

Cognitive changes over time and its relationship with APOE4 and modifiable risk factors in a cohort of adults from Bogotá

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Abstract

Low schooling, advanced age and arterial hypertension were associated with dementia in a cross-sectional study conducted between 2012-2014 in autonomous adults of Bogotá. A high prevalence of dementia of 23% was found. What is the relationship of APOE4 and modifiable risk factors in cognitive impairment over time?

The purpose of this study: is to evaluate the relationship of APOE4 and modifiable risk factors in cognitive impairment over time in adults of Bogotá

Methodology: A cohort study was conducted in subjects with normal cognition or with mild cognitive impairment (MCI) of the 2012-2014 study. The cognitive evaluation was done applying the protocol used in the previous study. ApoE genotyping was performed. An analysis was made for multiple correspondences and logistic regression.

Findings: 118 subjects with normal cognition and 97 with MCI diagnosis from the previous evaluation were included; 73% were women, with an average age of 71(SD7.3) years and schooling of 8.2 (SD5.4) years. Six percent of all subjects progressed to dementia in a follow up period of 4 (SD1) years.

Remained unchanged 75% of normal subjects and 22% progressed to MCI; 65% of subjects with MCI did not change and 25% normalized. Of the patients who went from MCI to Dementia, 30% had Diabetes Mellitus; 50% hypertension, 80% schooling under 11 years and 40% were E4 carrier.

The subjects that progressed versus those who did not were grouped, to be able to make a logistic regression, to determine whether or not to progress was related to being a carrier, adjusted for the risk factors; although the ORs are greater than 1, statistical significance was not reached

Conclusion and Significance: Although APOE4 was not related to dementia in our previous cross- sectional study; in the cohort study, its relationship with changes especially dementia is evidenced, but with risk factors remains doubtful

Biography

She has been and she is a Professor of Neurology at the Javeriana University and currently at the Fundación Universitaria de Ciencias de la Salud (FUCS) in Bogotá. She did Medicine and Neurology studies in Bogota and a Master in Neurosciences at the University of Montreal with professor MI Botez. Her work is on neurodegenerative disease of the cerebellum (inherited ataxias) and dementia. With The FUCS Neurosciences Group and evaluated cognitive functions and risk factors, in a convenience sample of 1263 adults over 19 districts of Bogotá and is following that cohort.

Pubication

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