

**The visual evoked potential (VEP) and Somatosensory evoked potential (SSEP) findings associated with dementia in patients with Parkinson's diseases**

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**Introduction:**

Parkinsonism occurs in all races. Its prevalence in the United States and Western Europe is 1.1 persons per 1,000 populations. Approximately one third of patients have cognitive problems that often doubles after 4 years in 80% of patients with dementia and Parkinson's disease occurs in the final stages. The aim of this study was to determine the relationship between VEP and SSEP findings in patients with Parkinson's disease with dementia.

**Methods:**

In a case-control study that performed in neurology department of Tabriz University of medical sciences on patients with PD, relationship between VEP and SSEP findings in 60 patients with Parkinson's disease with dementia evaluated.

**Results and conclusion:**

Right VEP AMP in 12 was abnormal and left VEP AMP was abnormal in 13 patients.

Mean right VEP P100 was  $10.4 \pm 24.18$  and mean left VEP P100 was  $10.49 \pm 24$  and also, left and right VEP P100 were abnormal in 33(55%)

**Conclusion:**

Significant liner correlation was not found between MMSE score with left and right VEP 100, Left and right VEP AMP, right SseP P40 and Ssep AMP but, Significant liner correlation was found between MMSE score with left Sesep and Ssep P40.

Significant difference was not found in mean of P100 Latency in patients with and without disorder. Significant difference was not found between Ssep AMP of patients with Parkinson's disease with and without functional disorder.

Key words:

Parkinson, Dementia, VEP, Ssep