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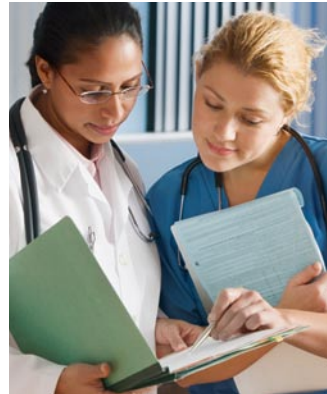
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CURING ATRIAL FIBRILLATION

Even the healthiest heart skips a beat now and then.

But for people with atrial fibrillation (AF), an irregular heart rhythm can be a constant companion, putting them at risk for stroke and congestive heart failure.

Caused by random electrical impulses that surge across the heart, AF can make the upper two chambers of the heart (atria) quiver instead of contract. In response, the ventricles (lower chambers)

also beat erratically. As a result, blood pools in the atria. If a clot forms, a stroke can occur.

Mini-Maze. Treatment for AF traditionally has focused on medications such as blood thinners and drugs to control the heart's rhythm and rate. But now, a new approach to an older surgical method is offering hope for a medication-free life to patients with AF.

Called the Wolf mini-Maze procedure, the new operation requires a small incision on both sides of the chest. Guiding a tiny video camera through one of these openings, the surgeon then introduces a radiofrequency-powered clamp. It's used to burn precise lines across the left atrium, creating scar tissue in areas where faulty impulses are known to originate. This isolates the out-of-control electrical signals from the rest of the heart. During the procedure, the atrial appendage, a small flap of tissue in which 90 percent of all heart-related blood clots form, is also removed to reduce the chance of a stroke.

A new procedure is offering hope to patients with atrial fibrillation.

"This minimally invasive procedure has transformed the lives of many patients with long-standing AF," says **Dr. Amir Abolhoda**, a University of California, Irvine Healthcare cardiac surgeon who performs the procedure. "It's cured them of the condition, freed them from medications and allowed them to overcome the depression and anxiety that's often associated with this problem."

"The older version of this operation is done mostly in conjunction with other open-chest surgeries. But the mini-Maze

can be performed as a stand-alone procedure for patients with no structural heart disease," says **Dr. Jeffrey Milliken**, a cardiothoracic surgeon at UC Irvine Healthcare. He stresses that treatment for AF and other heart conditions requires the close collaboration of internists, cardiac surgeons and cardiologists. "Providing patients with a convenient and integrated way to obtain all their cardiovascular care is the focus of the Comprehensive Cardiovascular Care Center being established at UC Irvine Medical Center," he says.

