



Association of Vascular Endothelial Growth Factor +405 Polymorphism and Psoriasis

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Abstract : Psoriasis is an inflammatory and proliferative disorder of the skin, in which both genetic and environmental influences have a critical role in pathogenesis of disease. Present study aims to assess the association of **Vascular Endothelial Growth Factor +405** genes polymorphism (SNPs) with psoriasis by PCR-RFLP while their serum levels determined by ELISA.

Methods blood samples were collected from (64) patients with psoriasis (40 males and 24 females) and (38) healthy people as control group matched with disease group. samples collected in Marjan Medical City in Babylon Province. Polymorphism (SNPs) determined by Polymerase Chain Reaction (PCR), restriction fragment length polymorphism (PCR-RFLP) and DNA sequencing techniques, while their serum levels determined by ELISA.

Results: The results show significant increasing in VEGF level in patient compared with controls ($P < 0.01$) while there is no correlation between VEGF serum level and severity or onset of disease ($-r = -0.05$). The genetic analysis of the Single Nucleotide Polymorphisms of VEGF +405 SNP, genotype distribution were CG heterozygous was predominant in patient 33(60.94%) and GG homozygous was 24 (37.05) while the homozygous CC was the least 1 (1.56%). Comparing with control group CC 13(34.21%) GG 7(18.42%) and CG 18(47.37%).

Conclusions: the study confirmed an association between the increase of VEGF serum level and susceptibility to psoriasis and the massive majority of single nucleotide polymorphism in VEGF +405 genes have a clinical importance concerning psoriasis.

Key word : psoriasis, Vascular Endothelial Growth Factor polymorphism, VEGF-RFLP.