mRNA Expression of NFKB1 with Parkinson's Disease

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Abstract : The aim of the present study was to investigate the expression levels of homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, transcript variant 1 (NFKB1*1) mRNA in the peripheral blood of patients with Parkinson to elucidate the role in the pathogenesis of Parkinson disease (PD). The study group comprised 50 patients with the diagnosis of PD who have applied to Gaziantep University Faculty of Medicine, and Department of Neurology. 50 healthy individuals without any neuro degenerative disease are included as controls. Ribonucleic acid (RNA) was obtained from blood samples of patient and control groups. Complementary deoxyribonucleic acid (cDNA) was obtained from RNA samples using reverse transcription polymerase chain reaction (RT-PCR) technique. The gene expression of NFKB1*1 in patient/control groups were observed to decrease significantly, and the differences between groups with the Mann-Whitney method within 95% confidence interval (p<0.05) were analyzed. This salient finding provide a clue for our hypothesis that reduced activity of NFKB1*1 gene might play a role, at least partly, in the pathophysiology of PD.

Keywords: Parkinson's Disease, NFKB1, mRNA expression, RT-PCR

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