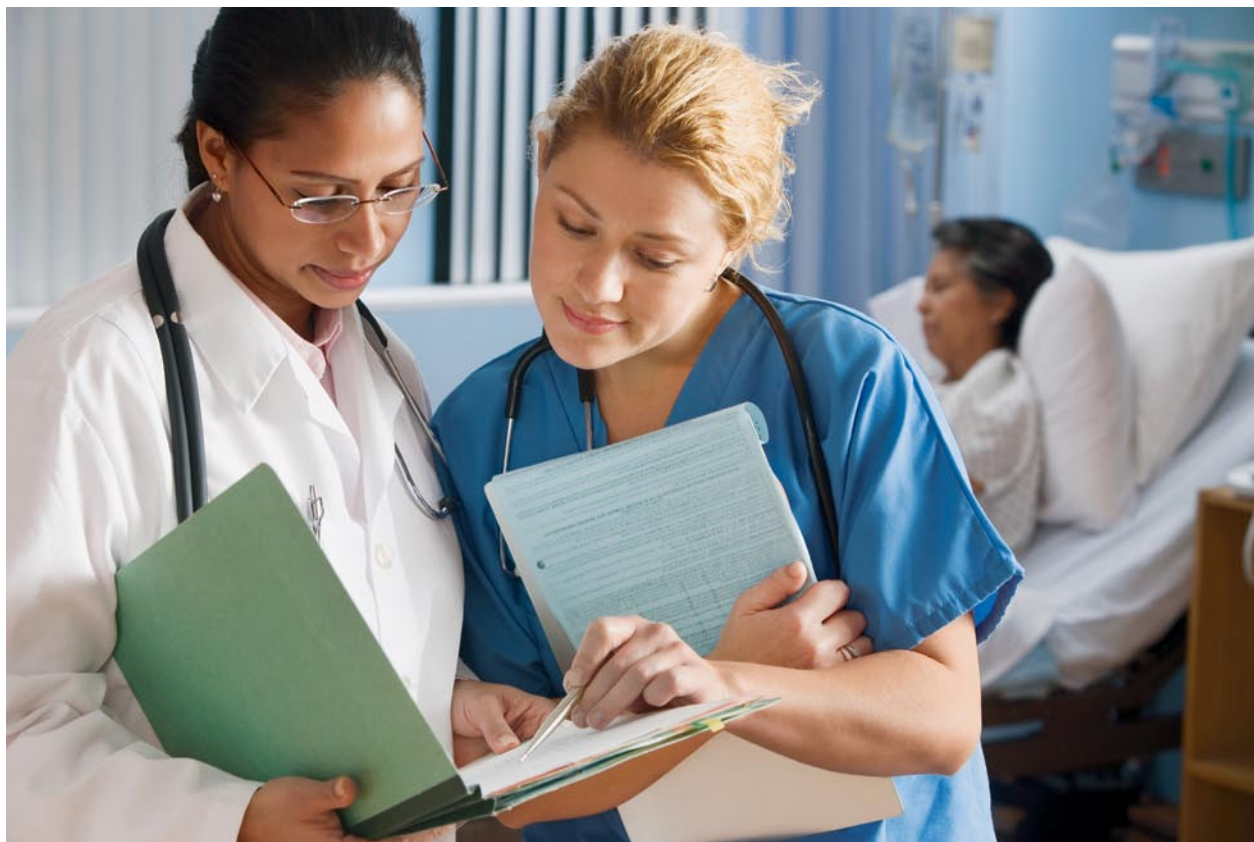
A nonsurgical solution. Another possibility for patients with AF is a nonsurgical procedure called catheter ablation. "Although chaotic electrical impulses can originate anywhere in the upper chambers of the heart, they often begin in the pulmonary veins or the region where these vessels intersect with the atrium," says **Dr. Subramaniam Krishnan**, a cardiologist specializing in abnormal heart rhythms. With catheter ablation, these areas are isolated from the rest of the heart by a series of radiofrequency-generated lesions created with a flexible electrode-tipped catheter.

The device is guided through a puncture in the groin to the area of the heart responsible for generating the random electrical signals. "Catheter ablation and the mini-Maze procedure are revolutionary advances in atrial fibrillation therapy," says Krishnan, who directs UC Irvine Healthcare's cardiac arrhythmia service. "With high success rates, they have the potential of freeing patients from a lifelong regimen of medication and relieving them from the burden of AF."

For an appointment, call the cardiovascular contact center at 714.456.6699.



The Doctor Is In



From pediatrics to geriatrics, there are dozens of well-known specialties.

A relatively new and rapidly developing specialty is hospital medicine, and the doctors in this field are called “hospitalists.” They work exclusively in the hospital setting, providing ongoing care to seriously ill inpatients.

University of California, Irvine Medical Center is among the first in the nation to assemble a team of surgical hospitalists, in addition to its medical hospitalists. “Although a growing number of medical centers have hospitalists who specialize in the medical management of patients, it’s rare to have a team of surgical hospitalists,” says **Dr. David Hoyt**, UC Irvine Healthcare trauma surgeon and chair of the Department of Surgery. The surgical hospitalist team works on a rotating basis, providing care to high-risk surgery patients 24 hours a day, seven days a week.

“In the past, it was necessary for patients to wait until their own surgeon could evaluate them,” says Hoyt. “If an emergency occurred, the patient’s doctor had to come to the hospital, sometimes taking 15 minutes or longer in transit and backlogging his or her office practice if the problem occurred during the day.” Now, surgical hospitalists are available at UC Irvine Medical Center to handle these situations around-the-clock—and free surgeons from the impossible task of being in two places at one time.

A new breed of doctor. This new breed of doctors coordinates the care of surgical patients from admission through discharge. They monitor progress, watch for complications, arrange for testing and meet with family members. They’re also able to take the patient back to the operating room immediately if a life-threatening emergency occurs. And because surgical hospitalists work solely at the medical center, they can visit assigned patients frequently, both in regular rooms and the

intensive care unit (ICU). They can also schedule tests promptly and get diagnostic results quickly. “The presence of surgical hospitalists to oversee assigned patients enhances safety and quality of care,” says Hoyt.

