

Study of aluminum level in the serum of dementia patients

El-Nemr, G. N.

Alex. Univ. (EGY). Fac. of Med.

Thesis ; M.Sc. 1996

This study aimed to correlate the possible relation between serum aluminum level and various forms of dementias. The study included 37 patients with dementia of various etiologies (group I). Being randomly selected, the patients were categorized in the following subgroups: Alzheimer's-dementia (15 patients), multi-infarct dementia (6 patients), hepatic encephalopathy (3 patients), uremic encephalopathy (4 patients), Parkinson's dementia (4 patients) and epilepsy dementia, dialysis dementia and Huntington's dementia (5 patients). Fifteen matching controls from the same age group and residence (group II) were also included in the study. Diagnosis of dementia and its type was guided by (DSM IV). The exact etiology of the dementia was reached depending on both clinical and investigatory data and Serum aluminum level was estimated by atomic absorption spectrophotometer. The difference between the distribution of serum Al levels among patients with dementia of whatever etiology and those of the control group was found to be statistically significant. So, the study revealed that there was a statistically significant increase in the serum Al level among cases of dementia of whatever etiology over their controls. So, Al might be a co-factor in the pathogenesis of any type of dementia.