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PROSTATE CANCER

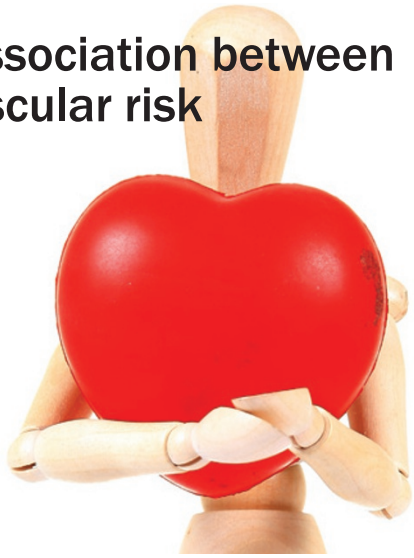
Unmeasured variables may confound the association between androgen deprivation therapy and cardiovascular risk

A new study has suggested that the association between androgen deprivation therapy (ADT) and increased cardiovascular risk, which has been described in previous reports, has been confounded by unmeasured variables.

In their paper in the *Journal of Clinical Oncology,* the researchers—led by Matthew Cooperberg—selected 7,248 men with biopsy-proven prostate cancer from the CapSURE database. The patients received different types of treatments: local therapy (surgery or radiation) alone, ADT (either alone or in combination with local therapy) and watchful waiting or active surveillance. Men who received ADT therapy were older, had more comorbidities (such as hypertension, heart disease and diabetes), and had greater cancer risks than those who received local therapy alone. Men who were under active surveillance were also older and had more comorbidities than those receiving local therapy alone; however, they had similar cancer risks to those treated with local therapy only. The mortality outcomes were reported after a mean follow-up duration of 47.6–57 months (depending on the type of treatment).

Comparison of cause of death and treatment type showed that ADT (alone or in combination with local therapy) was associated with an increase in cardiovascular mortality of almost two-fold, compared with local therapy alone. Surprisingly, patients who were under active surveillance had even higher (more than two-fold) cardiovascular mortality than patients treated with ADT. The fact that the active surveillance and ADT therapy groups had similar baseline demographics and comorbidity status suggested that other factors are involved. To control for these factors the researchers performed propensity-matched analysis, which failed to show an increased cardiovascular risk with ADT therapy.

The authors conclude that their inability to identify an association between ADT use and cardiovascular risk suggests that previous studies that found an association may have been confounded by unmeasured variables.



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