Adrenal sex hormone level may predict heart disease risk

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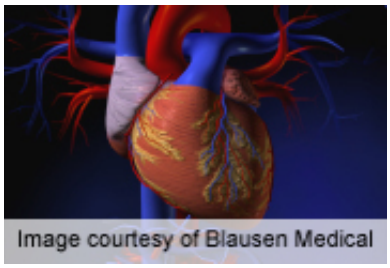
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(HealthDay)—Blood levels of the adrenal sex hormone dehydroepiandrosterone (DHEA) and its sulfate (DHEA-S) may predict an increased risk of coronary heart disease (CHD) in elderly men, according to a study published in the Oct. 28 issue of the *Journal of the American College of Cardiology*.

Åsa Tivesten, M.D., Ph.D., from University of Gothenburg in Sweden, and colleagues used gas and liquid chromatography-mass spectrometry to analyze baseline levels of DHEA and DHEA-S in a prospective cohort study (2,416 men; aged 69 to 81 years). Swedish national registries were used to evaluate cardiovascular clinical outcomes.

The researchers found that over five years of follow-up, 302 participants had a CHD event, while 225 had a cerebrovascular disease (CBD) event. There was an inverse association between both DHEA and DHEA-S levels and the age-adjusted risk of a CHD event (hazard ratios, 0.82 and 0.86, respectively). For risk of CBD events, though, DHEA/-S had no statistically significant association. Even after adjustment for traditional cardiovascular risk factors, serum total testosterone and estradiol, C-reactive protein, and renal function, the association between DHEA and CHD risk remained significant. It also remained so after exclusion of the first 2.6 years of follow-up (an attempt to reduce reverse causality).

"Low serum levels of DHEA and its sulfate predict an increased risk of CHD, but not CBD, events in elderly men," the authors write.

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