Hypogonadism Red Flags Cardiac Risks in Elderly

BY NANCY WALSH
New York Bureau

MONTRÉAL — Hypogonadism should be considered a risk factor for cardiovascular disease in older men, Dr. André T. Guay said at a congress sponsored by the Canadian Society for the Study of the Aging Male.

He based that conclusion on an analysis of testosterone levels in 154 men (mean age 55.5) seen at the andrology and endocrine units of the Lévyandré Ci clinic of the Lévy Clinic Medical Center, Peabody, Mass., where Dr. Guay is an endocrinologist.

Overall, 25% of the men had hypogonadism, defined as a free testosterone level below 10 pg/mL. Among men with low testosterone, 92.9% had insulin resistance, compared with 25.2% of those without low testosterone levels. High rates of metabolic syndrome also were seen among hypogonadal men, using both the National Cholesterol Education Program (NCEP) criteria and the more stringent World Health Organization criteria for metabolic syndrome. (See box.)

In a previous study, 91% of the cohort of men seen in the endocrine unit had risk factors. A total of 9 of the 10 risk factors plus age and systolic blood pressure were significantly associated with low testosterone levels, Dr. Guay said.

The study findings suggest that when patients present with ED, you should immediately look for major cardiac risks and either treat or refer for treatment. It also may be that we should be checking the testosterone level in every man with ED, he said at the congress, which was cosponsored by the International Society for the Study of the Aging Male.

Algorithm Refines Cardiac Risk Assessment in Women

BY MARY ANN MOON
Contributing Writer

A new, much more accurate clinical algorithm for predicting cardiovascular risk in women has been developed and validated by investigators in the Women’s Health Study.

The new method reclassified approximately half of women who had been previously categorized as intermediate risk into either low-risk or high-risk categories. If the new algorithm were applied to a representative population of 100,000 U.S. women who are now considered to be at intermediate risk, it would reclassify 12,500 of them as low risk, 48,500 as low to moderate risk, 5,400 as high risk, researchers reported.

“About half of women who had been at intermediate risk according to the Reynolds Risk Score were reclassified as being at either lower or higher risk. Of these 681 reclassified subjects, all but 93 were placed into more accurate risk categories, based on their 10-year clinical outcomes,” reported the investigators.

Among subjects who did not have diabetes, approximately 50% who had been classified as being at intermediate risk by traditional criteria were reclassified as being at either lower or higher risk. Of these 722 reclassified subjects, all but 1 were placed into more accurate risk categories (JAMA 2007;297:613-9).

Similar results were obtained using the simplified model B, which the researchers have termed the Reynolds Risk Score. For the 647 subjects without diabetes who were reclassified using model B, all but 6 were placed into more accurate risk categories, they said.

The Reynolds Risk Score uses these eight clinical markers to predict risk: age, systolic blood pressure, hemoglobin A1c if the patient is diabetic, current smoking status, total and HDL cholesterol levels, high-sensitivity C-reactive protein, and parental history of MI before the age of 60.

“A user-friendly calculator for the Reynolds Risk Score can be freely accessed at www.reynoldsriskscore.org,” the investigators added.

Homocysteine, fibrinogen, soluble intercellular adhesion molecule 1, and creatinine measures did not add to the accuracy of MI risk prediction, the investigators said.

The researchers cautioned that since the study subjects were predominantly white, well-educated women, these findings may not be generalizable to other populations.

Link Between Metabolic Syndrome, Heart Disease Is Weak in Women

BY PATRICE WENDLING
Chicago Bureau

NEW ORLEANS — Despite having a higher incidence of metabolic syndrome, women had less obstructive coronary artery disease in a study of 468 patients who presented for elective cardiac catheterization.

Nondiabetic women were significantly more likely to have metabolic syndrome than were their nondiabetic male counterparts (52% vs. 28%), although nondiabetic men had a significantly greater percentage of coronary artery disease (CAD) (42% vs. 18%). Dr. Andrew Weissman and colleagues from Lenox Hill Hospital in New York City reported their findings in a poster at the Southern regional meeting of the American Federation for Medical Research.

The results call into question whether lower cutoffs should be used to identify metabolic syndrome in women or whether the presence of metabolic syndrome itself is truly a risk factor for coronary artery disease, Dr. Weissman said in an interview.

“Almost all of the markers that we measured for metabolic syndrome in women were higher in men than in women, and we found a higher percentage of women in whom CAD was present, Dr. Weissman said.

Also, 41% of the men had metabolic syndrome, according to the NCEP criteria, compared with 24% of the general population. Insulin resistance was found in 79%, compared with a 25% incidence in the general population. These findings suggest that insulin resistance may be an early warning sign of cardiac disease, he said.

The new findings on hypogonadism go beyond this link to suggest that low testosterone also may be associated with underlying cardiovascular disease, according to Dr. Guay.

Several large reviews have indicated that men with low testosterone have increased cardiovascular risks, with a high incidence of metabolic syndrome and insulin resistance, the investigators added. "There are associations, but that doesn’t necessarily prove cause and effect," Dr. Guay said in an interview.

However, he added, “we know that testosterone can positively affect endothelial function, increasing blood flow, and we know that even acute stimulation of testosterone can decrease insulin resistance, which is the basis of the metabolic syndrome and many chronic diseases. Testosterone must therefore have a protective effect on the vascular lining where atherosclerosis begins.”

Dr. Weissman said the study suggests that when patients present with ED, you should immediately look for major cardiac risks and either treat or refer for treatment. It also may be that we should be checking the testosterone level in every man with ED, he said at the congress, which was cosponsored by the International Society for the Study of the Aging Male.