

Making Strides in Women's Health Care

As a proponent of personalized health care – the integrated practice of medicine based on a person's unique biological, behavioral and environmental characteristics – Ohio State University Medical Center (OSUMC) devotes considerable resources to women's health issues. The pages ahead briefly review a few of the many specialty areas in which the Medical Center offers innovative, science-based treatment to improve the lives of women through personalized health care.

Women and Mental Health Issues

“A woman's reproductive years are a unique time that requires special attention in assessing mental health issues,” says Stephen Pariser, MD, medical director of the Psychiatry Clinic and director of the Mood Disorders and Geriatric Psychiatry clinics at OSUMC.

“Although it's complicated and not altogether clear how various biological and psychosocial factors come into play, during the years between menarche and menopause women face an increased chance of experiencing mental illness or mood disorders,” Pariser adds. Problems range from mild to severe pre-menstrual syndrome, clinical depression, ante- and post-partum depression, bipolar disorder, anxiety disorders, eating disorders, alcoholism and schizophrenia.

“Primary care physicians do a good job of treating depression, which, according to the National Institute for Mental Health, affects twice as many women as men – six to eight million women in the United States alone,” Pariser says. “Unfortunately, once a woman experiences a depressive episode, she is more likely to have recurrences and is a candidate for medication. When symptoms go unnoticed by



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Stephen Pariser, MD

family members and are not reported by patients, lack of treatment may have dire results.”

Lisa Werner, DO, medical director of Psychiatry Emergency Services and Intake at OSUMC, agrees. “Suicidal

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ideation is a deadly symptom of depression. Patients who are acutely suicidal – who pose a risk to themselves or others – should be transported to an emergency room for evaluation immediately.

“However, when primary care physicians screen their patients and recognize the symptoms, they can initiate psychotropic medications or other treatments,” Werner says. “Several years ago, there was a limited number of antidepressants and mood-stabilizing agents available. Now we can choose from multiple neurochemicals with improved treatment efficacy and fewer side effects.”

Werner says when physicians examine patients who complain of depression symptoms, the doctors should also ask about mania. “Often, patients who suffer from bipolar disorder have limited insight about their manic episodes, because they may feel ‘great’ and see this as a time of increased productivity,” she explains. “Therefore, prescribing physicians need to be aware of the potential for antidepressants to fuel mania and watch for symptoms.”

Pariser points out that patients who are taking prescription medications for mood or other mental disorders, and who also wish to become pregnant, require counseling. “There have been some studies reported in the *New England Journal of Medicine* that indicate some birth defects, premature birth or low birth weight may be attributable to pharmaceuticals,” he notes. “In addition, newborns may suffer discontinuation syndrome, which could be problematic.”

To refer patients for psychiatric evaluation or treatment, please call: (614) 293-9600.



Stephen Pariser, MD



Lisa Werner, DO

Questions of Domestic Violence

“Although domestic violence is predominantly perpetrated by men upon women, it happens to individuals of both genders, all races, ages and socio-economic groups,” says Andy Thomas, MD, associate medical director at Ohio State University Hospital.

“Many physicians think it is not happening to patients in their practices. However, when one considers that the incidence of domestic violence – that includes verbal and emotional abuse – is 31 percent of all women annually, chances are it is happening in many practices,” says Thomas, who also is president of the Columbus Medical Association. He offers these suggestions for screening patients for domestic abuse:

- Take a thorough social history.
- Be aware of high-risk home circumstances, such as an unusual assortment of people living in the same home.
- Screen for depression – not all depressed individuals are abused, but most abused women show signs of psychological distress.
- Notice when a female patient’s appointments are being skipped or canceled by a male, as these could be signs that transportation, money and access to services outside the home are being controlled.

- Be alert to patients who skip from doctor to doctor; this could be a tactic to hide problems.
- Note when patients are non-compliant – for example, when a woman with a shoulder or other injury fails to go for an ordered X-ray or physical therapy appointments.
- Chart obvious signs/clues of prior abuse, such as old bruises and fractures.
- Ask whether the patient feels safe at home. This is the most straightforward approach, but it should be used carefully and in a setting where the patient feels comfortable opening up and the physician has time to listen. Don’t wait until the end of the appointment to pose this question.

