201 Association between mitral annular calcification and coronary artery disease
H.G. Chu, R.Q. Guo, S.M. Wang, Renmin Hospital, Wuhan University, Department of Ultrasound, Wuhan, China

Objective: To determine whether there is an association between mitral annular calcification (MAC) and coronary artery disease (CAD).

Methods: 380 patients aged 65 years old underwent transthoracic echocardiography. MAC was defined as a calcium deposit visible on the mitral annular area using the 2D ultrasonic transducer. Maximal and external diameters were measured. The correlations for intra-operator variability were r = 0.86 (p < 0.001), r = 0.70 (p < 0.001) for anterior and posterior wall thickness and lumen and external diameters respectively.

Results: The ability of angiography to detect early atherosclerotic changes in the coronary arteries is limited by arterial remodeling. Failure to detect early atherosclerosis may represent a missed opportunity for pre-emptive treatment. The optimal method for detection of subclinical coronary atherosclerosis would be non-invasive and would focus on the arterial wall rather than the lumen. A recent study has shown that high resolution transthoracic echocardiography (HRTE) can be used to visualize and make accurate measurements of the proximal left anterior descending artery (LAD) wall. Moreover, these measurements differ between patients with coronary disease and normal volunteers.

Conclusions: We used HRTE to visualize and measure the LAD anterior and posterior wall thickness and vessel luminal and external diameters to determine the intra- and inter-operator variability of these measurements. Thirty volunteers without a history of cardiac disease underwent a HRTE assessment of their LAD by two different operators on three separate occasions.

Results: The correlations for intra-operator variability were r = 0.86 (p < 0.001), r = 0.70 (p < 0.001), r = 0.82 (p < 0.001), r = 0.76 (p < 0.001) and r = 0.70 (p < 0.001) for anterior and posterior wall thickness and luminal and external diameters respectively. The correlations for inter-operator variability were r = 0.68 (p < 0.001), r = 0.62 (p < 0.001) and r = 0.65 (p < 0.001) for anterior and posterior wall thickness and luminal and external diameters respectively.

Conclusions: HRTE measurement of the LAD vessel is reproducible within and between operators in normal volunteers. This technique therefore warrants further study as a potential screening modality for subclinical coronary atherosclerosis.

202 Coronal artery wall thickness of the left anterior descending artery using high resolution transthoracic echocardiography: an intra and inter operator variability

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203 Coronary flow reserve (CFR) for diagnosis of a significant left anterior descending artery stenosis: influence of coronary risk factors
L. Ascione, M. Acciaia, G. Granata, M. De Michele, C. Scarsa, A. D’Andrea, P. Capogrossi, B. Tuccillo, L. De Siena, E. Santini, Department of Cardiology, Naples, Italy; A. D’Andrea, Rome, Italy; B. Stabile, G. Rummo Hospital Division of Cardiology, Benevento, Italy; S. Granzano Hospital, Division of Cardiology, Naples, Italy

Background: A new acute coronary syndrome: "Left ventricular apical ballooning syndrome". Clinical and echocardiographic findings, response to provocative stress-echo and resolution to subacute myocardial infarction
M. Prvitali, S. Pagano, E. Baldini, L. Scorsato, R. Repetto, L. Turchi, Pavia, Italy; IRCCS Pol. S.Matteo-Pavia University, Cardiology, Pavia, Italy

Purpose: Ventricular apical ballooning syndrome (VABS) is an acute coronary syndrome mimicking ST-elevation myocardial infarction (STEMI) so far observed mainly in Japan, characterized by transient akinesia and dilation of the apex in absence of significant coronary disease, whose pathogenetic mechanisms are as yet unknown. In this study we describe the clinical and echocardiographic find-