PRESENCE HALLUCINATION IN PATIENTS WITH PARKINSON DISEASE - IS REALLY AN EXTENSION OF VISUAL HALLUCINATION AND RELATED TO LEVO-DOPA?

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Objective: To evaluate the frequency and the clinical specificity of hallucinations in Parkinson disease (PD) compared to Alzheimer type dementia (ATD).

Background: Presence hallucinations were thought to have no relation to specific sensory modality (Fenelcon G and coworkers, 2000), however, being responsible cerebral cortical region and chemical imbalance as result of levodopa therapy (Chan D and Rossor MN, 2002) was hypothesized.

Patients and method: From February 2010 to October 2010, 131 PD patients (mean age 72.1 years old, duration of illness 7.2 years, Hoehn-Yahr Stage 2.8) and 53 ATD patients (78.5 y/o, 2.8 yrs) were investigated. Inquiry was done orally. In addition, medication at the time was recorded.

Results: In PD, visual hallucination 19.1\%, presence hallucination 12.2\%, auditory hallucination 6.9\%, watched sensation 3.8\% were reported. In cases of ATD, visual hallucination 7.5\%, auditory 5.7\%, illusion 5.7\%, presence hallucination 3.8\% were identifiable.

Conclusion: PD patients had high prevalence of hallucinations compared to those of ATD cases, especially visual and presence hallucinations. A few cases of PD had no levodopa treatment and was also the same in ATD patients. It suggests no relation between hallucinations and levodopa. However, watched sensation was restricted to PD with levodopa medication. It might be said that likely this phenomenon, illusion or hallucination, without specific sensory modalities in PD is resulted from disturbance of dopaminergic system.