Methods: Studies were systematically searched and identified in the PubMed and Embase databases. Published studies evaluating the efficacy of RDN in patients with RH, reporting at least one outcome of interest were included. Studies were divided into controlled and uncontrolled studies and analyzed using indicated meta-analysis models.

Results: We identified 21 eligible studies of 1225 participants. In controlled studies, there was a reduction in mean systolic and diastolic blood pressure (BP) and heart rate (HR) evaluated by ABPM at 6 months of -14 mm Hg (95% CI -23.93 -4.07), -8.0 mm Hg (95% CI -14.74 -1.26), and -3.77 beats per minute (bpm) (95% CI -7.05 -0.50), respectively, compared with medically therapy (for both, P<0.05). Similarly, in uncontrolled studies, reductions in mean systolic and diastolic BP and HR at 6 months were -12.83 mm Hg (95% CI -17.45 -8.21), -6.77 mm Hg (95% CI -9.24 -4.30), and -3.62 bpm (95% CI -5.60 -1.63), respectively (for both, P<0.001). Moreover, there were marked improvements in the effect of RDN on cardiac structure, whereas no worsening of renal function was reported and there were few procedural adverse events.

Conclusions: RDN demonstrates significant reductions of BP and HR evaluated by ABPM in RH patients. Moreover, it also elicits a marked improvement in cardiac structure without renal impairment. RDN may be a novel and effective approach in treatment of RH with a favorable safety profile.

GW25-e3209
Blood Pressure Variability in Mongolian and Han Hypertension Patients
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Objectives: To investigate the feature and clinical significance of ambulatory blood pressure (ABP) and central aortic pressure (CAP) in Mongolian and Han patients with essential hypertension (EH).

Methods: Methods A total of 432 hypertension patients were divided into groups, Mongolian [n=213, including 127males, 131 females, (59.9±6.2) years], Han [n=264, including 125 males, 139 females, (57.8±8.5) years]. Fasting plasma glucose (FBG),body mass index (BMI), total cholesterol (TC), triglyceride (TG), low density lipoprotein cholesterol (LDL - C), high density lipoprotein cholesterol (HDL - C), 24 h ABP including daytime diastolic blood pressure (dDBP), nocturnal systolic blood pressure (nSBP), nighttime diastolic blood pressure (nDBP), 24 h SBP, 24 h DBP were compared between 2 groups; CAP checks included central diastolic pressure (CDP), central systolic pressure (CSP), central pulse pressure (CPP), augmentation index (AI).

Results: Results BMI, TG, dSBP, DBP coefficient of variability, CSP were higher in Mongolian hypertension group than in Han group, the difference was significant (P<0.05). CSP, DBP decreased with the augment of age, and higher in Mongolian group than in Han group in varying age groups (P<0.05).

Conclusions: Conclusion CSP, dSBP are higher in Mongolian hypertension patients than in Han, increasing with the augment of age. So 24 h ABP and CAP tests play an important role in preventing hypertensive complications in Mongolian high -prevalence area.

GW25-e4114
Relation between White Coat Effect and Stroke A Cross Sectional Study from Beijing
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Objectives: Blood pressure variability (BPV) has been identified as an important new risk factor for cardiovascular events. White coat effect (WCE), measured as the first systolic blood pressure (SBP) measurement minus the mean of the second and the third measurements, is a type of BPV within a single visit. We investigated the relationship between WCE and stroke risk in this study.

Methods: 2972 participants who had 3 measurements of BP within one single visit were included. Participants were divided into three groups according to their WCE percentiles. Group 1 (WCE≤2.5%), Group 2 (WCE2.5, 0-2.4th percentiles of WCE) and Group 3 (WCE≥97.5, 97.6-100th percentiles of WCE). A multiple logistic regression model was used to analyze the relationship between WCE and stroke adjusted for age and BMI groups, gender, smoking status, hypercholesterolemia, SBP, hypertension, diabetes mellitus, IMT thickening, brachial-ankle pulse wave velocity (baPWV) abnormality and carotid plaque.

Results: Traditional risk factors, such as age, gender, hypertension, diabetes, and obesity were related to stroke (P<0.05). CIMT thickening, carotid plaque, ba-PWV abnormality were also related to stroke (P<0.05). Compared to WCE≤2.5% group, the OR for stroke in WCE2.5% group was 2.78 (95% CI 1.22, 6.36, P=0.015). After adjusting for age and BMI groups, gender, SBP, diabetes, hypertension, hypercholesterolemia, smoking status, CIMT thickening, carotid plaque and ba-PWV abnormality, the correlation became stronger, OR increased to 2.94 (95% CI 1.16, 7.50, P=0.025).

Conclusions: WCE2.5% is associated with stroke independently, further studies are needed to be conducted to assess the cause and effect relationship.

