In this Issue:

Your Best Foot Forward
(Page 2)

Emerging Needs, Emergency Care
Beebe Medical Center is redesigning the Emergency Department as part of a vision for the future (Page 6)

New Sensation
(Page 10)
The secret to longevity for cars and other modes of transportation is good maintenance. If regular tune-ups and accurate diagnostics keep our cars running, we should provide the same loving care for our primary mode of transportation: our own two feet. By the time average adults reach age 50, their feet have taken them 75,000 miles—or the equivalent of walking around the globe three times at the equator—according to the American Podiatric Medical Association (APMA). Active lifestyles or occupations may bring us to that mileage even sooner, which does not take into account wear and tear on the 26 bones, 33 joints, 107 ligaments, and 19 muscles and tendons that comprise each foot. Since the APMA estimates that 75 percent of Americans will experience foot health problems at one time or another in our lives, it makes sense to put your best foot forward.

“The important thing to remember is that foot pain is not normal. People should check with their physicians when their feet or ankles hurt, before small problems become more complicated,” explains Dr. Mark Menendez, a podiatrist on staff at Beebe Medical Center. “Preventing complications of systemic issues, including diabetes, lower extremity nerve problems, vascular issues, and poor circulation, is a main focus in podiatric medicine, and our feet often show the first signs of these diseases. However, foot injuries, either sports-related or from stepping on foreign objects, are also extremely common here at the beach.”

Dr. Menendez has a unique understanding of the structural role of feet: he started his professional career as an architect. “It’s important to consider the impact weight has on your feet as the supports for your body,” he explains. “A 150-pound person exerts
the equivalent of 63 and a half tons on each foot when walking one mile, which can take a toll on the feet and the rest of your body if you are wearing improper shoes or aggravating existing conditions.

ONLY IF THE SHOE FITS

Susan Moore, of Greenwood, 49 years young, had been having foot pain for over a year, but put off treatment for what turned out to be a bunion. Bunions (see ‘My Aching Feet’ sidebar) develop when the big toe makes contact with the second toe, making the bone more prominent. They are often hereditary, but swelling and soreness are made worse by ill-fitting shoes.

“I had not bought new shoes for two years and was wearing thong sandals to leave the bunion area open,” recalls Ms. Moore. “The pain finally led me to Dr. Menendez, who performed surgery on my foot in November. Now everything is wonderful. I can wear any shoes I want . . . but still no ‘strappy’ sandals. I’m not that brave yet!”

Just how important is proper footwear? Women have about four times as many foot problems as men, according to the APMA, which may be attributable to their shoes. When buying shoes, Dr. Andrew Collins, a podiatrist on staff at Beebe Medical Center, recommends taking the extra time to have your foot measured, going later in the day when feet are at their largest (as they tend to swell), and wearing shoes appropriate for your activity—saving the high heels for special occasions only.

“A good pair of walking shoes with a built-in arch or insoles is a good way to go. Increased plantar foot pressure can result in painful calluses under the ball of the foot and lead to foot complications. Tissue injury can occur in people with predisposing or risk factors towards complications, such as poor circulation and/or lack of sensation in the feet,” explains Dr. Collins, who actually comes from a family of dentists. He went from “head to toe” because he enjoys the preventive and precise surgical aspects of podiatry.

“Everyone with diabetes should take extra precautions when it comes to their feet, including keeping toenails trimmed and wearing good shoes,” Dr. Collins explains. “The most important advice I can give to people with diabetes is: Do not cut...
can be extremely distracting. Susan Moore is not alone in trying to ignore foot pain due to bunions, which evolve over time. Other progressive disorders, or ankle sprains and injuries, are more difficult to deny. “When the pain becomes severe enough, patients typically succumb to discomfort and seek treatment,” explains Dr. Roman Orsini, a podiatrist on staff at Beebe Medical Center. “Unfortunately, patients presume that surgery is the only treatment. To the contrary, conservative care is actually successful in 80 percent of most foot problems. Mid-foot arthritis, for example, is commonly under-treated and ignored, but patients see significant improvement with conservative methods, such as anti-inflammatories, slim custom-made orthotics, and braces. When surgery is indicated, it is designed to meet the needs and goals of individual patients. Approximately 90 percent of all foot surgery is performed in the outpatient setting.”

