Mary’s,” he says. “My wife, a couple of friends, and my dog Choco were waiting for me. When I left, Choco was just a puppy, but he remembered me!”

Not one to sit around, Capt. Davis was soon riding a customized bike and this fall, started driving again, using a custom made car with hand controls. His years captaining tugboats paid off. He says, “I was supposed to have six to eight training sessions before getting my license, but the therapist spent one session with me and approved my license.”

With home nursing and physical therapy, and “Bonnie’s remarkable strength, things are getting better,” he adds. “My wife and I went to Florida for a month and are planning to go back.”

Mrs. Davis grew up in a large family of watermen in St. Mary’s County, and most live within a few miles of each other in Piney Point. She has devoted most of her time to her husband’s recovery, but family members have offered tremendous support and enjoy regular family get-togethers with Maryland seafood at their home on the water. “I know this wasn’t the retirement we dreamed of,” Capt. Davis says, “and I don’t have great expectations. I just want to be strong enough to leave my wheelchair behind and walk with a walker into a restaurant or a friend’s home. Thanks to so many people, I may just get there.”

Capt. Davis required more than 20 liters of fluid to support his cardiovascular system during the first 24 hours in the hospital. Once we get a large burn through this initial resuscitation, we need to begin debridement to remove burned tissue to stop inflammation and control infection.”

Lost in Dreams

Capt. Davis has no memory of those early days—or the months of intensive care that followed. But he has read his wife Bonnie’s journal—a daily, heart-wrenching account. That’s where he learned about his round-the-clock care and dozens of surgeries, including a sudden wrinkle in her husband’s recovery. Weeks into his hospitalization, Capt. Davis developed internal bleeding from an unknown source.

“It was a mystery we needed to solve quickly,” says Dr. Shupp. “We were able to identify the bleed was in his colon where he previously had surgery. Dr. Laura Johnson and I had to remove much of his large bowel to stop the bleeding.” It was a setback—but Capt. Davis continued to defy the odds.

“It’s strange,” Capt. Davis says now. “I think I had this recurring dream. I felt as if I was in a shallow pool with other people floating, and we were in pain, but knew we just had to do our time and would eventually regain strength.”

The Benefit of Research

Three months into his hospitalization, it was time to graft new skin tissue on his wounds, using cadaver tissue and an innovative new tool available in just a few hospitals nationwide.

“We have been involved in clinical trials testing a medical device called ReCell® and received a compassionate waiver for Capt. Davis,” Dr. Shupp explains. “ReCell uses a very small sample of the patient’s skin to reconstitute cells into a spray. It’s an important additional grafting technique for patients like Capt. Davis who don’t have enough healthy skin for standard grafting.”

When his wounds were adequately healed, Capt. Davis began rehabilitation. Months of sedentary hospitalization, stiffening of muscle and loss of nerve sensation made movement difficult. And his 6’1” frame had withered to 120 lbs. “When I first left the ICU, just getting into my wheelchair was a big feat,” he says. “I was in a shallow pool with other people floating, and we were in pain, but knew we just had to do our time and would eventually regain strength.”

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Healthy, active and only 57, Cathy Dorusak of Denville, N.J., was taken aback when a routine physical revealed an abnormal blip on her electrocardiogram. Fortunately, the aberration with the odd-sounding name—Left Bundle Branch Block (LBBB)—was not causing any symptoms, like shortness of breath or fatigue.

After further tests confirmed that Ms. Dorusak’s heart was functioning just fine, her physician gave her the all-clear. So for the next four years, she went about her life as usual: working, biking, kayaking—and getting regular check-ups that she passed with flying colors.

But everything changed early one morning in April 2016 when Ms. Dorusak woke up, gasping for air. “I felt like I couldn’t catch my breath,” she says. “It was terrifying.” Tests in the nearest emergency department revealed that Ms. Dorusak’s lower left chamber, the heart’s master pump, was enlarged, weak and only working at half capacity. Her lungs had filled with fluid, a hallmark of congestive heart failure (CHF).

And her previously harmless LBBB most likely had something to do with it.

