

003. Predictive value of epicardial fat volume for the presence of significant coronary artery disease

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Purpose

Is to test sensitivity, specificity, positive and negative predictive values of Epicardial Fat Volume (EFV) to identify presence of significant CAD.

Methods

This was a cross-sectional study of 121 consecutive patients (69 males, 52 female aged 50 ± 12 years) who underwent 64 slice- CT coronary angiography between 2014 and 2016 in our institute We used a cutoff value of 125 cm^3 to differentiate between normal and increased EFV. CAD was considered significant with coronary artery stenosis $\geq 50\%$.

Results

There was a strong positive correlation between EFV and significant CAD ($r = 0.59$, $P < 0.01$), The sensitivity, specificity, negative, and positive predictive values of EFV in presence of significant CAD were 72.2%, 94.7%, 90.7%, and 100% respectively.

Conclusions

Up to our knowledge, this is the first study demonstrating that EFV has strongly positive correlation and high predictive value, independent of other risk factors and anthropometric measures, with the presence of significant CAD.