

C Connections

FOLIC ACID STUDY REDUCES NEURAL TUBE DEFECTS

Before Michelle Weeks gave birth to a baby girl with spina bifida in 1995, she had never even heard of the birth defect. "We didn't know in advance, so it was terrifying for us," said the Fort Mill, South Carolina resident. "My mom went to the library the next day to find out as much as possible," she recalled.

While Weeks' daughter, Brittany, had surgery on her spine when she was less than 24 hours old, the little girl has not required any additional operations and is now a healthy, active seven-year-old. Weeks and her husband learned just how devastating spina bifida can be, and how fortunate Brittany is not to suffer serious problems such as muscle paralysis and loss of bowel and bladder control. That's why the couple was more than willing to get involved with a long-term research study being conducted by the Division of Genetics. A joint effort with the Medical University of South Carolina and the Greenwood Genetic Center, the project was launched 12 years ago to study the effectiveness of folic acid supplements in women who previously had a baby with a neural tube defect. "I wanted to help with



Dr. Robert Best

the study so that other women would know what precautions to take to help prevent defects," Weeks said.

Weeks is one of 370 women involved in the project who had a prior pregnancy with a neural tube defect such as spina bifida or anencephaly. Women from throughout the state are invited to participate after being identified as being appropriate for inclusion in the study. "We find them by every means imaginable, from ultrasound diagnosis to live birth and fetal death records," said Robert Best, Ph.D., Director, Division of Genetics. The Division of Genetics also studies a control group of women who have not experienced neural tube defects.

Once women are enrolled in the study, they meet with a genetic counselor. Through a comprehensive series of written questions and a face-to-face interview, the counselor obtains a profile on each woman, from what she ate during her previous pregnancy to where she worked to a detailed family medical history. "The whole point is to gather information on what these pregnancies with neural tube defects have in common," said Carolyn Lovell, one of the prenatal genetic counselors who works with the participants and the project coordinator for the Division of Genetics.

See Folic Acid Study on Page 5.

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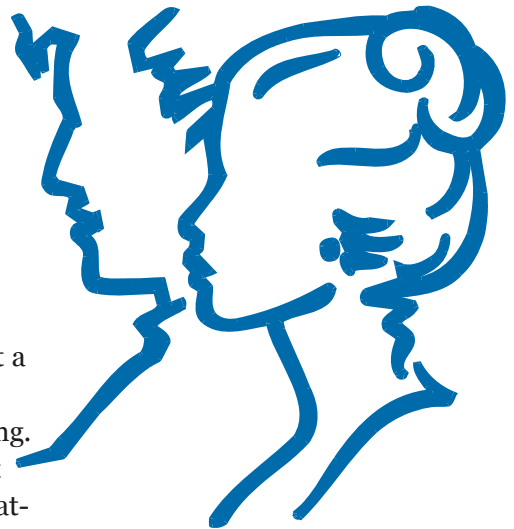
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Incontinence Treatment Provides Relief For Women



It's embarrassing, uncomfortable, and is accompanied by irritation and a distinctly unpleasant odor. Yet many women who experience urinary incontinence wait months or even years before they seek medical attention that could successfully treat their problem.

"A lot of women end up isolating themselves. Social isolation is a big part of incontinence," said Dr. Fleming Mattox, an associate professor in the Department of Obstetrics and Gynecology's Division of Urogynecology. Based in Greenville, South Carolina, Dr. Mattox travels to Columbia every Tuesday to treat patients at University Specialty Clinics.

Age Plays A Factor

Urinary incontinence is not uncommon; in fact, an estimated 20 million women in the United States suffer from some type of urine leakage. As women age, the incidence increases, affecting 40 percent of women by the time they are in their seventies. Incontinence ranks as one of the top four reasons women are placed in nursing homes. Yet women don't have to accept that incontinence is an unavoidable affliction that accompanies aging. A number of treatment options are available, and 86 percent of patients who pursue treatment make significant improvement, including complete restoration of bladder control.

When women seek medical at-

tention for incontinence, Dr. Mattox's first step is to conduct a comprehensive physical exam. "You don't want to miss anything. Incontinence is one of the great mimickers," he said. He elaborated, "A patient can have heart disease and it can mask itself as urinary incontinence. Diabetes is another example. I find one patient a month who's convinced she needs a pill for incontinence and turned out to be diabetic."

Two Common Forms

A number of medical conditions and medications prescribed for other problems can cause incontinence, which is seen most frequently in two forms. Women with stress incontinence may leak urine when they engage in exercise or other strenuous activity, or simply when they cough, sneeze or laugh. Urge incontinence involves leakage that occurs before a woman can get to the bathroom in response to an urge to urinate. "As women get older, the urge problem becomes more prevalent and is much more unpredictable," said Dr. Mattox. Some women experience both forms or mixed incontinence. The two problems may not be related and need to be addressed separately. "Typically you would treat them for the urge incontinence first and see how they improve," he said.

