عنوان مقاله:

The association of AGT, PDE4D and IL10 gene polymorphisms and stroke risk

محل انتشار:

دومین کنگره بین المللی و دهمین همایش ملی نوروژنتیک ایران (سال: 1396)

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خلاصه مقاله:

Introduction: Sequence variations are responsible for cerebrovascular diseases development. Some of thesesequences play a role in inflammation and renin-angiotensin system. Moreover, it has been observed that thevariants in PDE4D (phosphodiesterase 4D) gene is related to stroke. In the present study, we performed a geneticassociation study about the single nucleotide polymorphisms present in the intervening genes of IL-10 -1082 G/A(rs1800896), AGT M235T (rs699), and PDE4D SNP83 (rs966221) in an North-east of Iran.Methods: This case-control study included 120 stroke patients and 120 healthy controls. These two groups wererandomized according to age, gender and other demographic factors. IL-10 -1082 G/A (rs1800896), AGTM235T (rs699), and PDE4D SNP83 (rs966221) polymorphisms were discovered by ARMS-PCR method andPCR-RFLP. Study data was analyzed by chi-square test in SPSS software (version 11.5).Results: After regulation of the confounding risk factors, IL-10 (1082 G/A) was found to be strongly related tostroke (P<0.006) and there was a relation between stroke patients and healthy controls above 45 for PDE4D(SNP83) (P<0.036) and AGT (M235T) (P<0.021).Conclusion: Allele G of IL-10 -1082 G/A is known as a risk factor of stroke. This allele exacerbates the risk ofstroke and is independent of conventional risk factors in this study. But, it is still controversial if PDE4D(SNP83) and AGT (M235T) are sensitive genes for stroke and the results need to be confirmed in a largergroups.

کلمات کلیدی:

stroke, interleukin-10 gene, phosphodiesterase 4D gene, polymerase chain reaction