

(LVMI) was tested, myocardium pathology was made by hematoxylin and eosin stain, the level of type III precollagen and type IV collagen in serum were tested by radio-immunity method, the expression of type I and III collagen in ischemic myocardium were tested by immunohistochemical method.

Results compared with sham operation group, left ventricular mass and LVMI in model group increased significantly, the expression of type I, III collagen and type III precollagen increased significantly ($p < 0.01$). Compared with model group, the LVMI decreased significantly from 3.32 mg/g to 2.55 mg/g and level of type III precollagen decreased from 55.96 $\mu\text{g/l}$ to 45.61 $\mu\text{g/l}$ in Perindopril group. Moreover, the expression of type I, III collagen were inhibited in Perindopril group ($p < 0.05$, $p < 0.01$).

Conclusions Perindopril can play the role of protecting ischemic myocardium and inhibiting VR after AMI by decreasing the LVMI and expression of type III precollagen, inhibiting the expression of type I, III in rats.

[gw22-e0341]

THE PROTECTIVE EFFECT OF PERINDOPRIL ON MYOCARDIUM COLLAGEN DURING THE EARLY PHASE OF VENTRICULAR REMODELING AFTER ACUTE MYOCARDIAL INFARCTION IN RATS

Zhang Lei, Liu Jian-gang, Shi Da-zhuo Xiyuan Hospital, China Academy Of Chinese Medical Sciences, Beijing, China

10.1136/heartjnl-2011-300867.175

Objectives To investigate the protective effect of Perindopril on myocardium collagen during the early phase of ventricular remodeling (VR) after acute myocardial infarction (AMI) in rats.

Methods Sixty wistar rats were divided into four groups randomly: blank group, sham operation group, model group and Perindopril group. The AMI model was established by ligating the left anterior descending coronary (LAD) of the rat. Meanwhile, suture was penetrated around the left anterior but not tied in sham operation group. Intragastrical administration started from the next day after model establishment, once a day, lasting four weeks. The dosage of intragastrical administration in Perindopril group was 0.36 mg/kg, the other groups were given intragastrical administration with equivalent distilled water. After four weeks, left ventricular mass index