# **GWICC Abstracts 2010**

**Methods** 1307 in-patients with ST segment elevation ACS from 64 hospitals across China were received different therapies in hospitals and a standard questionnaire was used to get information of the patients including demographic, treatments and in-hospital outcomes. We analysed the status of application of reperfusion and aspirin, ACEI,  $\beta$ -blocker, LWMH, Clopidogrel and cholesterol lowering agents on ST segment elevation ACS patients.

Results 1. The were no significant differences in baseline characteristics between the patients from tertiary hospitals and that from the secondary hospitals. 2. 30.9%-69.4% received reperfusion therapies. 1.3%-62.7% received primary PCI, 1.9%-45.8% received Thrombolysis, and nearly 46.2% did not receive any form of reperfusion. Reperfusion therapy was more often used in tertiary hospitals (48.2%) than in secondary hospitals (6.46%). Thrombolysis was more often in secondary hospitals than that in tertiary hospitals (36.8% vs 14.6%) 3. Percentage of medications in ST ACS patients in different areas: aspirin (88.0%-98). 6%), ACEI (60.5%-84). 4%), β-blocker (55.8%-84.4%), LWMH54.2%-94.2%), Clopidogrel (14.3-88.6), cholesterol lowering agents Statins (51.9%-90.9%); 4. Major in-hospital events and death rates were significantly higher in secondary hospitals than in tertiary hospitals; 5. Mortality and congestive heart failure rate were significantly higher in patients with no reperfusion therapy compared to patients underwent reperfusion. The incidence of combined outcomes (death or MI, and death, MI or Stroke) was also higher in patients without reperfusion therapy 6. Multivariate logistic regression analysis showed that age>75 years, hypertension, diabetes, reperfusion, aspirin, β-blocker, ACEI/ARB inhibitor use were associated independently with in-hospital mortality.

**Conclusion** In the most tertiary hospitals in China the application of medications being proved effective by evidence-based medicine in clinical practice is better than that of the secondary hospitals, but there is a big gap between guidelines and current management of ST segment elevation ACS in China, and the application status in China could be further improved.

## e0259 **CONTROL STATUS OF CHOLESTEROL OUTPATIENTS WITH** HEART ARTERY DISEASE IN CHINA

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**Objectives** To evaluate the current control status of cholesterol among outpatients with heart artery disease in China.

**Methods** Sixty-four hospitals across China, including 32 secondary hospitals and 32 tertiary hospitals were selected for baseline survey. Fifty outpatients diagnosed heart artery disease were recruited consecutively in each participated hospital. Information for 1806 patients was collected, and control status of cholesterol among the patients was analysed.

**Results** (1) Mean age of the patients was 65.10. Seventy point five percent of the patients were male and 29.5% were female. (2) Overall 26.2% attained the cholesterol goal in the 1806 patients of heart artery disease, the goal attainment rate of cholesterol among male (30.5%) patients was higher than that among female (15.8%) patients. (3) The goal attainment rate of cholesterol was highest in middle China (39.7%) and lowest in northeast area (14.9%) among 7 geographic district (north China, east China, south China, middle China, northeast, northwest, southeast) (p<0.01).

**Conclusions** Only 26.2 heart artery disease patients attained the cholesterol goal, the rate varied significantly among sex, different areas and different degree hospitals. It was essential to pay more attention on control of cholesterol for secondary prevention of cardiovascular disease.

#### e0260 IMPACT OF PSYCHOLOGICAL INTERVENTION ON NEGATIVE Emotion and life quality of patients with acute Coronary Syndrome

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**Objective** To observe the impact of psychological intervention on patients' negative emotion and life quality with acute coronary syndrome (ACS).

**Methods** 80 patients with liver cancer were chosen in our hospital from January 2007 to December 2009, and randomly divided into experimental group (40 cases) and control group (40 cases), the followup assessment of psychological status and life quality were performed by taking symptom self-assessment form (SCL-90), self-rating depression scale (SDS), Self-Rating Anxiety Scale (SAS), Quality of Life Scale (ARES-S), and the targeted psychological intervention relayed on the basis of the initial results of assessment and intervention results were analysed to assess the differences between the two groups.

