PROTECTIVE EFFECTS OF PREINfarCTION ANGINA ON PATIENTS WITH ACUTE MYOCARDIAL INFARCTION UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION

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Objective To evaluate the protection effects of preinfarction angina (PA) on patients with first acute myocardial infarction (AMI) undergoing primary percutaneous coronary intervention (PCI).

Methods From 2009–2006 to 2010–2009, a total of 104 AMI patients undergoing emergency PCI within 12 h after symptom onset were enrolled in the study (74 male and 30 female). Each patient was assigned to without angina group (A group 38 cases), PA group (B group, 31 cases) according to occurrences of typical angina within 24 h before AMI and a group with angina but without PA (C group 35 cases). Coronary angiography was performed immediately after admission. Characteristics of lesion, infarction related artery (IRA), TIMI, spontaneous recanalisation and collateral circulation were recorded. Baseline clinical information of each patient was collected and compared. Echocardiography at 1 week and 3 month after PCI were performed.

Results There were no significantly differences in baseline clinical characteristics among the three groups (p>0.05). The peak value of CK-MB was higher in group A and group C than that in group B (266.12±197.49 vs 177.29±73.35 vs 232.31±90.93, p=0.001). The blood flow of the IRA before the stent implantation was lower in group A and group C than that in group B. The incidence of ventricular arrhythmia in the three groups was similar, and the score of ventricular arrhythmia in group B was lower than that in group A and C (42 vs 29 vs 38,
There was no significantly difference in the value of BNP in the three groups (413.99±207.69 vs 302.49±146.73 vs 396.57±189.81, p=0.035). The value of BNP in group B was lower than that in group A and group B. There was a significantly difference in EF among the three groups (45.70±5.16 vs 51.37±4.45 vs 45.93±5.94, p=0.000) at 1 week after PCI, and EF in group A and group C was lower than that in group B. EF in group B and group C was higher than that in group A, group B was higher than group C at the thr month after PCI.

Conclusion Preinfarction angina can reduce the injury extent of myocardium in patients with first AMI undergoing primary PCI.