

## **Electron Beam CT finds ethnic differences in heart disease mortality**

4/20/2006

Minority ethnic groups have higher baseline coronary artery calcium (CAC) scores and a greater mortality risk compared to non-Hispanic whites, according to a study presented at the 2006 American College of Cardiology (ACC) meeting in Atlanta.

"A more aggressive strategy, especially in ethnic minorities ... should be initiated with a lower threshold for initiation of targeted care, considered even for those patients with mildly abnormal CAC scans," said presenter Leslee Shaw, Ph.D., an associate professor at the Cedars-Sinai Research Institute in Los Angeles.

In the observational study, 14,812 asymptomatic individuals were referred by their primary care physicians for electron beam computed tomography (EBCT) screening for CAC. The study population was "a typical California population" of primarily non-Hispanic whites, but included 637 African Americans, 1,065 Asians, and 1,334 Hispanics.

In the 10-year follow-up after CAC scanning, 510 deaths from any cause occurred. Overall survival was 96% for Asians, 93% for Hispanics, 92% for non-Hispanic whites, and 83% for African Americans.

Death from coronary heart disease was significantly correlated with race in a multivariate analysis, and race continued to be an independent predictor after adjustment for CAC scores, according to Shaw.

Higher CAC scores were significantly associated with mortality in all racial groups but especially in the minority groups. The risk from higher CAC scores was highest for African Americans, and consistently so with increasing CAC score.

African Americans had a relative mortality risk of 16.1-24.3 compared to 7.9-9.0 for Hispanics for the same CAC score of 400. Asians with CAC scores above 1,000 had a 6.6-fold increase in risk compared to non-Hispanic whites with the same score. Both were significant findings.

This study suggested that "atherosclerotic burden may be responsible for accelerated mortality in minority populations," Shaw said. Clinicians should "be more attuned to ethnicity" in looking at cardiovascular risk, she added.