GW25-e4136
Lifestyle Modification Combined with Perindopril Therapy on hsCRP and MIF Serum Levels in Patients with Stage 1 Hypertension
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Objectives: The scientific advisory for hypertension 2013 from ACC/AHA suggested that lifestyle modification in patients with stage 1 hypertension would help to achieve goal of blood pressure control. Few studies focused on chronic inflammation status in stage 1 hypertension patients, while the chronic inflammation status would be relieved by achieving better blood pressure control. In this study we aimed to determine the effect of lifestyle modification combined with perindopril therapy on high sensitivity C-reactive protein (hsCRP) and macrophage inhibitory factor (MIF) serum levels. Methods: 16 cases of stage 1 hypertension patients were involved into the study. All the subjects were divided into lifestyle modification group (average age 54.1±7.2yrs) and perindopril therapy group (average age 56.1±6.7yrs) by matched pair design. Patients in perindopril therapy group also received lifestyle modification. Peripheral serum from the subjects was collected at the time of enrollment. The sample collection procedure was conducted after 4 and 8 weeks of intervention. Enzyme-link immune-sorbent assay (ELISA) was used to determine the serum level of hsCRP and MIF. Both groups blood pressure, hsCRP and MIF level was analyze by SPSS 19.0.

Results: At the time of enrolled there was no significant difference in blood pressure between two groups (149.7±3.6 vs 149.8±3.6 mmHg, P>0.05). Both groups’ hsCRP and MIF serum level showed no significant difference (hsCRP 3.75±0.22μg/L vs 3.79±0.19μg/L, MIF 9.12±0.24μg/L vs 9.19±0.18μg/L). In week 4, there was a reduction in blood pressure control at week 4 and week 8, while patients who receive lifestyle modification combined with perindopril therapy achieved better systolic blood pressure control than those who only receive lifestyle modification at week 8 (123.0±6.2mmHg vs 137.0±7.5mmHg) (P<0.05), but there was no significant difference in blood pressure between two groups at week 4. Also both groups hsCRP and MIF level became lower after intervention. At week 4 patients received both perindopril therapy and lifestyle modification showed significantly lower MIF level (8.32±0.34μg/L vs 8.85±0.36μg/L) (P<0.05), while hsCRP level showed no significant difference between two groups (3.56±0.22μg/L vs 3.54±0.18μg/L). Both groups’ hsCRP and MIF level showed no significant difference at week 8 (hsCRP 3.18±0.08μg/L vs 3.25±0.20μg/L, MIF 7.76±0.31μg/L vs 8.03±0.17μg/L).

Conclusions: Lifestyle modification could achieve good blood pressure control in stage 1 hypertension patients and it could help to lower serum level of hsCRP and MIF. Additional lifestyle modification combined with perindopril therapy showed slightly better blood pressure control. All with lower hsCRP and MIF. BUT the difference was slight. The results confirmed the important role of lifestyle modification in stage 1 hypertension. But hypotension therapy is still advised in those with high risk factors, such as diabetes.

GW25-e4417
Correlation among prehypertension, hsCRP and IL-6 in Xinjiang kazakh
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Objectives: To study the relationship among prehypertension, hsCRP and IL-6 in xinjiang kazakh and clinical significance.

Methods: The OPD physical-exam persons (n=396) in 2011 were chosen and divided into the normal group (n=124), prehypertension group (n=144) and hypertension group (n=128). The levels of hsCRP, IL-6 and MIF. Both groups blood pressure, hsCRP and MIF level was analyze by SPSS 19.0. The comparison of levels of TC, TG, LDL-C, HDL-C, FBG, systolic blood pressure (SBP) and diastolic blood pressure (DBP) among three groups showed that the difference was statistically (all P<0.01). The levels of serum hsCRP and IL-6 were higher in the prehypertension group than those in the normal group (P<0.01), and lower than those in the hypertension group (P<0.01). The result of multiple linear stepwise regression showed that hsCRP and IL-6 were, respectively, correlated to SBP and DBP independently (P<0.001).

Conclusions: The patients with prehypertension have higher levels of hsCRP and IL-6 in xinjiang kazakh,which are involved in the development of the Kazak hypertension.

GW25-e0085
Relationship between Vascular Overload Index and CA-IMT in Hypertensives
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Objectives: To investigate the relationship between vascular overload index (VOI) and intima media thickness of carotid artery (CA-IMT) in hypertensives.

Methods: 646 subjects with essential hypertension (EH) (386 men, 260 women, average age 48.5±11.5) were enrolled for the First Affiliated Hospital of Fujian Medical University between August 2000 and March 2013. Based on the cut-point of IMT≥ 1.0mm, EH patients were divided into two groups: IMT<1.0mm group (n=376) and IMT≥1.0mm group (n=270). 98 subjects with normal blood pressure served as the