than normaltherapy group (562 m vs 513 m, $p<0.05$) at 3 months after operate. Still after 6 months, the left ventricular ejection fraction were more higher in Buchang group than normaltherapy group (65.3% vs 60.8%, $p<0.05$). 6 miniters walk distance test were more higher in Buchang group than normaltherapy group (541 m vs 502 m, $p<0.05$). Moreover after 3 months, the level of sCD40L were lower in Buchang group than normaltherapy group (2.23 ng/ml vs 2.62 ng/ml, $p<0.01$), the numbers of EPCs were more in Buchang group than normaltherapy group (37.1 ± 5.8 vs 32.4 ± 4.6 , $p<0.05$).

Conclusion These study suggested that Danhong injection combined naoxintong pills could decreased sCD40L level, increased EPCs level, improved cardia function at ACS patients with PCI therapy, It was worthy for deeply research.

e0317 COMPARATIVE EFFECTIVENESS OF RENIN ANGIOTENSIN SYSTEM BLOCKADES PLUS CCBs OR DIURETICS FOR ESSENTIAL HYPERTENSION A SYSTEMATIC REVIEW

doi:10.1136/hrt.2010.208967.317

Ma Ruixin, Yu Jing, Xu Dian, Yang Longquan, Liu Peijun, Bai Feng. *The Second Hospital of Lanzhou University*

Background The relative effectiveness of two combination therapy-Renin Angiotensin System (RAS) blockades/calcium channel blockers (CCBs) versus RAS blockades/diuretics for lowering blood pressure is unknown. This systematic review is to compare the benefits and harms of RAS blockades plus CCBs versus RAS blockades plus diuretics for treating essential hypertension in adults.

Methods We retrieved MEDLINE, the Cochrane Central Register of Controlled Trials, EMBASE and SCI using computer to identify relevant randomised controlled trials in English that directly compared the effect of RAS blockades plus CCBs with that of RAS blockades plus diuretics in adult patients with essential hypertension, reported an outcome of mean difference of BP reduction or interest, lasted at least 4 weeks, and included at least 20 patients. A standardised protocol with predefined criteria was used to extract data on study design, interventions, population characteristics, and outcomes; We evaluated study quality and applicability; and assessed the strength of the evidence for key outcomes.

Results Five clinical studies were eventually included. We found no significant difference between RAS blockades/CCBs with RAS blockades/diuretics in reduction of blood pressure. However, RAS blockade/CCBs associated with significant stronger DBP response rate. No differential effects were observed for the incidence of adverse events.

Conclusion Available evidence shows that RAS blockade/CCBs and blockade/diuretics have similar effects on blood pressure control. High strength of evidence is needed. Data regarding is patient subgroups were missing.

e0318 PITAVASTATIN CALCIUM IMPROVES CAROTID ARTERIOSCLEROSIS IN PATIENTS WITH HYPERCHOLESTEROLAEMIA

doi:10.1136/hrt.2010.208967.318

Yan Hui-Min, Wang Jia, Wang Hua, Wang Zhi-Hao, Zhang Wei, Zhang Yun, Zhong Ming. *Key Laboratory of Cardiovascular Remodelling and Function Research, Chinese Ministry of Education and Chinese Ministry of Public Health, Department of Cardiology, Qilu Hospital of Shandong University, Jinan, China*

Objective Hence, our aims were to elucidate the changes of the carotid arterial structure and functions in patients with the HC. The purpose of the present study was to investigate the effect of pitavastatin calcium on artherosclerosis of carotid artery in patients with hypercholesteremia (HC).

