aimed to investigate the characteristics of false negative pulmonary embolism cases by V/Q scan.

Method During Jun 2008 to Apr 2010, patients with acute pulmonary embolism underwent both ventilation–perfusion scintigraphy (V/Q scan) and spiral CT pulmonary angiography (CTPA) were systematically reviewed. The patients were grouped by results of CTPA. Group 1: CTPA showed that the main pulmonary or lobe arteries were involved; Group 2: CTPA showed that the thrombi were limited to segmental or subsegmental pulmonary arteries. The characteristics of the false negative cases by V/Q scan were analysed.

Results In all 35 acute pulmonary embolism patients were included. There were 13 males (37.1%) and 22 females (62.9%) with a mean age of 59.3 ± 15.0 years. The mean onset time of pulmonary embolism was 9.9 ± 7.3 days and the mean interval time between V/Q scan and CTPA was 3.7 ± 2.5 days. There were 1 (4.4%) false negative cases out of 23 patients by V/Q scan in group 1 and 4 (33.3%) false negative cases out of 12 patients in group 2 ($p < 0.001$).

Conclusions The incidence of false negative cases in diagnosing acute pulmonary embolism by V/Q scan is increased significantly when CTPA showed that thrombi are limited to segmental or subsegmental and further branches of pulmonary arteries. In the clinical setting of highly suspected acute pulmonary embolism, even though the V/Q scan was negative, CTPA is needed for more diagnostic information.

e0578 DIVERSITY OF PLATELET INHIBITION UNDER CLOPIDOGREL AND ASPIRIN MEASURED BY VARIOUS ASSAYS

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Objective Characterize the inhibition of platelet P2Y₁₂ receptor and COX-1 pathway after clopidogrel adding to aspirin intake.

Methods 32 inpatients with coronary atherosclerosis were enrolled; 600 mg clopidogrel was given in consecutive two days, 100 mg/d Aspirin intake simultaneously. Inhibition of platelet aggregation induced by ADP/AA on Thrombelastography, platelet aggregation activated by ADP/AA, CD62p and vasodilator stimulated phosphoprotein (VASP) were measured at no clopidogrel, 10th hour and 36th hour after the first 300mg loading dose of clopidogrel.

Results (1) Inhibition ADP increases to $(42.5 \pm 29.1)\%$ statistically ($p = 0.034$) at 10h but not continues to the 36th hour ($p = 0.106$), Inhibition AA increases from $(56.6 \pm 36.6)\%$ to $(85.4 \pm 20.8)\%$ statistically ($p = 0.101$) at 36h, indicates COX-1 pathway is inhibited stronger than single aspirin intake. (2) Aggregation ADP decreases statistically ($p = 0.036$) until 36h, Aggregation AA decrease statistically ($p = 0.021$) at 10h and stabled to 36h ($p = 0.045$). Platelet response described by aggregation is different from inhibition percentage on TEG. (3) Change of Platelet Reactivity Index (PRI) in VASP assay is similar to Aggregation ADP, CD62p fluctuates from $(7.5 \pm 1.4)\%$ to $(4.2 \pm 1.1)\%$ ($p = 0.035$) and $(4.3 \pm 0.2)\%$ ($p = 0.211$) in a different way.

Conclusion No correlation could be found between results of platelet inhibition and aggregation, induced by whether ADP or AA. VASP helps to identify platelet responses to Clopidogrel specific. Absence of standard on platelet function measurement results in variety of clopidogrel resistance study.

e0579 NOVEL COAGULATION REGIME METHOD FOR CTO PRIOR TO PCI

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Objective The aim of this study is to demonstrate that coagulation regime for patients with CTOs enable successful PCI.

Methods During the period of 2009-2010, a total of six patients had undergone CT Coronary Angiogram and were found to have long CTO (more than 3 cm) in a single vessel. These patients had undergone prior PCI for the CTOs which were unsuccessful; the CTO could not be crossed. The patients were prescribed Warfarin for 6 months to a year. Their INRs were titrated to 1.5–2.0.

Results All six patients underwent successful PCI performed by a competent operator with more than 30 years experience and had performed more than 1000 PCI cases. There was no MACE or complications encountered with the complex CTO lesions.

Conclusions This pilot study illustrates the safety and feasibility of giving anticoagulation prior to PCI for complex CTO lesions.