Efficient treatment. Additionally, as members of the UC Irvine Medical Center Level I trauma team, these doctors are integral to the speedy treatment of patients with life-threatening injuries. “Our surgical hospitalists are in a perfect position to provide efficient treatment to patients because they have all the necessary medical resources and personnel immediately available to them,” says Hoyt. The hospitalist also recommends the patient’s discharge date and works with other hospital personnel to transition the individual into less acute healthcare settings.

UC Irvine Medical Center is among the first in the nation to assemble a team of surgical hospitalists.

New hospital. The role of surgical hospitalists at UC Irvine Medical Center will grow with the opening of the new hospital in spring 2009. Each of the new hospital’s 15 state-of-the-art operating rooms will be 50 percent larger than the current ORs. Equipped for both minimally invasive and conventional surgery, they will accommodate an eight-member surgical team and a wide array of leading-edge equipment. The future hospital will also include a new ICU, which will be one of the most modern facilities of its kind on the West Coast. Throughout the new hospital, most patient rooms will be private, quiet and equipped with daybeds to allow a family member to spend the night. For more information on the surgical hospitalist program or details about the new hospital, call 877.UCI.DOCS.

MULTIPLE BIRTHS

Twins, triplets and beyond. Multiple babies can make pregnancy a challenging time for mothers-to-be.

And in the dimly lit world of the uterus, fetuses can encounter major challenges not faced by singleton babies.

“Women expecting more than one baby are at high risk for premature labor, early delivery and other problems,” says University of California, Irvine Healthcare perinatologist **Dr. Manuel Porto**. A specialist in high-risk pregnancies, he is director of women’s health.

Each fetus increases the chance of gestational diabetes, problems with the placenta and preeclampsia—a potentially deadly complication signaled by a dramatic rise in maternal blood pressure and other symptoms. These conditions can trigger premature labor, the most common complication experienced by women carrying multiples. It occurs in 50 percent of pregnancies involving twins, 90 percent of pregnancies involving triplets, and almost all cases of quadruplets, quintuplets and greater.

Postponing labor. To determine whether there’s an increased risk for premature labor, the maternal-fetal team uses two tests pioneered by

UC Irvine Healthcare specialists. The first screens for the presence of fetal fibronectin, a protein that is a warning sign for preterm labor. The second—high-resolution ultrasound—measures the length of the cervix. A short cervix indicates that an early delivery is likely.

There are several strategies that can help postpone labor, including bed rest and intravenous fluids.

Additionally, tocolytic medications can stop contractions, while corticosteroid medications can speed the development of fetal lungs and other organs.

Women expecting more than one baby are at high risk for premature labor, early delivery and other problems.

Multiples also face many unique hazards of their own. Fifteen percent of identical twins, for example, develop a condition known as twin-to-

twin transfusion syndrome (TTTS). This complication occurs when small blood vessels in a shared placenta allow blood to flow between twins. As a result, the larger twin (the recipient) gets too much blood and amniotic fluid, while the smaller twin (the donor) gets too little. “This imbalance can result in heart

failure for the donor twin and fatal anemia coupled with growth restriction for the recipient,” says Porto.

Close monitoring for these babies is essential, including weekly ultrasounds. If the babies show signs of distress, immediate intervention is necessary. One treatment option is amnioreduction. During this procedure, excess amniotic fluid is removed from the recipient twin using a needle passed through the woman’s abdomen. This temporarily restores balance for both twins. “Until recently, TTTS claimed the lives of 90 percent of twins affected by this condition,” says Porto. “But advances in fetal medicine have brought about new and promising options.”

Twin dilemma. In extreme cases of TTTS, the recipient twin receives its entire blood supply from the donor twin, known in this case as the “pump” twin. This puts a huge strain on the donor twin. Meanwhile, the recipient twin does not develop a heart or other body structures. The condition is called twin reversal arterial perfusion (TRAP) because blood flow is reversed from its normal direction. TRAP is always fatal for recipient twins and up to 75 percent of pump twins. “With TRAP, when one baby dies, the other often does, too,” says Porto. To save the donor twin, radiofrequency ablation (RFA) is used to stop blood flow to the recipient twin that is nearing death. This often saves the life of the pump twin by freeing it from the life-threatening burden of supplying blood to its dying sibling. “A rapid improvement in the surviving twin is often noted,” says Porto. A small electrical instrument guided by high-resolution ultrasound can also be used for this procedure. This method, called bipolar cautery, and the RFA approach were developed by UC Irvine Healthcare specialists for the treatment of TRAP.

