WEILL MEDICAL COLLEGE OF CORNELL UNIVERSITY
WOMEN'S HEALTH | advisor
HELPING WOMEN OVER 50 MAKE INFORMED HEALTH DECISIONS™

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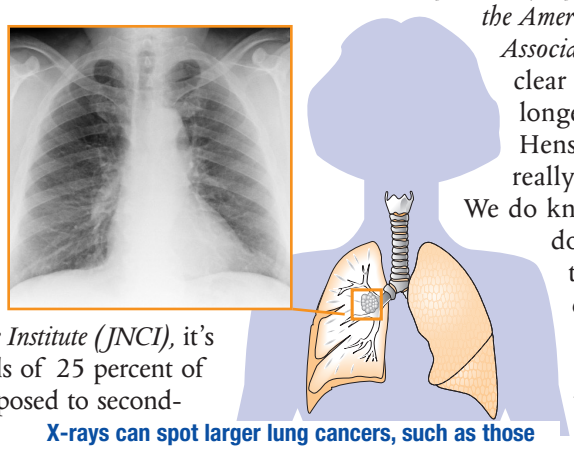
IN THIS ISSUE

Lung Cancer: Why You Need to Be Aware

Women are at greater risk for developing lung cancer than men—even nonsmokers need to avoid exposure to tobacco smoke

If you're like many women, you might assume that breast cancer is your major cancer threat. But that's not true. Lung cancer is actually the number one cancer-killer of women. This year it will claim more than 73,000 women's lives—causing more deaths than breast and colon cancer combined. A new study from investigators at the Weill Medical College of Cornell University and the International Early Lung Cancer Action Program finds fresh evidence that women are more vulnerable to cancer-causing chemicals in tobacco than men. There are many carcinogens in tobacco smoke, but another new study says nicotine fuels the growth of existing lung tumors.

While nonsmoking women are no more likely to die of lung cancer than nonsmoking men, according to a recent report in the *Journal of the National Cancer Institute (JNCI),* it's estimated that upwards of 25 percent of Americans may be exposed to second-hand smoke. Experts say this passive smoking is equivalent to actively smoking one cigarette a day.



X-rays can spot larger lung cancers, such as those above at left. But CT scans may make it possible to find early, smaller and more curable tumors

Illustration: Marty Bee; X-ray image courtesy Claudia Henschke, MD

Deadly puffs

Previous research has found that women develop lung cancer earlier and at lower levels of smoking than men, possibly due to sex-linked genetic differences. The latest study included more than 14,500 asymptomatic past or current male and female smokers at least 40 years of age who were undergoing screening for lung cancer in North America between 1993 and 2005. Both genders were in their late 60s when they were first diagnosed, but women had smoked considerably less—47 "pack years" compared to 64 "pack years" for the men. Among the 7,498 women, there were 156 cases of lung cancer, compared to 113 diagnosed among the 9,427 men. Controlling for age and the amount of cigarettes smoked, lead author Claudia I. Henschke, PhD, MD, professor of radiology at Cornell, concludes women smokers have almost double the risk of lung cancer compared to men.

At the same time, women were diagnosed in stage I more often than men and were less likely to die of the disease, according to the study in the July 11, 2006 *Journal of the American Medical Association (JAMA).* It's not clear why women survive longer than men, says Dr. Henschke. "We don't really know very much. We do know that women don't seem to repair the genetic damage caused by tobacco smoke as quickly or as well as men. But whether that's the reason is really unknown," says Dr. Henschke.

A recent study found that women's bodies metabolize and clear nicotine faster than men. This could be one explanation for better survival, but the actual differences were minimal. Estrogen receptors are present in women's lungs, and there's a suggestion the hormone may inhibit tumor growth somewhat. Women also respond better to certain chemotherapy drugs (*Iressa* and *Tarceva)* used to treat lung cancer, notes Dr. Henschke.

There are strong data that women are more susceptible to toxins in cigarette smoke. Researchers from the University of South

Continued on page 7

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Weill Medical College of Cornell University

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FRONTLINE

Get moving now, be more mobile in old age

Greater physical activity in midlife can help you remain mobile when you get older, conclude researchers from the National Institute on Aging. The researchers analyzed data from a population survey conducted from 1998-2000 among 1,155 men and women aged 65 and older, some as old as 102 (the average age was 74). Those who had been most active during their 30s, 40s, and 50s were significantly more likely to score high on tests of functional mobility, such as walking 400 meters (about 440 yards), according to the study in the September 2006 issue of the *American Journal of Preventive Medicine.*

