Angiogenesis was assessed using in vitro parameters (i.e. endothelial cell proliferation, cell migration and microvascular structure) and in vivo by matrigel plug assay and aortic ring assay. Cyclic guanosine 5'-monophosphate (cGMP) content in cell was measured by enzyme-linked immunosorbent assay. Western blot was used to determine the expression levels of proteins.

**Results:** Treatment of ECs with HSNO did not cause significant cytotoxicity or apoptosis. HSNO released H₂S and NO slowly after administration in vivo. HSNO concentration-dependently accelerated cell growth, migration and tube-like structure formation ex vivo and in vivo. At the same concentration, the hybrid was more potent than either one alone. These effects of HSNO on cell proliferation and migration were prevented by PI3K inhibitor LY294002, ERK inhibitor U0126 and p38 inhibitor SB203580. Incubation of ECs with HSNO resulted in the increase of phosphorylation of PI3K, Akt, ERK and p38, and these effects could be blocked by respective inhibitors. HSNO increased the content of cGMP and activated protein kinase G (PKG) as well as its downstream effectors.

**Conclusions:** The present study proves that H₂S and NO react together much potent than either one alone in cell proliferation. As a slow-releasing H₂S and NO hybrid, HSNO is a useful tool to study the interactions between H₂S and NO in many biological effects. Moreover HSNO could be recognized as an important potential drug in the therapy of cardiovascular disease.

**GW25-e0058**

The Research of Evaluation Standard of curative effect of coronary heart disease angina Based on clinical literature

Li Yanyang, Zong Aiqin, Zhu Yaping, Zhang Jumeng
1Tianjin University of Chinese Medicine, 2The First Hospital Affiliated to Tianjin University of Chinese Medicine

**Objectives:** To explore the efficacy evaluation system of CHD angina, we adjust problems of CHD angina combing the efficacy evaluation of SHD angina. To study the evaluation of clinical standard of efficacy evaluation system of CHD angina.

**Methods:** Using the method of clinical literature of CHD angina based on research objectives of CHD angina literature to summarize and extract the data of evaluation standard of curative effect, and provide ideas for establishing the clinical efficacy evaluation system of CHD angina.

**Results:** Association of International Medicine Economics and Efficacy, Coordination Office of the Quality evaluation in Europe, Food and Drug Administration in US, Working Group of healthy related quality of life and Administration, International surviving quality who call on the evaluation method of clinical effect include the function assessment, indicators of physical chemistry, report of caregivers and result indicators of patients. Form doctor. In general the efficacy evaluation of CHD angina can be divided into the following categories: Firstly, Biochemical indicators such as lipids, C-reactive protein, troponin, NO, superoxide dismutase, lipid peroxidation, tumor necrosis factor-α, interleukin-1, interleukin-6 and so on. Secondly, ECG indicators such as 24-hour ambulatory ECG and treadmill exercise testing. Thirdly, Radiographic indicators such as coronary angiography, intra-vascular ultrasound (IVUS), X-ray computer tomography (CT), magnetic resonance imaging Heart (CMR) and so on. Fourthly, Symptom evaluation is patients classification symptoms which give scores such as symptom score sheets and other quality of life scales. Fifthly, result indicators, including in the incidence of cardiovascular events (myocardial infarction, sudden cardiac death) and the hospitalizations per year. Finally, evaluation indicators which reflect on Chinese medicine efficacy of accumulation of symptoms which is not provide, but it offer a basic theory to build evaluation method of curative effect and standard system.

**Conclusions:** On one hand, we should clear the purpose of each indicators and do the best choices in scope of clinical indicators for curative effect evaluation of CHD angina. On the other hand, we should pay a attention to the structure and hierarchy to be sure the weight and relation of each indicators and build a synthetical evaluation method in clinical indicators system.

**GW25-e3490**

One case of coronary angiography in patients with orthotopic heart transplantation 10 years

Wang Mengxiang, Yuan Xuchan, Lu Jingshan, Li Yue, Liu Fan
The Second Hospital of Hebei Medical University

**Objectives:** Male, 41 years old, accepted heart transplantation in our hospital 10 years ago due to dilated cardiomyopathy, heart failure. The patient came to hospital because of palpitations for 1 day. Physical examination: T 36.4℃, P 38/ min, R 16/min, BP 131/68 mmHg. His consciousness was clear. No abnormal breathing sound was heard. Heart rate 38/min. Cardiac rhythm was not regular. No pathological murmurs.More than physical examination did not see obvious anomalies. The result of the holer: Sinus rhythm, paroxysmal atrial fibrillation, advanced or three degree atrioventricular block, average heart rate is 76 bpm, the slowest is 35 bpm, the fastest is 113 bpm, the amount of more than 2 seconds long pause is 175.

