

ERSD, heart disease and African-Americans with hypertensive nephrosclerosis

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For most patients with chronic kidney disease (CKD), the risk of experiencing a cardiovascular related death is greater than the risk of progressing to end-stage renal disease (ESRD). According to research being presented at the American Society of Nephrology's 41st Annual Meeting and Scientific Exposition in Philadelphia, Pennsylvania, African Americans with CKD caused by high blood pressure (hypertensive nephrosclerosis) demonstrated a higher risk of progressing to ESRD than dying from heart disease related events.

Tahira Alves, MD, of Vanderbilt University in Nashville, Tennessee, will present the cardiovascular and renal results from the AASK (African American Study of Kidney Disease) Cohort Study (2002-2007), which followed the original AASK Trial (1996-2001). Of 1,094 eligible patients from the original AASK Trial, 691 were enrolled in the subsequent AASK Cohort study. The patients received intensive follow-up to keep their blood pressure at a target level of less than 130/80 mm Hg (millimeters of mercury). The average age at the start of the study was 55 years.

During 11 years' follow-up, the patients were at higher risk of progressing to ESRD than of experiencing cardiovascular disease events such as myocardial infarction (heart attack). For each 100 "patient-years" of follow-up, there were four cases of ESRD (permanent loss of kidney function requiring dialysis or transplantation). By comparison, the rate of cardiovascular disease events was 3.2 per 100 patient-years.

The risk of death from cardiovascular disease was 0.8 per 100 patient-years. Of 74 deaths that occurred during the Cohort period of the AASK Study, more than 60 percent were from causes other than cardiovascular disease.

The finding that ESRD risk is higher than cardiovascular risk for African Americans with hypertensive nephrosclerosis is in direct contrast to what has been previously reported in other CKD populations. "The AASK trial and the subsequent cohort study allow the medical community to gain a broader understanding of incident cardiovascular disease and mortality during long-term follow-up in an entirely African-American population with nondiabetic hypertensive nephrosclerosis," comments Dr. Alves.

The findings are limited by the fact that the primary goal of the AASK trial was to detect changes in kidney function, ESRD, and/or risk of death. Cardiovascular events were measured as a secondary outcome.

The results may provide additional insight into the relationship between high blood pressure and kidney disease in African Americans, as well as some of the reported racial differences in the rates and outcomes of ESRD. "The study is timely given the increased recognition of medical health disparities observed among African American patients," Dr. Alves adds. "This type of information is needed if solutions are to be sought at the clinical and policy levels."

Source: American Society of Nephrology

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