

Method A group of 2832, 1828, 2277 elderly residents aged ≥ 60 in Beijing were chosen into this study in the year 2000, 2004, 2007 by well-established statistical sampling techniques such as cluster, stratification and random selection, and epidemiological trend of elderly hypertension was analysed by χ^2 analysis.

Result The prevalence rate (69.2%, 61.9%, 56.0%) of hypertension and the control rate (22.6%, 16.7%, 21.5%) lowered annually, and awareness rate (43.7%, 55.8%, 57.6%) of treatment elevated annually. There was no rising in the control rate of male (26.2%, 16.7%, 20.8%), less older (28.0%, 18.4%, 21.0%) and rural (19.5%, 9.6%, 13.4%).

Conclusion The results indicate that the prevalence of hypertension is high in the elderly rural people, while the rates of awareness, treatment and control are low. It suggests that effective public measures need to be developed to improve the prevention and control of hypertension.

e0244 HOW LOW WE SHOULD GO IN ELDERLY PATIENTS WITH TYPE 2 DIABETES AND HYPERTENSION IN CHINESE HAN PEOPLE

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Background The benefits of lowering systolic blood pressure (SBP) below 140 mm Hg in elderly patients with type 2 diabetes and hypertension are unclear.

Methods Elderly (age ≥ 65 years) patients with type 2 diabetes and hypertension underwent 12-lead ECG. The R-wave voltage in lead aVL (RaVL ≥ 0.57 mV) was used to assess CVD risk. GFR was estimated by Cockcroft-Gault formula. 235 patients were tight SBP controlled (130–139 mm Hg), and 472 patients were less tight SBP controlled (140–159 mm Hg).

Results The height of RaVL and risk of the height of RaVL ≥ 0.57 mV was no significance difference between the two groups, but some decline in eGFR was found in the less tight control group (adjusted mean 55.61 vs 59.65, $p=0.06$) although the decrease was not statistically significant.

Conclusions In elderly patients with type 2 diabetes and hypertension, to achieve the target SBP of below 140 mm Hg seems reasonable.

e0245 A REPORT OF 511 INHOSPITAL CARDIOPULMONARY RESUSCITATION BASED ON THE UTSTEIN STYLE

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Aim of the Study To use the Utstein Templates for Resuscitation Registries to evaluate the outcome and impact factors of cardiopulmonary resuscitation (CPR) at Hainan Provincial People's Hospital in China.

Material and Methods According to the "Utstein style" for CPR, a CPR registry form was designed and registry research methods were employed to study the epidemiological characteristics, outcome, and impact factors of CPR in 511 patients presented to the Emergency Department requiring CRP.

Results A total of 511 CPR patients were registered, including 356 males (69.7%). The highest CPR rates were observed for 45–54, 55–64, and 65–74 year old patients. Cardiovascular diseases (190 cases, 36.5%) and cerebrovascular diseases (48 cases, 9.2%) were common in the medical histories of included patients. The ROSC and survival to discharge rates were 46.96% (139 patients) and 13.51% (40 patients) in patients treated only with in-hospital CPR

but 16.74% (36 patients) and 4.65% (10 patients), in CPR patients treated prior to presentation to the Emergency Department ($p<0.01$), respectively.

Conclusions These results are comparable with those of international horizontal studies using the "Utstein style." Nonetheless, the data collected in this study indicate that the survival to discharge rates for patients treated with in-hospital CPR are low and that the effectiveness of CPR needs to be improved.

e0246 THERAPEUTIC EFFECT OF A DUAL-CHAMBER PACEMAKER WITH THE OPTIMISED PROGRAM-CONTROL MODE ON LONG-QT SYNDROME

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Objective To explore the optimised program-control mode of a dual-chamber pacemaker combined with β -blocker to treat congenital long QT syndrome (LQTS).

Methods 12 LQTS patients in our hospital that still have symptoms despite use of regular drug therapies or that can not endure the therapies were implanted with DDD cardiac pacemaker. The QT/QTc intervals of those patients were measured at different pacing rates respectively. Their cardiac pacemakers were all programmed to selectively turn on and turn off some related functions at the pacing rate of 80 beats/min. The dosage of β -blockers was adjusted according to the patients' PR intervals and blood pressures. The MACE and the cardiac function of the patients were recorded after operation.

