



PSORIASIS

## THE INVESTIGATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) GENE POLYMORPHISM AS A PHARMACOGENETIC MARKER TO EVALUATE BIOLOGICAL TREATMENT RESPONSE IN PSORIASIS

*Ozge Yontem<sup>(1)</sup> - Ilteris Oguz Topal<sup>(1)</sup> - Nagihan Sahillioglu<sup>(1)</sup> - Ozgur Emek Kocatürk Göncü<sup>(1)</sup>*

*Okmeydani Research And Training Hospital, Dermatology, Istanbul, Turkey<sup>(1)</sup>*

**Aim:** Psoriasis is a common, chronic inflammatory skin disease. Cell proliferation, immune system activation and angiogenesis are the main pathogenic factors that cause the disease. Vascular Endothelial Growth Factor (VEGF), a potent angiogenic factor, is now considered to be an important predictor of disease severity and control in psoriatic patients. VEGF gene polymorphisms may be associated with psoriasis susceptibility by altering VEGF expression. In our study, it was aimed to determine whether VEGF gene polymorphism is a predictive marker to evaluate biological treatment response.

**Material and Methods:** In our study, VEGF gene polymorphisms were investigated in 42 psoriasis patients and 40 control individuals who had applied to Okmeydani Training and Research Center Dermatology Psoriasis polyclinic between January 2014 and July 2018 and the biological agent treatment was started. Clinical, demographic and treatment-related characteristics of the patients participating in the study were recorded in the case report form and the -1154A/G, -460C/T and +405C/G polymorphisms were studied. VEGF gene polymorphisms were demonstrated by polymerase chain reaction (PCR) and Sanger Sequence Analysis method.

**Results:** Overall, the -460C/T RS833061 homozygous (TT) polymorphism was detected at lower rates in male patients (p:0,028). There was no statistically difference between the clinical, demographic and treatment characteristics of the patients with VEGF -460C/T RS833061, +405C/G RS2010963 and -1154A/G RS1570360 polymorphisms in the study group.

**Conclusion:** In our study, no correlation was found between VEGF gene polymorphisms and biological treatment response. There is a need to support our study with large patients group.





Key Words: angiogenesis, biological treatment, genetic, polymorphism, psoriasis, vascular endothelial growth factor (VEGF)