Clinical and Research Medicine: Hypertension

e0580 COMBINED NIFEDIPINE SUSTAINEDRELEASE TABLET WITH BETALOC TO TREAT ESSENTIAL HYPERTENSION

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Objective To investigate the clinical efficacy of the treatment of essential hypertension combined nifedipine sustained-release tablets with betaloc.

Methods 60 cases of essential hypertension discovered recently were divided into two groups in random, 30 patients in each group. The control group were given nifedipine sustained-release tablets 10 mg, twice a day at 08:00 and 20:00 oral; treated group were at the same of nifedipine sustained-release tablets with control group, but increased betaloc 25 mg before lunch. Measured blood pressure twice a week and total of 8 weeks.

Results In control group, significant therapeutic effect in 11 cases, there were clear therapeutic effect in 11 cases, no treatment effect in 8 cases, the total therapeutic efficacy was 73.3%; In treated group, significant therapeutic effect in 18 cases, there were clear therapeutic effect in 11 cases, no treatment effect in 1 cases, the total therapeutic efficacy was 96.7%; There was significant difference between two groups ($X^2 = 7.13$, $p < 0.05$). In control group, there was no significant change in heart rate ($p > 0.05$); But in treatment group, heart rate decreased at average of 10 times min^{-1} , There was obvious difference in Statistics ($p < 0.05$).

Conclusions It is a good way to treat essential hypertension combined nifedipine sustained-release tablets with betaloc, and there is a mutual synergy, worthy to be popularised.

e0581 EFFECT OF ECG CHARACTERISTIC AND CLINICAL PROGNOSIS OF THE VENTRICULAR ELECTRICAL STORM IN PATIENTS WITH HYPERTROPHY AND ACUTE MYOCARDIAL INFARCTION

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Objective To investigate the effect of ECG characteristic and clinical prognosis of ventricular electrical storm (VES) in patients with hypertrophy and acute myocardial infarction (AMI).

Methods 317 cases of VES in patients with hypertrophy and AMI group. Sixty cases of after AMI patients non-VES group. The analysed of ECG examination and keep watch on ECG was relationship between clinical features and prognosis among the two groups.

Results In VES group PTFv1 abnormal, $\sum$ ST segment elevation amplitude, ST segment elevation leads, ST segment reduction

amplitude leads, QTc interval prolongations, Left ventricular hypertrophy. The coronary arteries on complete close up anterior wall or complicated anterior more control of wall AMI and LAD merge LCX or RCA was significantly increased ($p<0.05-0.01$). Clinically occurrence of complications such as pump failure, infarct extension, angina pectoris, malignant arrhy mortality ventricular electrical storm 6h after AMI was obviously increased ($p<0.05-0.01$).

Conclusion For those after hypertrophy and AMI patients with VES who having abnormal ECG indexes, clinical shortterm prognosis was poor. Comprehensive measures should be taken to improve prognosis.

e0582 THE DETECTION OF CAROTID ARTERY INTIMA PLAQUE IN ELDERLY HOSPITALISED PATIENTS WITH HYPERTENSION AND ITS INFLUENCING FACTORS

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Objective To study the detection of carotid artery intima plaque in elderly hospitalised patients with hypertension and its influencing factors.

Methods Selected my hospital in the entire group of elderly hypertensive patients with a total of 328, used colour Doppler ultrasound to detect all patients' carotid artery intima plaque and grading. Patients' sex, age, the course of hyperpiesia, the controls of high blood pressure in the past, the smoking history, family history of hypertension, history of stroke and other messages were noted by clinical records.

Results The detection rate of carotid artery intima plaque was 77.4%. In which Class 1, Class 2 and 3 accounted for 32.0%, 36.9% and 8.5% (plaque score). Use Ordered Logistic regression univariate cumulative analysis to show that male, old, poorly controlled blood pressure, longer duration of hypertension were risk factors for plaque. Multivariate analysis showed that the major risk factors for plaque were male, old age and poor control of blood pressure.

Conclusions Hypertension in the elderly patients with higher rate of carotid artery intima plaque, and male patients, old age, patients whose blood pressure was in poor control were the high-risk groups.

e0583 THE INTERVENTION ROLE OF VALSARTAN ON LEFT VENTRICULAR HYPERTROPHY AND HIGH-SENSITIVITY C-REACTIVE PROTEIN I N HYPERTENSION PATIENTS

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Objective To explore the relationship between high-sensitivity C-reactive protein (hs-CRP) and left ventricular hypertrophy (LVH) and to examine whether angiotensin receptors antagonist ARB could decrease CRP expression, block or invert the progression of LVH with essential hypertension (EH).