Results The measured QT/QTc interval decreased with the pacing rate increasing. The pacing rate of 80 beats/min can make QT/QTc interval basically normal. The MACE of the patients were statistically declined ($p=0.003$) and no negative effect on cardiac function was found during the follow-up.

Conclusion The optimised program-control mode of a dual-chamber pacemaker combined with β -blocker to treat congenital LQTS are: to pace at the rate of 80 beats/min and program to turn off lag, sleep, automatic preventing PMT and automatic threshold-capture feature and turn on the PVC, rate adaptation and atrioventricular node priority function.

e0247 PREVALENCE OF METABOLIC SYNDROME AND ITS EFFECT ON CAROTID ARTERY INTIMA-MEDIA THICKNESS IN XINJIANG KAZAK POPULATIONS

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Objective To investigate the prevalence of metabolic syndrome (MS) in Xinjiang Kazak populations, and explore the effect of metabolic syndrome on Carotid artery intima-media thickness in Kazak populations.

Methods A cross sectional study was conducted in 1610 kazak participants aged from 19 years to 98 years (mean \pm SD, 46.7 \pm 12; 654 men and 956 women) in Xinjiang Yili. The National Cholesterol Education Program (NCEP) criteria for MS were used in the study. Carotid intima-media thickness (IMT) was measured by echocardiography. According to NCEP criteria, populations were divided into MS group and non-MS group.

Results The prevalence rate of MS by the NCEP criteria Was 40.1% (44.8% in men and 36.9% in women). IMT was significantly higher in MS group than non-MS group ($p<0.05$).

Conclusions MS is highly prevalent in Kazak populations in Xinjiang, particularly among men. And there was a tendency of increase in IMT with increasing components of metabolic syndrome. Metabolic syndrome in Kazak populations has adverse effect on early atherosclerosis. To find out high-risk MS groups is an important measure for preventing early atherosclerosis.

e0248 **INFLUENCE OF GENDER ON PULSE WAVE VELOCITY AND ARTERIAL COMPLIANCE IN PATIENTS WITH HYPERTENSION AND CORONARY HEART DISEASE 1**

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Objective The lower incidence of atherosclerosis in premenopausal women than in men was an established epidemiological observation. However, the incidence of cardiovascular disease in women increased dramatically after postmenopausal years. Compliance and distensibility are wall properties of arteries, which may play a role in cardiovascular disease. The purpose of this study was to investigate whether the influence of gender on arterial compliance in patients with hypertension (HP) and/or coronary heart disease (CHD).

Methods The cohort consisted of 500 patients with HP and/or CHD who were registered as outpatients in the Department of Geriatrics of the Qi-Lu Hospital of Shandong University from February 2007 to April 2008 (age from 45 to 87 year). All subjects gave informed written consent. The study protocol was approved by the Ethics Board of Qi-Lu Hospital of Shandong University. Five hundred patients (330 men, 170 women) were divided into four groups: premenopausal women (n=54) and age-matched normotensive men (n=118), postmenopausal women (n=116) and age-matched men (n=212). Postmenopausal women did not receive hormone replacement therapy. Carotid-femoral pulse wave velocity (CF-PWV), capacitive arterial compliance (C1), and oscillatory arterial compliance (C2) were measured using Complior SP automatic device and DO-2020 cardiovascular profiling instrument. Premenopausal and postmenopausal women were compared with age-matched men.