The Heart’s Electrical Grid

“Until the last 15 years, blockage of the left bundle branch nerve—a problem with the electrical signal that normally tells both lower chambers (ventricles) to beat in unison—was a bit of a ‘chicken-or-egg’ puzzle for physicians,” explains Seth Worley, MD, an electrophysiologist and LBBB expert.

“We know there is a definite relationship between CHF and LBBB since a bundle branch block is found in 20 to 30 percent of heart failure patients. But in some patients, the LBBB is the cause of heart failure while in others, it is the result.”

In the healthy heart, the left and right sides of the main pumping chamber beat simultaneously to push blood out to the body. But breaks or other problems in the wiring can interfere with the commands that control the pumping action, preventing signals from reaching both ventricles at the same time.

In Ms. Dorusak’s case, the “wire” relaying the electrical signal to the left ventricle was broken (blocked), and the two chambers were contracting and relaxing out of sync, basically fighting each other.

“The effect of an LBBB can run the gamut from being totally benign, as Ms. Dorusak’s condition first was, to causing devastating consequences,” says Dr. Worley. “When there’s a break in the electrical connection from the left bundle branch, the left ventricle works harder to make up for the lack of coordinated pumping ability. Over time, that extra effort damages the ventricle, causing CHF and, in the worst cases, even death.”

Ms. Dorusak’s physicians started her on a regimen of diuretics and powerful medications to reduce the strain on her heart and try to improve its function.

Nothing worked.

Restoring Connections

Exhausted all the time, Ms. Dorusak agreed to get an advanced and relatively new form of pacemaker therapy that could repair her faulty left bundle. The procedure, called cardiac resynchronization therapy (CRT), replaces the broken wire, restoring the correct electrical signal so both chambers can once again beat in time.

However, a CRT device requires three wires instead of the two found in standard pacemakers, making implanting the newer device more complex and complicated. And the third wire—which replaces the broken left bundle—is both the most important part of the puzzle and the most difficult to place.

As a result, nationwide success rates have been less than ideal. Dr. Worley understands why. “In my experience, the problem of positioning the third wire is typically caused by the design of the tools that accompany each CRT system,” he says. “They’re often too big and stiff to manipulate through the tiny, twisted pathways in the heart.”

Determined to find a better way, Dr. Worley started inventing and perfecting his own set of instruments and techniques.

Ms. Dorusak counts herself lucky to be among them. “When my medical team in New Jersey couldn’t get that third wire where it needed to be,” she says, “they immediately referred me to Dr. Worley.”

That was in July 2017. A mere 45 minutes after Dr. Worley performed her CRT revision, Ms. Dorusak woke up to learn her device was already making a difference. After an overnight stay at the Hospital Center, she returned home, her energy and stamina improving each day. Within three months, an echocardiogram and an ultrasound showed her heart was pumping at normal capacity, and her left chamber was no longer enlarged but back to normal.

Now 63, Ms. Dorusak continues to receive both medication and frequent monitoring. Yet she’s also back at work, biking and kayaking again, which she calls “extraordinary.”

“Without Dr. Worley, I probably would have had an unnecessary open-heart surgery, with weeks of recuperation,” says Ms. Dorusak. “I am so lucky and grateful to him. He gave me my life back.”

For more information about CRT, please call 202-877-7685.
After Procedure, Avid Runner and Cyclist Regains Stride: Wins National Competitions

Early in 2016, Don Forgione, 67, could hardly walk due to foot pain. And he’d given up his passion: running.
“My feet were always blotchy and red, and I would cut holes in the side of my shoes to relieve pain and pressure,” he recalls.
But that was before he was treated at MedStar Washington Hospital Center for a condition called peripheral artery disease, or PAD, in which narrowed blood vessels reduce blood flow to the limbs causing pain, cramping and even small wounds that won’t heal.
A year and a half later, after three minimally invasive procedures to open blood vessels in his legs, the avid runner and cyclist was back, pounding the pavement. This year he was ranked the third fastest male in the United States in his age group for duathlons, an athletic event that consists of back-to-back running, cycling and running.

It was the small, non-healing ulcer on his right little toe that led him to seek care, first with a podiatric surgeon and then with Nelson Bernardo, MD, medical director of the Peripheral Vascular Lab at MedStar Heart and Vascular Institute (MHVI) at MedStar Washington Hospital Center. Testing confirmed Mr. Forgione had total blockage in two of the three arteries that supply blood from the knee to the foot and toes.