“Finally, physicians need to understand that the victim is never at fault, and they should be prepared to help patients who are experiencing abuse,” Thomas says. “They should find out in advance where in their community they can refer women for safe housing and other services. Make business-card sized information sheets that can easily be kept confidential.”

To contact Dr. Thomas, please call (800) 293-5123.



From Ohio State University Medical Center

news briefs

OSU Medical Center Specialties Ranked Among America's Best

U.S. News & World Report has ranked Ohio State University Medical Center among "America's Best Hospitals" for the 15th consecutive year. In its 2007 listing, the magazine ranked seven specialties at the Medical Center among the nation's top 50, including: cancer; ear, nose & throat; gynecology; kidney disease; orthopedics; respiratory disorders; and rehabilitation. Ohio State's James Cancer Hospital and Solove Research Institute cracked the top 15, moving up six places from 21st in 2006 to become the magazine's top-ranking cancer program in Ohio. Also, the Medical Center's Rehabilitation program retained a top-10 spot on the list.

For more information, call (800) 293-5123.

'CarePages' Brings Support to Patients Via the Web

Patients at Ohio State University Medical Center can communicate with family and friends across the country before, during and even after their experience at OSUMC via a new Web-based tool called CarePages. "In the time it would take to make a phone call, patients and family members can set up a CarePages site that encourages communication in a private and safe environment," says Matthew Ridley, who is leading the project. "Family and friends who may be located some distance away can be updated regularly about a patient's progress." Only invited family and friends can visit a patient's CarePages, which cannot be located through Web search engines. Family and friends can also send notes of support and encouragement in a time-efficient manner and avoid phone calls that might wake or disturb patients. CarePages also offers links to Medical Center resources and information, such as maps, visiting hours, parking information and health-education resources.

For more information, call (800) 293-5123.

Doctors Promote Active Pregnancy Rather Than 'Delicate' Condition

Physicians at Ohio State University Medical Center say the days of considering pregnancy a "delicate condition" are over for most women. They note that just about any body – especially one carrying a developing baby – can benefit from consistent exercise. "I recommend at least 30 minutes of exercise five times a week



Melissa Goist, MD

if it's an uncomplicated pregnancy, and more if someone is used to exercising more," says obstetrician and gynecologist Melissa Goist, MD. "It's different for every person based on health, but the benefits are greater than the risk for just about all patients." Goist and Julie Bishop, MD, an orthopedic surgeon and sports medicine specialist, say exercise can result in an easier delivery, improving stamina for labor.

For more information or to contact Drs. Goist and Bishop, call (800) 293-5123.

Nutrition Counseling Aims to Help Cancer Patients

Breast cancer patients who previously had no access to individualized nutrition counseling are being helped through a pilot program at Ohio State's James Cancer Hospital and Solove Research Institute to improve recovery and lessen recurrence. The ONE (Oncology Nutrition Education)



Kari Kendra, MD, PhD

For All Project provides medical nutrition therapy to patients with no access to such insurance-funded care. The project targets underserved women in 23 Ohio counties who receive breast health, cancer prevention, treatment or post-treatment care at the Comprehensive Breast Care Center at JamesCare in Dublin. "We were the first to develop an outpatient nutrition program for our breast cancer patients to help them better tolerate chemotherapy with fewer side effects," says director Kari Kendra, MD, PhD.

For more information or to contact Dr. Kendra, call (800) 293-5123.

Lung Cancer

Because up to 90 percent of all lung cancer cases are smoking related, primary care physicians who ask their female patients about smoking habits and offer help with smoking cessation are doing them a great service," says Gregory Otterson, MD, a cancer specialist at Ohio State's Comprehensive Cancer Center - James Cancer Hospital and Solove Research Institute.

"Lung cancer is now the leading cause of cancer deaths among women, yet there are still no well-established screening programs for lung cancer as there are for breast and colorectal cancer," Otterson says. "That's another reason the five A's - Ask about smoking, Advise quitting, Assess willingness to quit, Assist in the quit attempt, Arrange timely follow up - are so important and effective in the primary care setting.

