Critical Gender Disparities

COPD *from page 1*

Indeed, distinct differences in the manifestations of the disease suggest significant gender disparities in COPD, said Dr. Hardin. Among those disparities are:

► CT scans show more architectural alveolar destruction in men's lungs, correlating with the fact that men seem more susceptible to emphysema.

► In women, COPD is more often an airway disease, harder to detect and more closely associated with chronic bronchitis.

► In women versus men, COPD appears more difficult to control. Women have higher rates of exacerbation and more hospitalizations.

► Women have more airway responsiveness compared with men.

► Women are more often misdiagnosed with asthma than are men.

► Forced expiratory volume in 1 second declines more rapidly in women than in men, even in nonsmokers or if pack-years of exposure to tobacco are taken into account.

► Inflammation, which plays a key role in COPD pathology, seems especially important in women with the disease. For example, women have increased lung inflammation even after they stop smoking, and nearly a third of nonsmoking women with COPD also have autoimmune diseases.

Theories abound as to the gender differences in COPD, which are only recently being explored.

Some researchers believe that women's smaller airways trap smoke particles and other noxious stimuli, increasing their exposure time. Others favor a hormonal explanation, suggesting that estrogen's impact on the cytochrome p450 system in the liver may bioactivate harmful compounds found in tobacco smoke.

Women may process heavy metals in tobacco smoke, such as cadmium, differently from men. And there may be a gender-specific genetic predisposition to bronchial reactivity.

Keep COPD in mind when you see a woman with lung disease, Dr. Hardin said. Current treatments, which include short- and long-acting bronchodilators, rehabilitation, and inhaled glucocorticosteroids, hold the promise of preventing disease progression as well as relieving symptoms.

Even better, physicians can counsel adolescent girls about the special risks from smoking they face later in life. The most recent government statistics show that 23% of high school girls are current smokers—edging out boys of the same age in taking up the habit early.

"We have a target population we need to counsel," she said. ■

Chronic Obstructive Pulmonary Disease Evolves

Traditional Concept	New Thinking
COPD is a disease of the old.	Most COPD patients are under age 65.
COPD is inevitable and untreatable.	COPD is preventable and treatable.
Airflow limitation in COPD is irreversible.	Airflow limitation is not fully reversible.
COPD is a disease of the lungs.	COPD has systemic, inflammation-linked consequences, including diabetes and heart disease.
Respiratory failure is the cause of death in COPD.	Among patients with mild to moderate COPD, lung cancer.and cardiovascular disease cause two-thirds of deaths.
COPD mostly affects men.	Mortality is now higher among women.
COPD is a disease of the past.	Mortality is sharply rising; COPD is expected to be the third leading cause of death by 2020.

Source: Dr. Hardin

ELSEVIER GLOBAL MEDICAL NEWS

New Data Drive Update of Screening For Bacterial Vaginosis in Pregnancy

BY KATE JOHNSON
Montreal Bureau

Updated recommendations from the U.S. Preventive Services Task Force advise against screening for bacterial vaginosis in pregnant women who are asymptomatic and at low risk for preterm delivery.

But the recommendations remain neutral about screening in high-risk pregnancies because "current evidence is insufficient to assess the balance of benefits and harms," said Dr. Ned Calonge, chair of the U.S. Preventive Services Task Force (USPSTF) and colleagues.

The new recommendations (Ann. Intern. Med. 2008;148:214-9) are an update of those compiled by the task force in 2001 (Am. J. Prev. Med. 2001;20:59-61). They are based on an analysis of new evidence, conducted for the task force by Peggy Nygren of the Oregon Health and Science University, Portland, and her associates and funded by the Agency for Healthcare Research and Quality (Ann. Intern. Med. 2008;148:220-33).

The analysis addressed "previously identified gaps, such as the characterization of patients most likely to benefit from screening and the optimal timing of screening and treatment in pregnancy outcomes," said Dr. Calonge, who is also chief medical officer of the Colorado Department of Public Health and Environment, Denver, and his colleagues.

Ms. Nygren and her associates noted the recent concerns that metronidazole, the antibiotic most commonly used to treat bacterial vaginosis, might increase preterm births in some populations. "The juxtaposition of these data, along with epidemiologic evidence associating bacterial vaginosis with preterm birth, leads to considerable confusion for clinicians and researchers alike. Whether to screen or treat multiple times, when to start, and at what interval during pregnancy are unanswered questions, as bacterial vaginosis may not necessarily persist throughout pregnancy," they wrote.

