

The Effect of TGFB1 and CD14 Gene Polymorphisms on the Clinical Findings of Cystic Fibrosis in Turkish Patients

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ABSTRACT Significant effects of several modifying genes on the clinical features of cystic fibrosis (CF) have been reported. In the present study, the researchers investigated the effects of transforming growth factor beta 1 (TGFB1) and cluster of differentiation 14 (CD14) polymorphisms on the clinical status of patients with CF. The present study included sixty-five patients with CF and eighty five healthy controls with no pulmonary disease. Single-nucleotide polymorphisms in the TGFB1 gene (rs1800469, rs1800470, rs8179181) were studied using DNA sequence analyses; the CD14 gene polymorphism rs2569190 was evaluated using restriction fragment length polymorphism analysis. The frequency of rs1800469 (TT genotype) was significantly higher in the healthy controls than in the patients with CF. Thus, the TT genotype may be protective against CF. Although rs8179181 (CT genotype) may have an overall negative effect, this genotype may have a favourable effect on growth parameters. However, these results should be confirmed in larger studies.