



Imaging

INCREASED CORONARY VESSEL REMODELING AS MEASURED BY CORONARY COMPUTED TOMOGRAPHY ANGIOGRAPHY IS ASSOCIATED WITH ABNORMAL SERUM BIOMARKERS

ACC Moderated Poster Contributions
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Background: Increased positive remodeling of coronary arterial segment can be measured by coronary computed tomography angiography (CCTA) and has been associated with increased adverse cardiac event risk.

Methods: 377 asymptomatic patients in the High Risk Plaque study were evaluated using CCTA. Using a 16-segment convention for the coronary tree, the presence of high positive remodeling index (defined as ≥ 2 segments per patient with positive remodeling) was evaluated and associated with serum biomarkers, including lipids, glucose and albumin-globulin ratio.

Results: Of 377 patients, 152 had high positive remodeling, 162 had low positive remodeling, and 63 had no plaques. Patients with high positive remodeling had higher total cholesterol, higher LDL and lower HDL levels (Figure). There was no difference in the levels of triglycerides, albumin-globulin ratio, or glucose across all groups. Patients with high positive remodeling had an overall higher CV risk by Framingham Risk Score than patients with low positive remodeling (14.76 ± 8.0 vs 11.56 ± 5.76 , $p < 0.01$).

Conclusion: Increased coronary vessel remodeling, as determined by CCTA, is associated with abnormal serum lipids and increased Framingham Risk in asymptomatic

