

## Hot off the Press

### ANDROGEN EXCESS

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### MEETINGS OF INTEREST

#### 50th Annual Meeting of the German Endocrine Society

March 1-4, 2006  
Essen, Germany  
www.essen2006.org

#### Diabetes Update and Advances in Endocrinology and Metabolism

March 23-25, 2006  
San Francisco, CA  
www.cme.ucsf.edu

#### The Athens PCOS International Congress

March 27-29, 2006  
Athens, Greece  
www.erasmus.gr

#### Androgen Excess Society Annual Meeting

June 23, 2006  
Boston, MA  
www.ae-society.org

#### The Endocrine Society

June 24-27, 2006  
Boston, MA  
www.endo-society.org



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#### 2006 CARD Lecture Series

Mark your calendar!

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#### 2nd Annual PCOS Conference

Sponsored by the  
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#### Clinical Review

## Center for Androgen-Related Disorders

### Director's Welcome

February Vol. 3, Issue 1

In honor of Women's Heart Health Month, and in an effort to bring a greater awareness to heart disease in women, the February 2006 issue of the CARD Newsletter highlights heart disease in women.

Though the rates of heart attack have steadily declined among men, women have not enjoyed the same benefits. Additionally, women are at greater risk for having a recurrent heart attack, and women with diabetes are 3-4 times more likely than men to develop heart disease.

This brings into focus the need for greater physician awareness of symptoms and more aggressive treatment of heart disease among our female patients as this has become a particular concern among our patients with PCOS.

At the Center for Androgen Related Disorders, we actively pursue studies which address the link between PCOS and heart disease. Some of our partners in research studies include Dr. Noel Bairey Merz, Medical Director and Dr. Donna Polk, Assistant Director of the Preventive and Rehabilitative Cardiac Center at Cedars-Sinai Medical Center. Dr. Bairey Merz is also the Director of the new Women's Heart Program. In this edition of the newsletter, Drs. Bairey Merz and Polk share with us their insight, research, and clinical experience in this field.

Thank you for your support during the Women's Heart Health Month and we hope you enjoy this edition of the CARD newsletter.

Sincerely,

Sheila Bolour, MD  
Assistant Director  
Center for Androgen Related Disorders

## CARD Calendar of Events

### February 7, 2006

#### LECTURE SERIES

"C - REACTIVE PROTEIN (CNP) AND METABOLIC SYNDROME"

YIH-DER IDA CHEN, PH.D.

Professor of Medicine and OB/GYN, Cedars-Sinai Medical Center and UCLA  
Director, Biochemistry Laboratory Center, Cedars-Sinai Medical Center

### March 9, 2006

#### LECTURE SERIES

SELMA F. WITCHEL, MD

Director, Pediatric Endocrine Fellowship Program, Associate Professor, Children's Hospital of Pittsburgh, Department of Pediatrics, University of Pittsburgh, Division of Pediatric Endocrinology, Diabetes & Metabolism

### March 10 and 12, 2006

#### 2ND ANNUAL PCOS CONFERENCE

**POLYCYSTIC OVARY SYNDROME (PCOS): FROM HIRSUTISM TO FERTILITY - A MULTIDISCIPLINARY APPROACH TO THE MANAGEMENT OF THE WHOLE PATIENT.**

### April 4, 2006

#### LECTURE SERIES

THEODORE CIARALDI, PHD

Project Endocrinologist, Division of Endocrinology & Metabolism, Department of Medicine  
University of California San Diego, VA San Diego Healthcare System

All CARD Lecture locations will be announced on Exchange and to the CARD Email Group.  
If you would like to be added to the CARD Contact List, please contact Faye Byrd at faye.byrd@cshs.org

## From the Bench

### HDL-Cholesterol and Women



Donna Polk, M.D., M.P.H.

