

Reader and expressed in arbitrary units in the range from 0 to 25. Plasma AGEs concentration was measured by the enzyme-linked immunosorbent assay kits and logarithmically transformed for statistical analysis. Arterial stiffness was assessed by carotid-femoral pulse wave velocity (PWV) using the SphygmoCor system (Sydney, Australia).

**RESULTS** The 218 participants (96 [44.0%] men, mean age 51.9 years), had a mean skin and plasma AGEs of 1.89 arbitrary units and 4.47  $\mu\text{g}/\text{ml}$ , respectively, and carotid-femoral PWV of 8.0 m/s. Skin autofluorescence was significantly correlated with plasma AGEs in diabetic or prediabetic patients ( $n=31$ ,  $r=0.37$ ,  $P=0.04$ ), but not in subjects with normoglycemia ( $n=187$ ,  $r=-0.47$ ,  $P=0.52$ ). Nonetheless, both measurements were significantly ( $P\leq 0.001$ ) higher in men (2.00 arbitrary units and 6.73  $\mu\text{g}/\text{ml}$ , respectively) than women (1.81 arbitrary units and 3.60  $\mu\text{g}/\text{ml}$ , respectively) and in diabetic or prediabetic (2.03 arbitrary units and 6.61  $\mu\text{g}/\text{ml}$ , respectively) than normoglycemia subjects (1.87 arbitrary units and 4.17  $\mu\text{g}/\text{ml}$ , respectively), but not in hypertensive ( $n=105$ ) than normotensive subjects ( $n=113$ ,  $P=0.35$ ). In adjusted multiple regression analyses, plasma AGEs concentration was significantly associated with PWV in all subjects ( $\beta=0.44$  m/s for each 10 - time increase;  $P=0.04$ ) and in subgroups of men, diabetes and prediabetes ( $\beta=0.12$  to 0.55 m/s for each 10 - time increase;  $P\leq 0.02$ ).

**CONCLUSIONS** In conclusion, although skin and plasma AGEs were similarly associated with gender and diabetes or prediabetes, they might measure something different and have different clinical relevance, such as for arterial stiffness.

#### GW27-e0711

##### The Association of Adiponectin or Its Polymorphism with Salt Sensitivity: A Human Dietary Intervention Study

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**OBJECTIVES** The mechanisms of salt sensitivity as an important intermediate phenotype of essential hypertension remain elusive. Evidences show that salt could modulate adiponectin level in normal individuals. Therefore, we hypothesized that abnormalities of adiponectin and inflammation may be the potential mechanism of salt sensitivity.

**METHODS** Subjects ( $n = 334$ ) from 124 families were selected from a rural community of Northern China. All of the people were sequentially maintained on 3 days baseline investigate, a low-salt diet for 7 days (3 g/day, NaCl), then a high-salt diet for 7 days (18 g/day). Salt-sensitivity was diagnosed in 10 subjects who exhibited a response of the increase in mean BP by  $\geq 10\%$  from low-salt period to high-salt period. The concentration of plasma adiponectin was measured by an immunoenzyme method (ELL SA). A total of seven single nucleotide polymorphisms (SNPs) in the were selected from adiponectin gene. Single marker and haplotype analyses were conducted using the Family Based Association Test program.

**RESULTS** Plasma adiponectin higher significantly in high salt intake than low salt diet ( $6.1\pm 1.3$  vs  $7.1\pm 1.7\mu\text{g}/\text{ml}$ ,  $P=0.047$ ) in normotensive salt resistant subjects but not in normotensive salt sensitive subjects ( $6.4\pm 2$  vs  $5.9\pm 2.1\mu\text{g}/\text{ml}$ ,  $P=0.481$ ). After adjustment for multiple testing, the adiponectin SNP rs16861205 was significantly associated with the DBP response to low-salt intervention and the DBP and MAP responses to high-salt intervention ( $P = 0.028$ ,  $0.023$ ,  $0.027$  respectively). SNP rs822394 was associated with the DBP and MAP responses to low-salt intervention and the DBP response to high-salt intervention ( $P = 0.023$ ,  $0.030$ ,  $0.033$  respectively).

