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Cytotoxic Testicular Cancer Treatment May Raise CVD Risk

Long-term cardiovascular disease risk higher in men who receive radiation, chemotherapy

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FRIDAY, Sept. 24 (HealthDay News) -- Men who receive chemotherapy, radiotherapy (RT), or a combination of the two as treatment for testicular cancer (TC) may be at increased long-term risk for cardiovascular disease (CVD), according to research published online Sept. 20 in the *Journal of Clinical Oncology*.

Hege S. Haugnes, M.D., of the University of Tromsø in Norway, and colleagues conducted a follow-up study in 2007 to 2008 of 990 men treated for unilateral TC in 1980 to 1994, grouped into surgery (206), RT only (386), chemotherapy only (364), and combination RT/chemotherapy (34). Their objective was to determine the prevalence of cardiovascular risk factors and incidence of CVD in this patient population, matched with 990 controls.

The researchers found that all groups receiving cytotoxic treatment had a significantly higher prevalence of antihypertensive medication use, and survivors in the RT and RT/chemotherapy group had a greater prevalence of diabetes compared with controls. Atherosclerotic disease occurred in 74 TC survivors (8 percent) during the median 19 years' follow-up. In age-adjusted analyses, the researchers observed higher risks for atherosclerotic disease after any cytotoxic treatment than after surgery (odds ratios: RT, 2.3; chemotherapy, 2.6; RT/chemotherapy, 4.8). Subjects treated with cisplatin, bleomycin, and etoposide (BEP) alone carried a risk of coronary artery disease 5.7-times higher than surgery only and a 3.1-fold higher risk for myocardial infarction compared with controls.

"Treatment with infradiaphragmatic RT and/or cisplatin-based chemotherapy, particularly the BEP regimen, increases the long-term risk for CVD in survivors of TC," the authors write.

Abstract
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