control rates (target blood pressure 90 mm Hg) were higher for aliskiren groups (300 mg, 52.46%; 150 mg, 49.82% and 75 mg, 45.91%) compared to ramipril (5 mg, 44.44%); and aliskiren 300 mg group was significantly superior to ramipril 15 mg group (p=0.0359).

The overall incidence of adverse effects (AEs) was similar among the treatment groups. The ramipril group had at least a four times higher incidence of cough (6.0%) compared with the three aliskiren treatments (ranging from 0.4% to 1.4%).

Conclusion Aliskiren was well tolerated, and superior or non-inferior to ramipril in lowering BP in Chinese patients with essential hypertension.

Methods From April 2004 to April 2008, based on the screening condition of male <55 years and female (<65 years), we selected premature coronary heart disease from a dedicated database of coronary angioplasty registry of the Center for Diagnosis & Treatment of Coronary Artery Disease, Fuwai Hospital. They had been subjected to coronary angiogram due to the angina pectoris or asymptomatic myocardial ischaemia in coronary heart disease.

Results 4478 consecutive patients (2056 males, 1422 females), average age was (49.7±7.0) years, were defined as coronary heart disease according to clinical manifestation and coronary angiogram. Patients with unstable angina pectoris (UAP), stable angina pectoris (SAP) and without angina pectoris were 2400, 1534 and 544, respectively. The proportion of coronary heart disease, hypertension, hyperlipidaemia, diabetic mellitus (DM), smoking history, prior myocardial infarction (MI), prior percutaneous intervention (PCI), coronary artery bypass graft and history of cerebrovascular diseases were 6.7%, 53.0%, 20.8%, 90.3%, 45.3%, 16.6%, 1.5%, 1.1%, respectively. The ratio of eccentric lesions, concentric lesions, chronic total occlusion lesions (CTO) and calcified lesions were 93.7%, 80% and 42.8%, respectively. Comparison between UAF and SAP, there was more MI, PCI, complex lesions (B2+C), eccentric lesions and calcium lesions among 3994 patients. There were more MI, PCI, DM, hyperlipidaemia, hypertension, cerebrovascular diseases, smoking, eccentric lesions complex lesions, anuglated lesions and calcified lesions in male than that in female (all p<0.05).

Conclusions The ratio of sex and clinical findings are different in Chinese Premature coronary heart patients. There were more MI, PCI, complex lesions, eccentric lesions and calcified lesions in UAP group, comparison between sexes, there were higher incidences of hypertension, hyperlipidaemia, cerebrovascular disease and smoking history in male.

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Conclusions The SKB technique is safety and efficacy for the special ostial LAD lesions, long-term follow-up and large volume patients study is needed to verify the initial results.

Materials and methods The subjects were 46 patients diagnosed or suspected CAD, including forty with angina, six with old myocardial infarction. Adenosine stress G-MPI were performed 90 min after injection of adenosine, and resting G-MPI performed in same day. All patients underwent coronary artery angiography within two weeks. Significant stenosis was defined when the coronary artery intraluminal stenosis ≥50%. Analyse the imaging and calculate the sensitivity, specificity and accuracy of adenosine stress G-MPI in diagnosing CAD and judging coronary artery stenosis. Do correlation analysis of left ventricular systolic function (left ventricular ejection fraction) between adenosine stress 99mTc-MIBI G-MPI and echocardiography.

Results The sensitivity, specificity, accuracy, positive predictive value and negative predictive value of adenosine stress 99mTc-MIBI G-MPI for the diagnosis of CAD were 87.0%, 85.7%, 86.6%, 93.8%, and 72.7% respectively. The sensitivity, specificity and accuracy for the diagnosis of LAD, LCX and RCA stenosis were 88.2%, 90.9%, 88.9%, 78.6%, 83.5%, 80.0%, 90.5%, 81.8%, 87.5% respectively. LVEF-G-MPI correlated with LVEF-UCG significantly, with a correlation coefficient of 0.855 (R = 0.0001).

Conclusions In Conclusion, stress adenosine 99mTc-MIBI G-MPI have provided better sensitivity, specificity and accuracy in the diagnosis of CAD, and is probably an accurate method for detecting coronary artery stenosis. It can be used in evaluating left ventricular function, especially for patients unsuited in the exercise MPI.

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e0356 THE RESEARCH ON CALCIUM HOMEOSTASIS EXPRESSION AND GENE TRANSCRIPTION OF ATRIAL MYOCYTES IN PATIENTS WITH ATRIAL FIBRILLATION

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Objective Inquire into the molecular biological mechanism of the occurrence and maintenance of atrial fibrillation (AF) by researching adjustment and control of the L-type passage and muscles sarcoplasmic reticulum (SR) Ca2+-the ATPase expression by main calcium ion (Ca2+) of AF and the sinus rhythm.

Methods We took 200 mg right auricle tissues and (or) left atrium tissues from each of the 63 patients undergoing cardiac surgery (including three groups: chronic AF, paroxysmal AF and sinus rhythm), extracted the protein and measured the density of overall sample protein, using Western-blot method to analyse the expression level of atria muscle L-type Ca2+ Passage and SR Ca2+-ATPase mRNA with RT-PCR method. Detailed clinical data were obtained before and after operation.

Results Firstly, left atrial diameter was obviously higher in patients with chronic AF or paroxysmal AF than in patients with sinus rhythm. Secondly, the patients with chronic AF have lower ratio of L-type Ca2+/GAPDH protein and SR Ca2+-ATPase/GAPDH protein than the group of sinus rhythm both in left atrium and right atrium with significant difference. Compared with sinus rhythm group, ratio of L-type Ca2+/GAPDH protein and SR Ca2+-ATPase/GAPDH protein in paroxysmal AF group decreased with no statistical significance. 3. Level of L-type Ca2+ and SR Ca2+-ATPase mRNA of the chronic AF group declined than sinus rhythm group both in left and right atrium with statistical differences.

Conclusion L-type calcium channel and SR Ca2+-ATPase mRNA and the amount of protein changed significantly in the patients with chronic AF and not significantly in paroxysmal AF group. There was statistical significance between left and right atrium.

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e0357 DIAGNOSTIC VALUE ADENOSINE STRESS 99mTc-MIBI GATED MYOCARDIAL PERFUSION IMAGING FOR CORONARY ARTERY DISEASE

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Objective Stress 99mTc-MIBI myocardial perfusion imaging (MPI) be useful in evaluating myocardial ischaemia and judging coronary artery stenosis. The purpose of this study was to evaluate the sensitivity, specificity and accuracy of adenosine stress 99mTc-MIBI gated myocardial perfusion SPECT (G-MPI) for the diagnosis of coronary artery disease (CAD).

Materials and methods All patients underwent adenosine stress 99mTc-MIBI G-MPI and exercise MPI. The sensitivity, specificity, accuracy of the diagnosis of CAD were 87.0%, 85.7%, 86.6%, 93.8%, and 72.7% respectively. The sensitivity, specificity and accuracy for the diagnosis of LAD, LCX and RCA stenosis were 88.2%, 90.9%, 88.9%, 78.6%, 83.5%, 80.0%, 90.5%, 81.8%, 87.5% respectively. LVEF-G-MPI correlated with LVEF-UCG significantly, with a correlation coefficient of 0.855 (R = 0.0001).

Conclusions In Conclusion, stress adenosine 99mTc-MIBI G-MPI have provided better sensitivity, specificity and accuracy in the diagnosis of CAD, and is probably an accurate method for detecting coronary artery stenosis. It can be used in evaluating left ventricular function, especially for patients unsuited in the exercise MPI.

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