MedStarGeorgetownMD

A MedStar Georgetown University Hospital Publication



Rachel Sigwalt is passionate about lacrosse. Hip surgery has got her back in the game.

Back on the Field: Hip Surgery Helps a Young Athlete Beat Pain By JENNIFER DAVIS

Rachel Sigwalt, 20, has been playing lacrosse for over half her life. While earning her associate's degree at Howard Community College in Columbia, Maryland, she was excited to join a collegiate team–but found that as her love of the game grew, so did pain in her hips.

Despite left hip discomfort so severe that she limped after games, Rachel was elated that her team made it to the national championships. At the big game, however, her pain took a turn for the worse.

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Transforming Treatments for Rare Blood Cancer

By Leslie Whitlinger

For plumber Alan Hunsberger, 64, aches and pains went along with the job. But when a persistent sore knee began interfering with his ability to work, he knew he couldn't ignore it any longer.

"I finally broke down and saw my doctor," Alan says. "He took an X-ray and told me I was probably looking at a joint replacement."

No fan of hospitals, Alan declined the recommendation and soldiered on. But within weeks, his knee pain extended to his hip, prompting another doctor visit. This time, the diagnosis was dire: multiple myeloma, a rare and incurable blood cancer that attacks the plasma cells that normally create antibodies in response to infections. Approximately 30,000 people in the United States are affected by the disease annually.

At the suggestion of a family friend, Alan and his wife traveled from their home in Oakton, Virginia, to MedStar Georgetown University Hospital's Multiple Myeloma Program, where they met with Program Director David H. Vesole, MD, PhD, FACP.

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MedStar Georgetown University Hospital's Multiple Myeloma Program helped Alan Hunsberger return to the life he loves, including spending time with his grandchildren.

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Twelve Hospitals Turned Him Down. MedStar Georgetown Gave Him a Second Chance. BY SUSAN WALKER

Michigan native Michael Gerald is no stranger to the operating room. The

65-year-old has lived with a genetic condition called glomerulonephritis, which has also affected several other members of his family. The disease causes inflammation of the filters in the kidneys that remove waste and extra fluid from the body and can lead to kidney damage and kidney failure. Michael had his first kidney transplant in 1980 at the age of 27, receiving a kidney from a deceased donor. That kidney failed a week after surgery. He underwent a second deceased donor transplant the following year, but that kidney failed after only a day. Then in 1991, Michael received a third kidney transplant.

MANY PROGRAMS WOULDN'T EVEN SEE HIM AFTER HEARING HIS HISTORY. OUR **PROGRAM IS WELL EQUIPPED TO HANDLE** THE MOST CHALLENGING CASES.

MATTHEW COOPER, MD

"My third transplant lasted for 27 years," he says. "But in 2015, I started getting tired more easily, and my complexion was grayer. A blood test confirmed what I feared-my kidney was starting to fail. Then last year, it just kind of pooped out, and I went on dialysis. My wife, LeAnne, and I started looking for a hospital that would perform a fourth kidney transplant."

That search was extremely difficult and frustrating for the Geralds. The hospital that had performed Michael's most recent transplant turned him down. They then tried a total of 12 hospitals in and around Michigan, including several major medical centers, but all of them said they couldn't perform the transplant. "They didn't want to take a risk," believes Michael.

A brochure brings new hope

Michael's nephrologist in Michigan received a brochure from MedStar Georgetown Transplant Institute and shared it with him, recommending he contact the Institute to see if the doctors there would be able to perform the kidney transplant he needed. Matthew Cooper, MD, director of Kidney and Pancreas Transplantation at the Institute, told Michael he believed he could help him.

"Many of the programs Mr. Gerald approached wouldn't even see him after hearing his history," explains Dr. Cooper. "Others told him his case was too complex. It's easy to say no if you don't think about the human being who's asking for a solution that's better than dialysis. Our program is well equipped to handle the most challenging cases, so we look at things differently and are able to help patients other transplant programs can't."

A CT scan revealed just how complex Michael's case was. Dialysis and decades of high blood pressure had caused calcifications of the arteries needed for his transplant. "We found a small segment of healthy artery we could attach the new kidney to, so we were able to proceed with the transplant," Dr. Cooper says.