Painkillers may raise heart attack risk slightly

While concerns over heart risk from painkillers have focused on Vioxx (withdrawn from the market in 2005), a recent study says all nonsteroidal antiinflammatory drugs (NSAIDs) appear to increase the risk of having a heart attack. The finding from the largest population study to date on NSAID risk applies not only to selective COX-2 inhibitors, such as *celecoxib (Celebrex),* but also to nonselective NSAIDs, such as ibuprofen and naproxen. The study evaluated data compiled between 2000 and 2003 for 33,309 Finnish heart attack patients and compared it with 136,949 matched "controls" and found current use of any NSAID was associated with a 40 percent increased risk of having a heart attack. The increased risk declined after the drugs (especially nonselective NSAIDs) were discontinued, according to the July 2006 *European Heart Journal.*

Women less likely to have blocked arteries reopened after a heart attack

Women who have suffered a heart attack are offered a procedure to open blocked arteries (such as coronary bypass or angioplasty) less often than men. The study looked at New York City hospital discharge records for 93,978 patients (43.7 percent of whom were women) hospitalized for a heart attack between 1995-2002. While 27 percent of the patients underwent "revascularization" procedures, the rate was only 20 percent among women compared with 32 percent for the men. More men were also more likely to be admitted to hospitals that provide such procedures compared to women. Even after undergoing the procedure, the number of women who died in the hospital was significantly higher (14.5 percent) than the death rate among men (9.6 percent), according to the study in the June 2006 *American Journal of Cardiology.*

Herbal sleep supplements may be contaminated

Tests by the independent laboratory ConsumerLab.com found that over 70 percent of the herbal sleep supplements recently tested lacked key ingredients or were contaminated. These products all claimed to contain *valerian,* an herb that has been shown to increase the depth and continuity of sleep. Of the 16 products tested, 10 failed to meet quality standards. Most of the failed products contained lower amounts of key valerian compounds; one product provided less than one percent. Three supplements were contaminated with cadmium (a heavy metal toxic to the kidneys) or lead. Only six products met quality standards. An abbreviated version of the report is available free at **www.consumerlab.com.**

Mixed studies on hormone safety

A skin patch that delivers low-dose estradiol has no apparent harmful effects on cognitive abilities or health-related quality of life. The study, led by the University of California, San Francisco, followed 417 postmenopausal women aged 60-80 who were randomly assigned to a skin patch that delivered .014 mg of estradiol daily or a placebo patch. The women were given standardized cognitive tests and a test of health-related quality of life at the start of the study, after a year, and again after two years. No adverse effects were seen among the estradiol patch users, according to the July 2006 *Archives of Neurology.*

At the same time, an update from the Nurses' Health Study found hormone therapy combining estrogen and testosterone more than doubles the risk of breast cancer. The study followed 121,700 nurses aged 30-55 for over 24 years. Most of the women using estrogen/testosterone took the drug *Estratest.* Current users of Estratest in the year analyzed (1988) had a higher risk than women taking either estrogen alone or estrogen and progestin. But the actual risk was small. Of the 4,610 cases of breast cancer in the postmenopausal women, only 17 occurred among the 500 or so taking Estratest. Enzymes in breast tissue may convert testosterone to estradiol, which may fuel the growth of breast cancer, the authors speculate in the July 24, 2006 *Archives of Internal Medicine.*

Zapping Atrial Fibrillation

New treatment guidelines say radiofrequency therapy could be an alternative to medication for some patients

Atrial fibrillation (AF) is increasing at an alarming rate. AF was thought to affect around 2 million Americans, but a new report says the number is more like 5.1 million, and that may triple by the year 2050. In AF, the upper chambers of the heart *(atria)* quiver ineffectively rather than beat normally, allowing blood to pool and potentially form clots. AF is associated with an increased risk of stroke, heart failure, and even cognitive dysfunction. "It's slightly more common in men, but women have an increased risk of overall mortality related to AF," notes cardiac electrophysiologist Bindi Shah, MD, an assistant professor of medicine at the Weill Medical College of Cornell University.

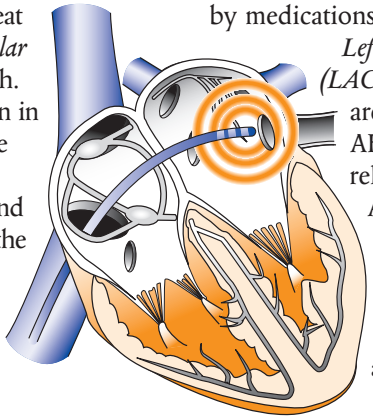
Newly issued treatment guidelines say the risk of stroke should be the main consideration in determining which anticlotting therapy—*warfarin (Coumadin)* or aspirin—is used to treat AF. The guidelines, issued in August 2006 by the American College of Cardiology, American Heart Association (AHA), and the European Society of Cardiology, call a minimally invasive *radiofrequency ablation* procedure a "reasonable alternative" to blood thinners for selected patients.

