Association of Omentin Val109Asp Polymorphism with Coronary Artery Disease (CAD) Risk

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Oral Presentation

Background & Objective: Coronary artery disease (CAD) is one of the most important morbidity and mortality diseases worldwide. Omentin is a recently found adipocytokine. It has anti-inflammatory properties and also reported to be involved in atherosclerosis and CAD. Here we aimed to investigate the association of omentin Val109Asp polymorphism with CAD .

Materials & Method: Through a case-control study a total of 400 individuals were recruited in our study comprising 200 cases with CAD and 200 healthy controls. The cases were diagnosed with CAD through angiography, they had at least one main coronary artery with more than 50% stenosis. Blood samples were taken from all participants and genotyping was carried out using PCR-RFLP technique .

Results: There were 112 women and 88 men in case groups and 120 women and 80 men in control group. 92 (46%) of cases had one stenosed vessels, 73 (36%) had two and 35 (18%) had three coronary vessels with stenosis. There was no association between Val109Asp polymorphism and risk of CAD in our population ($p>0.05$). When subgroup analysis was performed according to sex, there was a significant difference in distribution of alleles between case and control groups for men ($p=0.031$), but not for women ($p=0.88$) .

Conclusion: Our result indicated that T (Asp) allele is more frequent among men with CAD than normal men, so it could be possibly a risk for CAD only in men. The difference in association between men and women could be due to different patterns of fat tissue in men and women. More studies with larger sample sizes are required to elucidate the role of this polymorphism in CAD.

Key words: Coronary artery disease, Omentin, Polymorphism, Association study