

## ADIPONECTIN PLASMA LEVELS IN PATIENTS WITH AGE-RELATED DEMENTIA

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**Introduction.** Adiponectin play a significant role in the regulation of type 2 diabetes, obesity, atherosclerosis, non-alcoholic fatty liver disease and neurodegenerative disorders. Evidence suggests that adiponectin may be an independent risk factor for all-cause dementia and Alzheimer's disease (AD) and the level of adiponectin in plasma reflects its level in cerebrospinal fluid (CSF). Studies demonstrated that elevated adiponectin level in blood was associated with an increased risk of dementia and AD in women and indicates that the sex dimorphism with regard to adiponectin levels association with Alzheimer's disease was clearly observed.

**Methods.** Plasma adiponectin levels were measured in 20 patients (with age-related dementia recruited from neurology department of Astana city hospital 1 with a mean age of 68. Adiponectin levels were measured using ELISA kit.

**Results.** Obtained results suggest that adiponectin level was higher in women than in men. Serum hormone ranged from < 3-45 ug/ml with a mean of 16.83 and 6.37 mcg/ml for males and females, respectively.

**Conclusion.** This is consistent with the data that AD disproportionately affects women in both prevalence and severity compare with men. The tendency to have higher adiponectin in plasma and CSF from mild cognitive impairment and AD suggests that this molecule plays a critical role in the onset of AD.