CHD in Hainan Li and Han nationality. The higher TG level and the lower HDL-C level may be the risk factor in Hainan Li and Han nationality.

e0399 THE ACE GENE POLYMORPHISMS DISTRIBUTION STATUS IN HAINAN LI AND HAN PEOPLES WITH CORONARY HEART DISEASE

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[1]Yun Meiling, [2]Zhong Janghua, [3]Zheng Yin, [2]Zeng Yu, [2]Li Tianfa, [4]Zhang Yong. *[1]Affiliated Hospital; Hainan Medical College; [2]Affiliated Hospital Hainan Medical College; [3]Hainan Provincial Peoples Hospital; [4]Hainan Province Diseases of The Aged Hospital*

Objective To explore the significance of the ACE gene insertion/deletion (I/D) polymorphism in peoples of Hainan Li and Han nationality with coronary heart disease (CHD).
Methods Used the PCR to detect the polymorphisms of ACE gene insertion/deletion (I/D) in 150 patients with CHD and 150 healthy people from Hainan Han and Li nationality respectively. Observed the genotype frequencies and allele frequencies of DD, DI and II. Specific PCR detection was performed for patients who have been determined as DD by normal PCR to reduce misclassification rate. Meanwhile detected the blood lipid, the lipoprotein, the blood pressure, the blood sugar in all people. Used the multiple regression analysis to find out the risk factor in CHD patients.
Results The genotype frequencies of DD in the CHD group of Han and Li nationality are significantly higher than the control group of Han and Li ($p<0.05$). There were no significant differences in the genotype frequencies of DD, DI and II between the Han and Li with CHD. By the multiple regression analysis it shows: the genotype frequencies of DD in the CHD group of Han and Li nationality increased, the high density lipoprotein cholesterol (HDL-C) level in the CHD group of Han and Li nationality decreased. The triglyceride (TG) level in the CHD group of Han nationality increased.
Conclusions The genotype frequencies of DD are associated with CHD. The susceptibility of CHD in Han and Li nationality is the same. Increasing the HDL-C level can protect the CHD patients. The high level of TG is the independent risk factor in Hainan Han people with CHD.

e0400 MOBILISE AUTOLOGOUS BONE MARROW STEM CELLS TO REPAIR INFARCTED MYOCARDIUM

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Bo Wang, Xiaojuan Bai. *The First Affiliated hospital of China Medical University*

Objective Autologous bone marrow stem cells were mobilised and released by cytokines. On the basis of homing and injured micro-environment theories, we investigated the effective reparation of situ transplantation for acute myocardial infarction in rats.
Methods (1) We divided 60 Wistar rats into situ transplantation grouping and control group; To duplicate rat' acute myocardial infarction model by injection of drug; CK, LDH level were checked by automatic biochemistry analyser; (2) 30 Wistar rats were injected rhG-CSF 50 μg/kg.day; (3) We did a control analysis on pathological section between two groups by histological staining technique and computer graphic analysis; (4) Heart function were checked by polygraph system after AMI model 4 weeks.
Results (1) Serum cardiac enzymes were higher after AMI model 48 h than it before AMI model. We saw local necrosis region with grid and trabs shape in endocardium of left ventricular apex and papillary muscle; (2) The infarction size in situ transplantation group was smaller than one in control group; (3) The heart function parameters improved significantly in situ transplantation group compared with control group.
Conclusions (1) Rat's acute myocardial infarction model could be completed by injecting 10 mg/kg isoprenaline interaperitoneally; (2) Infarcted myocardium were repaired and heart function improved by using cytokines.

e0401 CHANGES OF INTRACELLULAR CALCIUM CONCENTRATION IN CARDIAC-LIKE MYOCYTES

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Wang bo, Bai xiaojuan. *The First Affiliated hospital of China Medical University*

Objective To study the effects of verapamil, endothelin on $[Ca^{2+}]_i$ in cardiac-like myocytes derived of bone marrow mesenchymal stem cells.
Methods (1) Bone marrow mesenchymal stem cells and cardiac myocytes were cultured by primary method; (2) Bone marrow mesenchymal stem cells differentiated into cardiac-like myocytes by 5-azacytidine induction agent; (3) We divide our test into three groups, including the first generation bone marrow mesenchymal stem cells, cardiac-like myocytes and cardiac myocytes; (4) The alteration of $[Ca^{2+}]_i$ affected by verapamil, endothelins was observed with $[Ca^{2+}]_i$ fluorescence imagine system in bone marrow mesenchymal stem cells, cardiac-like myocytes and cardiac myocytes.
Results (1) Cardiac myocytes were set up through trypsogen digestion method; (2) The alteration of $[Ca^{2+}]_i$ affected by verapamil was observed with $[Ca^{2+}]_i$ fluorescence imagine system. There was a same trend of variability between cardiac-like myocytes and cardiac myocytes, but no changes in bone marrow mesenchymal stem cells; (3) The alteration of $[Ca^{2+}]_i$ affected by endothelin was observed with $[Ca^{2+}]_i$ fluorescence imagine system. There was a same trend of variability that fluorescence intensity gradually strengthened with intervention time extended.
Conclusions After affected by verapamil and endothelins, there was a same trend of $[Ca^{2+}]_i$ changes between cardiac-like myocytes from bone marrow mesenchymal stem cells and cardiac myocytes. It shows that some common electrophysiological characteristics exist in cardiac-like myocytes and cardiaomyocytes.

e0402 THE EXPRESSION AND RELATION OF THE VITAMIN D3 UP-REGULATED PROTEIN 1 IN PERIPHERAL BLOOD MONONUCLEAR CELLS FROM PATIENTS WITH CORONARY ARTERY DISEASE

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Shui Xing, Wu Zhen. *The Third Affiliated Hospital of Sun Yat-sen University*

Aims Vitamin D3 up-regulated protein 1(VDUP1) is a stress-response gene and participates in oxidative stress, inflammation, apoptosis, proliferation, glucose homeostasis and lipid metabolism. All of these biological effects play important roles in atherosclerosis. Hence, we made an attempt to study the gene expression of VDUP1 using PBMCs from patients with coronary artery disease (CAD).
Methods The total RNA of PBMCs were acquired from 20 normal persons without history of cardiovascular disease and 72 patients with CAD. The CAD group was divided into 6 subgroups judged by following risk factor. The subgroup 1 was patient without hyperlipidaemia, hypertension and diabetes. The subgroup 2 was patient with hypertension only. The subgroup 3 was patient with hyperlipidaemia only. The subgroup 4 was patient with diabetes only. The subgroup 5 was patient with hyperlipidaemia plus hypertension.