For Mr. Forgione, the diagnosis was surprising. The Ellicott City, Md., resident had played rugby at Towson University, and competed in recreational athletic activities for most of his life. He had no history of smoking, coronary artery disease or diabetes, all risk factors for PAD.

But he had high cholesterol. Dr. Bernardo says, “Although Mr. Forgione was otherwise healthy, his high blood pressure, age, and hereditary factors led to his vascular disease. What’s important is early diagnosis and appropriate treatment.”

Dr. Bernardo performed percutaneous endovascular intervention. It’s a minimally invasive procedure that involves balloon angioplasty, or the surgical widening of a blocked or narrowed blood vessel using a balloon catheter that is inserted into an artery through a small opening in the skin. Mr. Forgione had two procedures on his right leg, and a month later (after attending his two sons’ weddings) another procedure on his left leg.

For Mr. Forgione, the results were better than he dared hope. “Now, my feet look normal, and my pain is almost completely gone; only at night do I sometimes feel mild pain, but that’s after I’ve run more than five miles.”

He also took Dr. Bernardo’s advice to cut cholesterol from his diet—red meat, high-fat dairy, eggs, saturated fats—and it paid off. Mr. Forgione says his cholesterol is now at normal levels, and he dropped several pounds that help with the burden on his knees and feet when running.
“I can’t say enough about Dr. Bernardo and the team at MHVI,” Mr. Forgione says. “I’m so pleased with the results and look forward to more races, as well as chasing after my grandchildren.”

Nelson Bernardo, MD

ABOUT PAD
Peripheral Artery Disease, or PAD, develops over time as a result of plaque build-up in the arteries. It most commonly occurs in the legs and causes pain, cramping and tiredness. Chronic wounds can form as a result of the decreased blood flow. Risk factors for PAD include diabetes, smoking, high blood pressure, high cholesterol, and age. While many people with PAD can be treated by medical therapy and lifestyle changes, more advanced stages often require intervention.

For more information about this condition, please call 202-877-DOCS (3627).
Calming Overactive Bladder: MODIFYING YOUR BEHAVIORS CAN HELP

Andrew Sokol, MD

Do you feel like you’re out to lunch with friends when you feel that urge again—yet you have to go to the bathroom, immediately? It doesn’t matter that you just went a half-hour ago.

For many women, the urge and embarrassment of an overactive bladder make it hard to enjoy a normal work and home life. But there are many options for ease the symptoms of overactive bladder. Andrew I. Sokol, MD, a urogynecologist at MedStar Washington Hospital Center, says the risk of overactive bladder increases with age, "but it’s not really a normal part of the aging process, and it can affect women at any age.”

Typical symptoms include a sudden urge to urinate right away, having to urinate frequently during the night, and leaking urine before being able to get to a bathroom.

Dr. Sokol says drinking too much fluid is a top cause of overactive bladder. Many women have been told they should drink eight glasses of water a day, he says, but there’s no scientific basis for that belief.

Other fluids also can be problematic. Some contain irritants or "diuretics," which encourage the body to produce more urine. Unfortunately, these beverages include some of our favorites, such as coffee, tea, and soda. Reducing consumption of these drinks can help restore bladder control.

Less often, overactive bladder symptoms can be linked to medical conditions such as bladder cancer, diabetes, urinary tract infection, and neurological disorders, including stroke and multiple sclerosis.

Dr. Sokol says the first option for women suffering overactive bladder is to change a few behaviors:

• Drink less fluid. “There’s no ‘magic number’ of glasses of water to drink per day,” Dr. Sokol says. “Just drink when you’re thirsty.”

• Stop all fluid intake within three hours of bedtime.

• Consider “timed urinations,” which are six to eight scheduled bathroom breaks per day.

• Try pelvic floor squeezing exercises, or “Kegels.” By squeezing the pelvic floor muscles several times a day, women can build up the muscles in this area and hold urine back longer.

