

**e0255 RELATIONSHIP OF ALCOHOL CONSUMPTION AND CAROTID ATHEROSCLEROSIS IN CHINESE HAN UIGHUR AND HAZAKH COHORT**

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**Aim** The relationship between alcohol consumption and carotid atherosclerosis had been reported in some epidemiologic studies. But the results were conflicting in different researches. In the present study, we investigated the association between alcohol intake and carotid atherosclerosis in Chinese Han, Uighur, and Hazakh population.

**Methods and Results** The study population sample comprised 13 037 Chinese people (5277 Han, 4572 Uighur, and 3188 Hazakh) aged 35 years and over, who participated a Cardiovascular Risk Survey between June 2007 and September 2009. Daily alcohol consumption was determined by the number and frequency of alcoholic beverages consumed. The carotid artery parameters including common carotid artery intima-media thickness (CCA-IMT) and carotid plaques were measured using high-resolution B-mode ultrasonography. In Han or Hazakh, carotid IMT as a function of alcohol consumption was depicted as a J-shaped curve with a nadir for the alcohol intake category of 20 to 29.9 g/d; In Uighur, the similar curve with a nadir of 30 to 49.9 g/d was observed. For the prevalence of carotid plaques, we also observed the similar curves in Han and Hazakh but not in Uighur. After adjusted for the age, sex, blood pressure, body mass index, smoking, GLU, total cholesterol, HDL, and LDL, the J-shaped curves remain existence.

**Conclusions** Our results indicated that moderate drinking is a protective factor for carotid atherosclerosis. But the definition of moderate drinking should be difference in Han, Uighur and Hazakh population.

**e0256 ALCOHOL CONSUMPTION AND ANKLE-TO-BRACHIAL INDEX**

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**Aim** A low ankle-to-brachial index (ABI) is a strong correlate of cardiovascular disease and subsequent mortality. The relationship between ABI and alcohol consumption remains unclear.

**Methods and Results** Data are from the Cardiovascular Risk Survey (CRS), a multi-ethnic community-based study of 14 593 Chinese people (5749 Han, 4747 Uighur, and 4097 Hazakh) aged 35 years and over at baseline in June 2007 to March 2010. The relationship between alcohol intake and ABI were determined by use of analysis of covariance and multivariable regressions. In men, a linear correlation between alcohol consumption and ABI was found by one-factor analysis of variance ( $p < 0.001$ ); After adjusted for the age, sex, ethnicity, blood pressure, body mass index, smoking, GLU, total cholesterol, HDL, and LDL, the difference remains significant ( $p = 0.007$ ). The multivariate-adjusted OR for peripheral artery disease was significantly higher in men who consumed  $> 60.0$  g/d (OR = 1.997, 95% CI 1.500 to 2.989) and was significantly lower in men who consumed 20.0–40.0 g/d compared with never drinking, respectively ( $p = 0.01$ ,  $p = 0.027$ , respectively, data not shown). Neither ABI nor PAD was correlated with alcohol intake in women.

**Conclusions** Our results indicated that in Chinese men, moderate drinking is a protective factor but heavier drinking is a risk factor for peripheral arteriosclerosis.

**e0257 ASSOCIATION OF C REACTIVE PROTEIN LEVELS WITH THE SEVERITY OF CORONARY ARTERY DISEASE**

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**Objective** To explore the association of CRP levels with the severity of coronary stenosis in patients with coronary artery disease (CAD) documented by angiography.

**Methods** A total of 368 patients with angiographically determined CAD (defined as stenosis of  $\geq 50\%$  in 1 or more coronary arteries) were enrolled after exclusion of patients with acute myocardial infarction, acute infectious diseases or CRP  $\geq 10$  mg/l, and chronic liver or kidney diseases. Serum CRP was measured using particle enhanced immunoturbidimetric method (DiaSys, Germany). CAD severity was assessed by the number of stenotic coronary arteries and the Gensini score. In the current study, LDL-C  $< 130$  mg/dl was defined as the lower level of LDL-C and LDL-C  $\geq 130$  mg/dl as the higher level of LDL-C.

**Results** Of 368 patients, 179 patients had single-vessel stenosis, 105 had 2 stenotic vessels, and 84 had  $\geq 3$  stenotic vessels. Systolic blood pressure and triglycerides levels increased significantly with the number of stenotic arteries. Median and inter-quartile range (IQR) of CRP in patients with single-vessel stenosis and multi-vessel stenosis was 0.93 (0.44–2.41) mg/l and 1.33 (0.66–2.39) mg/l, respectively,  $p = 0.030$ . Univariate analysis found that participants with CRP  $\geq 1$  mg/l had a significantly higher Gensini score (29.0 (12.0–56.0) vs 20.0 (10.0–46.2),  $p = 0.026$ ) and higher prevalence of multi-vessel stenosis (57.6% vs 44.1%,  $p = 0.010$ ) than those with CRP  $< 1$  mg/l. After age, gender, body mass index, systolic blood pressure, smoking status, fasting glucose, HDL-C and LDL-C adjustments, CRP levels remained to be associated with CAD severity. The OR was 1.77 (95% CI 1.14 to 2.76) for patients with a higher level of CRP ( $\geq 1$  mg/l) versus those with a lower level of CRP ( $< 1$  mg/l). Among patients with a lower level of LDL-C, treated or not treated with statins therapy, the prevalence of multi-vessel stenosis was higher in those having a higher level of CRP than in those having a lower level of CRP (55.0% vs 41.7%,  $p = 0.024$ ). Further analysis was undertaken by dividing the patients into 4 categories according to CRP levels and whether or not they had statins treatment. Compared with the risk of CAD in patients with a lower level of CRP who were taking statins, the risk increased significantly when the CRP level was higher, regardless of whether they were taking statins or not. The risk was the highest (OR = 2.15, 95% CI 1.08 to 4.27,  $p = 0.029$ ) for those with a higher level of CRP but who were not on statins therapy.

**Conclusion** CRP is associated with the severity of CAD. It may provide additional information regarding the risk of presenting multi-vessel stenosis even in patients with lower LDL-C.

**e0258 CURRENT CLINICAL PRACTICE AND GUIDELINE APPLICATION IN THERAPIES OF ST SEGMENT ELEVATION ACS INPATIENT IN A MULTI-PROVINCIAL STUDY IN CHINA: RESULTS OF BRIG PROJECT**

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**Objective** To evaluate the current practice of medications that have been proven effective by evidence-based medicine on inpatients with ST segment elevation ACS in China.

**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. There 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%),  $\beta$ -blocker (55.8%–84.4%), LWMH 54.2%–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,  $\beta$ -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 follow-up 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 accompanied with early poor mental health, anxiety, depression, obviously, the life quality significantly decreased; the initial results of the assessment were SDS (56.4 $\pm$ 8.3) points, SAS (55.6 $\pm$ 5.2) points, SCL-90 (1.9 $\pm$ 0.4) points, CARES-SF (25.2 $\pm$ 15.5) 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 $\pm$ 7.5) points, SAS (42.5 $\pm$ 5.2) points, SCL-90 (1.4 $\pm$ 0.3) points, CARES-SF (32.5 $\pm$ 16.7) 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.