With the only combined perinatal-neonatal program in Orange County, the UC Irvine Healthcare Maternal-Fetal Program has some of the best outcomes in the nation for the management of complicated pregnancies. For information, call 714.456.2911.



the Education Connection

Classes are free of charge to University of California, Irvine Healthcare patients and their families, UC Irvine employees and volunteers. Exceptions are the Joslin Diabetes Center, meditation, and Health Care Skills programs. Certain classes are also available in Spanish. Unless otherwise indicated, all classes are located at UC Irvine Manchester Pavilion, 200 S. Manchester Ave., Suite 840, Orange. Registration is required. Call toll free 877.UCI.DOCS or 877.824.3627 for registration and information.

FAMILY HEALTH

Asthma and Adults (1 Session)

Learn how to control asthma and not have it control you. Cost: \$20. Free peak flow meter. Friday, June 20 5-7 p.m.

Spanish Attention and Behavior Problems (10-Session Series)

Free parenting-skills classes for parents of children ages 3-5 with attention and behavior problems. Offered through a joint project of UC Irvine and Children's Hospital of Orange County. Information: 949.824.2462 or www.cuidar.net. Call for meeting dates, times and locations throughout Orange County.

Beginning Hatha Yoga (Monthly Series)

Wear loose-fitting workout clothes. Pack a cool-down sweatshirt and a yoga mat or beach towel. Do not eat or drink two hours prior to class. Cost: \$30 per month. Every Tuesday 5-6 p.m.

Breastfeeding (1 Session)

Includes process of milk production, how to breastfeed, avoiding potential problems and returning to work. Cost: \$20. Wednesday, June 4 6-8:30 p.m.

Spanish Breastfeeding (1 Session)

Monday, June 9 5:15-7:30 p.m.
Location: UC Irvine Family Health Center Santa Ana

Diabetes Management Overview (1 Session)

Monday, June 9 4-6 p.m.
Location: UC Irvine Family Health Center Anaheim

Spanish Diabetes Management Overview (1 Session)

Wednesday, May 28, June 4, 25 6-8:30 p.m.
Location: UC Irvine Family Health Center Anaheim
Wednesday, June 11 6-8:30 p.m.
Location: UC Irvine Manchester Pavilion

Early Pregnancy (1 Session)

For expectant mothers and their birth partners in the first four months of pregnancy. Includes nutrition, exercise, prenatal care, warning signs and car safety. Cost: \$20. Wednesday, May 21 6-8 p.m.

Heart-Healthy Diet (Cholesterol Awareness) (1 Session)

Learn the American Heart Association guidelines about low-fat, low-sodium and low-cholesterol diets. Cost: \$20. Tuesday, June 24 4-6 p.m.



Hepatitis C Pre-Treatment Education (1 Session)

For the person who is considering or about to begin hepatitis C treatment. Includes information about hepatitis C, treatment, management of side effects and injection training. Family members and other support persons are encouraged to attend. Pre-registration required: 714.456.8764
First Friday every month 9-10:30 a.m.
Location: UC Irvine Medical Center, Neuropsychiatric Center, conference room 101

Lamaze Prepared Childbirth (6-Session Series)

Offered in conjunction with Santiago Canyon College Continuing Education. For expectant mothers and their birth partners beginning the sixth month of pregnancy. Topics include relaxation, Lamaze techniques, labor and birth, surgical delivery, medication and anesthesia. Cost: Free to all.
Wednesdays, June 18 – July 23 7-9:30 p.m.
Thursdays, June 19 – July 24 7-9:30 p.m.
Location: UC Irvine Medical Center Library, room 2105
Tuesdays, June 17 – July 22 7-9:30 p.m.
Tuesday location: Santiago Canyon College Orange Education Center

Living Well with Heart Failure (1 Session)

Overview of heart failure, symptoms and basic lifestyle changes to manage the condition, including diet, exercise and medications. Cost: \$20. Monday, June 23 1:30-3:30 p.m.

