**CONCLUSIONS** Our meta-analysis suggests that MMP-1 rs1144393 polymorphism and susceptibility to acute myocardial infarction (AA/GG vs. GG: OR = 1.275, 95% CI = 1.016-1.600, \( P = 0.036 \)) or unstable angina pectoris subjects (AA vs. GG: OR = 2.128, 95% CI = 1.696-2.670, \( P < 0.001 \); AA vs. GG: OR = 2.933, 95% CI = 1.399-6.421, \( P = 0.007 \); AA vs. GG/GG: OR = 0.497, 95% CI = 0.457-4.211, \( P = 0.001 \)). But we found no significant association between the -519 A/G polymorphism and ACS either in Asian or Caucasian.

**METHODS** A single nucleotide polymorphism (rs4804611) in zinc finger protein 627 (ZNF627) gene has been demonstrated to be associated with the susceptibility to myocardial infarction (MI), but the results are inconsistent.

**RESULTS** Five eligible studies involving 11639 subjects (6299 patients and 5340 healthy controls) were included in this meta-analysis. Overall, the results indicated that rs4804611 polymorphism was associated with the risk of MI (GG vs. AA/AG: OR = 0.833, 95% CI = 0.704-0.985, \( P = 0.032 \)). Furthermore, subgroup analyses also showed that rs1801157 rs4804611 polymorphism was associated with the risk of MI in Caucasian (GG vs. AA/AG: OR = 0.985, 95% CI = 0.704-0.999, \( P = 0.048 \)).

**CONCLUSIONS** In conclusion, our meta-analysis suggests that the rs4804611 polymorphism in ZNF627 gene is associated with the risk of MI. However, further large scale case-control studies with rigorous design should be conducted to confirm above conclusions in the future.

**GW26-e3860**

**Hyperuricemia is independently associated with left ventricular hypertrophy in postmenopausal women but not in premenopausal women in rural Northeast China**

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**OBJECTIVES** To estimate the relationship between hyperuricemia, left ventricular hypertrophy and to investigate whether menopause was associated with the relationship between hyperuricemia and left ventricular hypertrophy.

**METHODS** This survey was conducted from July 2012 to August 2013. A total of 6029 women (3308, 58.2% were post-menopause) from the rural Northeast China were randomly selected and examined. Left ventricular hypertrophy was defined using the 2007 Guidelines for the Management of Arterial Hypertension of the European Society of Hypertension (ESH) and of the European Society of Cardiology (ESC).

**RESULTS** Age, body mass index, glucose, estimated glomerular filtration rate and lipid level were significantly correlated with serum uric acid level. Left ventricular hypertrophy (LVH) showed a gradual increase in accordance with the serum uric acid level in entire study population (<4.0 mg/dL, 11.4%; 4 to <5mg/dL, 14.9%; 5 to <6mg/dL, 18.9%; ≥6 mg/dL, 27.4%; \( P < 0.001 \)). Multivariate analysis revealed that hyperuricemia was a significantly independent risk factor for left ventricular hypertrophy in postmenopausal women (OR65%CI: 1.367[1.026,1.821]), but not in premenopausal women (OR95%CI: 1.290[0.669,2.480]).

**CONCLUSIONS** These findings suggested that hyperuricemia can be used as a risk marker of left ventricular hypertrophy in a female population, and particularly as an independent risk factor in postmenopausal women but not in premenopausal women.

**GW26-e3870**

**Gender-Related Differences in the Relationship between Plasma Homocysteine levels and lifestyle factors in rural Chinese population**

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**OBJECTIVES** Increased plasma total homocysteine (tHcy) is a known cardiovascular disease (CVD) risk factor. Observational studies have supported the role of lifestyle factors such as physical activity, diet and alcohol consumption in CVD prevention. The prevalence of hyperhomocysteinemia (hhcy) and the relationship between Hcy and lifestyle factors have been reported in other ethnicities. However, information available on rural Chinese population is scanty. Our present study aims to determine the gender-related differences in the relationship between Hcy and lifestyle factors in rural Chinese population.

**METHODS** In this cross-sectional study, a total of 7135 adults (3320 men and 3815 women) aged 35 years or older were recruited from rural areas of China. Anthropometric measurements, laboratory examinations and self-reported information on lifestyle factors, such as physical activities, sleep duration, current smoking and drinking status, dietary habits and familial factors were collected by trained personnel.

**RESULTS** Plasma Hcy was higher in men than in women and greater in the elderly than in other age groups. In men, persons with Hcy levels were more likely to be current smokers (odds ratio (OR): 1.328; 95% confidence interval (CI): 1.43-1.543) and to have an education of primary school or below (OR: 1.251; 95% CI: 1.068-1.465) and less likely to eat more vegetables (OR: 0.927; 95% CI: 0.863-0.996) than the normal-Hcy participants. In women, persons with Hcy levels were more likely to be current smokers (OR: 1.465; 95% CI: 1.214-1.767), to sleep longer (>9h/d) (OR: 1.677; 95% CI: 1.292-2.177), to have low physical activity (OR: 1.721; 95% CI: 1.197-2.475) and increased diet score (OR: 1.126; 95% CI: 1.007-1.259) and less likely to be current drinkers (OR: 0.488; 95% CI: 0.297-0.802) than the normal-Hcy participants.

**CONCLUSIONS** Our study revealed that substantial gender and age variations occur in plasma tHcy levels and prevalence of Hcy in a large rural Chinese population, and were considerably higher than those found in other countries. Physical activity and current drinking status were not significantly associated with Hcy in male, but...