An ineffectual beat

The underlying cause of AF is unknown, but risk factors include heart disease, hypertension, heart valve problems, and aging. Ten percent of people in their 80s have AF. "We know people have abnormalities in the heart muscle with age," notes Dr. Shah. "Certain conditions can predispose people to AF, including thyroid disease and sleep apnea. We also know AF tends to run in families." Obesity may also be a risk factor. A Mayo Clinic study published in July noted that the rise in AF corresponds to a rise in obesity rates, and may account for 60 percent of the new cases. "Alcohol and caffeine can also precipitate episodes of atrial fibrillation; alcohol lowers the threshhold for AF," says Dr. Shah. "Emotion or physical stress can also trigger episodes."

AF can provoke palpitations, and erratic heartbeats cause decreased heart output, leading to symptoms such as feeling tired, breathless, or faint. But in many cases, there are no symptoms. The errant electrical signals that cause AF also reach the main pumping chambers of the heart *(ventricles)*, and they can also start to beat irregularly. In rare cases, long-term AF can lead to a deadly rapid heartbeat in the ventricles *(ventricular tachycardia)*, says Dr. Shah.

"The longer you remain in atrial fibrillation, the more episodes you will have. There is some electrical and muscular remodeling of the heart the longer you remain in atrial fibrillation," explains Dr. Shah. "Our first line of therapy is *cardioversion.* We give a small shock to the heart to get it back into normal rhythm. With some people, the rhythm can stay normal for years."



Catheter ablation destroys areas of heart tissue where abnormal electrical signals originate in atrial fibrillation.

A new approach

The new guidelines for managing AF recommend that risk factors for stroke be the primary consideration for determining treatment—taking precedence over a patient's age, sex, heart disease risk, and coexisting conditions.

The guidelines recommend daily aspirin therapy (81-325 mg) to prevent blood clots in AF patients with no risk factors for stroke. For those with one "moderate" risk factor (such as hypertension, diabetes, or being over age 75), either aspirin or warfarin can be used to avoid clots. Warfarin is recommended for people at high risk for stroke—those with more than one moderate risk factor, people who've had a previous stroke or mini-stroke *(transient ischemic attack)*, or those with a prosthetic heart valve.

Antiarrhythmic drugs (including *toprol* or *digoxin* to control a rapid heart rate and *amiodarone* to regulate heart rhythm) are advised for people with persistent AF, or who have hypertension or heart disease.

Zapping atrial fibrillation

In catheter ablation, a tiny catheter is inserted via atrial blood vessels to deliver radiofrequency energy to destroy tissue where abnormal electrical signals originate, usually at the portals of the pulmonary veins. The procedure can be considered in AF patients with little or no left atrial enlargement, and who were not helped by medications, say the guidelines.

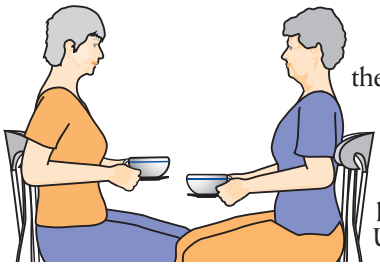
Left atrial catheter ablation (LACA), which targets the area of the heart where AF often originates, is a relatively new procedure. A recent report from the University of Michigan at Ann Arbor calculated that, compared with the cost of continued antiarrhythmic drug therapy, LACA was more beneficial for younger patients (around age 55) and who have one or more risk factors for stroke besides AF. However, the advantages were not so clear in older patients or those with no other risk factors for stroke, according to the May 2006 *Journal of the American College of Cardiology.*

"The success rate of catheter ablation is around 70-80 percent and has been increasing in recent years," says Dr. Shah. "Patients must also remain on Coumadin for six months before it can be stopped. Elderly patients can undergo ablation when antiarrhythmic drugs aren't working. But they can't come off Coumadin because of their increased risk of stroke." Recent evidence suggests that some younger patients may be able to stop drugs after ablation. "But, for now, we must decide on a case by case basis," says Dr. Shah.

STRATEGIES

Three Ways to Defeat Depression without Drugs

A combination of psychotherapy, exercise, and strong social ties can help you bounce back



Studies show social networks help you avoid depression. Just getting together with friends can improve your mood.

If you tend to dwell on your problems, their possible causes and consequences, you're not alone. Women have a greater inclination than men for ruminative thinking, a cognitive style that increases the risk for depression. Excessive rumination is also associated with more severe and longer episodes of depression, which affects women twice as often as men. The good news is that you can change this destructive pattern of thinking and ease depression without pills.