Dr. Orsini speaks to patients from experience. While in college, he knew that he wanted to become a surgeon and was considering different specialties.
Then he broke his ankle while playing soccer in Ohio. The surgeon who fixed his ankle was a surgical podiatrist who became his mentor. In addition to the large number of diabetic patients he sees, Dr. Orsini underwent additional surgical training to specialize in reconstructive rear-foot and ankle surgery.

In July 2003, Dr. Orsini corrected Mary Lou Bruggeman’s Achilles tendon. Mrs. Bruggeman, 76, of Lewes, had constant pain and difficulty walking due to an old, untreated injury.

“My foot was so sore, I even bought a scooter and a walker. Dr. Orsini did wonders. He transferred one tendon from my foot to my heel and also rebuilt my Achilles tendon,” she remembers. “I was in a cast for awhile, but compared to the pain I’d had for years, it was worth it.” Mrs. Bruggeman and her husband enjoy taking at least one cruise each year and visiting their children in Maryland and Florida. This year, they went on a cruise to Key West, Cozumel, Grand Cayman, and Jamaica, and she could walk without pain. “If anyone is living with foot pain,” Mrs. Bruggeman advises, “they need to make the next step to the doctor’s office.”

Mary Lou Bruggeman and her husband have resumed their favorite type of vacation, taking cruises, following Mrs. Bruggeman’s foot surgery.

"MY ACHING FEET"

Many common conditions are preventable and treatable with proper shoes, socks (cotton/acrylic blend), shoe inserts (orthotics), and consultation with a podiatrist when you have concerns. You are more likely to avoid surgery when you catch problems early.

ACHILLES TENDINITIS, irritation and inflammation of the tendon that attaches to the back of the heel bone, can be caused by improper warm-up or over-training.

ARCH PAIN can be attributed to flat feet (no arch) or a high arch.

BUNIONS are enlarged big toe joints that become swollen and tender, causing the first joint of the big toe to slant outward and the second joint to angle toward the other toes.

CORNS AND CALLUSES are thickened areas of skin from too much pressure.

HAMMERTOE, in which the toe is bent, is the result of muscle imbalance.

HEEL SPURS are growths of bone on the heel bone caused by the plantar tendon pulling at its attachment to the heel bone.

INFECTIONS, including athlete’s foot, other fungal infections, and warts thrive in moist environments. Consider the fact that nearly 250,000 sweat glands in a pair of feet excrete as much as half a pint of moisture each day.

INGROWN TOENAILS occur when corners of toenails dig painfully into the skin, often from incorrect nail trimming or shoe pressure.

NEUROMAS are inflamed nerves.

OSTEOARTHRITIS is the most common arthritis (also called degenerative joint disease, or DJD).

PLANTAR FASCIITIS is heel pain.

STRESS FRACTURES are incomplete cracks in bone caused by overuse.

BEEBE PODIATRISTS

Andrew Collins, DPM
Lewes • 302-644-8008

Patrick Kulina, DPM
Lewes • 302-645-8555

Kathryn Lightcap, DPM
Lewes • 302-644-0100

Mark Menendez, DPM
Lewes • 302-645-8555

James Palmer, DPM
Lewes • 302-644-8008

Roman Orsini, DPM
Lewes • 302-644-3980

Sources include the American Podiatric Medical Association, United States Department of Health and Human Services, and Drs. Andrew Collins, Mark Menendez, and Roman Orsini.
BEEBE MEDICAL CENTER IS REDESIGNING THE EMERGENCY DEPARTMENT AS PART OF A VISION FOR THE FUTURE

“Our volumes have been up every month this year,” asserts Fran Needham, R.N., director of emergency and outpatient services, an experienced leader during peak times.

