



Premi de recerca per a estudiants
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Entrega de l'Abstract

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Títol de la recerca: **VASCULAR RISK FACTORS ASSOCIATED TO MCI AND ITS SUBTYPES**

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Objective:

Mild Cognitive Impairment (MCI) is a nosological entity proposed as a transitional state between normal aging and dementia (Petersen & Morris, 2005; Winblad et al., 2004). This condition has become, in the recent years, an area of intense interest. The aim of this study was to assess the MCI prevalence in a community-dwelling sample and to detect modifiable risk factors in order to implement preventive measures that would significantly reduce dementia prevalence and severity.



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Method:

The final Barcelona-AsIA Neuropsychology sample consists of 747 dementia-free subjects older than 50 years old, without prior history of stroke or coronary disease and with moderate-high vascular risk. Complete details for the Barcelona-AsIA protocol have been described elsewhere (López-Cancio et al., 2011).

Subjects were classified into cognitively intact and MCI, based on neuropsychological performance. MCI group was further subdivided into amnesic single-domain (aMCI), amnesic multi-domain (amdMCI), non-amnesic single-domain (nMCI), non-amnesic multi-domain (nmdMCI) (Winblad et al., 2004).

Logistic regression models were used to determine the odds ratios for MCI associated with each vascular risk factor independently, adjusted by sex, age and education. Each MCI subgroup was matched individually with controls on the basis of age, sex and education, so that no adjusted variables were required in these regressions analyses.

Results

The prevalence of MCI in our community-dwelling sample was 16.3% (n=122). Of them, 1.7% (n=13) were classified as aMCI; 2.4% (n=18) as amdMCI; 9.8% (n=73) as nMCI, and 2.4% (n=18) as nmdMCI. Hypertension (OR=0.658, p=0.04), metabolic syndrome (OR=0.606, p=0.031), and history of depression (OR=0.522, p=0.008) was associated with MCI. Smoking habit was associated with amdMCI (OR=0.075, p=0.02) and metabolic syndrome with nMCI (OR=2.608, p=0.014).

Conclusion:

MCI prevalence in a large community sample over 50 years old was 16.3%. This data is similar to that observed in previous studies (Graham et al., 1997; Carazziolo et al., 2008). The fact that all this subjects were healthy, without seeking medical assistance for cognitive problems, indicates that incipient vascular related cognitive impairment is relevant and increasing problem, and that actual MCI prevalences could be underestimated.

In order to prevent and promote successful cognitive aging, it must be emphasized the importance of implementing prevention programs with the aim of reducing modifiable vascular risk factors.



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Personal contribution:

Working in this project, I have developed scientific skills with an ethical attitude. I have practiced all the theory learned during last years and I have improved my knowledge about MCI, I have understood the influence of risk factors in MCI and how prevention can be important in order to reduce dementia prevalence.

My contribution to this project was to review the literature about risk factors and MCI classification. Subsequently, the risk factors were selected and statistical analyses were made, explained and compared with literature. Finally, writing this abstract was the last task I have developed.