

HEALTH WISE

Your Resource for Healthy Living ■ University of South Carolina School of Medicine ■ University Specialty Clinics

What you need to know about hip replacement



Frank Voss, MD, University Specialty Clinics Orthopaedic Surgeon

Your hip hurts, keeping you from doing the things you want to do. The pain wakes you up at night. You are unsure about what to do, but you know you must do something. For many people, the pain associated with hip replacement surgery is far less than the pain they endured from the worn-out joint itself. The good news is that the three new types of bearing surfaces (ball and socket) for hip replacements used by the orthopaedic surgeons at the School of Medicine's University Specialty Clinics work better and last longer than older models. That means you might never need to have your original replacement redone. And it also means that younger people can now choose this option.

Hip Replacements that Last Longer, Work Better

For years, the standard hip joint replacements were made with a cobalt chrome head and an ultra-high molecular weight polyethylene socket. Over time, the metal would wear into the plastic, creating little chips of plastic that would lead to bone deterioration around the joint. This type of replacement had a life expectancy of 10–15 years before it failed.

Now, there are three much-improved hip joint replacements used by the orthopaedic surgeons at the University Specialty Clinic. Frank Voss, MD, associate professor of orthopaedic surgery and surgeon at the Uni-

See Hip Replacement, p.2

INSIDE

- Robotic Surgery For Women..... 3
- Newborn Metabolic Testing..... 4
- DVD Helps Children Understand Sickle Cell..... 5
- Dealing With Depression..... 6
- Expert Answers..... 7



UNIVERSITY OF SOUTH CAROLINA
SCHOOL OF MEDICINE



The expert orthopaedic surgeons at University Specialty Clinics offer multiple hip replacement options and explain the benefits of each to help patients make an informed decision.

Hip Replacement, continued from cover

University Specialty Clinics, said, “The good news is that all three new bearing surfaces seem to be doing pretty well.”

Voss said, “We’ll discuss all three with patients and help them make an educated decision on which replacement to use.”

Radiated Cross-Linked Plastic

This design is similar to the earlier standard plastic and cobalt chrome replacement, but the plastic is different. The plastic is irradiated to break it down, then relinked, resulting in a much stronger, longer-lasting material. Because it is stronger, the cobalt chrome ball joint can be larger, which results in a more stable joint.

Metal Ball and Metal Socket

With a metal ball and metal socket, there are no plastic fragments that break off with wear. This design does, however, produce metal fragments that

can travel to other parts of your body. In spite of this, metal on metal offers excellent results as a total replacement and a surface replacement, making this design the best choice for some people. Complications arise in a few people who have reactions to the metal. In these cases, the bearing surface (ball and socket) is replaced with another material.

Rock-Hard Ceramic Ball and Socket

Ceramic replacements are made of rock-hard glass that works very well. However, a small percentage of these have broken. Additionally, some squeak. When they squeak, most people replace them because there is a concern that something has lodged between the surfaces and is causing the squeak.

The Most Important Decisions You’ll Make

If you’re considering having a hip or other joint replaced, the most important

decision you’ll make is not what kind of materials to choose, but who’s going to perform the surgery.

“Pick a surgeon who does at least 15 or 20 hip replacement operations a year,” said Voss. “You should also choose a hospital that does 100–200 or more a year.” The more experienced your surgeon and team, the better your results will be.

Voss also recommends that you ignore advertising about joint replacement that urges consumer-patients to insist on a smaller incision. “You are better off to get a bigger incision and let your surgeon have the room he or she needs to work,” Voss said. Fitting a new joint to bone and muscle is precise work, and your outcome will be better if your surgeon isn’t restricted to working in a small area.

If you keep your weight down, your replacement will last longer. The new replacements may last 20–25 years.

Most replacement surgeries require a hospital stay of three and one-half days. You’ll be walking pretty easily with a walker or cane in two weeks, and with a cane or nothing in six weeks. “You can usually go back to moderate activities in two or three months,” Voss said.

These replacements can transform your life. “I have a 79-year-old patient with two knee replacements and one hip replacement who regularly plays tennis,” he said.

Replacing a joint is a big decision, but it can also bring welcome relief and great results. To explore your options, contact the University Specialty Clinics Department of Orthopaedic Surgery and Sports Medicine at 803-434-7121 or visit www.ortho.med.sc.edu.

HEALTHWISE EATING

Quench Your Thirst with a Double Punch

Sunshine Punch Cool off this summer with this low-carb, low-calorie fruity punch. It’s refreshing for children and adults alike.

Ingredients

2 cups cold water
2 cups orange juice
1 cup Splenda® No Calorie Sweetener, Granular
1 envelope Kool-Aid® unsweetened tropical punch
1 liter Diet Ginger Ale

Preparation

Combine water, orange juice, Splenda® Granular, and Kool-Aid® in a pitcher, stirring until Splenda® dissolves. Stir in ginger ale (or lemon-lime soda) just before serving. Serve over ice.

* This recipe, when compared to a traditional recipe, has a 77% reduction in calories, a 78% reduction in carbohydrates, and an 88% reduction in sugars. Recipe Courtesy of the American Diabetes Association



Dr. Lisa Spiryda, left, and Dr. Sarah Smith, right, use robotic surgery for difficult hysterectomies.

Robotic surgery offers advanced care for women

University Specialty Clinics gynecologic surgeons perform complicated surgeries with lower risks, smaller incisions, and faster recovery times

It used to be that the bigger the problem, the larger the surgical incision for the School of Medicine's University Specialty Clinics gynecologic surgeons Sarah Smith, MD, and Lisa Spiryda, MD. But now, with the technology called "robotic surgery," they're able to perform complex pelvic surgeries through several tiny incisions on the abdomen instead of a large abdominal incision. The risks are lower, the patient experiences less pain and blood loss, and the patient is out of the hospital the next day instead of several days later. They also have a quicker recovery time and can return to work and other activities sooner.

Drs. Smith and Spiryda use robotic surgery mainly for difficult hysterectomies and some ovarian surgeries. The name "robotic surgery" suggests that a robot actually performs the surgery, but that's not the case. Instead, it's a technology that allows surgeons to perform complex procedures using a robotic surgical system. The surgeon controls the exact movements of the robotic instruments as if they were their own skilled hands. But unlike real hands, these tools don't need a large incision to operate.

This state-of-the-art technology gives the surgeon seven degrees of motion, similar to the human hand and wrist. It uses high-definition, 3-dimensional magnified images for guidance and offers a level of precision that's even greater than that of the standard laparoscopic instruments.

Robotic surgery doesn't replace laparoscopic surgery. It is rather an alternative for surgeries that would require large incisions of six to twelve inches in the abdomen.

"It's allowed us to tackle surgeries that even a highly skilled laparoscopic surgeon would have to open up [with a large abdominal incision]," said Spiryda. "Any woman who's had multiple surgeries with scar tissue, C-sections, or severe endometriosis and is requiring a hysterectomy should consider robotics."

"I frequently perform robotic hysterectomies on patients whose fibroids made their uterus the size of a four-month pregnancy," said Smith. "The next morning, they are asking to be discharged, and at two weeks they are asking to go back to work."

The traditional hysterectomy takes a four-day hospital stay, and the patient can't return to work for six to eight weeks. A robotic hysterectomy has less than a third of the blood loss of a traditional hysterectomy, and the patient goes home the next day. Her incisions are very small, so there is minimal scarring and her pain is significantly less. The usual risks of infection and damage to internal organs are also far less with a robotic hysterectomy. Most patients can return to work in two weeks.

Robotic surgery is the most advanced type of surgery available in the Midlands. For more information, contact the University Specialty Clinics Department of Obstetrics and Gynecology at 803-779-4928.



One of the first babies that South Carolina ever tested for MCADD was positive for the disorder. Because of the testing, the parents and pediatrician were able to keep the baby safe and healthy.

What does the prick on your newborn's heel tell you about your baby's health?

Every baby born in South Carolina has an advantage over babies born in almost every other state. Our newborn metabolic screening is among the most advanced in the nation.



Dr. Bryant Fortner,
University Primary
Care

All most people know about testing newborns is that babies come home from the hospital with a little band-aid on their heel.

What's this all about?

When the baby is around 48-hours old, a drop of blood from the heel is put on special testing paper and sent to the DHEC (Department of Health and Environmental Control) lab, where it is tested for metabolic, hormonal, enzyme, and genetic disorders. By identifying these disorders early, intervention and treatment is sometimes possible. In some cases, these treatments save lives and prevent serious problems from developing later.

Many conditions are discovered through this testing, such as sickle cell and cystic fibrosis.

Most babies, even those with problems, appear healthy. Yet some disorders will send them to the emergency room within days of birth, and other disorders will prevent them from growing at a normal rate. Newborn screening lets your pediatrician know of any conditions that need to be treated and prevents these tragedies.

For example, in 2000 the state began to test for MCADD (medium chain acyl-CoA dehydrogenase deficiency), a rare fatty acid disorder that keeps a baby from being able to use certain kinds of fat for energy.

As Bryant Fortner, MD, associate professor of clinical pediatrics, University of South Carolina School of Medicine, explains, "A baby with this disorder seems fine, acts fine, and all goes well until the

baby has a typical childhood illness that keeps them from being able to eat as usual. An illness like a stomach bug that doesn't let them keep their food down can mean the difference between life and death for a baby with this disorder." A healthy baby without this condition will burn its fat stores for energy during this time. But an MCADD baby cannot. The parents don't know this (unless the baby was screened as a newborn), and therefore they seek no special treatment.

But without food or the ability to burn their own fat stores, these babies get very sick very quickly. Some die in their sleep and can be thought to be victims of SIDS. In fact, it is estimated that one-quarter of babies with this disorder were misdiagnosed as dying from SIDS before testing for MCADD became widespread.

One of the first babies that South Carolina ever tested for MCADD was positive for this disorder. Because of the testing, the parents and pediatrician were able to keep the baby safe and healthy.

South Carolina's newborn screening program is a collaborative effort between DHEC and birthing hospitals and newborn health care providers throughout the state. The University of South Carolina School of Medicine provides an on-site pediatric medical consultant to DHEC to support the program, and many of the members of the State Newborn Screening Advisory Committee are pediatric subspecialists at the School of Medicine. Because of this program, many lives are saved and adverse outcomes often significantly minimized.

To find out more, contact University Specialty Clinics at 803-212-7130 or go to www.scdhec.gov



Sickle Cell DVD helps children understand the illness

An IV port in her arm and a smile on her face, Ta'nautica Coles was transfixed in front of the portable DVD player.

While she sat in the clinic, the seven-year-old was delighted by the puppets on the small screen. When the 10-minute performance was finished, she pronounced, "I want to watch it again."

Coles has sickle cell anemia. Thanks to the educational DVD she viewed, the little girl from Sumter got a new look at the disease that has hospitalized her more than 15 times in her short life. The DVD was produced through a partnership among Palmetto Health Children's Hospital, the Auntie Karen Foundation, and South Carolina Educational Television. Funding was provided through grants from the Ronald McDonald House Charities of Columbia and the South Carolina Competitive Grants Program.

Dr. Carla Roberts, an assistant professor of clinical pediatrics in the University of South Carolina's School of Medicine Division of Hematology/Oncology, served as the medical advisor for the project. "There is not much age-appropriate information out there available to children with sickle cell to learn about their disease," she explained. "We wanted to bring something to them in their terms about one of the most common problems they encounter."

The problem highlighted in the DVD is a pain crisis in which the stiff, pointed, sickle-shaped cells get stuck in blood vessels and block the flow of blood. If severe enough, a crisis may require a child to be hospitalized. In the story, a girl named Cousin Zetta experiences pain in her arm, back, and hands on a visit to her cousin's house. Cousin Zetta is actually a yam, more specifically a Jamaican yam. In fact, all of the characters in the story are yams who are unmistakably Jamaican with their characteristic speech, dreadlocks, and brightly colored head wear. The Jamaican yams were the brainchild of Karen Alexander, who is the "Auntie Karen" in the nonprofit foundation that produced the DVD.

"Yams are very important in the Jamaican culture," explained Alexander, who said the characters were inspired by a calypso song written for another project years earlier. As Cousin Zetta and her yam cousins play on a Caribbean beach, their zealous activity proves to be too taxing for the little yam with sickle cell anemia. Her cousins learn why she needs to rest frequently and the importance of adequate hydration.



Top: Olivia the Octopus gives Ta'nautica Coles a big hug for being brave in her fight against sickle cell.

Left (pictured left to right): Byron Counts, Olivia the Octopus, Dr. Norma Jackson, and Karen Alexander, creator of The Jamaican Yams and president of the Auntie Karen Foundation.

The storyline was scripted over the course of a year as Alexander met with Roberts and a psychologist working with children who have sickle cell disease. Patients and their families were also involved in the process. "A lot of the wording in the DVD came directly from what the kids told us," Alexander said.

As the DVD has been introduced at the hematology clinic, Roberts has watched the faces of her patients as they gained new insights. "They will say, 'Oh, that's what's been happening inside my body' or 'that's why my mom says to drink all those fluids.'" She's found that the puppets provide a nonthreatening way of presenting information from a source other than the children's doctor or parents.

Roberts is a firm supporter of the message conveyed by the Jamaican yams to her young patients and their families. "These children are affected with a disease that can interrupt their usual activities, but it can be managed. This is a serious disease, but we try to help them live as normally as possible."

For more information about sickle cell, call the University Specialty Clinics Division of Hematology/Oncology at 803-434-3533 or visit www.sicklecelldisease.org.

How do you react to stress?



Dr. Meera Narasimhan

“Depression is a treatable illness. We are truly blessed in the 21st century to have so many options for the treatment of depression.”

Stress triggers chemical and physical changes in your body so that you can react quickly to a life-threatening situation. Our bodies, which haven't changed in thousands of years, are designed to cope with and conquer all kinds of adversity. So if you were to come under attack by a lion or other predator, or if you were to fight with a tribe hostile to yours, your body would respond by pumping in stress-related chemicals that boost your heart rate and brain chemistry, enabling you to defend yourself in a life-and-death encounter.

But what if the source of stress is the loss of a job, financial insecurity, fear of war or terrorist attacks, family problems, or other situations? You can't stand and fight, nor can you run or hide. Yet your body responds just as if you were facing a tiger: a tiger that doesn't retreat. That's when your body's response to stress can actually make you sick.

For many people, this type of stress and biological programming can lead to depression. Their body's chemistry changes, and even the nerve pathways and receptors in their brains cause biological changes that make depression almost a part of their brain's hard-wiring. Depression is as much a physical illness as an emotional one.

Dr. Meera Narasimhan, professor of psychiatry and director of biological research, Department of Neuropsychiatry and Behavioral Science at the University of South Carolina's School of Medicine, said, “Some people are vulnerable to depression

because of their genetic predisposition. Depression is a consequence of gene-environment interaction.”

Despite all the progress in medicine in understanding the biological causes of depression and the advanced treatments, we still grapple with unmet needs, including the stigma of depression,” Narasimhan continued.

If you are burdened by depression, you should understand that it's not your fault and there's nothing to be ashamed of. Like cancer, diabetes, and other illnesses, depression is caused by biochemical changes. And it can be successfully treated.

As the causes of stress in our world soar, so too does the rate of depression. And it's expected to get worse. The World Health Organization projects that depression will be the leading public health concern by 2020. Right now, this chronic disabling illness affects nearly 330 million people globally and 19 million in the United States. It's a major economic burden to the U.S. economy and costs our country more than \$40 billion yearly.

Fortunately, you don't have to live with depression. “Depression is a treatable illness,” said Narasimhan. “We are truly blessed in the 21st century to have so many options for the treatment of depression.”

Treatments include antidepressants and psychotherapy or talk therapy. Doctors and researchers at the School of Medicine's University Specialty Clinics also have experience with novel drug targets and cutting-edge treatments in depression. They are also interested in

pursuing complementary and alternative treatments such as exercise, the addition of omega-3 fatty acids to the diet, and novel devices that can change the neural pathways in the brain. The FDA has approved the use of magnetic stimulation (Repetitive Transcranial Magnetic Stimulation, or RTMS), Vagus Nerve Stimulation (VNS), and Deep Brain Stimulation.

Ideally, your primary care physician will work in collaboration with a psychiatrist to custom-design a treatment that brings you the most benefits and relief. To find out more, contact the University Specialty Clinics at 803-434-4250 or visit www.neuro.med.sc.edu.

SYMPTOMS OF DEPRESSION

Many people are depressed but believe their problems are caused by other things, such as lack of sleep or poor diet. In actuality, their depression may be keeping them from sleeping and affecting their appetite. Symptoms of depression include:

- not being able to sleep (insomnia)
- sleeping too much (hypersomnia)
- lack of interest in things you enjoy
- feelings of guilt or worthlessness
- low energy
- problems concentrating
- hunger leading to weight gain
- loss of appetite leading to weight loss
- slowed reaction time
- thoughts of suicide

Expert Answers



Elizabeth "Libby" Baxley, MD
Professor, Family Medicine,
Chair, Department of Family and
Preventive Medicine

Q What is swimmer's ear, and how is it treated?

A Swimmer's ear, or *otitis externa* (OE), is an infection of the ear canal. Excess water in the ears from activities such as swimming and excessive showering can remove the protective ear wax, making it easier for bacteria and fungus to grow. Symptoms of the infection include an itchy, painful ear, a temporary loss of hearing, or pain while chewing or pulling on the earlobe. In most cases, if the physician determines that there is no damage to the eardrum and the canal of the ear, the infection is treated with medicated ear drops, and for external irritation, a topical solution of 2% acetic acid combined with hydrocortisone for inflammation.

To prevent swimmer's ear, dry the ear canal after exposure using a hair dryer on the lowest setting. It's also a good idea to use a shower cap or wetsuit hood to keep water out of your ears. Consult a physician immediately should pain persist.



Al Pakalnis, MD
Associate Professor,
Department of Ophthalmology,
Retinal Specialist

Q What is the best way to protect my eyes from the sun?

A Unprotected exposure to the sun can cause cataracts, cancers in and around the eyes and face, macular degeneration, solar retinopathy (caused by staring directly at the sun without blinking or eye protection), and benign growths on the cornea.

You can't apply suntan lotion to your eyes like you can your skin, but you can protect them from the harmful effects of the sun by wearing effective sunglasses. Proper sunglasses must block ALL the ultraviolet rays of the sun, both the UVA and the more harmful UVB, to the maximum extent possible. Look for sunglasses with "100% UV protection." Polarized lenses or aviator sunglasses add additional protection.

A common myth is that darker sunglasses that have a mirror-like finish and reflect like aluminum foil provide better protection. Darker doesn't mean better! In fact, it can be just the opposite. Darker lenses without UV protection let in less light, which causes the pupil of the eye to widen—and actually expose you to more of the harmful rays of the sun than if you wore no sunglasses at all!

Also, clouds do not provide sufficient protection against UV radiation. Remember, you cannot see UV radiation. It is invisible to the human eye.



