



A Message from Cardiology Associates, P.C.



Dear Colleagues,

Welcome to the third issue of our Cardiology Associates' Referring Physician Newsletter. Our June, 2010 issue addresses women's heart disease, or Coronary Artery Disease (CAD). This condition claims the lives of more American women than men each year, and below you will find a case discussion on this topic from our women's heart health specialist, Dr. Susan K. Bennett.

About the Author

Dr. Bennett has been a member of Cardiology Associates, P.C. since August, 1997. She is a board-certified consultative cardiologist with a special interest in women's heart health and echocardiography.

Dr. Bennett is a clinical assistant professor of medicine in the Division of Cardiology at the George Washington University Medical Center, in Washington, D.C. Dr. Bennett is also the Director of the Women's Heart Program at George Washington University Hospital. This outpatient facility provides comprehensive cardiovascular care to women in the D.C. area.

Additionally, Dr. Bennett is the Medical Advisor for WomenHeart: the National Coalition for Women with Heart Disease. She served as the Chair for the National Heart, Lung, and Blood Institute (NHLBI) Advisory Panel on Women and Heart Disease, which convened in March 2001. Dr. Bennett is past-president of the greater Washington-Area American Heart Association and national spokesperson for the American Heart Association (AHA).

CAD and Women: An Alarming Trend in Cardiology



PRESENTATION OF CASE

- Mary is a 60-year-old Caucasian woman with treated dyslipidemia and a family history of premature cardiovascular disease. She has never smoked.
- Mary has had slightly higher blood pressure readings recently. Despite simvastatin at 10mg, her total cholesterol is 277 mg/dl, HDL 68 mg/dl and LDL 188 mg/dl.
- Over the past year Mary has suffered from both

exertional and non-exertional chest pressure as well as a feeling of fatigue. The discomfort in her chest lasts for a few minutes and is not associated with nausea, shortness of breath or diaphoresis.

- Since her symptoms were not restricted solely to exertion, Mary was treated with OTC GERD medications with marginal relief.
- Three months ago Mary went to the ER with a stronger episode of chest pressure and received an ECG and serial cardiac enzymes. After she was stabilized, she was told that her symptoms were not cardiac.
- Based on the standard Framingham risk score - Mary's 10-year risk of myocardial infarction and CV death is only 3%. This risk score utilizes systolic BP, total cholesterol, HDL, age and smoking status - all of which were abnormal for Mary. However, it does not take family history into account, which increases this risk two fold.

- A week ago Mary received a sales call from a vendor that performs EBCT scoring and was offered a free test. Her total calcium score was 1168, which placed her in the 98th percentile for cardiac risk for women her age. She was referred to a cardiologist.

Mary underwent a nuclear stress test, which demonstrated anterior ischemia with exercise-induced symptoms. Cardiac catheterization showed significant 3-vessel CAD. Mary successfully underwent coronary artery bypass grafting, and is receiving emotional support from friends, family and WomenHeart: The National Coalition for Women with Heart Disease (www.womenheart.org). After a 12 week cardiac rehabilitation program, she will be joining a local WomenHeart support group.

DISCUSSION

This case underscores several important issues with women and heart disease:

- Since 1984, more American women have died of cardiovascular disease than men.
- Symptoms can be fairly typical in women. Although Mary experienced symptoms at rest, even early in her presentation, the severity of her symptoms falls within reason to be angina.
- Women often present with true angina and normal ECG's. Serial cardiac enzymes would not be expected to be elevated with short-lived symptoms that do not cause myocardial cell death, making stress testing with imaging the optimum next step to evaluate for CAD.
- Although risk scores have been developed with the expectation of successfully screening our patients, the Framingham risk score can significantly underestimate risk in women. More cardiologists are looking towards using a lifetime risk and including other important parameters of risk. (cme.medscape.com/viewarticle/576930)
- Family history of premature cardiovascular disease is a potent risk factor for men and women. If one parent develops heart disease early in his/her life, it raises risk of cardiovascular disease in their offspring by 200%. If both parents experience an early onset, the risk of premature cardiovascular disease in their children goes up even higher. (See Figure A).

Odds ratios for offspring CVD over eight years by presence of premature parental CVD

Model adjustments	Paternal CVD	Maternal CVD	Both	One or both parents
Men age-adjusted	2.7	2.4	3.1	2.6
Men multivariable-adjusted	2.2	1.7	2.4	2.0
Women age-adjusted	2.8	2.3	4.1	2.3
Women multivariable-adjusted	1.7	1.7	2.8	1.7

Lloyd-Jones DM et al. JAMA 2004; 291:2204-2211.

Figure A

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We are offering you this monthly newsletter as a way to provide cardiovascular news and update you on developments within our field. For your convenience, we are distributing our newsletter via e-mail. Visit our site at (www.heartcapc.com) and click the Referring Physician Newsletter link at the upper left corner of our home page. You will receive an e-Newsletter every month featuring an article or a case report from one of our physicians and links to other sources featuring new trends in the field of cardiology. Our focus will be on real questions and issues that we encounter in our day-to-day medical practice. In fact, if there is a topic that is of particular interest to you (or a question that is related to any of our articles) please e-mail your inquiries to our Project Manager, Nazar Snihur at nsnihur@heartcapc.com. (Of course, we will not share your e-mail address outside of our offices.)

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