

P03-107

THE RISK FOR MILD COGNITIVE IMPAIRMENT IN ELDERLY PATIENTS WITH METABOLIC SYNDROME

D.M. Podea¹, P.D. Nanu², R.M. Chenderes¹, C. Mila¹

¹Psychiatry, ²Neurology, West 'Vasile Goldis' University of Arad, Arad, Romania

Objective: Recent studies suggest that the metabolic syndrome and inflammation affect cognitive decline in old age due to vascular risk factors that might cause leukoariosis. It is not known which components of the metabolic syndrome are mostly involved.

Material and method: There were included 60 subjects aged 65-90 years divided in two groups: group A-30 subjects diagnosed with metabolic syndrome according to NCEP-ATP-III criteria; group B-30 subjects used as control for the study group. Inflammation was assessed by measuring the C-reactive protein (CRP) plasma levels. Cognitive assessments included general cognition exam using Mini-Mental State Examination. The subjects underwent head CT-scan in order to observe the presence of the leukoariosis. The mild cognitive impairment (MCI) was considered when the MMSE score was between 28-21points.

Results: In group A 25 of the subjects presented MCI, while in group B only 13. In group A hyperglycemia was most strongly associated with cognitive function being identified in 80% of the subjects, followed by inflammation (CRP levels>1mg/L), present in 76.6% of the subjects. The subjects from group B presented hyperglycemia in 20% of the cases and high CRP levels in only 16.6% of the subjects. Leukoariosis was present in 60% of the subjects in group A, and in 23.3% in group B.

Conclusions: Subjects with metabolic syndrome had a poorer cognitive performance than subjects without metabolic syndrome at general cognition exam. In those subjects with metabolic syndrome hyperglycemia and inflammatory status were most frequently encountered when considered the association with cognitive impairment and was noticed a higher incidence of leukoariosis.

Acknowledgment: The work reported in this paper was supported by grant PNCDI2-41-057/2007 from the Romanian Ministry of Education and Research.