W. Mark Posey, Ph.D.
Licensed Psychologist, Certified School Psychologist III,
Associate Professor, Clinical Pediatrics

Q How do I know if my child has ADHD, and how can I have him tested and treated?

A There are three types of ADHD: inattentive, hyperactive/impulsive, or combined. Typically, children who may have ADHD seem very disorganized, are impulsive, have difficulty sitting still very long, always seem to be moving (even when sitting), interrupt conversations frequently, are forgetful, and seem to be easily distracted. Symptoms often look like other medical, behavioral, and emotional issues. Therefore, we highly recommend that you have your child diagnosed by a physician.

Research has consistently shown that medication and behavioral modification together represent the best manner of treatment. I often tell parents that the medication should not be thought of as "making" their children behave, but putting them in a mode in which they are better able to receive instruction and direction. The great news is that ADHD is very treatable, and much success can be found when the people in the child's life work together. If you would like to have your child tested, please call the University of South Carolina School of Medicine's Dunbar ADHD Program at 803-935-5343.



Annette Lynn, MD
Associate Professor,
Chair, Division of Dermatology

Q How much sun exposure is safe, and what is the best sunscreen SPF level for all types of skin?

A Sun (ultraviolet light) exposure in large doses is bound to occur for anyone who works or plays outside, and "inconsequential" exposure routinely occurs in any of us who cross a parking lot or walk to the mailbox. Even under 5 minutes of unprotected ultraviolet exposure damages your skin. The damage isn't seen right away, and it's an accumulative process—that's why it may be hard to believe until it is too late!

Have fun in the sun—safely. Use a broad-spectrum sunscreen with an SPF of 30 or higher for UVB protection and with Helioplex™, Continuous Protection™, Mexoryl, Anthelios, or titanium dioxide/zinc oxide for UVA protection. The easiest assurance of coverage is a hat with a full brim and a sun-protective shirt.

"Expert Answers" features commonly asked questions and the responses of our expert physicians, scientists, and health care providers.



University Specialty Clinics Welcome New Full-Time Clinical Faculty



Paul C. Browne, MD
OB/GYN
Interest: High-Risk Obstetrics
803-779-4928



Andrew T. McGown, MD
Orthopaedics and Sports
Medicine
Interests: Arthritic Patients and
Acute Care of Athletic Injuries
803-434-7121



Samuel J. Crutcher, MD
Family and Preventive Medicine
Interest: General Family Medicine,
Quality Improvement and Health
Information Technology
803-434-6113



Monica N. Milas, DO
Family and Preventive Medicine
Interest: General Family Medicine
803-434-6113



Jennifer A. Greene, MD
OB/GYN
Interests: Hysteroscopy and
Vulvar Disorders
803-779-4928



Harley B. Morgan, MD
Pediatrics
Interest: Pediatric Neurology
803-434-7961



Johan Hernandez, MD
Family and Preventive
Medicine
Interests: Geriatric Diabetes
and Hypertension and
Outpatient Medicine
803-434-6113



Brandi R. Newsome, MD
Pulmonology and Critical Care
Interests: Nodules, Lung Cancer,
and Pulmonary Rehabilitation
803-799-5022



Bethany B. Markowitz, MD
Ophthalmology
Interest: General
Ophthalmology
803-434-1561

University Specialty Clinics

EXPERT PHYSICIANS TAKING CARE OF YOU

It's a bond of trust we take seriously.
Call 803-255-3400 today to make
an appointment.

specialtyclinics.med.sc.edu

Richard A. Hoppman, MD
Dean, University of South
Carolina School of Medicine

Charise D. Bell
Director, Marketing
and Communications
HealthWise Editor

Anne Creed
Diane J. Epperly
Contributing Writers

*HealthWise is published twice a year
by the School of Medicine's University
Specialty Clinics to share general
health information. The content is
not intended to provide medical
advice. Please consult your physician
for any personal health concerns.
Send comments and suggestions
to charise.bell@uscmed.sc.edu, call
803-253-5898, or FAX 803-733-3335.*