Michael's nephew donated one of his kidneys, and the living donor transplant was a success, with his new kidney starting to function immediately. He has returned home to Michigan, where his nephrologist is partnering with the team at MedStar Georgetown on follow-up care.



MSN, RN, Kidney and Pancreas Transplantation nurse manager.

Michael says he's extremely grateful he found the team at MedStar Georgetown. "They did everything they said they would do and gave me a chance I wasn't sure I'd get. Working with the team was a breath of fresh air."

For more information, visit MedStarGeorgetown.org/KT or call 202-295-0668 to make an appointment.



Meet Matthew Cooper, MD

Visit MedStarGeorgetown.org/ CooperVideo to watch Dr. Cooper discuss kidney transplantations.

Sepsis: Know the Signs

BY BRENDAN FURLONG, MD, CHIEF OF SERVICE, EMERGENCY DEPARTMENT, MEDSTAR GEORGETOWN UNIVERSITY HOSPITAL

An estimated 1.7 million adults in America develop sepsis each year, and the condition leads to about 270,000 deaths. So, what is sepsis—and how can you reduce your risk?

What is sepsis?

The definition of sepsis has been evolving and really is best thought of as a range of reactions to infections. Your body's immune system protects you against bacteria, viruses, and other infections by releasing chemicals into your blood, causing inflammation and activating helpful, protective cells and cellular components. Sometimes, however, your body's natural regulatory checks fail—and the immune response can overwhelm your body, damage your tissues and organs, and eventually lead to death.

Almost any kind of infection can cause sepsis. Localized infections such as a skin or urinary tract infection can cause sepsis, as can more systemic infections like the flu. Whether or not an infection causes sepsis is based on a variety of factors, including the invading organism, the amount of time the infection has been developing, and the state of a person's general health. People with compromised immune systems are at greater risk.

Sometimes, procedures that open up your body or require the placement of a medical device (for example, a catheter) can introduce the risk of local and bloodstream infections. At MedStar Georgetown University Hospital, we take sepsis prevention extremely seriously and follow strict protocols to reduce our patients' risks.

What are the symptoms and signs of sepsis?

Symptoms and signs of sepsis include:

- General weakness, body aches, and/or shaking chills
- Confusion, sleepiness, and/or a lack of alertness
- Temperature greater than 101 degrees or lower than 96.8 degrees
- Elevated heart rate
- Difficulty breathing, or breathing unusually fast or slow
- Any symptoms associated with the inciting infection



Who is at risk?

Anyone can get sepsis. However, people who are at the highest risk are children under 12 months,



Brendan Furlong, MD, discusses sepsis.

adults over age 65, people with chronic health conditions, and people with weakened immune systems (for instance, people who are ill or who are undergoing treatments like chemotherapy).

How is sepsis treated?

Sepsis is an emergency condition. It is treated with IV fluids and antibiotic, antiviral, or antifungal medications. Some patients may require other interventions as well– for example, medication to treat dangerously low blood pressure, a breathing tube, dialysis, or a blood transfusion. Sometimes, surgery is needed to remove the source of an infection.

How can you lower your risk?

There are some healthy steps you can take to lower your risk of sepsis.

- Take good care of chronic health conditions.
- Get all your recommended vaccines.
- Wash your hands thoroughly and often, and keep cuts and scrapes clean.
- If you have an infection (or suspect one) and develop signs and/or symptoms, get to the Emergency department immediately.

When you are greeted by our staff, don't be afraid to say: "Could this be sepsis?" We are here to help and are committed to evaluating and treating you as quickly as possible!

Visit **MedStarGeorgetown.org/ED** for more information about the Emergency Department.

Philanthropic Leaders Advance the New Medical/Surgical Pavilion

By Kate Mattern

MedStar Georgetown University Hospital is always striving to reach new levels of clinical excellence. At the forefront of medicine, MedStar Georgetown is embarking on an exciting yet critical path to continue offering world-class health care.

The Hospital's new Medical/Surgical Pavilion, slated for completion in 2022, will become a new standard in patient care delivery. The Medical/ Surgical Pavilion will offer private patient rooms, state-of-the-art operating rooms, and beautiful new green space to enhance the patient experience and accelerate the healing environment.

