EVALUATING THE ROLE OF VITAMIN D RECEPTOR POLYMORPHISMS ON SUSCEPTIBILITY TO TUBERCULOSIS AMONG IRANIAN PATIENTS: A CASE-CONTROL STUDY

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Introduction: Many genetic studies recently have focused on HLA, VDR, NRAMP1, MBL, TNFX, and their relationships with susceptibility to diseases such as pulmonary tuberculosis. Some studies showed predisposing and protective roles for VDR polymorphisms in pulmonary tuberculosis.

Materials and methods: Through a case-control study, blood samples were taken from tuberculosis case (n=164) and control (n=50) groups. DNA was extracted from white blood cells by PCR-RFLP technique using special primers and enzymes for each polymorphism. VDR polymorphisms are known as Apa I, Bsm I, Fok I, and Taq I which were evaluated within the two mentioned groups.

Results: Combined genotypes AbfT and AabbFfTT were the only statistically significant factors which protected people against pulmonary TB in this study.

Conclusion: Two mentioned genotypes were protective factors against TB and this study could not find any predisposing genotype to TB. More study is requested on this matter.

Keywords: TB, VDR, polymorphisms.