Maternity Tea & Tour

Learn about maternity services and tour the UC Irvine Medical Center Maternity Unit. Cost: Free to all.
Thursday, May 22, June 26 1:30-3:30 p.m.
Location: UC Irvine Medical Center, Neuropsychiatric Center, conference room 101

Meditation for Health (4-Session Series)

An introduction to the art of meditation, including a discussion of the various types and styles. No special clothing or equipment is required. Cost: \$40. Mondays, June 2-23 6-7 p.m.

Newborn Care (1 Session)

Infant feeding, dressing, bathing, diapering, normal newborn appearance and signs and symptoms of illness. Cost: \$20. Fri, June 20 6-8:30 p.m.

Spanish Newborn Care (1 Session)

Monday, June 16 5:15-7:30 p.m.
Location: UC Irvine Family Health Center Santa Ana

Siblings (1 Session)

For children about to become big brothers and big sisters who want to learn what will happen when Mom goes to the hospital to have the baby. Cost: \$20. Wednesday, June 11 4-5 p.m.
Location: UC Irvine Medical Center 2 Tower Conference Room (2nd floor of main hospital)

Weight Control (4-Session Series)

Identify your healthy weight and learn about meal planning, the food-guide pyramid, exercise, label reading, restaurant dining, recipe modification and maintenance. Cost: \$80. Wednesdays, June 4-25 6-8 p.m.

SUPPORT GROUPS

All support groups are free and held at UC Irvine Medical Center, 101 The City Drive South, Orange, CA, unless otherwise noted. For a complete list, please visit www.ucihealth.com/events.

Art for the Soul

Creative techniques to foster better health while coping with cancer. No art experience required. Information: 714.456.5235
First and third Thursday every month 10 a.m.-noon
Location: Chao Family Comprehensive Cancer Center, 1st floor resource center

Bariatric Surgery Support Group

Offers support for patients before and after laparoscopic weight-loss surgery. Information: 888.717.4463 or 714.456.7057
Third Tuesday every month 6:30-8:30 p.m.
Location: UC Irvine Manchester Pavilion, 200 S. Manchester Ave., 2nd floor, rooms 210 & 211

Brain Tumor Education/Support Group

For individuals diagnosed with brain tumors and those who support them. Meetings are led by a social worker, and some meetings will include a speaker. Information: 714.456.8609
Second Monday every month 6-7:30 p.m.
Location: Chao Family Comprehensive Cancer Center, 4th floor conference room



Burn Survivors Support Group

Information: 714.456.5641
 Thursdays, June 19, July 17, Aug 21 and Sept 18
 Noon -1 p.m.
 Location: Occupational therapy room 3513

Children and Adults with Attention Deficit Hyperactivity Disorder (CHADD)

For parents and professionals interested in learning about ADD/ADHD in children and adults. Guest speaker at every meeting. Information: 949.UCI.ADHD (949.824.2343) or www.uci.edu/chadd.shtml. No RSVP necessary.
 Wednesdays, June 11, July 9, Aug 13 and Sept 10
 7-9 p.m.
 Location: UC Irvine Child Development Center 19262 Jamboree Road, Irvine

Epilepsy Support Group

Social and educational support group for adults with epilepsy, offered in collaboration with the Epilepsy Alliance of Orange County. Guest speaker at most meetings. Information: 714.557.0202
 Third Friday every month
 7-8:30 p.m.
 Location: Neuropsychiatric Center, conference room 101

Irritable Bowel Disease Support Group

An ongoing support group for individuals with the diagnosis of Crohn's disease or ulcerative colitis. Topics may include stress management, coping strategies, alternative medicine, dating/relationships and more. Information: 714.456.7507
 First Wednesday every month
 6:30-8:30 p.m.
 Location: Chao Family Comprehensive Cancer Center, 4th floor conference room

Kidney and Pancreas Transplant Support Group

Education and support for pre-dialysis, dialysis, pre-transplant and post-transplant patients, family members and friends. Information: 714.456.8342
 Fourth Wednesday every month
 4-5:30 p.m.
 Location: Medical library, 2nd floor, room 2105

Joslin Diabetes Center Education Classes

Joslin Diabetes Center at University of California, Irvine offers two types of classes to help people learn how to successfully manage their diabetes. "Steps to Success" is a five-session, comprehensive, educational program. "Diabetes Today" offers single-topic sessions that address specific issues of diabetes management. Classes are held at the center, located at Gottschalk Medical Plaza on the UC Irvine campus. There is a fee and insurance pre-authorization is recommended. For a full description of the programs, registration, or to schedule an appointment, please call Joslin Diabetes Center at UC Irvine at 949.824.8656 or visit www.ucihealth.com/joslin.