WE ARE SO VERY GRATEFUL TO THE BERNSTEIN FAMILY FOR THEIR GENEROUS COMMITMENT, WHICH WILL MAKE A REAL AND LASTING IMPACT FOR OUR PATIENTS AND CAREGIVERS BY ADVANCING THIS TRANSFORMATIONAL PROJECT.

MICHAEL C. SACHTLEBEN

With the inspiring philanthropic leadership of the Bernstein family, the Medical/Surgical Pavilion will include the Bernstein Family Patient Care Floor for Neuroscience Excellence. With cutting-edge technology, 52 patient beds, a physical therapy gym, tranquil patient rooms, and both Intensive Care and Intermediate Care units, the facility has been designed to promote bestpractice neurological care.

It's a visionary project made possible by a multimillion-dollar philanthropic investment from:

- Former U.S. Ambassador to the Kingdom of Denmark Stuart Bernstein and his wife, Wilma, who are grateful patients of MedStar Georgetown
- Stuart and Wilma's son, Adam K. Bernstein, and his wife, Tracy
- Josh Bernstein; his wife, Lisa; and the Diane and Norman Bernstein Foundation



Rendering of the Bernstein Family Patient Care Floor for Neuroscience Excellence

- Richard D. Bernstein
- Marc N. Duber, executive vice president and chief operating officer of the Bernstein Companies real estate firm, member of the MedStar Health Board of Directors, and chair of MedStar Health's Philanthropy Committee; along with his wife Nancy.

The Dubers hope that this philanthropic investment will inspire others to partner with MedStar Georgetown. "The Medical/Surgical Pavilion is an opportunity to support MedStar Georgetown at a pivotal moment in its long history," says Mr. Duber. "From growing our local health resources to facilitating broadreaching research breakthroughs, this expansion is a cause worth cheering."

The Bernstein Companies have built and renewed properties around our region for over five decades, and the family's commitment to fostering local growth makes this philanthropic investment in MedStar Georgetown's future particularly fitting.

For Ambassador and Mrs. Bernstein, this partnership was motivated by their personal experiences with Fernando L. Pagan, MD, vice chairman for the Department of Neurology, and Christopher Gene Kalhorn, MD, co-director of the MedStar Georgetown Movement Disorders Program and director of MedStar Georgetown's Epilepsy and Functional Neurosurgery Program. Their gift was an expression of gratitude for their care experience.

"At the Department of Neurology, my family experienced true excellence in care," says Ambassador Bernstein. "Our philanthropic investment is intended to promote the life-changing work that MedStar Georgetown clinicians perform each day-and in doing so, to support the health and well-being of our community."

Michael C. Sachtleben, president of MedStar Georgetown University Hospital and a senior vice president for MedStar Health, notes that this philanthropic investment will have an impact for years to come. "The construction of the new Medical/ Surgical Pavilion will advance our clinical, educational, and research missions. On behalf of all of those at MedStar Georgetown, we are so very grateful to the Bernstein family for their generous commitment, which will make a real and lasting impact for our patients and caregivers by advancing this transformational project."

For more information, visit MedStarGeorgetown.org/ NewBuilding or call 202-444-0721.

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A Real Miracle: Complex Spine Surgery Resolves Partial Paralysis By JENNIFER DAVIS

Surendra Kumari Chhina's family says the 80-year-old wife, mother, and grandmother has always been brave and resilient–especially in the face of the debilitating rheumatoid arthritis she's had for 50 years.

But the challenges began to seem insurmountable in recent years as the soft tissue between her joints deteriorated so badly that her skull sunk and settled, bone-on-bone, at the base of her neck. "The imaging of her neck showed that the spinal instrumentation from her skull and upper spine was causing the vertebra below to collapse, effectively crushing her spinal cord," explains Dr. Voyadzis. "Hers was a very challenging case because of the extent of the spinal cord damage, leading to near-complete paralysis of her arms and legs. Additional factors compounded the problem."



Doctors at another hospital performed two surgeries to try and stabilize the area, but implants from Surendra's second surgery failed after an infection weakened her body. Chronic pain turned into progressive weakness. In June 2017, Surendra was so sick and frail that she could barely eat. Then, she lost feeling in her legs and couldn't walk.