Beebe Medical Center’s Emergency Department doors will likely open to more than 34,000 patients by the end of this year, nearly a third of which will visit between May and September. If that sounds like a lot of people . . . it is. However it’s not surprising when you consider that some towns in our service area, especially in the South Coastal region, have grown by 200 percent in the past decade.

Beebe defines its primary service area as Route 16 to the north, Route 113 to the west, the Maryland border to the south, and the Atlantic Ocean to the east. The year-round population in this area increased by 51 percent overall from 1990 to 2000. With construction of thousands of new homes under way, the gap between ‘in-season’ and ‘off-season’ is narrowing.

PART OF A GREATER VISION

Housing growth naturally leads to increases in both seasonal and year-round population growth. “Beebe Medical Center is now at a critical point that makes doubling the size of the Emergency Department a requirement, not just a choice, to meet community healthcare needs,” explains Jeffrey M. Fried, Beebe Medical Center’s president. “Our challenge and commitment is to keep pace with growth and continue to provide healthcare services that parallel, and in many cases exceed, those available in metropolitan areas.”

Beebe is gearing up to fulfill this challenge and,
NEW TECHNOLOGY

Customer satisfaction and quality are driving the redesign of Beebe’s ED as well. It’s not just bigger; it’s truly better equipped to meet community needs. The expansion, which will be completed over nearly two years, received a jump-start this spring with a new electronic system, called ibex PulseChecks. The system integrates information for services including patient triage, registration, tracking, nurse and physician documentation, prescriptions, lab and radiology services, and reporting.

through the Vision 2005 Capital Campaign, has already embarked on expanding the ED to bring the number of beds from 18 to 36. Vision 2005 is the largest fund-raising campaign in the hospital’s history, with a goal of $12 million. Beebe’s Board of Directors, employees, physicians, Auxiliary members, volunteers, and members of the community have contributed over $7 million of this goal so far.

Beebe Medical Center recognizes that the ED is often the introduction to the hospital for visitors and residents alike. Upgrading this service is linked to ongoing patient satisfaction, which Beebe measures through a national firm called Press, Ganey Associates. Beebe sends Press, Ganey surveys to patients after discharge, asking them to rate Beebe services on a scale of one to five (five being the best). Employees in the ED and throughout the hospital are “striving for five” and are committed to delivering customer satisfaction along with excellent medical care.
“PulseCheck® is great, and with these volumes it is even more wonderful,” Ms. Needham explains. “Since we installed this new system in April, it has already begun to streamline and significantly reduce the paperwork side of healthcare, which will allow us to triage patients more effectively, decrease wait times, improve charting accuracy, access information quickly, and ultimately help our clinical staff focus on our main priority—patient care.”

Additional technology will also enable more personalized service for ED patients. Patients arriving at the ED will no longer complete a registration form at the triage nurse’s office. A registration staff member will greet patients at a new ‘ED Check-in’ area and send information through PulseCheck® directly to the electronic triage board for the triage nurse to view and address. A greeter meets patients who arrive by ambulance to begin the triage and registration process.

Registration will be 100 percent at the bedside, after patients are triaged. Patient information, such as insurance cards, will stay with patients, as registrars will now scan information directly into the system through a portable scanner. The system will eliminate the need for time-intensive paperwork and pulling patient charts. Physicians and nurses will make documentations and notes directly into the system, which will be immediately accessible to other members of the healthcare team in real time.

To assist visitors in understanding these changes, a centralized welcome desk with a telephone operator, members of the Beebe Medical Center Auxiliary, and registration staff will be visible during peak hours to help our ED patients obtain the services they need.

“A bright side to Beebe’s high patient volumes in the ED is experience,” Ms. Needham explains. “Volume is a key industry indicator for quality, and the Beebe team, with community support, is able to handle an increasing number of medical complica-
tions. If a patient requires treatment Beebe cannot provide, however, we have close working relationships with other hospitals and are prepared to have transfer arrangements made expeditiously.”