Korean Women's Share and Care Group

Help and support for Korean-speaking women with cancer. Information: 714.456.5057
 First Thursday every month
 3-4:30 p.m.
 Location: Chao Family Comprehensive Cancer Center, 4th floor conference room

Look Good, Feel Better

Help with appearance changes during cancer treatments. Information: 714.456.8609
 Mondays, July 14, Sept 8
 10 a.m.-noon
 Location: Chao Family Comprehensive Cancer Center, 4th floor conference room

Sarcoma Education and Support Group

Formal presentation followed by separate group discussions for young adults and older adults, led by social worker. Information: 714.456.8609
 Third Tuesday every month
 3-4:30 p.m.
 Location: Chao Family Comprehensive Cancer Center, 4th floor conference room

Spinal Cord Support Group

For those with spinal cord injuries and their friends and families. Information: 714.456.6628
 Third Monday every month, except holidays
 Noon-1 p.m.
 Location: Neuropsychiatric Center, conference room 135

Stroke Support Group

Information about treatment options and news in stroke, plus support and social interaction for stroke survivors, their families, friends and caregivers. Information: 866.STROKE3
 Thursdays, June 12, July 10, Aug 14 and Sept 11
 Noon-1:30 p.m.
 Location: Neuropsychiatric Center, conference room 101

Spanish Super Sibbs Klub

Therapeutic workshop for children ages 8-12 with siblings who have disabilities or chronic illnesses. Information: 714.532.8778
 Third Saturday every month
 9:30 a.m.-noon
 Location: Neuropsychiatric Center, conference room 101

Support for People with Oral, Head & Neck Cancers (SPOHNC-UCI-Orange)

Information: 714.456.5235
 First Monday every month
 6:30-8 p.m.
 Location: Breast Health Center, Chao Family Comprehensive Cancer Center, 3rd floor

Survivors Support Group

Support for teens facing the challenges of illness. Information: 714.456.2295
 Wednesdays, May 28, June 25, July 23, Aug 27, Sept 24 and Oct 22
 4:30-6 p.m.
 Location: Neuropsychiatric Center, conference room 101

Trigeminal Neuralgia Association Support Group

Information, education and support for patients and their families living with TN and related facial pain conditions. Guest speaker at every meeting. Information: 714.962.2369
 Second Saturday every other month, July 12 and Sept 13
 1-3 p.m.
 Location: Medical library, 2nd floor

Women's Share and Care Group

Support and education for women with cancer. Information: 714.456.8609
 Second and fourth Tuesday every month
 10-11:30 a.m.
 Speaker on fourth Tuesday
 Location: Chao Family Comprehensive Cancer Center, 4th floor conference room

HEALTH CARE SKILLS

Basic Life Support – Health Care Provider

Adult, pediatric and infant CPR, two-rescuer CPR, foreign-body airway obstruction, AED and barrier devices. Based on American Heart Association standards and guidelines. Registration: 714.456.7291
 Cost: \$72 (includes parking pass, card and book)
 Wednesday, May 28
 8:30 a.m.-1:30 p.m.
 Wednesday, June 25
 8:30 a.m.-1:30 p.m.
 Wednesday, July 23
 8:30 a.m.-1:30 p.m.

SENIOR SEMINARS

All seminars are free. For a complete listing, visit www.ucihealth.com/seniors.

Normal Pressure Hydrocephalus

Dr. Laura Paré, UC Irvine neurosurgeon
 Tuesday, May 27
 1 p.m.
 Location: Florence Sylvester Senior Center 23721 Moulton Parkway, Laguna Hills

The Aging Eye

Dr. Marjan Farid, UC Irvine ophthalmologist
 Wednesday, May 28
 10:30 a.m.
 Location: Jewish Community Center, 1 Federation Way, Irvine

Back Pain: Prevention & Treatment

Dr. Justin Hata, UC Irvine pain medicine specialist
 Wednesday, May 28
 11 a.m.
 Location: Tustin Senior Center, 200 S. C St., Tustin