Cardiovascular disease remains the most common cause of death in women, yet our current fund of knowledge about cardiovascular disease in women is limited. It is quite clear that hypercholesterolemia is associated with a higher risk of cardiovascular disease. In the last decade, we have expanded our understanding of the role of cholesterol and it is clear that the individual components of the cholesterol, in particular the HDL and triglyceride levels, are particularly important in women and independently predict risk in women. Low levels of HDL (below 50 mg/dL) in women are associated with a higher cardiovascular risk, even more so than in men. HDL appears to be cardioprotective because of both its role in reverse cholesterol transport as well as its antioxidant effect. While many of the available pharmacologic drugs are excellent at treating high cholesterol, they are aimed mostly at lowering the LDL. Efforts at raising HDL cholesterol have proven to be a bit more challenging, but are worth the effort. We know that for every 1 mg/dL increase in HDL cholesterol, the risk for cardiovascular disease decreases by 2-3%. There are several non-pharmacologic means of raising HDL cholesterol including weight loss, exercise, smoking cessation, and even modest alcohol consumption. There are also several pharmacologic agents that are currently available to treat low HDL, and the one with the most potent HDL raising ability is niacin or nicotinic acid.

Niacin has been used for over 40 years to treat high cholesterol and is quite effective at raising HDL cholesterol. As early as the 1970's treatment with immediate-release niacin in the coronary drug project resulted in an 11% reduction in cardiovascular mortality and a 27% reduction in major coronary events at up to 10 year follow-up. This study was performed in men, and thus our knowledge of the effects of niacin is limited in women. In order to better understand how niacin works in women specifically, we have recently completed enrollment of 44 women in an NIH-CreFF (National Institutes of Health) funded project aimed at raising HDL levels. We randomized these women with high cholesterol to receive intermediate acting Niacin (Niaspan) or placebo in addition to their statin drug. We measured changes in cholesterol levels as well as a measure of endothelial function (brachial artery reactivity testing) before and after treatment. While the results are still pending, we hope that studies such as this one will provide further insight into the gender differences in risk factors for and treatment of cardiovascular disease.

References available on request. Please contact Dr. Donna Polk at [polkd@cshs.org](mailto:polkd@cshs.org)

Donna Polk, MD, MPH is Assistant Director of the Preventive and Rehabilitative Cardiac Center at Cedars-Sinai Medical Center. Dr. Polk specializes in preventative and rehabilitative cardiology, as well as noninvasive cardiology.

### SECOND ANNUAL CONFERENCE

#### **POLYCYSTIC OVARY SYNDROME: FROM HIRSUTISM TO FERTILITY - A MULTIDISCIPLINARY APPROACH TO THE MANAGEMENT OF THE WHOLE PATIENT**

**FRIDAY, MARCH 10, 2006  
7:30 AM - 3:30 PM  
CME/CEU Education Conference**

The Center for Androgen-Related Disorders will host it's second annual conference for physicians and other allied healthcare professionals.

This conference will provide attendees with a minimum of 6 category 1 credits toward the AMA Physician's Recognition Award.

The 2nd Annual Conference will be held in the Harvey Morse Auditorium. For additional information, contact Marta Betancourt in the CME's office at (310) 423-1921 or you may visit [www.csmc.edu/6950.html](http://www.csmc.edu/6950.html). For online registration, visit [www.csmc.edu/cme](http://www.csmc.edu/cme).

**SUNDAY, MARCH 12, 2006  
1:00 PM - 4:00 PM  
Community Education Conference**

This one-day conference is open to the public. Speakers will discuss PCOS and treatment options. For additional information, contact April Moore at [mooreas@cshs.org](mailto:mooreas@cshs.org) or at 310-423-4887.

There is a registration fee of \$10.00. This fee includes refreshments, parking validation, and all registration materials. Visit [www.csmc.edu/8610.html#pcos](http://www.csmc.edu/8610.html#pcos) for online registration. Please share this information with your patients.