That's when she was referred to MedStar Georgetown University Hospital. Her son, Raman Chhina of Bethesda, Maryland, says he literally carried her into the Hospital to be seen by Jean-Marc Voyadzis, MD, co-director of the Center for Minimally Invasive Spine Surgery and associate professor of Neurosurgery at MedStar Georgetown. Dr. Voyadzis and his team believed it was possible to perform a revision surgery to stabilize Surendra's spine and decompress her spinal cord. The family eagerly agreed. "It was do that or face the inevitable–which would have been death or permanent paralysis from the neck down," Raman says.

Doctors rushed Surendra in for the emergency six-hour procedure. She surprised everyone as she began to recover and show function again in the days following. "First, she could wiggle her toes, and then she could move her hands." Dr. Voyadzis says. THERE ARE MANY AMAZING ADVANCES IN SPINE SURGERY THAT ALLOW US TO TREAT THE MOST COMPLEX CASES-EVEN PATIENTS WHO HAVE BEEN TOLD THEIR CONDITIONS ARE INOPERABLE.

JEAN-MARC VOYADZIS, MD

Three months after her surgery, Dr. Voyadzis was amazed by her progress.

"He asked her if she could stand up from the wheelchair. Instead, she took five to 10 steps. He had tears in his eyes," Raman remembers.

MedStar Georgetown is home to one of the most experienced multidisciplinary teams on the East Coast for complex spinal disorders. Dr. Voyadzis says the combination of highly trained specialists and the most advanced techniques makes outcomes like Surendra's possible, even in challenging circumstances.

"There are many amazing advances in spine surgery that allow us to treat the most complex cases—even patients who have been told their conditions are inoperable or that they are too old for surgery," he explains. "It's wonderful to be able to provide care that makes a difference in these patients' lives."

Surendra now uses a walker but has no leg pain. Raman says the time that he and his family get to spend with her is both unexpected and priceless. "It is a gift that my mom is with us, can get around, and is fully cognitive. It's a real miracle."

For more information, visit MedStarGeorgetown.org/NeuroSpine or call 301-856-2323 to make an appointment.

Back on the Field: Hip Surgery Helps a Young Athlete Beat Pain continued from page 1

"During the national championship game, I felt something pop in my groin. I knew right away something was very wrong," Rachel recalls. "When I came off the field, I told my parents we needed to call a doctor right away. The pain was so bad I worried I might not ever be able to play lacrosse again."

The first doctor Rachel saw ruled out bone problems and then referred her to William F. Postma, MD, chief of Sports Medicine at MedStar Georgetown University Hospital. Dr. Postma discovered a tear in the ring of cartilage lining Rachel's left hip socket, called the labrum. The tear was the result of hip impingement, a condition caused by abnormal bone growth that prevents the ball of the hip from rotating properly in the socket. MedStar Georgetown University Hospital is part of the MedStar Orthopaedic Institute, with more than 35 orthopaedic surgeons and locations throughout Washington, D.C., Maryland, and Virginia.

Dr. Postma most often sees hip impingements in patients between the ages of 12-50. "Some people are genetically predisposed to hip impingement, but it's also common in young athletes," he explains. "The stress placed on their growing hips can cause extra bone to form, resulting in a mismatch in the shape of the ball and socket. This can impinge on, or pinch, the surrounding cartilage and lead to tears."

Dr. Postma recommended arthroscopic surgery, a minimally invasive procedure that allows him to repair tears and reshape hipbones so that injuries don't recur. Almost all athletes suffering from hip impingements are able to return to their sport after this surgery. "The procedure is designed to be a permanent fix, depending on the amount of cartilage damage at the time of the surgery," he explains.

Eager to recover, Rachel underwent the procedure on her left side. Recovery was much quicker than she expected. She needed crutches for two weeks and physical therapy for four months, and was back on the lacrosse field after five months.

After successful surgery on her hips, Rachel Sigwalt is back to playing lacrosse pain-free. Photo courtesy of Rachel Sigwalt After another season of playing lacrosse, hip impingement on her opposite side also resulted in a tear. She decided to get the same surgery on her right hip to fix it. "I knew after having the first surgery that it was in my best interest if I wanted to be able to play lacrosse again. I already knew I was in good hands with Dr. Postma as my surgeon," Rachel explains.