If behavioral changes don’t work, Dr. Sokol says, other treatments might help. They include:

• Pelvic floor physical therapy

• Medications called anticholinergics, which block involuntary nerve signals, like the ones that control the urinary tract process

• Acupuncture with electrical stimulation near the ankle

• Botox (best known for treating wrinkled skin), which can be injected into a woman’s bladder, with benefits typically lasting six to 12 months per treatment

• An InterStim, a pacemaker-like device, which can be implanted during an outpatient visit to help with bladder control

Overactive bladder is very common,” says Dr. Sokol. “Luckily, we’re well equipped to treat it.”

To schedule an appointment with one of our specialists, call 202-877-DOCS (3627).
Reflux
Heartburn, difficulty swallowing, chronic cough, and sour taste are symptoms of reflux, in which stomach acid backs up into your food pipe (esophagus). Twenty percent of Americans have chronic reflux.

“Reflux can be associated with obesity, smoking, excessive caffeine, alcohol, peppermint, and fatty foods,” Eiman Nabi, MD, says.

Avoiding those foods, not eating within two hours of bedtime, and sleeping with your head elevated can provide initial relief. “But if you have persistent heartburn, difficulty swallowing, unexplained weight loss, nausea or anemia, you should see a gastroenterologist,” Dr. Nabi adds. Other reasons to visit a specialist are blood in stool, black tarry stools, a family history of GI cancer, or new onset of symptoms after age 50.

Dr. Nabi says reflux can be difficult to diagnose and may not respond to initial medical therapy. Such patients can undergo outpatient monitoring for acid (pH) changes. This involves placing a wireless pH monitor in your esophagus through a camera endoscope, which detects reflux and acid exposure up to 48 hours. Similarly, a thin catheter can be placed into your stomach through the nose to detect pH change up to 24 hours. Patients with mild reflux who haven’t responded to lifestyle changes or have severe symptoms are usually prescribed medications. Most are treated with a proton pump inhibitor. Surgery is rarely needed.

Gluten Intolerance
Gluten is a protein found in wheat, barley, and rye that can cause abdominal discomfort, diarrhea, bloating, and even confusion.

“First we evaluate for celiac disease,” says Jennifer Lee, MD. Celiac disease is an intestinal inflammation caused by eating gluten. Blood tests and endoscopy can detect inflammation. About 1 in 100 people worldwide have celiac disease.

Some people have symptoms even when celiac disease is ruled out. They may be gluten intolerant, and can benefit from following a gluten-free diet. This means eliminating foods with wheat, barley, and rye, and instead, eating meat, fish, fruit, vegetables, rice, and potatoes.

“You should be tested first, before going on a gluten-free diet,” Dr. Lee advises, to avoid nutritional deficiencies and other problems.

Probiotics
The 10 to 100 trillion microbial cells in the human gut comprise the microbiome. Mostly bacteria, they also include fungi and viruses. We are just beginning to understand that our lifestyles affect our microbiotic balance and “disorders ranging from autism, dementia, cardiovascular health, and obesity,” says Nidhi Malhotra, MD.

When the microbiome is disrupted, the body can have potential short-term effects, such as a Clostridium difficile (C.diff) infection, or long-term effects, such as Crohn’s disease.

“If you take antibiotics for an infection,” Dr. Malhotra says, “I usually prescribe a course of a probiotic to maintain microbiotic balance.”

Dr. Malhotra stresses that probiotic products are not FDA-approved. She recommends specific probiotics for specific conditions based on actual studies.

Hemorrhoids
A hemorrhoid is a swollen vein in the lower part of the rectum or anus that can become irritated and quite painful. Some bleed. Common causes are straining during bowel movements, chronic constipation, and pregnancy/chilbirth. “Hemorrhoids can really affect your quality of life,” says Eiman Nabi, MD.

Seventy five percent of Americans have a hemorrhoid by age 50. “They are very common and very treatable,” Jennifer Lee, MD, says.

Some bleed. Common causes are straining during bowel movements, chronic constipation, and pregnancy/chilbirth. “Hemorrhoids can really affect your quality of life,” says Eiman Nabi, MD.

There are two kinds of hemorrhoids: internal and external. Painful external hemorrhoids are usually treated by surgery. To treat internal hemorrhoids, providers place a rubber band around the hemorrhoid to block its blood supply. The treatment takes just 10 minutes and requires no anesthesia.

