inhibiting RhoA/ROCK pathway, suppressing RhoA activities, downregulating associated proteins and interfering with the formation of stress fibers.

GW25-e0074
Effects of Astragaloside IV on the SDF-1/CXCR4 Expression in Atherosclerosis of ApoE-/-Mice Induced by Hyperlipemia
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Objectives: Astragaloside IV (ASIV) is the major effective component extracted from the Chinese herb Astragalus membranaceus, which has been widely used to treat cardiovascular disease. Recent studies have shown that ASIV can potentially protect the arteries from atherosclerosis, but the mechanisms of action are unknown. We therefore examined the effects of ASIV on SDF-1, CXCR4 expression content, SDF-1, CXCR4 mRNA gene and protein expression in the high-fat diet ApoE-/- mice.

Methods: Thirty-nine 8-week-old male ApoE-/- mice were divided into Three groups: model group, AMD3100 groups and AsIV group; Another Twelve 8-week-old inbred C57BL/6 mice were used as the control group. Groups of mice were sacrificed at 12 weeks of treatment, and the blood and the aorta were removed.

Results: Biochemical analysis showed TG, TC, HDL-C, LDL-C levels of each group of mice were detected using large biochemical analyzer. Aortic cross-sectional pathologic damage of mice was detected using HE staining. Aortic SDF-1, CXCR4 expression levels were quantified using western blotting and real-time PCR. Protein and mRNA expression of SDF-1, CXCR4 was quantified using western blotting and real-time PCR. Using western blotting and real-time PCR to quantify protein and mRNA expression of the bone marrow-derived endothelial progenitor cells CXCR4 of in Each group mice.

Conclusions: The protective effects of ASIV in atherosclerosis injury may be related to the regulation of lipid metabolism disorders, down-regulation of SDF-1/CXCR4 biological axis expression. SDF-1/CXCR4 biological axis is probably one of targets that astragaloside intervention atherosclerosis in ApoE-/- mice.

GW25-e0422
Relationship between polymorphism of SOCS-3 and dyslipidemia in China Xinjiang Uygur
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Objectives: We investigated the relationship between the polymorphism of SOCS-3 and dyslipidemia of people from Uygur in Xinjiang, China.

Methods: This cross-sectional study included 1379 participants in a Hetian Xinjiang Uygur population who were 30-70 years of age and were not from interracial marriages of 3 generations; all subjects were genotyped (909 dyslipidemia subjects, 470 healthy subjects).

Results: Allele (P = 0.002) and genotype (P = 0.003) frequencies of the distribution of rs12953258 was significantly different between the dyslipidemia group and control group. Between the total cholesterol (TC) abnormal group and control group, high-density lipoprotein cholesterol (HDL-C) abnormal group and control group, triglycerides (TG) abnormal group and control group, the frequencies of genotype in rs12953258 were significantly different (P = 0.007, 0.012, 0.0004, respectively). Based on the logistic regression analysis, genotype CA and AA of rs1295328 were independent and risk factors for dyslipidemia in Uygur (CC vs CA; OR = 1.48, 95% confidence interval 1.11-1.98, P = 0.008), (CC vs AA; OR = 2.48, 95% confidence interval 1.07-5.79, P = 0.035). Genotype AA of rs12953258 merged with subjects whose waist-hip ratio was abnormal, indicating the existence of dyslipidemia.

Conclusions: Our study demonstrated a significant association of GLUT4 gene SNPrs5417 with OSAS, compared with controls (P < 0.05). Haplotype B1 (TCC and H3 (CC) defined as SNPs5451, rs4517 and rs5435 are marginally associated with OSAS (P < 0.05). Frequencies of C haplotype of rs5417 in OSAS were higher than in controls. After adjustment for confounding factors, glucose transporter 4 (GLUT4) genes is Human and rodents’ main glucose transporter sensitive to insulin, and therefore confirmation of candidate gene polymorphisms and association with OSAS is needed. Aim of our study was to assess whether GLUT4 gene polymorphisms are associated with OSAS.

Methods: Patients hospitalized at People’s Hospital of Xinjiang were selected from January to December 2010. A total of 568 Han subjects who possibly exist OSAS base on a history and physical examination were completed the polysomnography, 4120 whose data were diagnosed with OSAS, and 156 individuals with OSAS were screened without OSAS (27%). 96 severe OSAS patients chosen from OSAS were used for DNA sequencing in functional domain. Blood samples were collected from all subjects and genotyping was performed on DNA extracted from blood cells.

Results: We performed GLUT4 genome sequencing found 4 mutated sites. And 4 sites were located at different sites such as rs5415, rs4517 and rs5435, according to principle of linkage disequilibrium (r² > 0.8) and minimum gene allele frequency > 5%. All SNPs satisfied HEW (P < 0.05). Our study demonstrated a significant association of GLUT4 SNPsrs5417 allele with OSAS, compared with controls (P < 0.05). Haplotype H1 (TCC and H3 (CC) defined as SNPs5451, rs4517 and rs5435 are marginally associated with OSAS (P < 0.05). Frequencies of C haplotype of rs5417 in OSAS were higher than in controls. After adjustment for confounding factors, glucose transporter 4 (GLUT4) genes significantly reduces prevalence of OSAS, compared with CC genotype. Level of awake blood oxygen and lowest blood oxygen of (AA + AC) genotype was significantly superior to those of CC genotype.

Conclusions: Our study demonstrates GLUT4 gene SNPsrs5417 is associated with OSAS in hypertensive population. Carriers of AA + AC have less prevalence of obstructive sleep apnea syndrome than that of CC carriers.

GW25-e0617
Scutellarin Attenuates Myocardial Ischemia Reperfusion Injury by Inhibiting JAK2/STAT3 Pathway
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Objectives: Animal studies have demonstrated that scutellarin (SCU) limits damage after myocardial ischemia injury. However, the underlying molecular mechanisms of