New research shows that specific types of therapy, including cognitive behavioral therapy (CBT), regular exercise, and maintaining close social ties can all help recovery. "If you don't want to take medication, there are a number of other viable treatment options, all of which can be effective," says Minna Fyer, MD, assistant professor of psychiatry at Weill Medical College of Cornell University. "Women with mild to moderate symptoms often respond to psychosocial interventions. Depression is treatable in the vast majority of cases."

Later life woes

Menopause doubles women's risk for depression (although it's not thought to be a direct cause), according to two studies that appeared in the April 2006 *Archives of General Psychiatry.*

"The transition to menopause is often considered a high-risk period for depressive symptoms," explains Ellen Freeman, PhD, research professor in the department of obstetrics and gynecology and the department of psychiatry at the University of Pennsylvania, who led one of the studies. "Some women are sensitive to the hormonal changes that accompany menopause."

"A subset of women are more likely to develop depression around the time of menopause, but for most women with depression, the cause is not hormonal," notes Gail Saltz, MD, clinical associate professor of psychiatry at the Weill Medical College of Cornell University. "A biological predisposition or environmental factor is usually the cause. Some women may be deficient in the neurotransmitter *serotonin;* others may be going through a crisis in their life." Women may also be more prone to depression after a stressful event.

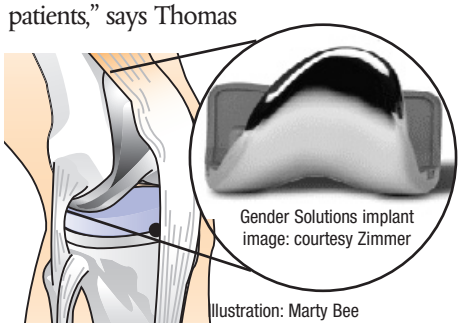
Continued on next page

YOUR HEALTHCARE

A "Female" Replacement Knee?

Women comprise 65 percent of the estimated 400,000 patients who undergo total knee replacement (TKR) every year. This year the U.S. Food and Drug Administration approved a prosthetic touted as the first replacement knee specifically designed to fit a woman's anatomy, the *Gender Solutions High-Flex Knee* from the orthopaedic manufacturer Zimmer.

Will it prove to be better for women than existing implants? "We simply do not know. We have no data yet in patients," says Thomas Sculco, MD, chairman and professor of orthopaedic surgery at the Weill Medical College of Cornell University and Surgeon-in-Chief at the Cornell-affiliated Hospital for Special Surgery (HSS).



Gender Solutions implant image: courtesy Zimmer

Illustration: Marty Bee

There are anatomical differences between men and women, most notably in the ratio between the width and height of the top of the thigh bone *(femur),* the angle at which the femur attaches to the shin bone *(tibia)*, due to a woman's wider hips, and a less prominent groove in the femur where the kneecap *(patella)* slides up and down during motion. The ligaments supporting the knee tend to be more lax in women, partly due to hormonal differences. Women also tend to have weaker *quadriceps* muscles at the top of the thigh, which are crucial for knee stability and strength. *Osteoarthritis,* a breakdown of the cartilage that cushions the joint, is more common in women.

Ads for the new knee suggest that women who undergo TKR receive a smaller-sized version of an implant designed for men. This is not true, emphasizes Steven B. Haas, MD, an orthopaedic surgeon and associate chief of the knee service at HSS. Newly released implants from other companies incorporate similar modifications to match female anatomy.

"There are now more than 100 permutations of knee implants. They come in sizes 1-9, and 90 percent of surgeries in women use size 5 or below, which are based almost entirely on measurements from females," says Dr. Haas. "Any new product is also going to be more expensive, increasing the cost to patients, when the actual benefit is still unknown." The expertise of the surgeon matters more than the implant used, both doctors stress. Our advice: If you're a candidate for TKR, you'll get a new knee tailored for you—regardless of how it's marketed.

Make positive changes

Certain forms of therapy, such as CBT, interpersonal therapy (IPT), and psychodynamic psychotherapy, are especially effective for women.

CBT is a short-term therapy in which you learn to recognize patterns of negative thinking and substitute new thoughts for destructive old ones. One of the most effective therapies for depression, CBT helps to break the cycle of ruminating.

Research shows that CBT has a lasting effect, preventing the return of symptoms. A study in the July 2006 *Archives of General Psychiatry* found that people treated with CBT were less likely to engage in negative thinking that can lead to a relapse than those who took antidepressants. "Negative thought patterns are an important part of depression, especially in women who tend to ruminate," says Dr. Freeman. "Cognitive therapy works to change those negative thinking patterns."