Once a woman's particular situation is evaluated through a thorough exam and any diagnostic

testing that may be needed, treatment can include medication, Kegel Exercises to strengthen the pelvic floor muscles that help control the bladder, bladder retraining to teach a patient to urinate on a timetable rather than on the urge to do so, and diet modification to eliminate foods that irritate the bladder. Dr. Mattox is referred many complex incontinence problems; about 40 percent of these patients eventually require surgical treatment.

Surgical Treatment

While surgery to treat incontinence has historically met with varying degrees of success, this has changed with the development of advanced procedures such as suburethral sling and retropubic urethropexy. One of the newest procedures available enables surgeons to place a suburethral sling on an outpatient basis. The sling is made from permanent material, and current evidence suggests that this has the best long-term success compared to other slings. "These procedures are considered to be the gold standard for treating incontinence. Ninety percent of patients are immediately dry after surgery," Dr. Mattox said.

SERVING WOMEN'S NEEDS

Department of Obstetrics and Gynecology

They guide women through stressful high-risk pregnancies, evaluate complex urinary problems and conduct genetic research on neural tube defects. The 11 faculty members in the Department of Obstetrics and Gynecology provide a full range of obstetric and gynecologic services, as well as a referral source for women requiring subspecialty care in maternal-fetal medicine, urogynecology, and clinical genetics.

Dr. Paul Dietz will join the faculty in July. Trained in the department's residency program, Dr. Dietz will practice general obstetrics and gynecology. Recruitment efforts are currently underway to add another maternal/fetal medicine specialist.

Dr. Janice Bacon, who became interim chair of the department in November 2001, is proud of the department's efforts in providing outstanding academic education and state-of-the-art care. She's also quick to recognize the vital role of the Division of Genetics, which offers an impressive array of clinical genetic services (see related articles on pages one and eight). "We like to think they are on the cutting edge, taking those technologies that are gold standard and those that are in development and merging them for the benefit of patients," Dr. Bacon said.

The department's teen clinic is another source of pride. In its fifteenth year, the clinic serves young women through the age of 18 with gynecological and obstetrical services, including family planning and testing for sexually transmitted diseases. "We also offer educational seminars to the community and work closely with school nurses," said Dr. Bacon.

Faculty members' particular interests, such as Dr. Bacon's focus on pediatric and adolescent gynecology, allow the department to provide specialized services that are not widely available, including treatment for pelvic pain, irregular menses and vulvovaginitis. Dr. Patricia Carney takes a special interest in the health care issues that women face during menopause. Taking an educational approach to menopause, the department will host its second annual menopause symposium for the general public on September 29. More information on the symposium can be obtained by contacting the department at 779-4928.

When Dr. Fleming Mattox began traveling to University Specialty Clinics on a part-time basis two years ago, he added a fellowship-trained urogynecologist to the department's resources. The Medical Director of the University of South Carolina School of Medicine Department of Obstetrics and Gynecology Division of Urogynecology in Greenville, South Carolina, Dr. Mattox sees patients in Columbia on a weekly basis. In addition to helping patients find relief from incontinence problems (see page two), Dr. Mattox is skilled in evaluating women with recurrent bladder infections and treating women with hematuria and pelvic support defects.

Dr. Bacon is pleased that the expertise of the department is sought out by women who consult the Ob/Gyn faculty through the State newspaper website. Questions submitted to www.thestate.com/mld/thestate/living/health/womens___health receive a response from one of the department's faculty members. "We were getting several inquiries a week. Now that number keeps growing and growing," she said.



Dr. Janice Bacon talks with a patient in her office.

Health Care For Women

Survey Puts A Price Tag On Doctors' Value To Hospitals



At least one survey is trying to answer the question: How much revenue does a physician generate for a hospital?

According to physician staffing company Merritt Hawkins & Associates, that answer is \$1.5 million – a little more if you’re a family physician or an internist, a lot more if you’re a cardiovascular surgeon, and a lot less if you’re a pediatrician. The company itself says the results might be a bit skewed, because the majority of survey responses it received were from 200-bed or smaller hospitals serving areas of less than 250,000 people. Merritt Hawkins surmised that chief financial officers at those facilities would have an easier time calculating physician revenue than would a CFO at a larger hospital. The Irving, Texas-based company sent surveys to 4,000 hospital CFOs and got 153 responses.