**CONCLUSIONS** Our data indicates that the disturbance of adiponectin exists in normotensive salt sensitive subjects during high salt diet, which may be a novel underlying mechanism of salt sensitivity. Adiponectin gene variation might be mechanistically involved in the salt sensitivity.

#### GW27-e0799

##### Safety of azilsartan medoxomil in hypertension: A Meta-analysis

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**OBJECTIVES** This study was to compare the safety in patients with hypertension receiving azilsartan medoxomil as monotherapy or other antihypertensive agents.

**METHODS** The Cochrane library, PubMed, Chinese National Knowledge Infrastructure (CNKI), Wanfang Data were searched from the beginning of the records through September 2015. Eligible studies were prospective randomised controlled trials of azilsartan (including azilsartan medoxomil) vs. any control therapy. Six articles were extracted by two physicians. The pooled risk of serious adverse effects, clinical adverse reactions, laboratory were computed and expressed as odds ratios (ORs) for azilsartan medoxomil 40 mg and 80 mg and relative to any antihypertensive monotherapy.

**RESULTS** Difference in total adverse effects, serious adverse effects and adverse leading to discontinuous have no statistical significance between azilsartan medoxomil and the controlled group. Dizziness, urinary tract infection and potassium  $\geq 6.0$  mmol/L were more frequent on azilsartan medoxomil 40 mg (respectively: OR=1.44, 95% CI[1.01,2.06];  $P=0.04$ ; OR=1.82, 95% CI[1.10,3.01];  $P=0.02$ ; OR=5.88, 95% CI[1.53,22.59];  $P=0.01$ ).

**CONCLUSIONS** Total adverse effects and serious adverse effects were similar in azilsartan medoxomil group and controlled group in patients with hypertension. However, it should be used with caution in patients with renal insufficiency and hyperkalemia.

#### GW27-e0802

##### The Efficacy of wet cupping in treatment of hypertension

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**OBJECTIVES** Wet-cupping is a old method that is still used in medicine, but few empirical studies have been done about its effect on hypertension. The purpose of this study, the effect of wet-cupping on blood pressure in patients 35-60 years old was diagnosed with hypertension. The objective of this randomized clinical trial was to assess wet cupping for treating hypertension.

**METHODS** This study was a matched random controlled clinical trial and samples were 42 patients that came to Imam Hussein (A) Clinic of Quchan. Samples determined purposive sampling method and divided randomly two groups. Blood pressure measured before starting the study, before and after wet-cupping sessions and 2 weeks after the third session. Analysis was done by SPSS 17. Statistical methods used included Independent t test, Paired t test, Fisher exact test.

**RESULTS** The study subjects for age, body mass index, and duration of hypertension and duration of antihypertensive drugs, independent t test, does not show significant difference between wet-cupping and control groups and two groups respectively with  $p=0.983$ ,  $p=0.682$ ,  $p=0.770$ ,  $p=0.540$  are homogeneous. Paired t-test results showed that systolic blood pressure in cupping group before and after wet-cupping course there is a significant difference ( $P < 0.05$ ), but there was no significant difference in diastolic blood pressure ( $P > 0.05$ ).

**CONCLUSIONS** With regard to increasing use of wet-cupping to treat a wide group of illnesses and the clients' satisfaction, presenting suitable and proper use, informing people usage, and supervising the above-mentioned centers should be considered by authorities.

#### GW27-e0826

##### Impacts of amlodipine, valsartan and the two drugs combination on blood pressure variability and pulse wave velocity in hypertensive patients

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**OBJECTIVES** Antihypertensive therapy is effective to control blood pressure and prevent cardiovascular events, but further treatment for patients who cannot achieve goal BP with mono-therapy is still under dispute. Our study investigates the impacts of amlodipine, valsartan and their combination on blood pressure variability (BPV) and pulse wave velocity (PWV) to provide reference for clinical medication.

**METHODS** A total of 119 outpatients newly diagnosed essential hypertension or receiving low dose mono-therapy underwent a 10-week