"Since the 1970s - when tobacco companies began targeting advertising to women - the incidence of women dying from lung cancer steadily rose through the 1990s, only beginning to plateau recently," Otterson adds. "There are expected to be 98,000 new cases of female lung cancer this year, 10-15 percent of which will be diagnosed in women who have never smoked."



Gregory Otterson, MD

Otterson says the challenge is for primary care physicians to have a high index of suspicion and push for chest X-rays of patients who have a change in breathing or coughing patterns, who cough up blood, or who have non-healing or recurrent pneumonia, such as those who have had three or four courses of antibiotics to no effect.



X-ray image of lung cancer in a 60-year-old woman who never smoked.

"Early detection has been shown to be important for multiple cancers," he says. "In a multimodality setting, even if therapy is not always curative, it is often helpful in improving the quality and duration of life."

For more information or to contact Dr. Otterson, call (800) 293-5066.



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Genetics of Breast Cancer

All women dread hearing a diagnosis of breast cancer, and many will come to their primary care physicians with concerns for their own health when a sister or other close relative is diagnosed.

"In most cases, women will ask their primary care physician or gynecologist if they have an increased risk because of a diagnosis in the family," says Judith Westman, MD, a clinical geneticist at Ohio State's Comprehensive Cancer Center - James Cancer Hospital and Solove Research Institute.

"There are many types of breast cancer, only 15 percent of which are known to be familial," Westman adds. "However, when a patient has breast cancer before age 50 and there is a family history of breast or ovarian cancer, that patient may be a candidate for genetic screening, because if the cause of the relative's cancer is hereditary breast ovarian cancer syndrome (HBOC), there is an increased risk."



Judith Westman, MD

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Caused by mutations to either the *BRCA1* or *BRCA2* genes, HBOC results in a lifetime risk for breast cancer as high as 85 percent, an increased lifetime risk for ovarian cancer as high as 60 percent, and an increased risk for other cancers as well. "When patients are referred to us for genetic testing for HBOC, we begin with counseling because only about half of all familial cases of breast cancer are HBOC," Westman says.

The required blood test costs approximately \$3,000 and is administered to the breast cancer patient as well as to family members; some insurance companies pay only when the test is ordered by a geneticist or genetic counselor, and some do not. Results are sometimes difficult to interpret, because the test reveals probabilities rather than certainties. Depending on results, some patients will have choices to make about their healthcare management, including the possibility of lowering their breast or ovarian cancer risk through prophylactic surgeries.

"A thorough family history is always important to obtain, but physicians may want to suggest that their patients also take a personalized cancer risk assessment, such as one we make available through The James' Web site (www.jamesline.com/go/jameslink), and bring it to their next visit. That may help patients dig deeper and provide either a starting place for discussion or provide peace of mind," Westman says.

For more information or to contact Dr. Westman, call (800) 293-5066.

Reconstructive Breast Surgery

"For some women, having a natural appearance to the breast is so important they will actually delay having a breast lump investigated because they are afraid the treatment may leave them deformed," says Michael Miller, MD, a plastic surgeon who specializes in breast reconstruction and other reconstructive surgery at OSUMC.

"And although having a natural appearance to the breast is an essential part of recovery from breast cancer," he adds, "many women feel too embarrassed or apologetic to ask about it because they are concerned that others will think them vain."

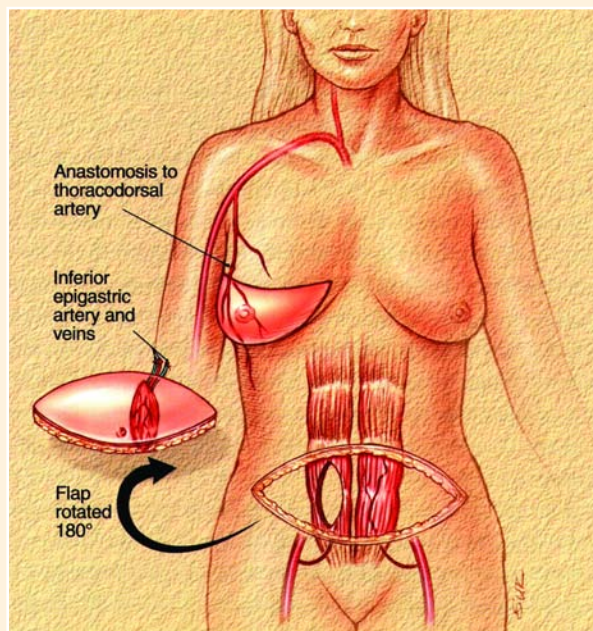
Miller says primary care and other physicians can affirm their patients' desire to remain whole and help them understand that reconstruction is a valid and important phase of treatment. He says patients also need to know that, thanks to two federal laws, insurance companies are mandated to cover reconstruction costs.