Merritt Hawkins said it conducted this survey – the first of an ongoing series – to “provide benchmark data hospitals can use as a quantitative analysis of their physician recruiting programs.” The numbers should make hospitals look for ways to help recruit physicians to their communities, said Mark Smith, executive vice president of Merritt

Hawkins. “It probably is a wake-up call for everyone to look at this and say, ‘my gosh! Look at what I’m missing out on!’ It gives you ability to provide some benchmark to establish the value of your staff,” Smith said. “The hospitals that are more competitive in terms of their income are the ones that attract physicians to the community,” he said.

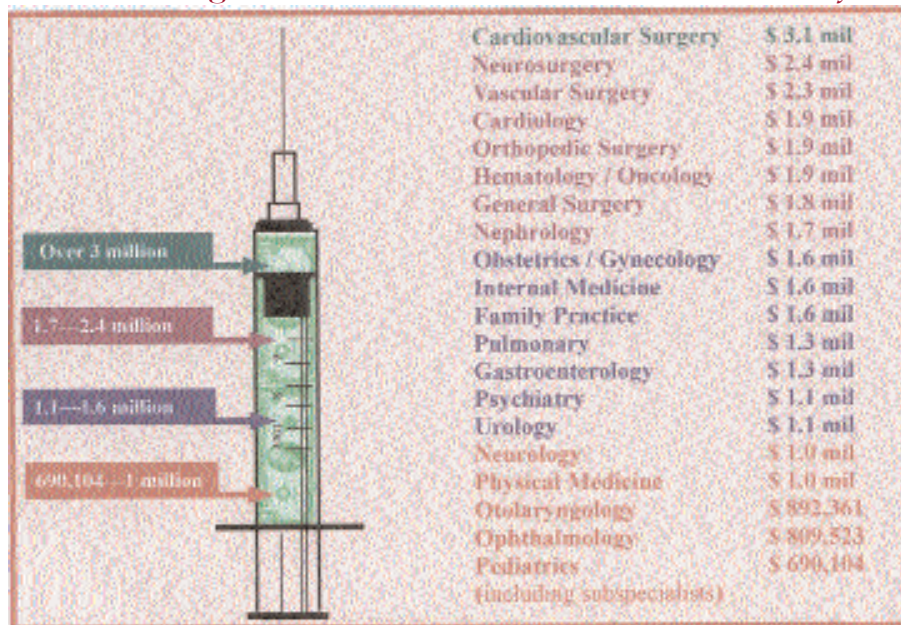
As more people opt for PPOs over HMOs, hospitals are paying closer attention to physician influence, Smith said. “As people have gone away from the true HMO mod-

el, you see more focus on physician revenue. The physicians control where the patient goes.... They control where that person is admitted and in many cases, the procedures and services.”

But Jesse Hixson, an American Medical Association economist, said the survey information doesn’t mean a lot. “It’s a number that one can compute from other numbers. But it does not have any importance for any kind of business decision. It doesn’t have any importance for any kind of public policy,” he said. The information also could be used to blame physicians for keeping health care costs high, Hixson said. “Somebody using it could find it useful to

See Survey on Page 5.

Revenue Physicians Generate Each Year For Affiliated Hospitals According To A Merritt Hawkins & Associates Survey:



➡ ➡ ➡ ➡ ➡ ➡ Folic Acid Study (From Page 1)

Education on folic acid and the role it plays in the early stages of pregnancy is a critical component of the study. "Ideally women would get adequate folic acid nutritionally. The practical fact of the matter is that getting people to eat healthy, balanced diets every day is difficult," said Dr. Best. So participants are advised to take a daily multivitamin with 400 micrograms of folic acid. The genetic counselors stay in contact with the women by phone, calling them at least every three months to check on them and address any questions and concerns they may have. If a woman relates that she is considering another pregnancy, then a ten times higher dose of folic acid is prescribed (4 milligrams), which needs to be taken at least three months before conception and in early pregnancy. Over the 12-year period, the outcomes of 276 subsequent pregnancies were documented. Only two women had recurrences of neural tube defects, neither of

whom took folic acid. "We would have expected 10 or so babies with neural tube defects with this number of subsequent pregnancies. Approximately half of them would have



Carolyn Lovell studies a questionnaire completed by a participant in the folic acid research study.

passed away prior to birth due to life-threatening birth defects, and the other five would have had potentially serious problems with their spinal cord," said Dr. Best. "This

long term prospective study confirms what we suspected about the importance of prevention through folic acid," he said.

The study will continue as long as funding remains available. Dr. Best credits Dr. Roger Stephenson for his leadership role in developing the statewide project and in securing financial support year after year. "We would like to expand the study to evaluate other types of birth defects and how they might respond to vitamins," he said.

Dr. Best is encouraged by the work that has been done to date. "The biggest way you can measure this is in human terms. We're talking about the difference between a child not making it at all and a child who may grow up to become an olympic athlete. There are 10 children walking around in South Carolina today because they got past that critical stage of development in the first month after conception," he said.

