The aerobic exercise program increased significantly exercise tolerance changing our therapeutic decisions. methods in the same patients (pts) provides additional information, capable of when used for the detection of viable myocardial tissue after myocardial infarction with dobutamine are both characterized by satisfactory sensitivity and specificity Tl 201 scintigraphy (Tl) with reinjection and dynamic stress echocardiography (DSE) N.T. Kouris1, D.D. Kontogianni2, M.D. Sifaki2, G.S. Goranitou2, E.M. Kalkandi 2, I15 pts with EF < 0.28 mcg/kg/min over 2min). RNV as well as ECHO was repeated at rest, 12 weeks after successful angioplasty. Five percent increase of regional ejection fraction (REF) by RNV was used as criterion for functional improvement of infarcted regions. By ECHO, viability was defined as improvement of wall thickening or contractile improvement of grade one or more, utilizing wall motion score index (WMSI). Out of 180 examined (20x9) segments by RNV, 51 were dysysnergic and they had abnormal REF (29±10%). Out of these 51 segments functional improvement was documented in 33 on low DIPY. Sensitivity for predicting functional recovery after 12 weeks follow up was 63%, and specificity was 77%. WMSI assessed by ECHO was 1.35±0.22, 1.16±0.20 and 1.13±0.14 for rest, low DIPY and rest follow up, respectively (p<0.05). Sensitivity of low DIPY-ECHO for predicting functional recovery was 80% and the specificity was 90% (p<vs low DIPY-RNV). In conclusion, both techniques, RNV and ECHO are comparable diagnostic predictors of myocardial viability in medium term follow up.

The value of early ambulatory cardiac rehabilitation program after myocardial infarction on parameters of left ventricle in patients with left ventricular dysfunction. L. Elbl1, V. Chaloupka2, S. Nehyba1, J. Tomaskova2, P. Kala2, J. Schildberger3, B. Semrad2, 1Bnno, Czech Republic; 2University Hospital, Cardiopulmonary Cardiovascular Disease, Cardiology, Belgrade, Yugoslavia; 3Institute for Cardiovascular Disease, Cardiology, Belgrade, Yugoslavia. The purpose of the study was to compare diagnostic value of low dose diprydamole radionuclide ventriculography (DIPY-RNV) and low dose diprydamole echocardiography (DIPY-ECHO) for the prediction of functional recovery of viable myocardium in the medium term follow up. Twenty patients (18 male; 51±10 years) with previous myocardial infarction and resting dysysnergia were studied before angioplasty of infant related artery (IRA), by RNV and ECHO at rest, as well as during diprydamol infusion (0.28 mcg/kg/min over 2min). RNV as well as ECHO was repeated at rest, 12 weeks after successful angioplasty. Five percent increase of regional ejection fraction (REF) by RNV was used as criterion for functional improvement of infarcted regions. By ECHO, viability was defined as improvement of wall thickening or contractile improvement of grade one or more, utilizing wall motion score index (WMSI). Out of 180 examined (20x9) segments by RNV, 51 were dysysnergic and they had abnormal REF (29±10%). Out of these 51 segments functional improvement was documented in 33 on low DIPY. Sensitivity for predicting functional recovery after 12 weeks follow up was 63%, and specificity was 77%. WMSI assessed by ECHO was 1.35±0.22, 1.16±0.20 and 1.13±0.14 for rest, low DIPY and rest follow up, respectively (p<0.05). Sensitivity of low DIPY-ECHO for predicting functional recovery was 80% and the specificity was 90% (p<vs low DIPY-RNV). In conclusion, both techniques, RNV and ECHO are comparable diagnostic predictors of myocardial viability in medium term follow up.

The early ambulatory rehabilitation program (including isometric exercise) was to study changes in peak velocity of PSM II in the basal anteroseptal wall. Heart rate was 72±10/min during peak stress (88±10/min at the maximal heart rate). Exercise stress echo showed an improvement of the amplitude of the apically directed PSM II from 3.0±1.7 cm/s at rest to 7.9±2.6 cm/s during peak stress (p<0.001), mean increase of 4.9±2.0 cm/s. In the subgroup of patients with proven CAD the mean increase did not differ from that of the whole group. In 7 patients with a positive stress-echo (5 RCA, 1 LAD, 1 RCX territory) the mean increase was 5.3±1.8 cm/s (p<NS vs the whole group).

Conclusions: Peak velocity of the apically directed PSM II in the non-ischemic basal anteroventricular wall increases with approximately 160% during peak stress.

In conclusion, both techniques, RNV and ECHO are comparable diagnostic predictors of myocardial viability in medium term follow up.

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