

ASSOCIATION OF RS3850641 POLYMORPHISM IN OX40 LIGAND GENE AND PREMATURE MYOCARDIAL INFARCTION, SOUTHERN OF IRAN

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Background and aims: Tumor necrosis factor (TNF) is one of the inflammatory cytokines which has an important role in inflammation and migration of other inflammatory cells to the atherosclerotic plaques. OX40L is a member of the TNF super family receptor protein. OX40 and OX40 ligand are co-stimulators for T-cells and can increase inflammatory response in atherosclerotic plaques. The aim of this study was to determine the association of rs3850641 polymorphism in OX40L gene with premature myocardial infarction.

Methods: This case control study was done on 100 patients with premature acute myocardial infarction (AMI) and a similar number of sex, age and some other cardiovascular risk factor matched healthy people.

Results: The OX40L rs3850641 polymorphism was genotyped, using PCR-RFLP method. AA genotype frequency of rs3850641 SNP was higher non-significantly in Premature AMI, compared to healthy subjects (58.80% vs. 57.50%). AG genotype frequency of rs3850641 SNP was lower non-significantly in Premature AMI, compared to healthy subjects (0.0% vs. 1.40%), also GG genotype frequency of rs3850641 SNP was lower non-significantly in Premature AMI, compared to healthy subjects (41.20% vs. 41.10%), ($P>0.05$).

Conclusion: The results of this study indicate that the rs3850641 SNP of OX40L gene is not associated with premature AMI in the evaluated population.