➡ ➡ ➡ ➡ ➡ Survey Puts Price Tag... (From Page 4)

play the numbers game. They can blame doctors for generating hospital bills. I'm sure somebody will try to do that." Still, he said, the numbers don't sound very high to him, especially those for heart specialists. Cardiovascular surgeons were top revenue-producers according to the survey at \$3.1 million per physician; cardiologists were fourth at \$1.9 million. "I thought it would be more than that. Those kinds of procedures are very expensive. They require a lot of hospital resources and they require fairly long hospital stays. These days and times, a few million dollars is nothing," Hixson said.

The numbers also seem low to Arthur Palamara, M.D., a Hollywood,

Fla., vascular surgeon. His specialty was third overall, at \$2.3 million of revenue per physician. Dr. Palamara figures that he generates about \$6.25 million a year in hospital revenues, admitting about 250 patients a year to hospitals, and estimating that the facilities bill about \$25,000 for each of those patients.

Pensacola, Fla. Internist, George Knefely, M.D., said he believes that although the number of hospital admissions and lengths of stay he's responsible for are likely lower than those of most doctors, he generates higher than average revenue for the local Baptist Hospital. Internists generate about \$1.6 million a year, according to Merritt Hawkins. "You've

got to do what you have to do," said Dr. Knefely, a solo practitioner. "I'm just very conscientious about ordering what's appropriate. I make sure all of my lady patients get mammograms and Pap tests. I order a lot of colonoscopies." But, he says, quantifying his contribution to hospital revenues might have little impact on his practice. "I haven't gotten any rewards," he said. "But maybe [the hospital] would listen to me a little bit closer if I had something to say in improving the care of patients. Maybe it gives me a little clout in trying to make things better."

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Diabetes In The Pregnant Woman



Dr. John Busowski

“We can’t prevent a large baby, but we can reduce the likelihood by controlling the blood sugars.”

-- Dr. John Busowski

Will her hair be curly? Will he have his daddy’s smile? Every pregnant woman looks forward to the moment when she can see her newborn for the very first time. For a woman with diabetes, preparing for her baby’s birth is a more complex process.

Dr. John Busowski, Assistant Professor of Obstetrics and Gynecology and Director of Maternal-Fetal Medicine, is well attuned to the health care needs of women as they balance the physical demands of pregnancy and diabetes. Proper prenatal care and effective management of blood sugar are essential for women with diabetes, whether they were diabetic before conception or are diagnosed during pregnancy with gestational diabetes mellitus.

Gestational Diabetes

When routine blood glucose testing between 24 and 28 weeks of pregnancy determines that a woman has gestational diabetes, in most instances Dr. Busowski’s initial course of action is to manage the patient’s condition through diet modification. “It can be hard to convince these women that they need to follow the regimen of a strict diet and to call the office when their sugars are abnormal because they don’t feel sick. I have to tell them that they are doing it for their baby, and often they’ll listen to that,” he said. Patients are also referred to a nutritionist and/or diabetic instructor to learn about the dietary guidelines established by the American Diabetes Association and how to make the appropriate food choices.

Because a woman with gestational diabetes has high sugar levels, the extra blood sugar causes her growing baby to make extra fat. This can lead to macrosomia or a fat baby, which carries a risk of complications at delivery and a number of health problems for the infant immediately after birth. “We can’t prevent a large baby,

but we can reduce the likelihood by controlling the blood sugars,” said Dr. Busowski.

In some instances women’s gestational diabetes cannot be controlled by diet, and insulin injections become necessary. These women require more medical attention with prenatal checkups every week or two. “A big part of their care is to make sure that their sugars are under control,” Dr. Busowski said. Antenatal testing is utilized to monitor the fetus’ health, and growth measurements are taken every three to four weeks to make sure the baby does not get too large in the womb.

After the baby is born, in most cases a woman’s blood sugars revert back to normal. Yet Dr. Busowski cautions, “The big issue with these women is developing Type 2 diabetes down the road,” he said. Just as obesity is a contributing factor to gestational diabetes, it also plays a significant role in the development of Type 2 diabetes. “Diet is a major part of it. Obesity increases their risk,” Dr. Busowski said. He also noted that these women should adopt a proactive approach to their increased risk for diabetes. “They need to be tested six weeks postpartum and then yearly for the rest of their lives,” he said.

Diabetes Before Pregnancy

Unlike the mother who develops gestational diabetes, the woman who was diabetic before conception is more likely to have a smaller infant because of a poor blood supply to the baby. These women also need to be followed closely during pregnancy, particularly for the impact of the pregnancy on their diabetes. “Problems with their eyes, kidneys and vascular system can all accelerate during pregnancy,” Dr. Busowski said. Since high blood sugars early in pregnancy

See Diabetes on Page 11.