Dr. Lee, using an e-office anoscope, also performs rubber band ligation.

“It provides symptomatic relief, and patients can be retreated as needed,” she says. This procedure is quick, and requires no anesthesia or preparation.

For more information on these conditions, go to MedStarWashington.org/podcasts. If you have concerns you’d like to discuss with one of our specialists, please call 202-877-DOCS (3627).
Cochlear Implant Restores Hearing in 90 Year Old

Due to her profound hearing loss, Edna Whitted would pass notes back and forth in church with her granddaughter in order to understand what was being said. Now, the 90-year-old Upper Marlboro, Md., resident can hear every word the minister says, thanks to a recent cochlear implant.

“You don’t have to suffer with severe hearing loss,” says Selena E. Briggs, MD, a neurotologist and skull-base surgeon in the Department of Otolaryngology at MedStar Washington Hospital Center who treated Mrs. Whitted. “Cochlear implants are the next step after hearing aids no longer help.”

That was indeed the case for Mrs. Whitted, who for nearly five years could not hear due to a 92 and 88 percent hearing loss in her left and right ears, respectively.

“Before, she could never be part of the conversation,” says Amelia Stewart, Mrs. Whitted’s granddaughter. “She would get really upset because she couldn’t be part of it.”

Sensorineural hearing loss—presbycusis—is a natural part of aging, explains Dr. Briggs. Hearing aids are a natural first step in assisting with progressive hearing loss. However, should those no longer offer any improvement, implants are an option.

A cochlear implant is a small, surgically implanted electronic device that provides sound to a person who is deaf or severely hard of hearing. Unlike hearing aids, which amplify sounds, cochlear implants provide signals to the brain by stimulating the auditory nerve. The brain then recognizes these signals as sounds.

“It’s a safe and easy procedure,” says Dr. Briggs. “People love having them, and it’s simply life-changing for them.”

Dr. Briggs notes there is no age limit to having a cochlear implant, and the implants are designed to last a lifetime. They are also covered by insurance and Medicare. The implants have two parts, an external piece that sits behind the ear and an internal part that is placed under the skin and secured to the skull. The procedure takes 1-2 hours and can be done on an outpatient basis.

In addition to improving hearing, cochlear implants also relieve tinnitus, or the perception of noise or ringing in the ears, in 75 percent of patients.

“People don’t realize the things they have been missing,” says Dr. Briggs. “Cochlear implants can help older adults stay active and engaged. I have never had a single patient say they regretted getting one.”

That holds true for Mrs. Whitted, who received her left-sided implant two months shy of a surprise 90th birthday party. “This has improved my grandmother’s quality of life so much,” says Ms. Stewart. “You can tell how happy she really is.”

If you or a loved one is experiencing severe hearing loss and are interested in learning more about cochlear implants, please call 202-877-6733 to make an appointment.

Say Ahhh!

Salivary stones can be painful, but are treatable

Using a new technique, Matthew Pierce, MD, treats patients with painful salivary stones.

Salivary stones, also known as salivary duct stones or sialolithiasis, frequently cause pain and swelling when the calcified structures block the tiny openings in the mouth that produce saliva.

And often, explains Matthew L. Pierce, MD, an otolaryngologist and head and neck cancer surgeon at MedStar Washington Hospital Center, conservative management such as increasing fluid intake, gentle massage, and the use of lemon wedges or salt solutions to increase saliva production is enough to treat the stone. However, should those methods fail, or if the stone is too large to pass, a new technique called sialendoscopy offers patients a minimally invasive treatment option. Prior to sialendoscopy, surgical removal of the gland was sometimes necessary to remove larger stones.

With sialendoscopy, a small tube with a tiny camera, called an endoscope, is inserted into the salivary duct. The stone can be seen and removed by using a small wire basket or by a grabbing technique. The procedure usually takes less than one hour and patients can go home the same day. Patients typically can resume normal activity and are advised to drink plenty of fluids and avoid foods that are hard to eat or swallow immediately afterward.

An additional indication for sialendoscopy, Dr. Pierce notes, is for relief for patients who have received radioactive iodine for thyroid cancers.

