Association between TAP1 gene polymorphisms and alopecia areata in a Korean population


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ABSTRACT. The transporter 1 ATP-binding cassette sub-family B (MDR/ TAP) gene (TAP1) is located in the major histocompatibility complex class
II region, and forms a heterodimer that plays a key role in endogenous antigen presentation pathways. Investigation of polymorphisms identified in these loci has revealed an association with several autoimmune disorders. Alopecia areata (AA) is a common autoimmune disease resulting from T cell-induced damage to hair follicles. The present study documents for the first time a comparison between the allelic and genotypic frequencies of TAP1 single nucleotide polymorphisms (SNPs) in patients with AA and those of a control group, using a direct sequencing method. Our results suggest an association between a promoter SNP (rs2071480) and susceptibility to this disease.

**Key words:** Alopecia areata; Association; Single nucleotide polymorphism; Transporter 1 ATP-binding cassette sub-family B