Osteoporosis And Women

Bone density testing provides physicians with an important tool to diagnose osteoporosis and treat the disease while still in its early stages.

The first indication might be a hip fracture or a broken wrist when grandma takes a spill on the pavement. It isn't unusual for women to experience no signs of osteoporosis until their thin, weakened bones begin to break.

An estimated 28 million Americans are at risk of having osteoporosis, and 80 percent of them are women. Fortunately today's technology is allowing physicians like Dr. Howard Nankin to identify and treat osteoporosis earlier in women before the disease progresses to such complications as a disfiguring dowager's hump or a hip fracture that can dramatically impact mortality.

A professor in the Department of Internal Medicine, Dr. Nankin can evaluate the health of a patient's bones through bone mineral density testing available in his department. Using dual energy x-ray absorptiometry (DEXA) equipment, he and other physicians determine if osteoporosis has resulted in mineral loss and reduced bone strength in a patient.

"The beauty of DEXA is that we can quantify quite precisely how much mineral is in the bone," said Dr. Nankin. "We can see changes well before they would show up on conventional x-rays." The spine, hips and wrists, which are the sites most commonly fractured, are studied in the simple, painless procedure. "The spine in particular has mainly spongy bone, which is more vulnerable to losing minerals," Dr.



Adrian Parker (left), bone density technician, lines up the DEXA equipment to perform a bone density scan on a patient.



Nankin said. The test results provide physicians with invaluable diagnostic information. "We can use bone density testing to tell the patient how they compare with what is considered to be normal bone density, what their risks are for fracturing bones, and what they can expect over time," said Dr. Nankin.

If significant mineral loss is detected through DEXA, physicians can choose from several drug therapy options that slow down the rate at which the patient loses bone. A new class of treatment, expected to receive FDA approval in the next few months, will be the first osteoporosis medication that actually stimulates new bone formation. Additional DEXA testing can be used with a patient in the future to monitor the effectiveness of treatment in stabilizing bone loss.

"People ask why we are seeing so much osteoporosis now, and there's no pat answer," Dr. Nankin said. Physicians and researchers

speculate on factors such as a population that's living longer, less physical activity on a regular basis, and an increased likelihood of inadequate calcium intake during the years when it's most crucial. "We drink a lot of soft drinks and not enough milk, especially teenagers. Teens need to absorb huge amounts of calcium to build their bone mass," he said, noting that an individual's peak bone mass occurs between 25 and 30 years of age.

Dr. Nankin stressed that it's prudent for women to take a proactive approach to osteoporosis. Because accelerated mineral loss is associated with menopause, he recommends that women have a bone density test as they are approaching menopause, even if they have none of the risk factors associated with osteoporosis. "The only way to know if you have osteoporosis is by having a bone density test. Once you get the disease, it is much more difficult to treat it than it is to prevent it," he said.

Talking Through The Turmoil



Janice Edwards, M.S., CGC

The young woman was obviously distressed. While her pregnancy had gone smoothly for 18 weeks, the most recent visit to the obstetrician had thrown her for a loop. She couldn't even recall anything her doctor had explained after she heard the words "possible birth defect."

Janice Edwards knows the turmoil that women experience when a birth defect is suspected or diagnosed. As Director of Genetic Counseling for the Department of Obstetrics and Gynecology's Division of Genetics, she and three other prenatal genetic counselors work with couples who have encountered abnormal test results, who have a family history of genetic disorders, or for whom advanced maternal age puts their baby at higher risk for particular chromosomal conditions.

About one-third of the patients referred to Division of Genetics and Ultrasonography have had an abnormal result on a Multiple Marker Screening test, indicating an increased risk for

certain types of birth defects.

The counselor's role is to help the patient understand what the result means, work through the emotional impact of learning about an increased risk, and look at the next step for the patient to take. "We try to show patients that we have the time to really talk to them about what's on their mind. We help them sort through their feelings and take control of the situation," said Edwards.

