

14th International Conference on

Clinical & Experimental Cardiology

November 14-16, 2016 Orlando, Florida, USA

A single nucleotide polymorphism in the *SLC19A1* gene is associated with thoracic aortic aneurysms and dissection in Indian population

Kalpnath¹, Sujatha Sunil², Priya Jagia¹, S K Choudhary¹, R K Bhatnagar² and Sanjiv Sharma¹¹All India Institute of Medical Sciences, India²International Centre for Genetic Engineering and Biotechnology, India

Objective: Genetic susceptibility is an important risk factor for aortic wall degeneration and its leads to thoracic aortic aneurysm and dissection (TAAD). In many patients with TAD, the aorta progressively dilates and ultimately ruptures. The purpose of this study was to determine the single nucleotide polymorphism in 6 genes associated with thoracic aortic aneurysm and dissection patients in Indian population-A case-control study.

Methods: Genomic DNA was isolated from blood and aortic wall tissue of 66 patients with degenerative TAAD, and 67 control individuals. Six SNPs-rs819146, rs8003379, rs2853523, rs326118, rs3788205 and rs10757278 were genotyped using TaqMan SNP Genotyping Assays (Applied Biosystems, Foster City, Calif). The data was analyzed using STATA11.0 Statistical software. Associations between polymorphisms and disease in tissue, blood and within gender were estimated with odds ratios and their 95% confidence intervals.

Results: The T allele frequency for the SNP on 21q22.3, 5' near gene as rs3788205 (- 2174 C/T) was higher in male patients than in male controls (P-.049). Moreover, with adjustment for traditional cardiovascular risk factors (sex, age, hypertension dyslipidemia diabetes and smoking), the rs3788205 {odd ratio (OD) 0.41, 95% confidence interval (CL) 0.14 to 1.09} polymorphism was found to be an independent susceptibility factor for TAAD in males.

Conclusion: Our results suggest that a sequence variant on 21q22.3 is an important susceptibility locus that confers high cross-race risk for development of TAAD in Indian population.

kalpnath3@gmail.com

Anxiety symptoms in patients with cardiovascular risk factors

Lilian Lopes Sharovsky

University of São Paulo, Brazil

Different studies have clearly and convincingly demonstrated the important correlation between psychological factors and pathogenesis of coronary artery disease, particularly of depressive symptoms. Nevertheless, symptoms of anxiety are also considered fundamental to higher cardiovascular risk. Traditional risk factors such as hypertension, high blood glucose levels, obesity, increased waist circumference, dyslipidemia can be directly related to alcohol abuse, a hyper-caloric diet, rich in carbohydrates, saturated fat and sedentary life in an attempt by the patient to control symptoms of anxiety. However, the latter tend to be under diagnosed in clinical practice contributing to a metabolic deterioration and the occurrence of vascular events. Therefore, it is essential to early identify people with high psychological risk. The aim of the study was to analyze the intensity of anxiety symptoms using the Hamilton Anxiety Scale (HARS) in 136 participants (69 women) without a coronary event history, cerebrovascular and/or psychiatric illness and had not suffered a significant stressor in the last 6 months (bereavement, job loss or violence) and presenting aggregation of cardiovascular risk factors under ambulatory treatment. 93 participants (68.4%) had serious or very serious symptoms of anxiety, 17 (12.5%) moderate symptoms, in women the mean score was 36.7 (very serious) and men was 26 (severe) (Mann Whitney $p < 0.0001$). Early psychological diagnosis of anxiety symptoms can contribute to prevent cardiovascular events in patients with increased cardiovascular risk factors.

liliansharovsky@hotmail.com