Hearing Loss: Detection, Diagnosis & Treatment

Dr. Hamid Djalilian, UC Irvine otolaryngologist
 Friday, May 30
 1 p.m.
 Location: Oasis Senior Center, 800 Marguerite Ave., Corona del Mar

Travel Medicine

Dr. Simin Torabzadeh, UC Irvine geriatrician
 Wednesday, June 4
 10:30 a.m.
 Location: Jewish Community Center, 1 Federation Way, Irvine

High Blood Pressure

Dr. Vivek Jain, UC Irvine neurologist
 Tuesday, June 24
 11 a.m.
 Location: Brea Senior Center, 500 Sievers Ave., Brea

When It Isn't Alzheimer's Disease, It May Be Normal Pressure Hydrocephalus

Dr. Laura Paré, UC Irvine neurosurgeon
 Wednesday, June 25
 11 a.m.
 Location: Tustin Senior Center, 200 S. C St., Tustin

Toll free 877.UCI.DOCS



NEW CEO LEADS MEDICAL CENTER

Maureen Zehntner, RN, MHA, MA, has been named chief executive officer of University of California, Irvine Medical Center and associate vice chancellor for medical center affairs. Zehntner joined UC Irvine Medical Center—Orange County's only university hospital—as its chief operating officer in 1996 and has been the hospital's interim CEO since 2005.

"I'm a nurse by background, and I went into my career because I care about what happens to patients. That is what is most important to me and that is what I will continue to focus the organization on as we continually improve and strengthen our clinical programs," Zehntner said. "I want every patient who visits our medical center to know they have received the highest quality care. UC Irvine Medical Center is a premier university medical center and will be a national leader in patient safety and satisfaction."

Under Zehntner's leadership, the medical center was named as one of "America's Best Hospitals" by *U.S. News & World Report* for the seventh consecutive year. Zehntner will direct the completion of UC Irvine's new university hospital, which is scheduled to open in early 2009. UC Irvine Medical Center is the only hospital in Orange County with a Level I trauma center and an National Cancer Institute-designated comprehensive cancer center.

"I am enthusiastic and take great pride in working for an organization like University of California, Irvine that is continually focused on achieving excellence in patient care, research and teaching," Zehntner said. "I am so proud that many of our doctors have been named Orange County's 'Physicians of Excellence' and that our nurses achieved the Magnet Designation for Nursing Excellence."

www.ucihealth.com

Seniors: Ask the Doctor

Seniors and Hospital Stress

Hospitalization is a stressful event for most people, no matter what their age. But for seniors, being away from their normal environment can be especially challenging. Join geriatrician and hospitalist Dr. Michael Wang for a discussion of hospital stress, how it can affect seniors and strategies to counteract it.

Q What effect can hospital stress have on older patients?

A Some people develop temporary memory problems and difficulty focusing in response to being hospitalized. This can also result from mild dementia, which wasn't noticeable when the person was in the familiar setting of his or her own home. However, for about 20 percent of older patients, there's a significant change in mental status. Known as delirium, it includes memory loss, confusion, hallucinations, paranoia, sleep disturbances and agitation or lethargy.

Q What causes delirium?

A It can develop as the result of severe illness, medical treatments, surgical procedures, electrolyte disturbances and drug side effects. Although the symptoms are troublesome, the condition is usually temporary.

Q Are there any other factors that contribute to delirium?

A Yes—immobility, sleep deprivation, dehydration, cognitive impairment, hearing problems and poor vision. Research shows that if we improve these six factors, the incidence of delirium can be reduced by more than 30 percent.

Q How can this be done?

A There are several strategies that can make a difference. For example, patients should wear their eyeglasses and hearing aids to prevent sensory deprivation—a contributing factor to disorientation. Devices such as ear plugs and eye masks can help induce sleep by controlling noise and light, which is preferable to sleeping medications.

Mental alertness can be stimulated by having a clock, calendar, family photos, reading materials and writing supplies by the bedside.

Q What about immobility and dehydration?

A Constant bed rest hastens the physical and mental decline of older people. If the patient is permitted out of bed, family members should encourage their loved one to walk. Physical therapy can also help. And because a person's response to thirst and hunger is blunted with age, older people should be encouraged to eat and drink. Having family members visit during mealtimes can help immensely.

Q What else can relatives do?