One of the issues patients may struggle with during a counseling session is deciding whether to pursue additional testing and determining their level of

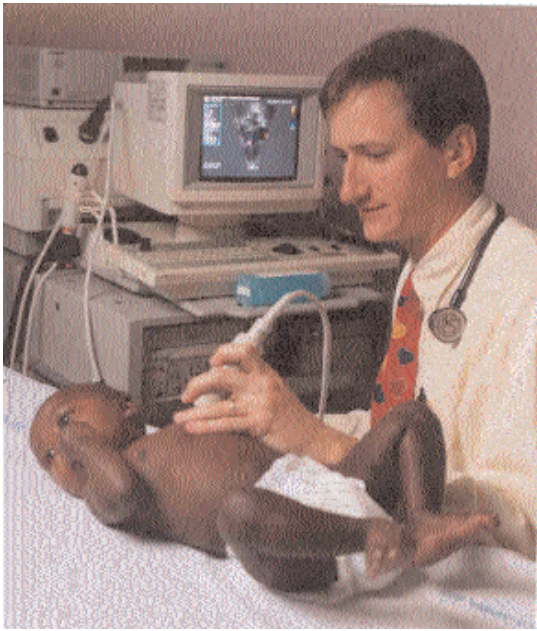
comfort with the small risk to a fetus involved in a procedure. "Couples who experienced infertility may not want any risk," said Edwards, "yet those who have already had a baby with a birth defect may have such high anxiety that additional testing may be the only way to alleviate their concern."

Edwards and her staff work hand-in-hand with the maternal-fetal physicians and the Ultrasonography Division of the Department of Obstetrics and Gynecology, who have particular expertise in identifying syndromes through tests like amniocentesis and targeted, high resolution ultrasound. When such follow-up testing is done, only a small number of pregnancies are actually found to have a birth defect. "The majority of the time we are giving good news. It warms your heart to have been able to support someone during such a stressful time," Edwards said.

When birth defects, such as spina bifida or Down syndrome are diagnosed, the genetic counselor works closely with patients and their physicians. "These patients are often grappling with the biggest crisis of their life," Edwards said. In addition to helping patients with the shock and grief that can accompany such unwelcome news, Edwards and her counselors also function in a teaching capacity. "We allow them to absorb the information at their own pace. Frequently they can't even ask much at first, but usually mobilize in a day or so," she said. She added, "As a counselor you have to be available the next day or the day after that."

See Genetic Counseling on Page 10.

When the possibility of a birth defect puts a stressful burden on expectant parents, USC's genetic counselors are on hand to help.



Pregnancy is a time of joy and anticipation as women happily make plans for the new life developing inside of them. Yet those same nine months can be quite a different experience for women with congenital heart disease. “Pregnancy is a fairly stressful time for them,” said Dr. Ozzie Shuler, an associate professor in the Department of Pediatrics and a pediatric cardiologist.

Because Dr. Shuler follows patients born with complex or unusual heart diseases through their adult years, it’s a natural

miscarriage, usually in the second trimester. Dr. Shuler noted another consideration; “Some medications that our patients take for cardiac reasons cause birth defects in a fetus. If they are planning to become pregnant, then we will stop the medications when they start trying,” he said. When a woman’s heart defect would be potentially dangerous to her and/or a fetus’ health, he recommends that these patients pursue some type of permanent birth control. “If they do not desire or are unwilling to do that, then I make sure that they understand the potential risks to themselves and the fetus if they decide to go ahead with it,” he said.

The patients that Dr. Shuler counsels on pregnancy represent a new era in medical care. Until recently, women born with such heart defects as single ventricles didn’t live long enough to have babies of their own. Modern medicine and the availability of life-extending surgery have changed all that. “This group of females is now making it to reproductive age, and we are only seeing the tip of the iceberg. The numbers are small now, but we all know that they are going to grow,” said Dr. Shuler.

Pediatric Heart Defects

Dr. Shuler and the other pediatric cardiologists in the Department of Pediatrics also provide care for infants with heart defects, following the babies’ progress even before they are born. When an obstetrician detects a potential heart problem during a routine exam, women are referred to Pediatrics for additional evaluation. Mothers who have previously given birth to a child with heart disease are also tested with a fetal echocardiogram to rule out the presence of cardiac

See Congenital Heart Disease on Page 10.

Prenatal Care Is A Matter Of The Heart

“When it’s time for the baby to be born, they have already prepared themselves for the upcoming heart surgery and can enjoy and celebrate the child’s birth.”

- - Dr. Ozzie Shuler

Above: Dr. Ozzie Shuler performs an echocardiogram on Deisha Payne to assess her heart function. Diesha’s heart disease was diagnosed in utero.

progression to continue caring for these patients after they conceive children. While many women with congenital heart disease can have successful pregnancies, they require closer medical supervision by their obstetrician/gynecologist and the involvement of a cardiologist to monitor their cardiac health. In addition to keeping close tabs on the added demands on the woman’s heart during pregnancy, Dr. Shuler and his colleagues typically perform a fetal echocardiogram to determine if the fetus has any cardiac abnormalities. Children of mothers with congenital heart disease have a slightly higher risk of being born with a heart defect.