Beebe’s Emergency Department holds a Level III trauma accreditation from the American College of Surgeons Commission on Trauma, which means Beebe has implemented the necessary treatment protocols and procedures, acquired the necessary equipment, and ensured the availability of qualified personnel required for this verification. Beebe can stabilize patients and have them transferred to a Level I center, if necessary.

EMERGENCY DEPARTMENT IMPROVEMENTS

• New security system to secure patient privacy.
• New electronic tracking system to streamline the entire ED experience.
• Bedside registration using portable laptop computers instead of the traditional registration booths. The registration staff can handle patients more quickly as the triage nurse assists them to a bed. Since over 65 percent of Beebe’s inpatient admissions are through the ED, this change also helps the registration staff work more closely with patients and their families to expedite the admissions process.
• Additional triage area to meet the needs of our expanding year-round and seasonal community.
• New admitting department location, the former registration area.

ON THE HORIZON

In the fall, Beebe Medical Center will begin a 9,400 square foot expansion of the emergency department behind the hospital toward the School of Nursing. This will include a basement and an expanded first floor, and a second floor over almost all of the ED. “The plan includes a centralized nurses’ station and an elevator to take patients directly from the ED to the Critical Care Unit (CCU). The ED will be renovated, in a phased approach, which allows us to stay open during construction and minimize disruption throughout the hospital,” explains James Monihan, Beebe’s vice president of construction projects.

MILLVILLE EMERGENCY CENTER

The Bethany, Fenwick, and Ocean View areas now have access to walk-in emergency care 24 hours a day, 7 days a week during an “extended summer.” Beebe Medical Center has extended the Millville Emergency Center season this year to 7 a.m. on September 27, 2004, to serve the emergency healthcare needs of South Coastal residents and visitors. Beebe operates the Millville Emergency Center each year with the goal of meeting the healthcare needs of residents and visitors throughout our entire service area.

“People who live in the South Coastal area frequently tell us they would like the Millville Emergency Center to be open longer,” says Dr. Michael Edwards, medical director for Beebe Medical Center’s Emergency Services. “This year, we will extend service through the last weekend of September, and this will be a gauge for us to determine the community’s need for us to be open past Labor Day.”

The Millville Center is located off Route 26 in Millville near the Food Lion and is intended for people with medical complications living in or visiting Bethany Beach, Fenwick Island, and surrounding areas. Beebe’s Lewes Emergency Department is most convenient for those living in or visiting the Lewes and Rehoboth Beach areas.

As a reminder, all patients with potentially life-threatening illnesses and injuries should call 911.
Neuropathy, or nerve damage that often leads to loss of or altered sensation in the feet and hands, is a complication for nearly half of the estimated 18 million people in the United States with diabetes. Recently, neuropathy has also been identified as a side effect of chemotherapy, especially in patients with breast or ovarian cancer. Some patients have pain, some have numbness, but a chief concern is the potential to develop foot ulcers or wounds that go untreated. People with diabetes should have their feet checked regularly, especially if they have neuropathy, because small cuts they cannot feel can lead to non-healing wounds and even amputation.

“The notion that once you have neuropathy, you have to live with it is simply not true anymore. Something can be done,” emphasizes Dr. Patrick Swier, a plastic surgeon on staff at Beebe Medical Center. Dr. Swier is one of only several surgeons in the country trained in a specialized technique to perform “nerve release” or decompression surgery by its pioneer, Dr. Lee Dellon, a clinical professor at Johns Hopkins School of Medicine.