There are three basic types of reconstruction, according to Miller. Nationwide, nearly 80 percent of all

procedures involve tissue expanders and breast implants at the time of mastectomy or later.

"I prefer to use the patient's own tissue whenever appropriate," Miller says. "There is no 'best' way, but because at Ohio State we take a personalized approach to health care, we want to determine what is best for each patient."

The TRAM (transverse rectus abdominal musculocutaneous) procedure involves using microvascular surgery techniques to remove muscle, fat and skin from the patient's abdominal area and relocating it, using a flap, to take the place of breast tissue.



Medical illustration depicting the TRAM procedure.

DIEP (deep inferior epigastric artery perforation), like the TRAM, uses a flap but involves only skin and fat tissues.

The latissimus dorsi musculocutaneous flap procedure uses tissue from the patient's back along with an implant, but no expansion is needed.

"By using microsurgery techniques, we are able to ensure a better blood supply to the new breast tissue and cause less disruption to the abdominal wall," Miller explains.

"A key point that primary care physicians can emphasize to their patients when discussing breast reconstruction as part of the cancer treatment is that having reconstruction does not interfere with detection of cancer recurrence," he adds. "Also, patients should understand that reconstruction often is a process that may require several small procedures to arrive at the desired result."

For more information or to contact Dr. Miller, call (800) 293-5066.



Michael Miller, MD

Uro/Gyn Issues - Incontinence & Dysfunction

"Many women are reluctant to seek care for problems such as female sexual dysfunction and incontinence because they are embarrassed by these issues," says Jason Gilleran, MD, a urologist at OSUMC who specializes in female urology and voiding dysfunction.

His colleague, Andrew Hundley, MD, agrees. "It is a huge hurdle for women to mention these problems, even to their primary care physicians or gynecologists, with whom one would expect them to be more comfortable," he says.

"Many women erroneously think these issues are a normal part of aging - that's why it's so helpful when physicians open a conversation by asking questions," adds Hundley, a urogynecologist and director of the OSUMC Division of Female Pelvic Medicine and Reconstructive Surgery.

"At Ohio State we recognize that, even though surgery is the mainstay of incontinence therapy, it is not always the right therapy for a given individual . . ."

Jason Gilleran, MD

Incontinence

Gilleran and Hundley note that, although aging plays a role, many cases of both stress and urge incontinence are exacerbated or initiated by childbearing. Patients with mild cases may be referred to a nurse practitioner or physical therapist for biofeedback, electrical stimulation and to learn Kegel exercises. Post-menopausal patients may find relief through prescriptions of locally applied hormone creams or suppositories.

These non-surgical interventions can alleviate the problem - or at least make it livable - for patients who make a commitment to the program, keeping appointments and continuing exercises at home and/or routinely using medication.

"Professional women and those with extremely busy lives sometimes do not have time to devote to non-surgical solutions," Hundley says. "Others choose surgery over the use of a pessary device, which they might find difficult to fit into their routine."

"In severe cases, including where there are anatomical structural abnormalities such as prolapse of the uterus, cervix, vaginal wall or rectum, surgical intervention is often the best option," Gilleran says. "At Ohio State we recognize that, even though surgery is the mainstay of incontinence therapy, it is not always the right therapy for a given individual. Our commitment to personalized health care means we gauge each patient and find the right solution for her."