Dr. Shuler encourages his patients with congenital heart disease to talk with him and/or their OB/GYN before getting pregnant. It’s important that they understand how their specific cardiac problem will impact a pregnancy. For example, women with certain heart defects are at increased risk of having a

➡ ➡ ➡ ➡ ➡ ➡ Genetic Counseling (From Page 8)

Edwards emphasized that the genetic counselor functions like a case manager who stays in contact with the patient. "I feel like we anchor the process. Our job is to help them feel supported and plugged in to their community." For a couple expecting a baby with Down syndrome that could mean linking them up with other families with an affected child, introducing them to a support group, or getting their pastor involved.

Genetic counselors also assist parents through the Antepartum Project at Palmetto Health Richland. With the permission of the parents, the appropriate subspecialty physicians and staff at the hospital are made aware of the impending birth of a child with an identified birth defect. During the pregnancy, parents can tour the hospital's neonatal intensive care unit and talk with physicians, such as neonatologists and pediatric neurosurgeons, to learn about the care their child will require.

"As a health care team we anticipate the baby's birth during the remainder of the pregnancy, and make sure the parents are supported with resources after the birth," Edwards said.



Janet Padgett, Ultrasound Coordinator, (second from left) conducts an ultrasound exam, while Janice Edwards (far right) and Dr. John Busowski (far left) look on.

The Division of Genetics is unique in that it is also home to one of the only genetic counseling programs in the Southeast. USC's master's program has trained over 100 counsel-

ors since its inception in 1985. In addition to providing prenatal counseling, preconception counseling (for couples with specific concerns while considering pregnancy), and infertility counseling, USC Clinical

Genetics has a designated cancer genetic counselor. The Division of Genetics continues to see the number of specialties that utilize genetic services grow as the knowledge of the human genome expands. In particular, there is room for expansion of collaborative efforts with family practitioners and internists now that scientists have begun to understand the

genetics of common diseases. "We'd like to build that consultative relationship that has been so integral with obstetrics/gynecology, pediatrics and more recently with oncology because there are genetic diseases in every patient's history and genetics crosses all specialties of medicine," said Edwards.

Congenital Heart Disease

➡ ➡ ➡ ➡ (From Page 9)

problems. "If we do identify something, then we can advise the mother of the significance of it and if the baby will need surgery," he said.

Detecting a heart defect in utero provides several distinct benefits for the baby. "There are certain medications we can start immediately after birth that will keep the child healthy until it is time for surgery," said Dr. Shuler, noting that surgery can take place as soon as two to three days after delivery for particular heart defects. Babies whose cardiac problems are not diagnosed until after

birth can become very ill very quickly, causing a delay in surgery, more damage to the heart, and less favorable surgical outcomes.

When Dr. Shuler knows in advance that a baby will require heart surgery, he will plan for the delivery to occur at a hospital where neonatal heart surgery can be performed, in most instances the Medical University of South Carolina in Charleston. Making these preparations ahead of time will keep the mother and child from being separated if the mother is not physically able to travel

and be with her child at another hospital.

Dr. Shuler has also found a major psychological advantage for his patients who learn of their child's heart defect before birth. "These mothers have already gone through the mourning stage with the anxiety and regret it produces. When it's time for the baby to be born, they have already prepared themselves for the upcoming heart surgery and can enjoy and celebrate the child's birth," he said.

Managed Care Credentialing Update

*Clinical Faculty Appointments
Since December 2001*

Department of Neuropsychiatry And Behavioral Science

Robert J. Froehlich, LPC
Assistant Professor of Clinical
Neuropsychiatry and
Behavioral Science

Jasjet K. Miglani, M.D.
Assistant Professor of Clinical
Neuropsychiatry and
Behavioral Science

William R. Quirk, LISW
Instructor of Clinical
Neuropsychiatry and
Behavioral Science

Sherri L. Rempe, LMSW
Instructor of Clinical
Neuropsychiatry and
Behavioral Science

Department of Orthopaedic Surgery

David E. Koon, Jr., M.D.
Assistant Professor of Clinical
Orthopaedic Surgery

Department of OB/GYN

Thomas F. Mattox, M.D.
Assistant Professor of
Clinical OB/GYN

Department of Ophthalmology

Andrew H. Woldorf, M.D.
Assistant Professor of Clinical
Ophthalmology

Department of Surgery

Theodore J. Bunt, M.D.
Professor of Clinical Surgery

Allan C. Walls, M.D.
Associate Professor of
Clinical Surgery

The last quarterly credentialing meeting was held on June 3. For additional information on future meetings, contact Beth Edmonds at 255-3417 or by e-mail at bedmond@gw.mp.sc.edu.

