

Coronary calcification independently predicts all-cause mortality

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By: Reuters Health

NEW YORK (Reuters Health), May 4 - The coronary artery calcification (CAC) score, measured by electron beam tomography, provides incremental information independent of traditional risk factors on all-cause mortality risk, results of a study published in the May 8th issue of the *Journal of the American College of Cardiology* indicate.

Dr. Matthew J. Budoff, of Harbor-UCLA Los Angeles Biomedical Research Institute, Torrance, CA, and colleagues conducted an observational outcome study of a cohort of 25,253 consecutive patients referred by their primary physicians for CAC measurement.

Overall, CAC scores ranged from 0 in 44% of the subjects to over 1000 in 4%. The mean duration of follow-up was 6.8 years, during which time there were 510 deaths (2%).

The CAC independently predicted mortality in a multivariable model controlling for age, gender, ethnicity, and cardiac risk factors, the investigators found.

Compared to a CAC of 0, adjusted relative mortality risk ratios ranged from 2.2 for a CAC score of 11-100, up to 12.5 with a score greater than 1000.

After adjustment for risk factors, 10-year survival was 99.4% for a CAC score of 0 compared with 87.8% for a score greater than 1000 ($p < 0.0001$).

"This large observational data series strongly indicates that CAC is an independent estimator of all-cause mortality," Dr. Budoff and colleagues conclude.