

## Visualizing coronary artery calcium may improve patient compliance

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By: Reuters Health

NEW YORK (Reuters Health), May 1 - Asymptomatic patients at high risk for cardiovascular disease (CVD) who are able to see the calcium deposited in their coronary arteries (CAC) are more apt to take lipid-lowering drugs and to alter their behavioral risk factors, new study findings suggest.

Even though the benefits of lipid-lowering agents are well known, they are not used as often as they should be among at-risk patients, Dr. Matthew J. Budoff and colleagues note in their report, published in the April issue of *Atherosclerosis*.

The research team performed electron beam tomography (EBT), which shows CAC as bright white spots in their coronary arteries. Patients with baseline CVD, those with interim cardiac events, and those who weren't prescribed a statin were excluded.

The remaining 505 subjects completed questionnaires regarding risk factors at baseline and three years later, and were stratified according to CAC score quartiles.

The results showed that "seeing is believing." Among patients in the first quartile, 52% adhered to statin therapy, which increased to 91% in the fourth quartiles, ( $p = 0.0001$ ). Dietary modification increased from 41% among those with the lowest CAC score to 64% among those with the highest ( $p = 0.001$ ).

Similar patterns were observed among subjects who smoked or who had hypertension, diabetes, or a family history of coronary heart disease. After adjusting for these confounders, subjects in the highest quartile were 10 times more likely to persist with lipid-lowering therapy compared with those in the first quartile.

Dr. Budoff, from the Harbor-UCLA Medical Center in Torrance, CA, and his team "believe that the improved adherence in our study reflected a change in the patients' (and their physicians') perceived threat of their atherosclerotic disease after their EBT test."