Faculty Awards

Congratulations to the following faculty who were honored by the School of Medicine:

2001 Teaching Advancement Awards:

Robert G. Best, Ph.D.
Department of
Obstetrics/Gynecology

Wayne E. Carver, Ph.D.
Department of Developmental
Biology and Anatomy

G. Paul Eleazer, M.D.
Department of Internal Medicine

Jamee H. Lucas, M.D.
Department of
Family and Preventive Medicine

2001 Research Advancement Awards:

Suzanne W. McDermott, M.D.
Department of
Family and Preventive Medicine

Alexander J. McDonald, M.D.
Department of Neuropsychiatry
and Behavioral Science

Robert L. Price, Ph.D.
Department of Developmental
Biology and Anatomy

Marlene A. Wilson, Ph.D.
Department of Pharmacology
and Physiology

Internet Update

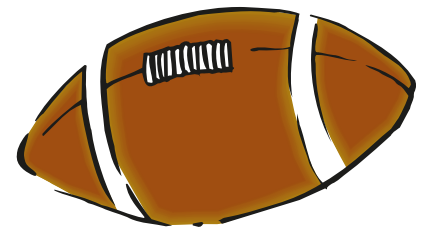
Locating the UPIN number of a referring physician can be done with ease using the resources available at: www.cpg.mcw.edu.

To access the information:

- ◆ From the first screen, choose: "Searchable UPIN data."
- ◆ Scroll to the bottom of the page and choose the state in which the physician practices.
- ◆ Scroll to the bottom of the page and enter the physician's first and last name. Do not include "MD."

School Of Medicine Alumni Weekend

Make plans to attend this year's School of Medicine Alumni Weekend, to be held September 20 - 21. In addition to a board meeting, a full membership meeting and committee meetings, the weekend will include a tailgate party at Rebekah's Garden before the USC vs. Temple football game.



Details on the Alumni Weekend will be mailed out this summer. For more information, contact Debbie Truluck, Alumni Affairs Office, at 733-1568.

◆ ◆ ◆ ◆ Diabetes (From Page 6)

affect development, these babies have a higher risk of structural and cardiac anomalies.

Because of the potential risks to the baby and mother, Dr. Busowski stresses that women with diabetes receive preconceptual counseling before considering pregnancy. He also advocates having their blood sugars in control and taking folic acid for three months before getting pregnant, along with undergoing a thorough physical and eye exam. "It's like going on a long trip and getting your tires and breaks checked out before you go. Some people spend more time planning their vacation than their pregnancy," Dr. Busowski said.



The woman was looking for a pair of prescription sunglasses. “Let me ask you a few questions,” said Dianne Guyton, as she greeted her. “Are you outdoors a lot? What type of activities do you take part in?”

LOOKING GOOD IN GLASSES

Dianne Guyton enjoys helping customers select the best type of glasses to meet their individual needs. As the optician staffing The Optical Shop operated by the Department of Ophthalmology, she’s found that she does more than provide a tool to improve vision. For many of the women she serves, glasses can be a fashion accessory as well. “The styles are much more attractive than even 15 years ago,” she said. “There are so many more choices, and color is in now.”

Guyton notes that today’s woman is much more knowledgeable about available options, including the types of lenses on the market. Some come into the shop at Four Medical Park (Suite 100) requesting no-line bifocals, which eliminate the traditional line associated with bifocals. Technically called progressives, the glasses are particularly helpful for computer work. Others are interested in an anti-reflective coating, which cuts down on glare, providing clearer vision for tasks like night driving and extended periods of sitting at a

computer monitor.

The Optical Shop offers women everything from designer brand glasses to flexible frames that easily bend back into shape if they befall an accident. “The flexible frames are made from a titanium mix, and titanium is the strongest, but lightest metal available,” explained Guyton.



Dianne Guyton helps a patient with a pair of glasses at The Optical Shop.

“They are also hypoallergenic,” she added, noting that allergies are not uncommon to the nickel used in many wire frames.

Offering a wide variety of choices for feminine tastes (and an equally appealing selection for men), The Optical Shop’s

frames can suit anyone from the young professional to the retiree. “We have everything from these,” said Guyton, holding up a black cat-eyed pair with rhinestones in the corners, “to your more traditional styles.” Other frames are adorned with delicate floral engraving. For petite women, frames are being made much smaller to better suit their faces. “A good 20 percent of our stock are sizes that five to ten years ago would have been considered children’s sizes,” she said.

With the shop conveniently located next to the Department of Ophthalmology’s practice, women and men alike have easy access to their eyeglass needs. Guyton feels the location provides another benefit. “People tend to put more trust in it because it’s at their doctor’s office.”

State employees receive a 20 percent discount at The Optical Shop on glasses, as well as discounted rates on eye exams.

Connections is published three times a year by University Specialty Clinics to enhance connections among member physicians. Comments and suggestions for articles are welcomed.

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