IPT, another short-term therapy, is based on the idea that dysfunctional personal and social relationships can lead to depression. Like CBT, this therapy targets problems in the present (rather than your past), such as changing roles. IPT focuses on four categories of problems associated with an onset of depression: grief, a dispute, a role transition, such as moving or retiring, and an interpersonal deficit, such as loneliness or poor social skills. The therapist helps you make a diagnosis, identify the problem, and then deal with the problem. IPT has been proven effective in numerous clinical trials.

WHAT YOU CAN DO

To reduce your risk of depression:

- **Don't ruminate** about problems.
- **Exercise regularly** for its mood-boosting effects.
- **Maintain active social ties**; friends can help you cope with setbacks.
- **Don't be ashamed to ask for help;** depression is a medical illness, not a personal weakness.

Psychodynamic psychotherapy, a longer-term therapy, is similar to psychoanalysis but is less intense. The goal is changing self-injurious thoughts and behaviors through personal insight. You learn *why* you have negative thought patterns, not just how to change them. "If the reason for the depression is not just biochemical, psychodynamic psychotherapy can help you understand the cause," says Dr. Saltz. "Without therapy, you're not addressing the underlying cause of your depression or changing anything in a long-term way," she adds. "If you've had one episode of depression, you're likely to have another. But therapy changes the odds by providing coping skills and giving you a way to manage when an upsetting event or a crisis occurs."

Working it out

Hundreds of studies have shown that exercise can help relieve depression, and it is often prescribed as part of treatment. Exercise provides an enhanced body image, social support (if you exercise in a group), distraction from problems, increased self-confidence when you meet a goal, and release of *endorphins,* morphine-like substances in the brain.

A 2005 study in the journal *Medicine & Science in Sports & Exercise* found that 30 minutes of exercise on a treadmill was enough to improve mood in people with major depression. On the other hand, a study in the March-April 2006 issue of *Psychosomatic Medicine* found that if you exercise regularly, depression can set in after just a week of inactivity.

Don't be ashamed

Symptoms of depression not only include sadness and feeling hopeless, but also sleeping or eating too much or too little) and unexplained aches and pains. If you think you're suffering from depression, see a doctor to rule out any physical or medication-related problems causing symptoms, and find an appropriate treatment. "If one therapy doesn't work, keep trying until you find one that works for you," says Dr. Feyer.

PREVENTION NEWS

Better skin self-examination could cut melanoma risk

Surviving skin cancer (melanoma) depends on early detection. Found while the cancer is thin and before it has spread, the 10-year-survival rate is 88 percent, according to a study in the *August 2006 Journal of the American Academy of Dermatology*. Most melanomas are self-detected, with almost 69 percent of women reporting they found the cancer themselves. Now researchers have tweaked skin self-examination (SSE) by adding a mole-mapping diagram, showing the torso from the neck to lower back, to the monthly exam.

In the study, the upper and lower backs of 88 participants were digitally photographed; they watched a video on how to perform SSE, then were taught the technique. Half received the mole map, told to draw their moles between appointments; the others received a blank sheet. When they returned, all were asked to identify changes in the moles (some photos had been doctored to add a new pigmented lesion.) Almost twice as many "diagram" participants correctly identified the change. This is significant, say researchers, because the ability to spot a new skin lesion is "a very important warning sign for melanoma." The study concluded that mole-mapping could be effective in reducing melanoma mortality.

Ovary removal reduces risk for carriers of BRCA genetic mutations

Women who carry the BRCA1 and BRCA2 mutations have a 60-80 percent lifetime risk of breast and ovarian cancer. Doctors have advised preventive *bilateral salpingooophorectomy* (removal of both ovaries and fallopian tubes) by a woman's mid-30s to prevent ovarian cancer. Until now, it's been unclear how much the surgery actually reduces risk. But according to the first large study of the procedure, published July 12 in the *Journal of the American Medical Association,* the surgery is dramatically beneficial.

Researchers followed more than 1,800 women listed in genetic registries in the U.S., Canada, Europe, and Israel, and found those who underwent the prophylactic surgery had an approximately 80 percent reduced risk of ovarian and fallopian tube cancer, and lowered their risk of peritoneal cancer to just four percent.

Without the surgery, the researchers estimate the risk of ovarian cancer at 62 percent for BRCA1 carriers and 18 percent for BRCA2 carriers up to age 75. "BRCA2 carriers could be candidates for surgery closer to menopause at about age 45 without increasing ovarian cancer risk, though breast cancer protection would not be as optimal," says lead researcher Steven A. Narod, MD.