**Methods:** The diagnosis of the patient was dilated cardiomyopathy, heart failure, NYHA class IV, post of heart transplantation, atrial fibrillation, three degree atrioventricular block.

**Results:** We used all kinds of drugs to improve the patient’s heart rate, but there was no effect. So we decided to implantate a cardiac pacemaker (DDD). In order to
GW25-e4524

Prevalence of glucose abnormalities in elderly hypertensive patients from community health centers in Shenzhen City, China

Yao Gongyuan1, He Zhiming2, Li Shuangfei1, Ma Xinhu2
1Shenzhen FuTian No.2 People’s Hospital; 2Hospital affiliated to Shouyang medical college

Objectives: Hypertension and prehypertension are correlated with future cardiovascular disease (CVD) and diabetes. The aim of this study was to assess the prevalence of glucose abnormalities in Chinese population with hypertension.

Methods: According to Chinese Hypertension Prevention Guide 2009, 212 patients with essential hypertension from 11 community health centers were enrolled in this study. Secondary hypertension and coronary heart disease were excluded. 212 patients aged from 30 to 85 years, 98 males and 114 females. All patients were divided into 3 groups according to their ages. Group1 (aged <44 years) included 30 cases, with 22 males and 14 females. Group2 (aged 45-65 years) included 77 cases, with 37 males and 40 females. Group 3 (aged ≥65 years) included 99 cases, with 45 males and 54 females. We measured BMI, fasting plasma glucose (FPG), oral glucose tolerance test (OGTT), 2-hour glucose and lipids including total cholesterol, triglycerides, high-density lipoprotein and low-density lipoprotein.

Results: Sex, lipids and BMI were comparable between 3 groups (P>0.05). 41.98% (89 in 212) had glucose abnormalities. 23.11% (49 in 212) had impaired fasting glucose (IFG), 32.55% (69 in 212) had impaired glucose tolerance. In the 89 cases, 50 (23.58%) had been diagnosed before, and 39 (18.40%) cases were diagnosed this time, in which 15 (7.08%) were diagnosed as diabetes. The prevalence of glucose abnormalities were significantly different between 3 groups (χ²=8.546, P=0.014), with a prevalence of 25.5% ≤ 44 years, 37.66% in 44 to 65 years and 51.52% in aged ≥65 years, respectively.

Conclusions: Glucose abnormalities are prevalent in hypertensive patients, and growing with the increase of age, with a high rate of misdiagnosis (18.40%). So we need to pay more attention to the early prevention for elderly hypertensive patients for early diagnosis of diabetes and other glucose abnormalities.

GW25-e0078

A Systematic Review including meta-analysis and GRADE for traditional Chinese medicine for myocardial infarction

Wang Yue1, Wang Jiaying2, Zhang Shuo3, Shang Hongcai1
13Metabolic disease hospital of Medical University of Tianjin

Objectives: Systematically assess the effect of traditional Chinese medicine on the main outcomes of myocardial infarction.

Methods: Search the online databases including WanFang, CNKI, VIP and CBM to indentify the relevant studies about TCM for myocardial infarction. Revman was used to meta-analysis the data and GRADEpro was used to summion the findings.

Results: 66 studies were included with the sample of 7535. The merged result showed that the TCM group was better than the controlled group in terms of mortality, reinfarction, heart failure, recanalization and arrhythmia with significant difference. GRADE showed the effect of TCM was moderate to low.

Conclusions: TCM has certain advantage for myocardial infarction treatment. However due to the limitation of low quality of the evidence, TCM is weakly recommended for clinical practice. Its widely application needs more further studies.

GW25-e0816

Research and Practice in Electrocardiogram Teaching in English Mode in Chinese Medical Undergraduate

Chen Liping, Wang Quanwei, Wang Jiqun
Cardiovascular Disease Center, 1st Hospital of Jinlin University

Objectives: To study the feasibility of implementing ECG taught in English in medical undergraduates and establish the English - medium teaching mode.

