COMPARATIVE EFFECTS OF PTC A AND CABG ON INFARCTED MYOCARDIUM

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Increased myocardial perfusion by PTC A and CABG on infarcted site was evaluated by exercise Tl-201 myocardial imaging (T1-IM) and left ventriculography (LVC). Twenty patients with single vessel disease were classified into 4 groups. Twelve patients underwent PTC A (Group II) consisted of 8 patients with regional hypo perfusion and redistribution (Ia), and 4 patients without redistribution (Ib). Eleven patients underwent CABG (Group III) consisted of 7 patients with redistribution (IIa) and 4 patients without redistribution (IIb). By T1-IM, regional uptake ratio (RUR) was measured in both groups the improvement of myocardial perfusion is pararell to that of wall motion abnormality.

INDICATION OF PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY (PTCA) FOR OLD MYOCARDIAL INFARCTION

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We assessed the viability of old myocardial infarction (MI) before PTCA and examined the grade of ischemia before and after PTCA. 23 patients with old MI who had successful PTCA were studied. PTCA were done after 51 to 850 days of acute MI. The viability before PTCA was assessed by the presence of angina pectoris, stress Tl-201 scintigraphy, treadmill stress test and left ventriculography.

In 20 of the 23 patients the viability was confirmed by the chest pain or the change of ST segment during PTCA. In 20 patients who had the viability, we could assess the viability in 70% by stress Tl-201 scintigraphy, in 55% by treadmill stress test, in 75% by left ventriculography and in 100% by any of these three examinations after PTCA. All in 12 patients with old angina pectoris before PTCA have had no angina pectoris after PTCA. The improvement of the grade of the ischemia were observed in 78% of the patients who had the viability assessed by stress Tl-201 scintigraphy or treadmill stress test before PTCA.

Conclusion: PTCA is useful for OMI when the viability is assessed before PTCA. The viability should be assessed by the combination of several diagnostic methods.

HIGH-DOSE, SHORT-TERM INTRAVENOUS CORONARY RECANALIZATION (IVC R) AND PTC A BY UROKINASE (UK) IN ACUTE MYOCARDIAL INFARCTION: ASSESSMENT BY THALLIUM-201 EXERCISE MYOCARDIAL IMAGING. N. MABUCHI, K. NAKAGAWA, T. HAMADA, K. FUJII, M. KUMANO, O. ISHIDA, M. SHIMIZU, K. ISHIKAWA AND K. KATORI, KIN KI UNIVERSITY SCHOOL OF MEDICINE, OSAKA.

Twenty patients with single vessel disease of AMI were treated with Tl-201 myocardial imaging. Eight patients were treated by PTC A. Recanalization was angiographically recognized in these patients both in acute and chronic phases. In seven patients who were not treated by UK, recanalization was recognized in chronic phase. The washout rate of the center of diseased area was obtained. The development rate on defect scores was calculated from circumferential profile curves at 10 minutes and 3 hours after exercise. It was possible to distinguish the patterns of redistribution by the combination of washout rate and development rate. In IVC R-treated group, partial redistribution (PR) and incomplete redistribution (lR) were observed each in one patient. In PTC A-treated group, IR was observed in three patients. In non-UK group, PR and IR were observed each in one patient. The conclusion of this study was that Tl-201 scintigraphy for acute coronary thrombolysis (group I) and 25 on conventional therapy (group II). ZCK was calculated by serial measurement of serum creatine phosphokinase activities, and Tl-201 by circumferential profile analysis of Tl-201 myocardial imaging. LVEF closely correlated with both ZCR (r = 0.76) and Tl-201 (r = 0.83). There was a significant correlation between Tl-201 and ZCK in group II, although ZCK significantly correlated with Tl-201 in both groups, it tended to be smaller in group II than in group I for approximately equivalent Tl-201. In conclusion, it was suggested that Tl-201 was more useful to estimate infarct size than ZCK because the latter was strongly influenced by recanalization itself.