You *Can* Tame Chronic Pain

New treatments are on the horizon, but to get today's best therapies you need to help your doctor help you

Whether it's a stabbing feeling or a throbbing sensation, you know pain when you feel it. Acute pain, such as pain from a cut or muscle pull, usually subsides relatively quickly. But chronic pain, whether due to headaches, arthritis, or another source, keeps recurring. Chronic pain, which affects about 50 million Americans, can interfere with sleep, work, physical activity, and the ability to enjoy life.

While there are many effective treatments, chronic pain is definitely underdiagnosed and undertreated, says the American Society of Pain Educators. The stigma surrounding pain and pain medications (especially patients' and doctors' concerns about addiction) "largely contributes to the undertreatment of pain," says Sudhir Diwan, MD, director of the Division of Pain Medicine at New York Presbyterian-Weill Cornell Medical Center.

New additions to the arsenal of pain medications with less troubling side effects may come from nature, scientists told the First Annual Symposium of the National Institutes of Health (NIH) Pain Consortium. Some, such as a drug derived from snail toxins, are already available, and other compounds from sources such as plants, are currently being tested. Patients can even use the power of the mind to ease chronic pain, researchers told the NIH meeting held in Bethesda, Maryland, this past spring.

Rating your pain

Chronic pain is a subjective experience, and each person's pain is different. "Studies have shown that usually women have a high pain threshold, but it has wide variation from patient to patient," says Dr. Diwan. "As there is no gold-standard test to measure pain, the physician has to make a clinical diagnosis depending on a patient's subjective perception."

The best judge of your pain is you. "The patient can report intensity by describing whether it is mild, moderate, or intense pain, and by describing how it feels. For example, like a sharp knife, electrical shooting, burning, or strong pressure," explains Dr. Diwan. "The description helps the physician to pinpoint the source, whether the pain is coming from the tissues (bones, ligaments, muscles), an injury, or nerve dysfunction."

Describe the intensity of your pain on a scale of one to 10, with one being the least severe and 10 being the worst. Try to describe what lessens your pain and what makes it worse, and whether its intensity changes at different times. Be sure to mention any stresses and distresses in your life, such as a divorce, the loss of a loved one, or job-related problems. (See "Distress Is the Sixth Vital Sign" on page 7.)

There are a wide variety of treatments for pain, ranging from over-the-counter (OTC) pain killers such as acetaminophen or ibuprofen. While *opioids* (narcotics) are effective for severe pain, they can lead to tolerance, physical dependence, and psychological addiction. Fear of addiction (actually rare in people with severe pain) is one reason pain is undertreated.

Combating cancer pain

Around half of patients being treated for cancer report moderate to severe pain, but often don't realize it can be treated, says Christine Miaskowski, RN, PhD, professor in the department of Physiological Nursing at the University of California San Francisco.

Among the most effective treatments is a skin patch that releases continuous doses of the drug *fentanyl*. A promising study of a new delivery system for fentanyl was presented at the annual meeting of the American Pain Society (APS) last May. The drug would be delivered orally, with a tablet placed under the tongue. The *fentanyl effervescent buccal tablet (FEBT)* promoted faster and more efficient absorption of the pain-killing medicine, researchers told the APS meeting.

Pain relief from nature

New sources of pain relief may come from nature, says Baldomero Olivera, PhD, distinguished professor of biology at the University of Utah in Salt Lake City. Two years ago, the FDA approved a drug for intractable pain derived from an ocean cone snail. The drug, *Prialt,* is based on the sea snail's ability to use a venom called a *conotoxin* to capture its prey, he explains. "There are 700 species of cone snails; all are venomous," Dr. Olivera told the NIH Pain Consortium. "Analgesic conotoxins act through numerous nonopioid targets," he adds, so these natural pain-killers may ultimately help patients who become tolerant to narcotics.

Another pain relief compound may come from a Moroccan plant that produces a natural toxin known as *RTX,* says Michael Iadarola, PhD, chief of the Neurobiology and Pain Therapeutics Section at the National Institute of Dental and Craniofacial Research Intramural Research Program. RTX causes pain-sensing cells to accumulate calcium, which creates a cell-killing calcium overload that destroys them, Dr. Iadarola told the NIH meeting. He says his tests in dogs were successful, and he now plans to test the drug in humans.

The human brain may turn out to be the best pain reliever. Pain patients can learn to directly control certain regions of the brain and reduce their perception of pain using real-time *functional magnetic resonance imaging (FMRI)*, says R. Christopher deCharms, PhD, director of the Omneuron 3TMRI Research Center in Menlo Park, California. In a small

WHAT YOU CAN DO

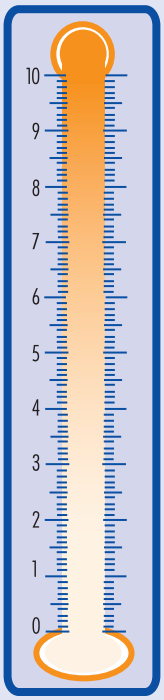
To get relief for chronic pain

- If you have chronic pain, see your doctor and describe your symptoms as best you can.
- Ask for a referral to a board-certified pain specialist for an evaluation.
- Don't be afraid to ask for stronger medication if OTC drugs fail to control your pain.

study, eight patients learned to manipulate their brain activity to decrease the amount of pain they felt, deCharms told the NIH gathering. He plans to test the technique in larger groups of patients.