Methods: Teachers who participated teaching ECG in English for international student 2007-2010 batch were chosen for this study. This plan were performed for 2012 batch Chinese medical undergraduate in autumn semester by bilingual teaching in theoretical courses and practicum, Chinese in exam; for 2013 batch Chinese medical undergraduate in the fall semester by English teaching in theory courses, bilingual teaching in practicum, Chinese in exam. Practicum and writing exam were analysed in 2011 (all taught in Chinese), 2012 (bilingual taught), 2013 (taught in English) undergraduate including accuracy of reading electrocardiogram in practicum, theoretical knowledge and reading electrocardiogram the final writing exam. The results were analyzed by X² and P<0.05 was significant different.

Results: There was no difference in accuracy of reading electrocardiogram in different language taught in practicum. Identification of ventricular arrhythmya, location and duration of myocardial infarction were the same parts which were made wrong diagnosis in different language taught in practicum. There was no different significantly in final writing exams by Chinese teaching, bilingual teaching, and English teaching.

Conclusions: ECG diagnosis can be taught in English in Chinese student.

GW25-e0564

Influencing factors of the success rate of cardiopulmonary resuscitation

Sai Xiangqian, Zhou Yanhua, Deng Min, Xu Yang, Ma Wei, Zhu Shibing, Zhang Xiaojie, Huang Juny
Hangzhou Red Cross Hospital

Objectives: To investigate the influencing factors of the success rate of cardiopulmonary resuscitation (CPR) in emergency departments and to explore the methods of raising the efficiency of first aid treatments.

Methods: From January 2004 to December 2009, 222 patients who underwent CPR were included. The patients admitted in 2004 and 2005 were treated according to the 2000 American Heart Association (AHA) guidelines for CPR, and the patients admitted from 2006 to 2009 were treated according to the 2005 AHA guidelines for CPR. The cases were divided into the success group (84 cases) and the failure group (138 cases), Thirty-four influencing factors on the results of CPR were analyzed by t test and logistic regression analysis.

Results: The ratios of male patients and receiving thumpversion therapy were higher in the failure group than in the success group, while the ratios of having incentives or precursory signs occurring from 2006 to 2009 and getting sick in the winter or spring were lower. In addition, in the failure group, there were a long time before commencing CPR, a low frequency of cardiac compression, a large total dose of epinephrine and a low utilization rate of amiodarone. There was statistically significant difference between the two groups (P<0.05). Logistic regression analysis showed that the start time of CPR (OR=1.0364) and the total dose of epinephrine (OR=1.2163) were independent risk factors for the failure of CPR while use of amiodarone was an independent protective factor (OR=0.2439).

Conclusions: Early identifying precursory signs, using the new guidelines to implement CPR with the least delay possible and giving amiodarone are favorable factors that improve the success rate of CPR.

GW25-e0586

Double-lumen endotracheal tube versus bronchial blocker in one lung ventilation

Shan Rong, Yuan Luqing
Department of Anesthesiology, First Affiliated Hospital of Gannan Medical College

Objectives: To compared the clinical performance and the effect of double-lumen endotracheal tube and bronchial blocker on one lung ventilation (OLV) surgery.

Methods: Sixty patients undergoing thoracotomy were randomized into double-lumen tube group (DLT, n=30) and bronchial blocker group (BB, n=30). The process of intubation was performed by one skilled anesthesiologist. The tube placement and location were confirmed by bronchoscope. Changes of hemodynamics were recorded. The time of intubation and tube localization, arterial PH and arterial PaCO₂, 30 min after OLV, atelectasis and exposure extent in surgery at one-lung ventilation and postoperative sore throat were evaluated in the two groups.

Results: Compared with group DLT, the time of intubation in group BB was shorter, (1.01±0.23) vs (2.34±0.35) min, P<0.05; the time of tube localization was shorter, (2.24±0.67) vs (3.26±0.68) min, P<0.05; peak airway pressure was lower, (21.8±4.1) vs (29.1±4.9) cmH₂O, P<0.05; the frequency of early postoperative hypoxia was less, 35% vs 68%, P<0.05, the frequently of early postoperative hypoxia was less, 18% vs 90%, P<0.05. There were no significant differences in arterial PH and arterial PaCO₂, 30 min after OLV and atelectasis and exposure extent in surgery at OLV between the two groups.

Conclusions: OLV can be achieved either by a bronchial blocker or a double-lumen bronchial tube for the patients undergoing thoracotomy. However, the time