While there is no definitive cause of salivary stones, some indications point to chronic dehydration, scarring, or recurrent infections of the salivary glands. High calcium intake has also been seen as a contributing factor; however, this is not always the case. Most times, salivary stones have no known cause. They most frequently occur in middle age, and tend to affect men more than women.

Most stones form in the submandibular gland, located beneath the floor of the mouth. But they can also form in parotid glands, located inside the cheeks, or the sublingual glands, which are under the tongue. The calcified debris is usually benign, but can cause chronic infection if left untreated.

“ Stones can take years to develop and are often asymptomatic,” says Dr. Pierce. “ CT scans and ultrasound confirm the diagnosis and can differentiate salivary stones from other diseases.”

“It’s important to see your doctor, specifically an Ear, Nose and Throat specialist, should you experience symptoms of salivary stones,” adds Dr. Pierce. “This is a very treatable condition, and the use of sialendoscopy offers a minimally invasive, gland-preserving treatment option.”

For more information on sialendoscopy, or for evaluation of salivary stones or any other disease of the ear, nose and throat, please call 202-877-6733 to make an appointment.
“I am thrilled that my surgery was successful, and I am starting to feel like myself again.”

—BRITTANI RIDDLE

Greater Success and Accuracy with New Technology

During the spring of 2017, Brittani Riddle, a cheerful, 22-year-old communications coordinator for the American University library, began suffering from fatigue and thirst. At first she chalked it up to stress, but eventually went to her doctor, who sent her to an endocrinologist. An MRI scan revealed a benign pituitary tumor. “That was the worst-case scenario they had warned me about. It was mind blowing,” she recalls.

Ms. Riddle was referred to neurosurgeon Edward F. Aulisi, MD, at MedStar Washington Hospital Center. Dr. Aulisi, chairman of Neurosurgery and director of the MedStar Pituitary Center, specializes in treating endocrine tumors that grow at the base of the skull, in the space behind the nose. He partners with Dr. Aulisi, “We were working in a small area very close to important structures,” says Dr. Aulisi. “The space is less than a centimeter in diameter. On each end are carotid arteries and the nerves that control the eyes. Any injuries could mean blindness, stroke or even death.”

But with Ms. Riddle’s surgery, Dr. Aulisi had a brand new tool in his pocket. She was the first patient with a pituitary tumor to be operated on using a new portable CT scanner that is rolled into the OR and gives surgeons a real-time look at the brain or spine during surgery. (See sidebar.)

“With Brainlab Airo® Mobile Intraoperative CT,” says Dr. Aulisi, “we can perform CT imaging while still in the operating room, so we can make decisions quickly and change course if it’s appropriate.”

It saves time, uses less radiation, and can be integrated with Magnetic Resonance Imaging (MRI) to create three-dimensional images rather than the standard two dimensions of traditional CT scanners, so the team can work with greater surgical accuracy.

Ms. Riddle’s surgery was performed June 21 of this year. She was unaware she was the first to receive the benefit of the new imaging scanner. She says, “I was trying to cope with extreme fatigue and constant thirst, and the idea of surgery, including incisions and possible scars, was very scary. The fact that they were able to use the minimally invasive technique gave me greater confidence and alleviated some of my fears. I didn’t know about the new CT scanner, but am glad they have it!”

After surgery, Ms. Riddle says she was tired and had mild headaches at first, but was soon able to resume work from her home in Hyattsville, MD, and then go back to her office three days a week. In early October, she was given a clean bill of health and has resumed all normal activities.

“I am thrilled that my surgery was successful, and I am starting to feel like myself again,” she says. “I am building up my energy, happy to be back working, and exercising with some light walking.”

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

NEUROSURGERY SUITE EXPANDS, COMBINES SPACE WITH NEUROLOGY

This fall, the MedStar Neuroscience Center received a facelift, with a new waiting room and the expansion of exam rooms to 11. And, to provide both patients and providers with greater convenience, Neurosurgery offices have combined with Neurology offices. As before, the Center has its own parking lot and entrance on the ground floor, behind the main hospital.

