Method A group of 2332, 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 χ² 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 (45.7%, 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.

HOW LOW WE SHOULD GO IN ELDERLY PATIENTS WITH TYPE 2 DIABETES AND HYPERTENSION IN CHINESE HAN PEOPLE
doi:10.1136/hrt.2010.208967.244

Gang Chen, Xiaolan Lai, Lixiang Lin. Fujian Provincial Hospital, Fujian, China

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 (140–159 mm Hg), and 472 patients were less tight SBP controlled (159–135 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.

A REPORT OF 511 INHOSPITAL CARDIOPULMONARY RESUSCITATION BASED ON THE UTSTEIN STYLE
doi:10.1136/hrt.2010.208967.245

Song Wei, Chen Shi, Lan Baqong, Mo Defana, He Ningninga.

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±SD, 46.7±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.

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), capillary arterial compliance (C1), and oscillatory arterial compliance (C2) were measured using Compilir 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 (3.3% vs 36.54%, 3.5% vs 21.15%, p<0.05; 58.11% vs 81.58%, 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%, 22.75% 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 meno-pause.