While these treatments are still in the future, there are plenty of effective remedies right now. See a doctor if your pain doesn't respond to an OTC pain reliever or increases in intensity. Don't be stoic, says Dr. Diwan, "strong pain has to be treated."

DISTRESS IS THE SIXTH VITAL SIGN



In addition to pain, physicians monitor a patient's heartbeat, breathing rate, temperature, and blood pressure. Assessing these five vital signs helps determine if everything is normal or whether a patient needs additional medical care. But mental distress can also affect physical functioning. It can exacerbate pain, increase stress, and raise heart rate and blood pressure. Severe distress can lead to depression and anxiety, further worsening a patient's condition and compromising treatment.

So Jimmie C. Holland, MD, chair of Psychiatric Oncology at the Memorial Sloan-Kettering Cancer Center in New York, believes a patient's mindset should be monitored as the sixth vital sign. "A patient's psychosocial problems get little attention. Doctors don't ask and patients don't tell," says Dr. Holland.

In 1997, as part of a multidisciplinary panel of the National Comprehensive Cancer Network (NCCN), Dr. Holland helped develop a "distress thermometer" to help physicians measure emotional well-being in a similar fashion to widely used pain scales. Patients are asked to rate their distress on a scale of one to 10—with one being not distressed and 10 being extremely distressed, explains Dr. Holland. Patients are also given a problem checklist to rate distress about problems ranging from medical insurance to sex. Based on their replies, patients can be referred to the appropriate professional.

"Just as with pain, because the patient is the one experiencing the feelings, he or she can most accurately evaluate their suffering. Any answer that measures above 4-5 indicates a patient's distress needs attention," she says.

Dr. Holland pioneered the field of psychiatric oncology, which explores the emotions a patient can experience as a result of having cancer. "There's a stigma to cancer. But there is an even greater stigma attached to anything considered 'mental,'" Dr. Holland says. "Patients don't want to take up their doctor's time by talking about their anxiety, fears, and emotions. They're afraid they'll be considered 'wimps' or 'crazy.' So many patients don't get the help they need. A distress scale takes the stigma away."

Canada has adopted distress as the sixth vital sign, and doctors in the U.S. are following suit. The NCCN is now developing educational materials about distress for physician waiting rooms and modifying the distress thermometer for use with children and family members.

LUNG CANCER *Continued from page 1*

Florida recently reported that nicotine functions like a growth factor for lung cancer. The lab studies, reported online in the *Journal of Clinical Investigation* in July, found nicotine binds to nicotine receptors on bronchial cells and lung cancer cells, triggering a cascade of molecular activity that contributes both to the initiation of cancer and to its progression.

"Not everyone agrees that women are more susceptible to lung cancer, but it's mainly because they don't see much difference in death rates. But death rates among women are increasing progressively," says Dr. Henschke.

Fatal differences?

Women smokers face other cancer dangers. Smoking has been linked to bladder and colon cancer. In addition, a recent study of more than 800 women in four U.S. cities conducted by the National Cancer Institute (NCI) found that smoking makes it harder for women's bodies to clear high-risk strains of the virus that causes cervical cancer. While the body usually rids itself of the *human papillomavirus (HPV),* long-term infection with high-risk strains leads to precancerous cervical changes and to cancer. Smoking may increase the likelihood of a persistent HPV infection by causing immunosuppression in the cervix, according to the study in the July 15, 2006 *American Journal of Epidemiology.*

Women who have never smoked seem no more likely to die from lung cancer than men. Men who've never smoked have higher lung cancer death rates than nonsmoking women, say researchers from the American Cancer Society. Between 80-90 percent of the almost 175,000 new cases of lung cancer that will be diagnosed this year are due to smoking. (Lung cancer is also caused by exposure to radon gas and asbestos.) But there is a small but significant risk among nonsmokers, as demonstrated by the death in March 2006 of the nonsmoking actress-singer Dana Reeve, widow of "Superman" star Christopher Reeve. "We didn't include nonsmokers in our study, so we don't have an answer to that question yet," says Dr. Henschke.