**Results** The patients with liver cancer companied with early poor mental health, anxiety, depression, obviously, the life quality significantly decreased; the initial results of the assessment were SDS ( $56.4\pm8.3$ ) points, SAS ( $55.6\pm5.2$ ) points, SCL-90 ( $1.9\pm0.4$ ) points, CARES-SF ( $25.2\pm15.5$ ) points. 1 month after intervention, the psychological status and life quality of patients than in a month ago has significantly improved, the scale scores were SDS ( $42.1\pm7.5$ ) points, SAS ( $42.5\pm5.2$ ) points, SCL-90 ( $1.4\pm0.3$ )points, CARES-SF ( $32.5\pm16.7$ ) points, the scores were significantly difference (p<0.01 or p<0.05). between before and after psychological intervention. Therefore, the psychologically negative emotions (depression, anxiety, hostility, fear) in the test group after the intervention were significantly decreased (the first two p<0.01, both of p<0.05).

**Conclusion** Psychological intervention can effectively relief negative emotional and psychological stress and help to improve the life quality of the patients with acute coronary syndrome.

### e0261 RELATIONSHIP OF PHYSICAL EXERCISE AND CHEST PAIN RECURRENCE OF 2401 CORONARY ARTERY DISEASE (CAD) PATIENTS

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**Objective** To study the relationship of physical exercise and chest pain recurrence of CAD, and if physical exercise could reduce rate of chest pain recurrence and improve quality of life.

**Methods** 64 hospitals across China mainland, involving 2401 patients, 50 out-patients with CAD in each hospital were included and standard questionnaires were used to get relative information on patients' demographic, physical exercise, chest pain recurrence *et al.* **Results** It existed significant differences between exercise and chest pain recurrence.

**Conclusions** Appropriate physical exercise could reduce rate of chest pain recurrence.

### e0262 ANALYSIS OF SMOKING STATUS AMONG RESIDENTS IN BEIJING SHOUGANG DISTRICT

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**Objective** This survey aims to know the current status of smoking among residents in Beijing Shougang district and analyse the relative factors.

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blood lipids between the Li and the Han nationality. The reason could be that the Li nationality living in the poor area who are under low living standard. The different Polymorphisms of blood lipid genes may be one of the causes. e0265 **ANALYSIS OF 24 H SLEEP DEPRIVATION ON ARRHYTHMIA** AND HEART RATE VARIABILITY Wei-Ren Chen, Xiang-Min Shi. Pla General Hospital Backgroud Sleep deprivation (SD) is a common phenomenon in emergency, especially during war time, conflict, natural disasters or disease crisis such as SARS, it can cause exhaustion in members of armed forces and non-combat casualty. In conditions of high-tech war, deprivation is becoming more serious and mandatory than ever before. **Objective** To study the impact of 24-h sleep deprivation on arrhythmia and heart rate variability (HRV). Methods Soldiers were used as research objects, they were divided into normal group and the sleep deprivation group. 1. Heart rate, atrial premature beat, ventricular premature beat and heart rate variability were observed by 24-h ambulatory ECG during sleep deprivation. 2. The changes of serum cortisol levels were detected during sleep deprivation.

Results 1. After 24 h sleep deprivation, HF, SDNN and RMSSD significantly reduced, LF significantly increased, LF /HF showed a significant increase. 2. Part of volunteers presented atrial premature beats and ventricular premature beats. 3. The level of serum cortisol significantly increased.

**Conclusions** There were statistical difference about the levels of the

**Conclusion** The underlying mechanism of alteration of arrhythmia and HRV after 24-h sleep deprivation would be ascribed to lower vagal activity and elevated sympathetic activity.

#### e0266 SNORING IS ASSOCIATED WITH SUBCLINICAL CAROTID ATHEROSCLEROSIS IN 1050 URBAN CHINESE

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**Context** Epidemiological studies have identified snoring as a risk factor for atherosclerotic cardiovascular diseases. However, there is little evidence on snoring and subclinical atherosclerosis.