## Sex Hormones, The Metabolic Syndrome and CVD Risk in Women: What You Need to Know



C. Noel Bairey Merz, M.D.

Cardiovascular disease (CVD) is responsible for more than one half million deaths among women annually, exceeding the number of deaths in men and the next 7 causes of death in women combined. While deaths rates from cardiovascular disease have fallen compared to prior decades, rates of decline have been less for women, as well as ethnic minority groups. While recent attention has been paid to combined cancer deaths achieving parity with heart disease deaths for Americans under the age of 85 years, cardiovascular disease continues to kill more women compared to breast cancer, including women under the age of 50.

Sex differences in CVD are apparent, yet we still have no clear explanation for them, impacting current diagnosis and treatment strategies. Observational data demonstrate a relatively lower risk of CVD in women, particularly in premenopausal women, compared to age-matched men. Oophorectomy in humans is associated with greater CVD, while estrogen replacement in animal models demonstrates benefit. This has led the speculation that estrogen protects against atherosclerosis, yet a variety of hormone replacement trials in postmenopausal women have failed to demonstrate benefit. What are some potential explanations to the "Reproductive Hormone Paradox"?

The obesity epidemic, fueled by unhealthy eating habits and falling levels of physical activity have produced a rising prevalence of the metabolic syndrome. The metabolic syndrome is present in over half of the US population, and is defined as having 3 of the following 5 criteria:

- Triglycerides > 150 mg/dL
- Fasting glucose > 110 mg/dL
- HDL Cholesterol < 40 mg/dL for men or < 50 mg/dL for women
- Blood pressure > 130/85 mm Hg
- Waist circumference >40 inches for men and >35 inches for women.

Research from CSMC demonstrates that the metabolic syndrome is associated with an elevated risk of future CVD events in women, and therefore poses an ideal preventive opportunity. Most patients are asymptomatic, and yet have identifiable pre-clinical disease that can be easily screened and treated when appropriate.

Data from the NHLBI-sponsored Women's Ischemia Syndrome Evaluation (WISE) at CSMC has addresses this issue and relation to sex hormones. Specifically, a number of new findings from the WISE study indicate:

1. Estrogen deficiency is a potent risk factor for angiographic CAD in young premenopausal women, and oral contraceptives appear to provide protection later in the postmenopause. Prospective study is needed to validate these findings and determine cause and effect.
2. Hormone replacement therapy may be beneficial in young estrogen-deficient women. Prospective study has been started.
3. The metabolic syndrome is associated with an adverse CVD prognosis, and that physical activity and preventive strategies are associated with an improved prognosis.

For more information or to refer a patient call (310) 423 9680, or visit the CSMC websites:

*Cedars-Sinai Heart Center* offers programs to determine your level of risk. Visit [www.csmc.edu/2266.html](http://www.csmc.edu/2266.html).

*Cedars-Sinai's Wellness Solutions* offers programs and services designed to help you lose weight, increase fitness, stop smoking, manage blood pressure and cholesterol, and get the most out of daily living. Visit [www.csmc.edu/3760.html](http://www.csmc.edu/3760.html).

*Cedars-Sinai Women's HeartAdvantage Program* offers gender-specific risk assessment for women. Visit [www.csmc.edu/2379.html](http://www.csmc.edu/2379.html).

*Cedars-Sinai Women's Health Research Registry™* supported by the Women's Guild offers women opportunities for participating in research and access to cutting-edge treatments from Cedars-Sinai Medical Center research healthcare providers. Visit [www.csmc.edu/5823.html](http://www.csmc.edu/5823.html).

C. Noel Bairey Merz, MD is Medical Director of the Preventive and Rehabilitative Cardiac Center at Cedars-Sinai Medical Center. Dr. Bairey Merz is also Holder of the Women's Guild Chair in Women's Health and Medical Director of Women's Health at Cedars-Sinai, and serves as Professor of Medicine, Department of Medicine at the David Geffen School of Medicine at the University of CA, Los Angeles (UCLA).

### CARD UPDATES...

\* The 2005 CARD Lecture Series is now available on DVD and VHS. To order a single copy of a 2005 CARD lecture, or for a listing of available lectures, contact the CARD Administrative Office at (310) 423-8750 or e-mail