THE RELATIONSHIP OF EXERCISE TOLERANCE, GLOBAL/REGIONAL EJECTION FRACTION AND QRS SCORE IN ACUTE MYOCARDIAL INFARCTION.


We studied relationship between exercise tolerance measured by treadmill exercise test(TEX) and left ventricular function obtained from radionuclide ventriculography (RNV) and QRS score(Palmer et al) by 12 leads electrocardiography(ECG) in acute myocardial infarction(AMI).

The subjects were 27 patients with AMI (mean age of 59 years). The global EF(GEP) and regional EF(REF) which was infarction were measured by RNV at modified LAO view.

The correlation between QRS score and GEF, REF were -0.67(p<0.01) and -0.70 (p<0.01), respectively. The correlation between QRS score and REF was more closely related than GEF. Exercise duration of TEX correlated with QRS score and GEP, significantly. Double product did not correlate with GEF. Significantly more patients with QRS score more than 5 were in left ventricular failure, and GEP<40% REF<30% compared with patients those QRS score of less than 5.

We conclude that QRS score reflected global and regional left ventricular function fairly well and was used as the bedside indicator of prognosis and rehabilitation in AMI.


To determine the effect of the first major septal branch on septal function, 12 old anterior myocardial infarction patients with coronary narrowing in segment 7(B) underwent Thallium-201 scintigraphy and ECG gated blood pool imaging.

There were no significant differences between A and B in terms of the septal uptake indices, global ejection fraction(G-EF), regional ejection fraction(R-EF) and R-EF/G-EF. Perfusion from the first major septal branch probably does not significantly affect septal function.