**Objective** To evaluate whether and to what extent snoring is associated with carotid atherosclerosis.

Methods Population-based study was conducted at a community in Beijing on 1050 subjects aged 50-79 years who had an ultrasound examination of the carotid artery at age ranging from 45 to 74 years in 2002 and a carotid ultrasonic reexamination in 2007, as well as a cross-sectional survey including snoring information and cardiovascular risk factors from September to November 2007.

Main Outcome Measures Carotid intima-media thickness (IMT) and plaque as two indexes of carotid atherosclerosis were diagnosed by B-mode ultrasonography. Association of snoring with increased IMT and plaque were analysed by multivariable logistic regression models adjusted for cardiovascular risk factors.

Results The prevalence of snoring was 64.3% in this population (71.4% in males and 58.4% in females). In multivariable models adjusted for traditional risk factors, snoring was significantly associated with increased IMT of common carotid artery (CCA) (OR, 1.38; 95% CI 1.04 to 1.82) and bifurcated carotid artery (BCA) (OR, 1.65; 95% CI 1.24 to 2.19), with having plaque of CCA (OR,

**Method** We carried out the research by multi-steps random sampling through questionaires. 1312 records had been completed for analysis. Indicators as smoking, age, education, occupation and income, etc., were calculated

**Results** The total smoking rate was 23.8%, 52.4% in male and 4.0% in female. The smoking rates of different education, occupation and income had statistical differences.

Conclusion The smoking rate of Shougang district was lower than that of Beijing and the whole country. The smoking rate in male was significantly higher than that in female. It is very important to develop the health education and the smoking control in some special people.

#### e0263 EPIDEMIOLOGICAL SURVEY OF HYPERTENSION IN GENERAL ADULT POPULATION OF DIFFERENT NATIONALITIES IN XINJIANG

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Objective To estimate the prevalence and distribution of hypertension and to determine the status of hypertension awareness. treatment, and control in Xinjiang.

Methods The Cardiovascular Risk Survey in Xinjiang, A total of 14618 adults, age  $\geq$ 35 years in Xinjiang.

**Results** The standardisation prevalence is 42.25%. Prevalence rate of hypertension is 42.44% in Han, 35.2% in Uygur, 53.04% in Kazak respectively. Among hypertensive patients, only 45.5% were aware of their high blood pressure, 19.7% were taking antihypertensive medication, and 11.3% achieved blood pressure control (<140/ 90 mm Hg). These data are 46.7%, 29.6%, 6.1%; 48.5%, 18.3%, 14.2%; 41.5%, 14.5%, 4.6% as sequence in Han, Uygur and Kazak. **Conclusions** Our results indicate that hypertension is highly prevalent in Xinjiang. The percentages of those with hypertension who are aware, treated, and controlled are relatively low.

#### e0264 **INVESTIGATION ON BLOOD LIPIDS OF THE LI NATIONALITY IN HAINAN ISLAND**

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Objective To study the blood lipid level of the Li nationality in Hainan Island, and to compare it between Li nationality and other people. To analyse the effects of the way of life style and the Polymorphisms of blood lipid gene on the levels of blood lipids.

Methods The epidemiological study was carried out in a natural population 1000 (500 samples from the Li nationality and 500 samples from the Han nationality) individuals aged aged between 30 and 50 from Li Nationality in Hainan area by cluster and random sampling. To measure TC, TG, LDL-C, HDL-C according to "Suggestion on protocol of measuring serum lipdaemia and standardisation", the data were analysed by SPSS 13.0.

**Results** There were no differences about the levels of TC, TG, HDL-C and LDL-C between the Li nationality and the Han nationality. but there were significant difference about the levels of HDL-C between two population (p < 0.05). The levels of HDL-C in the Li nationality was significantly higher than that in the Han nationality among female (p<0.05), and the levels of TG in the Han nationality was significantly higher than that in the Li nationality among male (p<0.05). The levels of HDL-C in the Li nationality was significantly higher than that in the Han nationality in the group of age 30-39and the group of age 40–49 (p<0.05).