A Nothing is better than being by the bedside to provide companionship, comfort and a watchful eye.

Confusional states often begin with subtle behavioral changes that the family can be very helpful in recognizing. The new hospital scheduled to open in spring 2009 is designed to accommodate family members for overnight stays—a wonderful amenity in situations like this.

Q What if a patient's confusion persists?

A The family can request an evaluation by a neurologist, psychiatrist or geriatrician. The latter is trained to see the entirety of an older patient's condition, but all three specialists have expertise in drug effects, the most common cause of confusion and delirium.

Learn more about seniors' concerns through a special report, "Aging and Caregiving," at www.uci.edu/aging.



Dr. Michael Wang is a geriatrician and hospitalist who cares for older patients at UC Irvine Medical Center.

Childhood ASTHMA

Summertime can be a breathtaking experience for children with asthma.

Vigorous exercise, campfire smoke, chlorinated pools, air pollution, pollen and changes in humidity—they're all factors that can provoke an asthma attack. Add them to a long list of year-round asthma triggers such as tobacco smoke, respiratory infections and allergies, and the world can be a dangerous place for asthmatic children.

"Asthma is a leading cause of chronic illness in children, accounting for more missed days of school and hospitalizations than any other condition," says **Dr. Dan Cooper**, a pediatric pulmonologist and researcher with University of California, Irvine Healthcare. The disease causes the airways in the lungs to narrow, making breathing difficult. Furthermore, if the lungs are inflamed for a long period, the delicate tissues in the airways can change permanently, leading to chronic lung disease.

Fortunately, proper treatment can help control symptoms and prevent dangerous episodes. "Children with asthma typically receive a low daily dose of an inhaled corticosteroid to reduce inflammation," says Cooper. The prescribed medications have few side effects and are considered safe for pediatric patients older than age 3. Short-acting bronchodilators or "rescue" medicines, which relax the airways, are needed when symptoms flare.

Exercise-provoked asthma. Researchers are trying to understand the underlying causes of the disease. "We've learned that children with asthma have an abnormal inflammatory response," says Cooper. "This has led to enormous advances in treating asthma symptoms. But the basic reason for asthma is still a mystery."

The recipient of a \$7.2 million National Institutes of Health grant, Cooper and his colleagues are investigating how vigorous physical activity—one of the leading causes of asthma attacks—affects the immune systems of children. "Up to 90 percent

of children with asthma will have an exercise-provoked attack," says Cooper. "On one hand, aerobic exercise stimulates the immune system and is necessary for normal growth and development. On the other hand, vigorous physical activity can lead to asthma attacks, especially when air pollution and allergies are also present."

Wheezing puzzle. Studies are conducted through the UC Irvine Pediatric Exercise Research Center, which Cooper directs. Laboratory research focusing on exercise is particularly valuable because it allows medical scientists to study a well-known asthma trigger in a controlled setting.

The basic cause of asthma is still a mystery that needs to be solved.

"Unlike viruses or changes in the weather, exercise is one factor that we can reproduce with certainty in the laboratory," explains Cooper. He hopes these studies will lead to better treatments for childhood asthma by clarifying why non-asthmatic children don't wheeze when they exercise—and what protects them from this troublesome problem. Cooper's work is complemented by the studies of UC Irvine epidemiologist **Dr. Ralph Delfino**, who is investigating how air pollution influences asthma. Additionally, UC Irvine biomedical engineer **Dr. Steve George** is developing noninvasive tools to assess asthma by examining gases in exhaled breath.

Cooper notes that it is important for pediatric asthma patients to remain physically fit. "Although most children with mild to moderate asthma can



participate in a physical activity program, those with more severe cases must learn to minimize the possible negative effects of exercise," says Cooper. This requires a close partnership of families, doctors, coaches, teachers and school nurses. Everyone should be well informed about exercise-induced asthma. They should also make sure the condition isn't ignored when it occurs and insist that children take their asthma medications in a timely manner. "The sooner treatment begins, the less likely the attack will lead to seriously compromised breathing," says Cooper. For more information, visit www.ucihealth.com.

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UC Irvine Healthcare's Heart Failure Program and Stroke and Cerebrovascular Center have earned Gold Seal of Approval™ certification for quality from The Joint Commission, the nation's predominant standards-setting and accrediting body in healthcare. For more information, visit www.ucihealth.com/news.

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