MedStar Washington Hospital Center is the first hospital in Washington, D.C., to use the Brainlab Airo® Mobile Intraoperative CT, an advanced imaging scanner that gives surgeons a real-time look at the brain or spine during surgery to make immediate decisions when it counts the most.

The Airo CT system has redefined neurosurgical processes. It offers faster, more precise neurosurgery with better outcomes and less radiation exposure than ever before.

“Having the ability to confirm the surgical progress during procedures is critical,” says neurosurgeon Edward F. Aulisi, MD. “It may reduce re-operation rates and lead to improved patient outcomes. Intraoperative imaging can also offer patients the benefit of a less-invasive surgical procedure, because the incisions are smaller and more accurate. There is reduced trauma and potentially faster recovery times.”

The traditional, stationary computed tomography (CT) scanners offer limited usefulness during surgeries. It made the surgeries take longer and sometimes led to the need for multiple procedures. The traditional CT scanners also limited surgeons to either scanning patients before their procedures or transporting them from the operating room to the imaging lab mid-surgery, then back to the operating room.

With the Airo scanner, surgeons bring the scanner to the patient instead of the other way around, and just one person can move it. They can create accurate CT images of the brain or spine right up to the time surgery begins. And they can scan in real time during the surgery to guide surgeons more effectively during complex procedures, which often leads to quicker, more precise surgeries.

Having the CT scanner in the operating room also lets them instantly learn whether a procedure is successful. With the old scanners, because of infection-control procedures, the team had to wait until the patient was out of surgery and recovering. The following day before they could do a follow-up scan. This also eliminates the need to rely on images taken before surgery that might not be as accurate, or wait to get images afterwards that could result in a second surgery.

Seventy patients have been treated so far at the Hospital Center using the system’s synchronized imaging capabilities.
Gifts Will Help the Tiniest Patients

Each fall, MedStar Washington Hospital Center leaders, physicians and associates come together to support a project through the annual Giving: The Power to Heal Campaign. The associate-driven Power to Heal Committee selected our Level 3 Neonatal Intensive Care Unit (NICU) as this year’s campaign recipient.

Our NICU team cares for more than 800 of our tiniest, most vulnerable patients every year. It touches the hearts of so many of our associates to know that the NICU staff is devoted to saving these fragile lives. Then there are those associates who know, firsthand, what it means to have their newborn loved ones receive care in our NICU.

Perioperative Service Assistant Andre Simmons is one such associate. Both his daughters—Arielle, 4, and Aeris, 1—were admitted to the NICU after his wife, Dail, suffered from preeclampsia and delivered the babies early. The first pregnancy was really frightening. Preeclampsia developed so quickly that Mrs. Simmons had a seizure shortly after her 30-week appointment. The doctors did an immediate C-section while she was unconscious. She didn’t know she’d delivered Arielle until she woke up much later. She says she was emotionally unprepared for having a premature baby, but the NICU nurses helped her understand that Arielle would be fine.

“We were in the right place,” says Mr. Simmons. Arielle, weighing 3.2 lbs. at birth, spent 43 days in the NICU. “Her only real problem was her lungs were not fully developed, so she was on oxygen,” says Mrs. Simmons. Once she was discharged, Mrs. Simmons and her husband shuttled between home and the NICU, with the new father dropping off bottles of breast milk in the mornings, and Mrs. Simmons bringing more in the afternoon. “Arielle never lost any weight, which babies normally do at first,” her mom said.

Their younger daughter, Aeris, weighed 4.8 lbs. at birth, and was in the NICU only eight days. But going back and forth wasn’t easy, because of Arielle. Luckily, “we had a lot of help,” Mrs. Simmons says. Both her mother, Barbara Agnew, a unit clerk on 2D, and her aunt, Mary Davis, RN, Emergency Department, were able to visit Aeris.

Like other parents with premature babies, the Simmons are grateful to the NICU staff. With the campaign’s support, the NICU hopes to buy two high-tech incubators called “Giraffes,” and a video streaming program, NICVIEW, that allows parents to watch their babies remotely when they cannot be at the hospital.

If you would like to contribute to The Power to Heal to help us continue to safely usher premature or sick newborns into the world, call 202-877-6558 or visit Giving.MedStarHealth.org/whcnicu.