Methods A total of 40 patients with HC were administered pitavastatin calcium 1 mg or 2 mg daily for 8 weeks and thirty healthy

subjects were chosen as controls. Carotid atherosclerosis was evaluated by high-resolution B-mode ultrasonography (5-MHz linear array transducer; Sequia 512, Siemens). The right and left common carotid arteries (CCA) were assessed in the antero-oblique direction. For each study the following parameters were assessed and calculated using the following formulae, respectively: (1) IMT, (2): Vs, Vd, Vm, (3):Ep [Pressure-strain elastic modulus, $Ep=\{(SBP-DBP)/(Dd-Ds)\times Dd\}$, $Ep^*=Ep/DBP$ (4) $\beta:\{\beta=In (SBP/DBP)/[(Dd-Ds)/Dd]\}$, (5): AC [Arterial compliance, $AC=\pi (Ds\times Ds-Dd\times Dd)/4\times (SBP-DBP)$], (6)RI:[$RI=(Vs-Vd)/Vs$], (7)PI:[$PI=(Vs-Vd)/Vm$], (8)plaque index.

RESULTS (1) As compared with healthy control group, IMT, β in the HC group was significantly higher ($p<0.001$), while Vs, RI, AC in the HC group was markedly lower ($p<0.01$). (2) In HC patients, β level was significantly reduced ($p<0.001$), and, RI, AC were improved significantly ($p<0.05$, $p<0.001$ respectively) 8 weeks after treatment as compared with those before treatment, however, no significant difference was noted in IMT.

Conclusions Our findings demonstrated that (1) Significant alterations to carotid arteries structure and functions were found in the HC patients, including thickened IMT, distended vessel diameter, reduced elasticity and augmented stiffness. (2) Carotid arterial functions were markedly ameliorated after treatment with pitavastatin calcium for 8 weeks.

e0319 PREDICTING 30-DAY MORTALITY AMONG PATIENTS HOSPITALISED FOR DECOMPENSATED HEART FAILURE

doi:10.1136/hrt.2010.208967.319

¹Zhao Yusheng, ¹Wu Xingli, ¹Xue Qiao, ¹Gao Lei, ²Lin Haili, ¹Wang Shiwen. *¹Institute of Geriatric Cardiology, Chinese PLA General Hospital; ²Chinese PLA General Hospital*

Objective We investigated clinical correlates of in-hospital mortality and comorbidity of patients demonstrating heart failure progression in a large population.

Methods We included 6,949 patients with demonstrating heart failure who were hospitalised from the period of January 1, 1993, to December 31, 2007, at Chinese PLA General Hospital in Beijing. Hospital mortality and comorbidities were examined for the patients primarily admitted for decompensated HF.

Results The 30-day in-hospital mortality was 5.4% in patients. Cox regression multivariate analysis showed that a history of cor pulmonale, stroke, renal failure, cirrhosis of liver-myocardial infarction, pneumonia, gastrointestinal bleeding and multiple organ dysfunction syndromes and age older than 65 years were the only independent predictors of in-hospital mortality. Using the regression coefficient as a benchmark, we calculated a convenient score. Nearly 23% of the patients with the score >6 died compared with only 1.2% of the patients with the score of 0.

Conclusion Medical comorbidity at admission or age older than 65 years is an independent risk factor for 30-day mortality in patients with heart failure. The study illustrates that medical comorbidities at admission have proved to be a major prognostic marker for immediate poor outcome in the patients with heart failure. The score may help to identify patients who are more likely to have a risk of in-hospital mortality within 30-days.

e0320 IMPACT OF PLAQUE MORPHOLOGY ON INTIMAL HYPERPLASIA AFTER STENTING ASSESSED BY OPTICAL COHERENCE TOMOGRAPHY

doi:10.1136/hrt.2010.208967.320

Jin Qinhua, Chen Yundai, Akasaka, Mizukoshi, Kitabata, Liu Changfu, Tian Feng, Chen Lian, Sun Zhijun, Liu Hongbin, Wang Zhifeng, Guo Jun, Wang Jinda. *Chinese PLA General Hospital*

Objective The objective of this study was to evaluate whether the plaque morphology can affect the in-stent neointimal hyperplasia.