Six months after fixing the other side, Rachel resumed lacrosse at the club level at Towson University, where she is now earning her bachelor's degree. "I'm back out on the field, and my hips feel normal again," she says. "I feel like the same player, just without any pain. It was definitely worth it."

For a complete listing of physicians and locations, please visit MedStarOrthopaedicInstitute.org.



Meet William F. Postma, MD

Visit **MedStarGeorgetown.org/ PostmaVideo** to watch Dr. Postma discuss knee, hip, and shoulder surgery; or call **202-295-0549** to schedule an appointment.

Transforming Treatments for Rare Blood Cancer continued from page 1

"Over the last 25 years, we have quadrupled the life span of people with multiple myeloma through novel and innovative treatments, including autologous stem cell transplant," Dr. Vesole says. "Through these and other advancements, we have changed multiple myeloma from an incurable disease with a very short life span into a chronic disease with a long life span."

WE HAVE CHANGED MULTIPLE MYELOMA FROM AN INCURABLE DISEASE WITH A VERY SHORT LIFE SPAN INTO A CHRONIC DISEASE WITH A LONG LIFE SPAN.

DAVID H. VESOLE, MD, PHD, FACP

Alan's treatment began with two months of targeted therapy: a potent cocktail of three different drugs designed to obliterate as many myeloma cells as possible. After having a good response to this therapy, Alan continued his care with the MedStar Georgetown Stem Cell Transplant and Cellular Immunotherapy Program–which is the only program between Baltimore and Central Virginia accredited for cell-based therapies by the Foundation for the Accreditation of Cellular Therapy (FACT).

First, specialists harvested Alan's stem cells from his bloodstream for safekeeping, then administered high-dose chemotherapy to destroy the vast majority of his remaining myeloma cells. Approximately 24 hours later, Alan's previously collected stem cells were thawed and returned to his body by an intravenous infusion. They then homed in on his bone marrow where they grew and matured into healthy bone marrow–a process that takes approximately 11 days.



Alan Hunsberger is happy, healthy, and back to his work as a plumber after successful treatment for a rare blood cancer.

When his blood counts returned to normal, Alan was discharged from the Hospital.

"Basically, what we're trying to do is beat the disease into remission," says Dr. Vesole, "starting with relatively mild but potent targeted therapy, followed by high-dose chemotherapy to destroy any remaining myeloma cells. Through this stepwise approach, we're optimistic that we can keep the disease asleep with minimal residual myeloma remaining, thereby buying both quantity and quality time for the patient. In most cases, the myeloma will stay in remission for years following a stem cell transplant."

Within two months of his procedure, Alan was easing back into his job. Today, he's in complete remission, working full time, and singing a new tune about hospitals and healthcare professionals, at least when it comes to MedStar Georgetown and the Stem Cell Transplant team. "Each and every member of that team is an angel-they saved me from the grim reaper!" he exclaims. "They answered all my questions and, whenever I was nervous, calmed me down. I couldn't have asked for better care or treatment."

For more information, visit MedStarGeorgetown.org/MM or call 202-444-3736.



Meet David H. Vesole, MD

Visit **MedStarGeorgetown.org/ VesoleVideo** to watch Dr. Vesole discuss care for multiple myeloma.



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Barrett's Esophagus and Esophageal Cancer

Tuesday, May 7, 2019 • 7 to 8:30 p.m. Bethesda Marriott • 5151 Pooks Hill Rd. • Bethesda, MD 20814 MedStarGeorgetown.org/CommunityLectures

Gastroesophageal Reflux Disease (GERD)

Tuesday, May 14, 2019 • 7 to 8:30 p.m. Bethesda Marriott • 5151 Pooks Hill Rd. • Bethesda, MD 20814 MedStarGeorgetown.org/GERDLecture

Shoulder Pain

Wednesday, May 22, 2019 • 7 to 8:30 p.m. Bethesda Marriott • 5151 Pooks Hill Rd. • Bethesda, MD 20814 MedStarGeorgetown.org/ShoulderLecture

To register, visit the websites listed above or call 202-295-0510.

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