The analysis included studies published after the release of the task force's 2001 recommendations to examine "new evidence on ... screening and treating bacterial vaginosis in asymptomatic pregnant women."

Asymptomatic patients were defined as those presenting for routine prenatal care and not for evaluation of vaginal discharge, odor, or itching. Low-risk patients were defined as having no history of and no risk factors for preterm delivery, whereas average-risk patients were defined as "the general population," regardless of risk status. Women with a history of preterm delivery related to spontaneous rupture of membranes or spontaneous preterm labor were categorized as high risk.

The analysis found no benefit in treating women with low- or average-risk pregnancies if they were asymptomatic. For high-risk asymptomatic pregnancies, Ms. Nygren and her colleagues noted that findings from one trial that had been published since the USPSTF 2001 recommendations showed "a significant adverse effect of treatment on delivery before 37 weeks" in 127 women, "indicating that treatment of bacterial vaginosis increased the chance of preterm delivery" significantly (S. Afr. Med. J. 2002;92:231-4).

However, when this study was considered with previous studies that had been included in the 2001 recommendations, the results were "heterogenous and conflicting," they wrote. For the outcome of delivery before 37 weeks, three of the trials reported a significant treatment benefit, one showed significant treatment harm, and one showed no benefit. "Inherent differences in populations, such as previous pregnancy complications, gestational age, ethnicity, or co-infection, may also influence which women are helped or harmed by screening and treatment for bacterial vaginosis," they wrote, noting "a potential but unclear benefit of treatment for some [high-risk] patients."

In keeping with the USPSTF recommendation against screening in low-risk pregnancies, the Centers for Disease Control and Prevention (CDC), the American Academy of Family Physicians (AAFP), the American College of Obstetricians and Gynecologists (ACOG), the Cochrane Pregnancy and Childbirth Group, the British Association for Sexual Health and HIV/Clinical Effectiveness Group (BASHH) have similar recommendations.

Although the task force maintains its neutral position regarding high-risk pregnancies, the CDC, ACOG, AAFP and BASHH say there might be high-risk women for whom screening and treatment may be beneficial, the USPSTF authors wrote, noting that optimal treatment for bacterial vaginosis in pregnancy remains unclear. ■

For Recurrent BV, Stay With Metronidazole Gel

SAN DIEGO — Long-term use of metronidazole gel remains the mainstay of treatment for women with recurrent bacterial vaginosis, said Dr. Jeanne Marrazzo of the division of allergy and infectious disease at the University of Washington, Seattle.

Patients are advised to use intravaginal metronidazole gel 0.75% at bedtime for 10-14 days, then biweekly for about 6 months before retesting, Dr. Marrazzo said at Perspectives in Women's Health, a conference sponsored by FAMILY PRACTICE NEWS, OB.GYN. NEWS, and INTERNAL MEDICINE NEWS.

The mechanism of action in this regimen is not fully understood, although it may suppress overall anaerobic overgrowth for so long that the patient's lactobacillus population can recover. Suppression of an unknown pathogen may also be at work, she said.

"The problem is cost," she said. Generic products exist in the gel formulation but offer little cost advantage over the branded products. Research suggests benefit from condom use during intercourse in the initial and suppression treatment regimens, again, for reasons that are not fully understood. "Condom use should be part of the counseling of patients with recurrent BV."

At present, there are no good alternatives to metronidazole gel for these patients, she noted. Over-the-counter lactobacillus remedies and yogurt are not good options. "You don't want to use bovine lactobacilli in the human vagina. …These [remedies] really aren't going to work, although some people will say anecdotally that they do."

Early trials assessing the efficacy of intravaginal capsules containing the probiotic *Lactobacillus crispatus* have proven disappointing, she said. But the organism remains under evaluation as a potentially useful agent for repletion of normal vaginal lactobacilli, since it is one of the three most common lactic-acid–producing bacteria in the healthy vagina.

Research shows it adheres well to vaginal epithelial cells; in 2006, Dr. Marrazzo and her associates reported a high rate of satisfaction in 232 women who used an intravaginal capsule containing lactobacillus (J. Womens Health 2006;15:1053-60). Women in the study said they would use the product again, regardless of the clinical response they received.

Dr. Marrazzo had no financial disclosures. FAMILY PRACTICE NEWS is published by the International Medical News Group, a division of Elsevier.

—Betsy Bates