
60 old myocardial infarction patients were divided two groups. One was given CoQ10 60mg/day (triple vessels disease 16, double vessels disease 3, single vessel disease 15), the other was control (triple vessels disease 15, double vessels disease 4, single vessel disease 13). Right and left ventricular functions were measured by radionuclide ventriculography before, six months after and one year after given CoQ10.

In single and double vessels disease, right and left ventricular functions were not changed through before, six months after and one year after given CoQ10. But in triple vessels disease, LVEF and LVET were significantly increased at six months after and one year after given CoQ10 and LVPEF/LVET was significantly decreased at one year after given CoQ10, compared with control. In triple vessels disease, left ventricular function was reduced at before, but in single and double vessels disease, left ventricular function was not so reduced. These suggested that CoQ10 was effective in myocardial infarction with reduced myocardial contractility.


12 patients having undergone 18 AC-bypass grafts surgery (12 LAD, 5CX, 1RCA) were studied by quantitative TI-201 stress imaging to assess the functional result of this intervention. All patients were studied pre and post AC-bypass graft, all within 4 weeks after surgery. All out of one AC-bypass graft were confirmed its patency by the post surgical coronary angiography.

In the preoperative study quantitative circumferential profile analysis of the early distribution (E-R) and wash-out ratio (W-R) detected individual coronary artery abnormality in 52%, 83% respectively. Using combined criteria, 96% of suffered coronary artery were detected individually. Post operative interpretation of the AC-bypass graft patency, when using E-R criteria alone, 8 of 17 were recognized of its improvement, but using W-R criteria 13 of 17, regional wash-out abnormality was seen with pre op studies and in the all region, regional wash-out was normalized in the post op studies. From our result, measurement of regional wash-out ratio was very useful tool for the detection of CAD and evaluation of AC-bypass graft patency.

53 RADIONUCLIDE EVALUATION OF TRANSLUMINAL CORONARY ANGIOPLASTY (TCA).

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The effect of TCA was evaluated by TI-201 myocardial imaging (TMI) and radionuclide (Tc-99m) ventriculography (RNVG) at rest and exercise before and after the procedure. Subjects were 52 patients (pts, mean 48 years) with angina and critical coronary stenosis (270%) at least in one major coronary artery. These pts were divided into 3 groups: group 1 consists of 36 pts with successful TCA, group 2, 6 pts who underwent AC bypass surgery because of unsuccessful TCA, and group 3, 10 pts with unsuccessful TCA and medical therapy. In group 1, average coronary stenosis was dilated from 81±8% (mean±SD), to 33±14%. Myocardial perfusion in computerized TMI 5-10 min after exercise expressed as vitality index increased from 73±8% to 80±12% (p<0.001) following TCA. RNVG showed statistically significant increase in EF, maximum left ventricular ejection rate divided by end-systolic and end-diastolic counts both in systole and diastole after the dilatation.

In group 2, these parameters showed comparable improvement after surgery. In group 3, however, no significant changes were noted.

We conclude that TCA improves both coronary perfusion to ischemic areas supplied by critical coronary artery stenosis and left ventricular function, if luminal diameter is dilated by more than 20%.