Sexual Dysfunction

"These types of anatomic abnormalities also can make sexual intercourse painful or uncomfortable for some women," says Hundley. "If they are not painful, embarrassment or concern that her sexual partner will be aware of the abnormality can also cause a woman to not enjoy sexual activity."

"Women who want to be sexually active can find relief for sexual dysfunction depending on the root cause of the problem," Gilleran notes.

Gilleran and Hundley agree that functional problems, such as declining hormone levels, can be treated medically, usually by a gynecologist or endocrinologist, while problems caused by anatomic defects can best be treated surgically.

"Women who have issues with arousal and climax are often best referred for psychosocial or social therapies," Hundley says. "Often, sex therapists can provide a beneficial adjunct therapy in that they can get the partners talking and focus on aspects of arousal and climax that can be helped in terms of intimacy, foreplay technique and romance."

For more information or to contact Drs. Gilleran and Hundley, call (800) 293-5123.



Andrew Hundley, MD



Jason Gilleran, MD



From Ohio State University Medical Center research highlights

Sleep Aid Studied for Effects on Tinnitus



Abraham Jacob, MD

Melatonin may be taken as a supplement to help regulate sleep, but an Ohio State University Medical Center physician is testing its effectiveness in the ear. Otolaryngologist Abraham Jacob, MD, is studying whether melatonin can decrease tinnitus. Previous studies have suggested that it may reduce ringing in the ears, but

Jacob's research will compare the supplement to placebo to determine whether this is real relief. The study will involve 60 patients diagnosed with tinnitus that has lasted for more than six months. These patients will be evaluated objectively with specific measures and questionnaires. Half will receive melatonin and half will receive placebo during the first segment of the trial. The study medications will then be reversed. "We'd like to see whether a readily available product used for years as a supplement can be used as a therapy for a common problem," Jacob says. Tinnitus affects about 10 percent of the U.S. population, but Jacob considers it under-diagnosed and under-evaluated.

For more information or to contact Dr. Jacob, call (800) 293-5123.

Multiple Sclerosis Drug Shows Promise Against Leukemias

A study at the Ohio State University Comprehensive Cancer Center suggests that an experimental drug being tested for the treatment of multiple sclerosis and to prevent organ rejection might also help people with certain chronic and acute leukemias. The laboratory and animal study focused on fingolimod. Researchers say it might help patients with advanced chronic myelogenous leukemia (CML) or acute lymphocytic leukemia (ALL) whose cancer cells show a genetic change called the Philadelphia chromosome. The study found that the drug prevented these cancers in mouse models and killed laboratory-grown human CML and ALL cells. Although the findings must be verified in humans through a future clinical trial, the research also suggests that

the drug might help patients with these leukemias who are resistant to imatinib (Gleevec) and dasatinib (Sprycel). Fingolimod is currently in advanced clinical-trials testing for the treatment of relapsing multiple sclerosis, and to prevent organ rejection following kidney transplantation. "This agent represents a promising strategy for treating CML that is resistant to imatinib and related targeted agents," says co-author Guido Marcucci, MD. "These findings also suggest that it will be an important contribution to a new therapeutic approach to CML that considers combinations of molecular-targeting compounds."

For more information or to contact Dr. Marcucci, call (800) 293-5066.

New Method Enables Genomic Screening of Blood Vessels from Patient Tissue

Scientists at Ohio State University Medical Center have developed a method of capturing a complete genome-wide screening of blood vessel cells in their disease state, advancing the potential for genetic research on tissue responsible for delivering nourishment that can



Chandan Sen, PhD

accelerate the growth of both a cancer tumor or wound healing. The method also makes it possible to determine whether genes associated only with cancer are also expressed in chronic wounds. The scientists are using laser capture microdissection to pluck blood vessels, or if need be a single cell, from human wound tissue to seek mechanisms underlying chronic wounds. They published a description of the research method in the Sept. 4 *Proceedings of the National Academy of Sciences*. "We have enabled the capture and genome-wide screening of blood vessels from biopsy material regardless of disease," says Chandan Sen, PhD, executive director of Ohio State's Comprehensive Wound Center. "It's a leap in our ability to perform high-resolution vascular biology research using patient material."

For more information or to contact Dr. Sen, call (800) 293-5123.