Race and mortality risk after radiation therapy in men treated with or without androgen-suppression therapy for favorable-risk prostate cancer.

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Abstract

BACKGROUND: African American (AA) men are more likely than non-AA men to have a comorbid illness that could interact with androgen-deprivation therapy (ADT) and shorten survival. This study assessed the impact that race had on the risk of all-cause mortality (ACM) and other-cause mortality (OCM) among men definitively treated for favorable-risk prostate cancer (PC).

METHODS: Between 1997 and 2013, 7252 men with low-risk or favorable intermediate-risk PC were treated with brachytherapy with neoadjuvant ADT (n = 1501) or without neoadjuvant ADT (n = 5751) for a 4-month median duration. Cox and Fine-Gray multivariate regressions were used to analyze whether the risk of ACM and OCM increased among AA men versus non-AA men receiving ADT; adjustments were made for the age at brachytherapy, year of brachytherapy, cardiometabolic comorbidity status, risk group, and ADT treatment propensity score.

RESULTS: After a median follow-up of 8.04 years, 869 men (12.0%) died: 48 (5.52%) of PC and 821 (94.48%) of other causes. There was a significant association between AA race and an increased risk of both ACM (adjusted hazard ratio [AHR], 1.77; 95% confidence interval [CI], 1.06-2.94; P = .028) and OCM (AHR, 1.86; 95% CI, 1.08-3.19; P = .024) among AA men versus non-AA men who received ADT but not among those who did not receive ADT (AHR for ACM, 1.33; 95% CI, 0.93-1.91; P = .12; AHR for OCM, 1.39; 95% CI, 0.96-2.02; P = .08).

CONCLUSIONS: ADT use may shorten survival in AA men with favorable-risk PC; therefore, its reservation for the treatment of higher risk PC, for which level 1 evidence supports its use, should be considered. Cancer 2016;122:3608-14. © 2016 American Cancer Society.

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