The Nerve

Nerves are long structures that originate in the brain, travel down the spinal cord, and radiate out to our fingers and toes (called “peripheral nerves”). They carry signals to muscles to allow us to move and take messages back to the brain about texture, temperature, or pain. Nerves naturally narrow in certain areas, including at the back of the thigh, outside of the knee, in front of the leg (the peroneal nerve), and the inside of the ankle (the tarsal tunnel). People with diabetes, however, are prone to additional compression at these points because their nerves become swollen. As glucose enters nerves to provide energy, it is converted into sorbitol, which attracts water to the nerve and causes it to swell. As the nerve becomes constricted, it does not receive oxygen. When this happens, the nerve begins to die and cannot transport sensory messages.

The Nerve Release

Carpal tunnel surgery is extremely common; however, leg nerve surgery—specifically peroneal nerve decompression—is considered "cutting edge."

“We are now seeing a high success rate in releasing several nerves in the leg,” Dr. Swier explains.
Initially, physicians believed one nerve was responsible for numbness in hands or feet. Now we target the entire pattern of numbness and pain, which often follows a ‘glove and stocking’ distribution.

If you feel a ‘glove’ of numbness, such as with carpal tunnel syndrome, it is possible three nerves in your wrist are compressed. If you have a ‘stocking’ of numbness, we often find compression in nerves in the leg, knee, and foot.

Following surgery, most patients can once again feel a cold tile floor or a hot bath, which helps them avoid trauma to their feet, walk with more stability, and avoid the sores common for patients with advanced neuropathy. Patients are at low risk for infection because they can feel their feet and be proactive about detecting wounds and wearing orthotics to relieve tarsal tunnel pressure.

New Sensation

Mary A. Jenson, who moved to Rehoboth Beach several years ago from York, Pennsylvania, had experienced some loss of sensation in her feet, which became less of a priority when she was diagnosed with breast cancer at the age of 65.

‘Numbness in my knees and toes got progressively worse after chemotherapy, and I was worried about falling,’ Ms. Jenson explains. ‘I heard about Dr. Swier and came to Beebe Medical Center for a test (Quantitative Sensory Motor Test), which I guess I failed,’ she jokes. ‘Dr. Swier performed surgery on both of my legs, which eliminated my pain and helped me feel more confident on my feet.’

For Ms. Jenson, the surgery was an outpatient procedure. She was required to wear a soft boot after surgery, which she compares to a ‘mummy’s foot,’ and keep her foot elevated and immobile so sutures would stay intact. After two weeks, Dr. Swier removed the sutures and Ms. Jenson could progress from walking to exercising over the next six weeks.

‘For the first time in 12 years, I had no burning or pain in my legs. I was overwhelmed,’ she explains.

Now a cancer survivor as well, Ms. Jenson enjoys gardening and going to movies, without the dulling pain she lived with for so long.

Results can be immediate upon recovery from surgery and continue gradually as nerves regenerate (approximately one inch each month). Patients’ feet continue to improve more than a year after surgery.

‘I am amazed to see what it means for people to regain sensation in their feet,’ Dr. Swier explains. ‘It is difficult to imagine, but without feeling in your feet, you have no spatial point of reference and may feel like you are floating. When I tickle patients’ feet after surgery, and they can feel it, the effects are profound.’

Identifying nerve compression early, at the first signs of numbness or tingling, is one way to improve patients’ results and prevent permanent nerve damage. Beebe Medical Center’s Vascular Lab offers Quantitative Sensory Motor Testing (QST) to measure potential nerve damage. QST is easy and painless. A device assesses how much pressure needs to be applied before the patient feels the various points, which shows how much sensory and motor loss may exist. For more information about QST, call Beebe’s Vascular Lab at 645-3710.
Beebe Medical Center has updated its website, www.beebemed.org, making the site easier to navigate and more informative. Use our site to find out about physicians on our medical staff, services available at Beebe, employment opportunities, and more.

We plan to continually make improvements, so we need your feedback. Please visit our updated website and complete the online survey to receive a small gift of appreciation from Beebe Medical Center. Thank you for helping us improve to serve you better.

SURF’S UP!
www.beebemed.org
Check out Beebe Medical Center’s Updated Website