Methods 186 EH patients were divided into LVH group (n=92) and non-LVH group (n=94) by Devereux standard. All patients received Valsartan therapy for 24 w t o detect blood pressure, hs-CRP and left ventricular mass index (LVM I) 1.

Results The hs-CRP level of LVH group was higher than that of non-LVH group. Hs-CRP was positively correlated with LVM I. Hs-CRP decreased obviously in non- LVH and LVH group s after treatment. LVM I decreased significantly than before treatment in LVH group ($p<0.01$).

Conclusions Plasma hs-CRP level is an independent risk factor for the development of LVH in EH. Valsartan treatment can decrease the incident LVH by reducing hs-CRP.

e0584 A STUDY OF EXFORGE ON THE TREATMENT EFFECTS AND CVE PREVENTION IN PATIENTS WITH MILD TO MODERATE ESSENTIAL HYPERTENSION

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Objective To compare the difference of the treatment effects and the incidence of CVE in further 10 years in the mild to moderate essential hypertensive population who used Exforge—a new fixed combination regimen, or Norvasc—a classic antihypertensive monotherapy, in order to provide more choices of regimens for them.

Designs and Methods This stage III clinical trial was 8-week and randomised. Patients received Exforge (Amlodipine 5 mg/Valsartan 80 mg) or Norvasc (Amlodipine 5 mg) once daily. The difference of blood pressure reductions between them were compared. The Chinese Multi-Provincial Cohort Study (CMCS) model, which is an adjusted model of Framingham model in China, was used to predict the incidence of CVE in further 10 years before and after taking the drug regimens in hypertensive patients with different levels of risk factors.

Results A total of 256 patients were randomised to the treatment groups (128 in Exforge group and 128 in Norvasc group), and the overall mean age was 54.4 years. (1) The treatment effects in Exforge group was better than that in Norvasc group, and the blood pressure lowering efficiency were 84.9% and 71.9% respectively. Meanwhile the risk difference was 13.0% (12.49%–13.51%), which was statistically different ($\chi^2=6.692$, $p=0.010$). (2) After taking the anti-hypertensive treatment, the incidence of CVE in further 10 years were smaller than those before therapy, and the reduction of incidence in Exforge group were more than those in Norvasc group. The preventive effects on stroke were more obvious than those on CHD. 1. Before taking the hypertensive treatment, the incidence of CHD in further 10 years was 17.40% at the baseline level of risk factors, and after the treatment, the incidence were 9.43% in Exforge group and 12.22% in Norvasc group, reducing 45.81% and 29.74% respectively. The reduction of incidence in Exforge group was 1.54 times than that in Norvasc group. Before taking the hypertensive treatment, the mean incidence of CHD in further 10 years was 27.63% at different levels of risk factors, and after the treatment, the mean incidence were 15.74% in Exforge group and 19.53% in Norvasc group, reducing 44.44% and 29.93% respectively. The reduction of incidence in Exforge group was 1.48 times than that in Norvasc group. 2. Before taking the hypertensive treatment, the incidence of stroke in further 10 years was 24.51% at the baseline level of risk factors, and after the treatment, the incidence were 8.31% in Exforge group and 15.22% in Norvasc group, reducing 66.82% and 37.91% respectively. The reduction of incidence in Exforge group was 1.76 times than that in Norvasc group. Before taking the hypertensive treatment, the mean incidence of stroke in further 10 years was 33.81% at different levels of risk factors, and after the treatment, the mean incidence were 12.71% in Exforge group and 22.34% in Norvasc group, reducing 63.02% and 34.60% respectively. The reduction of incidence in Exforge group was 1.82 times than that in Norvasc group.

Conclusions Compared to Norvasc, Exforge had better treatment effects in the patients with mild to moderate essential hypertension. The reductions of incidence of CVE in future 10 years in Exforge group were more than those in Norvasc group, and the preventive effects on stroke were more obvious than those on CHD. Exforge could be recommended to use in anti-hypertensive treatment and the CVE prevention.