ROLE OF VISFATIN (PBEF1/NAMPT) AND VISFATIN G-948T POLYMORPHISM IN ALZHEIMER'S DISEASE

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Introduction: Alzheimer's disease (AD) is the most common form of dementia in elderly. It's characterized by progressive deterioration of cognitive functions. In clinical practice, current criteria for diagnosis of AD are still largely based on the exclusion of secondary causes and other dementive disorders. In view of this, the need for specific AD marker is great. Visfatin is a cytokine that expressed from adipocyte.

Aims: In this study, we aimed to if Visfatin is a biomarker for AD and its G-948T polymorphism causes predisposition for AD.

Method: In the present study, 40 AD patients and 40 healthy subjects were included. AD patients were selected from Dementia outpatient clinic at Dokuz Eylul University Department of Neurology and control group were selected from healthy people which similar demographic distribution with patients. Peripheric blood samples were drown to analyse visfatin levels with ELISA using sera and G-948T polymorphism analysis with allele specific primers for polymorphism region.

Results: The concentration of Visfatin protein in sera from patients with AD was not different from controls. We did not find any correlation between serum Visfatin levels and clinical parameter of AD. There were no significant difference between patients and healthy cases for G-948T polymorphism.

Conclusions: Our study showed that level of Visfatin in the serum will not be a biomarker for AD. Visfatin G-948T polymorphism does not cause predisposition for AD. Future studies are necessary for clarify exact role of Visfatin in AD.