Alcohol Consumption and Cardiovascular Disease Mortality in Hypertensive Men

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Background  Heavy alcohol drinking is associated with a dose-dependent increase in blood pressure, but data on the relation between alcohol consumption and mortality in hypertensive patients are sparse.

Objective  To assess the relation between light to moderate alcohol consumption and total mortality from cardiovascular disease (CVD) among men with hypertension.

Participants and Design  From the Physicians' Health Study enrollment cohort of 88,882 men who provided self-reported information on alcohol intake, we identified a group of 14,125 men with a history of current or past treatment for hypertension who were free of myocardial infarction, stroke, cancer, or liver disease at baseline.

Main Outcome Measure  Comparison of total and CVD mortality among men with hypertension who had reported to be either nondrinkers or rare drinkers, or light to moderate drinkers.

Results  During 75,710 person-years of follow-up, there were 1018 deaths, including 579 from CVD. Compared with individuals who rarely or never drank alcoholic beverages, those who reported monthly, weekly, and daily alcohol consumption, respectively, had multivariate adjusted relative risks (RRs) for CVD mortality of 0.83 (95% confidence interval [CI], 0.62-1.13), 0.61 (CI, 0.49-0.77), and 0.56 (CI, 0.44-0.71) (P<.001 for linear trend). In the same groups, RRs for total mortality were respectively 0.86 (CI, 0.67-1.10), 0.72 (CI, 0.60-0.86), and 0.73 (CI, 0.61-0.87) (P<.001 for linear trend). Among men with a systolic blood pressure of 140 mm Hg or higher or a diastolic blood pressure of 90 mm Hg or higher, the RRs for CVD mortality were, respectively, 1.00 (referent), 0.82 (CI, 0.56-1.21), 0.64 (CI, 0.48-0.85), and 0.56 (CI, 0.42-0.75) (P<.001 for linear trend). On the other hand, we found no significant association between moderate alcohol consumption and cancer mortality (P = .8 for linear trend).

Conclusion  These results, which require confirmation in other large-scale studies, suggest that light to moderate alcohol consumption is associated with a reduction in risk of total and CVD mortality in hypertensive men.