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## Serum levels of high molecular weight adiponectin and leptin in elderly patients with dementia

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Dementia is a progressive impairment of cognitive function sufficient to cause functional decline. It may affect up to 28 million individuals world-wide; 30% of those older than 85 years. Adiponectin is a cytokine released by the adipose tissue and presents in the cerebrospinal fluid of human. It has important functions in the central nervous system. Leptin is another cytokine, was implicated in cognitive decline and dementia processes. We aimed in the present study to determine the serum levels of adiponectin and leptin in elderly patient with dementia. Sixty subjects aged 65 years and older were involved, divided into two groups; Group (I): 40 demented patients, and Group (II): 20 age and sex matched healthy subjects as a control group. Participants with dyslipidemia, hypertension, diabetes mellitus, chronic liver diseases, chronic kidney diseases, thyroid disorders or morbid obesity were excluded from the study. All participants were subjected to MMSE and MOCA tests, serum adiponectin and leptin were measured. Serum adiponectin was higher, while leptin levels were lower in demented patients. A significant negative correlation between serum levels of adiponectin and both MMSE and MOCA scores, while a high positive correlation was noted between serum levels of leptin and both MMSE and MOCA scores. We concluded that serum adiponectin and leptin were strongly associated with dementia in elderly patients, which may help in understanding of its pathogenesis and emergence of new drugs for better outcome of this devastated disease.

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