What you should do now

The best way to prevent lung cancer is to avoid exposure to tobacco smoke. Census data show there are about 16.2 million women in the U.S. over age 60 who have never smoked, compared to just 6.4 million men. In the 1960s, "women's cigarettes" were aggressively marketed, resulting in an increase in women smokers. Currently, around 22 percent of women of all ages smoke.

Don't assume it's too late for you to quit. Women age 65 years or older are better at quitting than male peers, according to a recent study from Duke University. "One thing we can conclusively state is that women, particularly younger women, should not start smoking. If women smoke, they should quit. And women should possibly be screened earlier than men," concludes Dr. Henschke.

ASK DR. ETINGIN

When I returned from my summer golfing vacation, I noticed what I thought was a bad sunburn on the sides of my neck. The redness has faded a little, but there's now a brownish discoloration on my neck. I always wear a sun visor on the links and I use sunscreen. Do you have an explanation? What can be done about this?

We referred your question to Diane S. Berson, MD, an assistant professor of dermatology at the Weill Medical College of Cornell University. According to Dr. Berson, the problem sounds like *Poikiloderma of Civatte,* a condition that usually affects the skin on the sides of the neck and is related to accumulated sun exposure over the years. The term *poikiloderma* refers to reddish-brown discoloration, thinning of the skin, and increased dilation of tiny blood vessels *(telangiectasia)*; the skin under the chin is usually not affected since the chin shades that area of the neck. Some patients report mild itching. Poikiloderma is more common in women, especially those who are fair-skinned. It can be triggered by hormonal factors, photosensitizing ingredients in cosmetics or perfumes, and drug-related sun sensitivity due to antiinflammatory pain relievers (such as ibuprofen), antibiotics like *doxycycline,* antihistamines, diuretics, and hormones, says Dr. Berson. A dermatologist can prescribe a *tretinoin* cream or a preparation containing the bleaching agent *hydroquinone,* which may help fade the pigmentation. Treatment with a *pulsed dye laser* or *intense pulsed light (IPL)* may help reduce the discoloration and telangiectasia. A sun visor may protect your face, but will leave your neck exposed. So when you golf, wear a broad-brimmed hat and make sure to apply sunscreen with a sun protection factor of at least 30. You can also wear a collared shirt or bandana to cover your neck.

I keep reading that dying your hair causes cancer. Some of the articles I read in the past said it was only a problem for women who used very dark colors, and another said it depended on how long you've been coloring your hair. I have been prematurely gray since my 30s. Should I be worried?

There have been many studies over the years; some find a link and others do not. The study you read linking hair dye and a form of cancer called *lymphoma* came from Spain. Researchers compared data from more than 4,700 people, including lymphoma patients and matched healthy controls from six European countries. About three-quarters of the women reported using hair dye (around seven percent of the men dyed their hair). Overall, the researchers found a 19 percent increased risk of lymphoma among people who colored their hair; those who used hair dye monthly had a 26 percent increased risk, according to the July 1, 2006 issue of the *American Journal of Epidemiology.* Use of hair dyes before 1980 was linked to a higher risk. Hair color formulas have since been changed to eliminate potentially cancer-causing agents (it's not clear if newer dyes are risk-free). But the risk is small. The researchers calculate that roughly 10 percent of lymphomas in women might be linked to hair dye. If you're concerned, talk to your doctor about your lymphoma risk.

COMING SOON

- **Avoid medication mistakes**
- **What to do about dry eye**
- **Should you get a genetic test to assess your cancer risk?**

FYI: NEWS FROM THE SOCIETY FOR WOMEN'S HEALTH RESEARCH

Remission is less likely for women with rheumatoid arthritis

Rheumatoid arthritis (RA), an autoimmune disease that damages the joints, affects more than two million Americans. The vast majority are women. New research from Sweden presented at the Annual European Congress of Rheumatology reveals another disadvantage for women: They are less likely than men with RA to go into remission or have lessened symptoms after treatment, even though disease activity was the same when they began treatment.

The reason for these sex differences is unclear. Because RA predominates in women, hormonal influences are thought to play a role along with genetics and environmental factors. "The sex ratios probably do not reflect hormones only," explains Michael Lockshin, MD, professor of rheumatology at the Weill Cornell-affiliated Hospital for Special Surgery in New York City. "There is a real possibility that exposure difference to some unknown stimulus accounts for at least some of the sex ratios," Dr. Lockshin told the Society for Women's Health Research. For example, recent research in the *Annals of the Rheumatic Diseases* found smoking nearly doubles the risk of RA in women without genetic risk factors.

There is currently no cure for RA. Early diagnosis and treatment can slow disease progression and minimize joint damage. The Swedish researchers called for "reinforced vigilance in the frequency and quality of follow-up in order to achieve optimal suppression of the inflammatory process in all patients, regardless of gender."

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