

Association study between vitamin D receptor gene polymorphism and chronic periodontitis in Koreans

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Adult periodontitis is a chronic inflammatory disease whose etiology is not well defined. Recent studies have shown that vitamin D receptor gene has been a candidate for the susceptibility of adult periodontitis. The purpose of this study is to investigate the frequency of *Taq* I restriction fragment length polymorphism (RFLP) in the vitamin D receptor gene in 141 periodontically healthy controls and 32 adult periodontitis patients. *Taq* I RFLP in the vitamin D receptor gene were detected by PCR amplification, followed by restriction enzyme digestion and 2% agarose gel electrophoresis. There were no significant difference in the distribution of *Taq* I RFLP between healthy controls and adult periodontitis group ($P > 0.05$). Thus, *Taq* I RFLP in the vitamin D receptor gene may not confer the susceptibility to adult periodontitis in Korean population. However, allele distributions of this RFLP showed various frequencies among ethnic groups studied. Further studies in other ethnic groups will be required.

Key words: Adult periodontitis, Korean population and vitamin D receptor