Mohammad Roushanghalb et al., J Mol Genet Med 2016, 10:3 (Suppl)
http://dx.doi.org/10.4172/1747-0862.C1.013

PDCD1 single nucleotide genes polymorphisms confer susceptibility to juvenile-onset systemic lupus erythematosus

Mohammad Roushanghalb[1], **Arash Salmaninejad**[2], **Ali Hosseini Bereshneh**[1], **Tayyeb Bahrami**[3], **Saeed Tarverdizadeh**[1], **Reyhane Sadat Saeedi**[1] and **Nima Rezaei**[1]
[1]Tehran University of Medical Sciences, Iran
[2]Mashhad University of Medical Sciences, Iran
[3]University of Social Welfare and Rehabilitation Sciences, Iran

Juvenile-onset systemic lupus erythematosus (JSLE) is a multisystem autoimmune disease in which both the genetic and environmental factors seem to be involved in the etiopathogenesis of the disease. The aim of this study was to evaluate the association of programmed cell death 1 (PDCD1, also called PD-1) gene polymorphisms with JSLE susceptibility in Iranian population. In this case-control association study, three *PDCD1* SNPs, including *PD-1.1 G/A, PD-1.3 G/A* and *PD-1.9 C/T* were genotyped in 50 Iranian patients with JSLE and 202 healthy unrelated controls using PCR-RFLP method. The PD-1.1 A allele was found to be more frequent in the case group compared with controls (6% vs. 1.5%, p=0.024). Moreover, the GG genotype was less frequent in cases than in controls (88% vs. 97%, p=0.021). The other *PDCD1* SNPs did not show association. At the haplotypic level, no significant differences was recognized between the two groups of case and control neither for the GAC (*PD-1.1 G, PD-1.3 A, PD-1.9 C*) nor for the GGC haplotype (*PD-1.1 G, PD-1.3 G, PD-1.9 C*). Our findings support the influence of the *PD1.1* A SNP on the development of JSLE in Iranian population.

Biography

Mohammad Roshanghalb is currently a Medical Intern of Imam Khomeini Hospital Complex, Faculty of Medicine, Tehran University of Medical Sciences, Iran. He is also a Member of Students' Scientific Research Center.

m.roshanghalb@gmail.com

Notes: