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APPLICATION OF WAVE INTENSITY AND ECHO-TRACKING TO EVALUATE CARDIOVASCULAR FUNCTION CHANGES IN PATIENTS WITH MYOCARDIAL INFARCTION

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Objectives to evaluate the changes of cardiovascular function and its clinical significance in patients of myocardial infarction (MI) with Wave intensity (WI) and Echo-tracking (ET) technique

Methods 59 patients with coronary artery disease diagnosed by coronary angiography were divided into 2 groups, A group of stable angina pectoris (n=38) and B group of myocardial infarction (n=21), these two groups and 27 healthy people were examined by WI, ET and routine examinations, the parameters of these groups were made comparison and linear correlation analysis

Results Compared with the normal group the elasticity modulus (Ep), stiffness parameter (β) and pulse pressure (PP) increased in A group; The intima media thickness (IMT) increased in two groups while B group became more thick. W1 W2 and NA decreased in B group compared with A group. In correlation analysis, W1 has significant positive relationship with W2, SBP, β , Ep and one-point pulse wave velocity (PWV β) while having negative relationship with R-W1; W2 correlated positively with NA, PP; NA also have positive relationship with PP

Conclusions wave intensity and Echo-tracking are effective non-invasive and simple ultrasonic techniques to evaluate the changes of cardiovascular function in patients with myocardial infarction which has clinical application value