

The subgroup 6 was patient with diabetes plus hypertension. The expression of mRNA level were identified by Real-time RT-PCR.

**Results** The ratios of VDUP1/ $\beta$ -Actin of two groups were skewed distribution. In CAD group, the maximum was 630.346, the minimum was 1.000, the median was 5.205. In control group, the maximum was 837.532, the minimum was 2.395, the median was 80.449. By logarithmic transformation, the results indicated the expression of VDUP1 in PBMCs from patients with CAD were markedly down-regulated than that from control group ( $p < 0.05$ ). The expression of VDUP1 in PBMCs from patients with single risk factor were down-regulated than that from patients with multiple risk factors in CAD group ( $P_2 = 0.044$ ,  $P_4 = 0.033$ ).

**Conclusion** These findings shed new light onto the mechanisms of CAD, demonstrate that the expression of VDUP1 in PBMCs from treated patients with CAD has a negative correlation to CAD, and suggest that modulating the function of VDUP1 may open a new era of the therapy for CAD.

#### e0403 THE DIAGNOSIS OF CORONARY ARTERY ORIGIN ANOMALIES WITH DUAL-SOURCE CT AND ITS CLINICAL SIGNIFICANCE

doi:10.1136/hrt.2010.208967.403

Li Dongye, Zhang Yonggeng, Xu Kai, Long Bin, Xie Lixiang, Xia Yong, Zhang Yanbin. *The Affiliated Hospital of Xuzhou Medical College*

**Purpose** To investigate the clinical value of dual-source computer tomography (DSCT) in detecting anomalous origin of coronary artery for adult patients.

**Materials and methods** A retrospective evaluation to identify 3903 patients who underwent DSCT coronary angiography from Jan 2009 to Jan 2010.

**Results** All images were considered to be suitable for evaluation. Forty-two of 3903 patients were detected to have coronary artery origin anomaly. The incidence is 1.08%. They include 26 cases with an anomalous origin of right coronary artery (0.67%), 13 cases with an anomalous origin of left coronary artery (0.33%), 3 cases with single coronary artery (0.08%).

**Conclusion** DSCT coronary angiography that provide accurate depiction of anomalous coronary origin and course along with the complex anatomical relation with the adjacent structures can be considered as a first-line imaging method for delineating coronary arterial anomalies.

#### e0404 RELATIONSHIP BETWEEN INSULIN RESISTANCE AND

doi:10.1136/hrt.2010.208967.404

<sup>1</sup>Wei Ren-long, <sup>1</sup>Hasimu Buaijaer, <sup>1</sup>Yuan Bin-bin, <sup>2</sup>Yang Zhi-jian. <sup>1</sup>Department of Cardiology, Nanjing Benq Hospital, The Affiliated Hospital of Nanjing Medical University; <sup>2</sup>Department of Cardiology, The First Affiliated Hospital of Nanjing Medical University

**Objective** To determine insulin resistance in patients with coronary heart disease and explore the relationship between insulin resistance and coronary atherosclerosis, cardiovascular risk factors.

**Methods** The study population consisted of 506 consecutive patients (376 male and 130 female) who underwent coronary angiography and laboratory measurements for suspected or known coronary heart disease. The severity of coronary atherosclerosis was defined by using Gensini's score system. High specific BA-ELISA assays for true insulin was used. Insulin resistance was assessed by HOMA index. 506 cases were allocated into four groups according to HOMA index. Analysis of variance, kruskal-wallis test and  $\chi^2$  test was employed to investigate the distribution of the clinical data in

four groups according to HOMA index. Spearman's correlation analysis and multivariate stepwise linear regression analysis were employed to explore the relationship between HOMA index and Gensini's score, the cardiovascular risk factors.

**Result** One-way ANOVA and kruskal-wallis test indicated that age, triglyceride, apolipoprotein A, high density lipoprotein cholesterol, uric acid, BMI and Gensini's score differed among four groups according to HOMA index ( $p < 0.05$ ). Spearman's correlation analysis suggested that HOMA index was positively correlated with triglyceride, apolipoprotein B, uric acid, BMI and Gensini score but HOMA index was negatively correlated with apolipoprotein A and high density lipoprotein cholesterol. Multivariate stepwise linear regression analysis showed that BMI had the independent association with HOMA index ( $r = 0.090$ ,  $p = 0.05$ ).

**Conclusion** Insulin resistance existed in the patients with coronary heart disease. Insulin resistance was positively correlated with coronary atherosclerosis and was independently correlated with BMI in the patients with coronary heart disease.

#### e0405 EFFECT OF TELMISARTAN ON CARDIAC FUNCTION AND BRAIN NATRIURETIC PEPTIDE IN PATIENTS WITH CHRONIC HEART FAILURE

doi:10.1136/hrt.2010.208967.405

Bin Hu, Yujie Zhou, Dongmei Shi, Yingxin Zhao. *Beijing Anzhen Hospital*

**Objective** To evaluate telmasartan on cardiac function and brain natriuretic peptide (BNP) patients with chronic heart failure (CHF).

**Methods** We enrolled 120 patients with CHF, NYHAI-III, age 30–79 ( $61.25 \pm 10.18$ ) years. All the patients were randomly assigned to 2 groups: standard therapy group ( $n = 60$ , receiving ACEI, digoxin, diuretic,  $\beta$ -blcoks), telmasartan treatment group ( $n = 60$  receiving telmasartan in addition to the standard therapy). These patients were treated for 1 years, and plasma levels of BNP and left ventricular ejection fraction (LVEF) were measured before and after treatments.

**Results** No significant differences in baseline characteristics were observed between the two groups. After treatment, BNP plasma levels both decreased and LVEF increased significantly in two groups. BNP plasma levels in telmasartan treatment group were lower than that in standard group and LVEF higher at 1 year follow-up.

**Conclusion** Telmasartan in addition to the standard therapy can improve the cardiac function and decrease BNP plasma levels.

#### e0406 HIGH SENSITIVITY C-REACTIVE PROTEIN AND THE RISK OF STENT THROMBOSIS AND CARDIOVASCULAR EVENTS

doi:10.1136/hrt.2010.208967.406

Bin Hu, Yujie Zhou, Yuyang Liu, Dongmei Shi, Yingxin Zhao. *Department of Cardiology, Beijing Anzhen Hospital, Capital Medical University, Beijing, China*

**Background** C-reactive protein (CRP) is one of the acute phase proteins that increase during systemic inflammation. It's been suggested that testing CRP levels in the blood may be an additional way to assess cardiovascular disease risk. A more sensitive CRP test, called a highly sensitive C-reactive protein (hs-CRP) assay, is available to determine heart disease risk. However, and the association between CRP and stent thrombosis after drug-eluting stent implantation has not been defined.

**Objective** To investigate in a follow-up study whether high-sensitivity C-reactive protein (hs-CRP) predicts coronary heart disease (CHD) events and stent thrombosis in subjects undergone drug-eluting stent implantation.