Results Postmenopausal women had lower positive rates of CF-PWV and C1 than age-matched men (44.83% vs 72.17%, $p<0.01$; 25.86% vs 41.04%, $p<0.01$), whereas the positive rates of C2 was higher in postmenopausal women (35.34% vs 15.57%, $p<0.01$). But the positive rates of CF-PWV, C1 and C2 of premenopausal women did not differ significantly than age-matched men ($p>0.05$). Women with CHD, HP+CHD had lower CF-PWV ($p<0.05$) than men. CF-PWV of women with HP did not differ significantly than men with HP ($p>0.05$). Moreover, women with CHD, HP+CHD had lower positive rates of CF-PWV and C1 than men (3.33% vs 36.54%, 3.33% vs 21.15%, $p<0.05$; 58.11% vs 81.38%, 29.73% vs 50.34%, $p<0.01$), whereas the positive rates of C2 was higher in women with CHD, HP, HP+CHD (30.00% vs 9.62%, 22.73% vs 9.77%, 32.43% vs 18.62%, $p<0.05$). But the positive rates of CF-PWV of women with HP did not differ significantly than men with HP ($p>0.05$). In multiple regression analysis of patients with CHD, HP and CHD, CF-PWV, C1 and C2 were significantly correlated with gender (women) ($r=0.480$, -0.259 , -0.242 , $p<0.05$; 0.200 , -0.145 , -0.237 , $p<0.05$), whereas there were no close correlations between CF-PWV and gender (women) in the patients with HP ($r=0.095$, $p>0.05$).

Conclusion The effect of cardiovascular risk factors on arterial compliance was not uniform but depends on gender and menopause.

e0249 **PROGNOSTIC VALUE OF PREMATURE VENTRICULAR CONTRACTION ORIGINATING FROM DIFFERENT LOCATION FOR PATIENTS WITH CHRONIC HEART FAILURE**

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Background Several studies have suggested that ventricular arrhythmias detected by ambulatory ECG (AECG) may identify patients with chronic heart failure (CHF) at high risk for cardiovascular death. However, few studies aim at whether different origins of premature ventricular contraction (PVCs) can hold any prognostic value in CHF patients.

Methods Ventricular arrhythmias were analysed and quantified by use of prespecified criteria on baseline AECG from 206 patients diagnosed with CHF and left ventricular ejection fraction (LVEF) $\leq 40\%$. After follow-up, the patients were divided into two groups: survival group and cardiac death group by an independent group. The relationship between cardiovascular mortality and AECG parameters were determined respectively by univariate and multivariate analyses.

Results 206 patients were enrolled and 198 (96.12%) patients were completed in this study. After follow up, there were 37 deaths. A-V block, 24 h-average heart rate, number of PVCs, presence of nonsustained ventricular tachycardia (NSVT), frequency of NSVT episodes, fastest rate of NSVT, PVCs originating from left ventricular inflow tract (LVIT), NSVT originating from LVIT and LOWN grade were univariate predictors of cardiovascular mortality. In multivariate logistic regression analysis, 24 h-average heart rate, number of PVCs, PVCs originating from LVIT and frequency of NSVT episodes were significant independent predictors of cardiovascular mortality.

Conclusion Determinating the location of PVCs by AECG can indicate prognosis of CHF patients.

e0250 **STUDY AUGMENTATION INDEX AND INFLUENTIAL FACTORS IN UYGUR HEALTH ADULTS IN HETIAN, XINJIANG**

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Objective To investigate augmentation index (AIx) and the affecting factors in Xinjiang Uygur health adults.

Methods The total of 2366 Uygur natural adults were investigated. 559 health adults (male 251, female 308) were selected in the study and the mean age was (44.95 \pm 11.87) years. All the subjects were measured the following indexes: questionnaire, physical examination, fasting blood glucose, blood lipid, renal function and C-reactive protein (CRP). Central systolic blood pressure (cSBP) and central augmentation index (AIx) were measured by Sphygmocor.

Results AIx in female was higher than in male (male: 18.52 \pm 11.27, female: 29.84 \pm 8.44, $p<0.05$). The same result was found in different age groups. Unadjusted correlation analysis showed AIx was positively related to age in both genders (male: $r=0.548$, female= 0.405 , $p<0.05$), as well as adjusted other influential factors (male: $r=0.182$, female= 0.234 , $p<0.05$). Multivariate regression analysis showed that cSBP, systolic blood pressure (SBP), age, weight and CRP were main factors which affected AIx in male, while age, cSBP, SBP, height and CRP were main factors which affected AIx in female.

Conclusion AIx in female was higher than in male. AIx was positively related to age in both genders. Age, cSBP, SBP and CRP were main factors affected AIx in Xinjiang Uygur health adults.