

**SUBJECTIVE COGNITIVE COMPLAINTS, MILD COGNITIVE IMPAIRMENT AND MILD DEMENTIA: THEIR PREVALENCE IN A MEMORY CLINIC**

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**Summary**

The term Mild Cognitive Impairment (MCI) indicates subjects with some subtle but measurable cognitive impairment but no autonomy loss in basic life activities, even if some difficulties may be found in those most complex. MCI includes different subtypes : two characterized by a memory impairment that may be isolated or associated with some other dysfunctions . The non amnesic subtypes may concern only one cognitive function different than memory or more. We evaluated within subjects with cognitive complaints but without autonomy loss the proportion of those with MCI and the different subtypes and found that the large majority of subjects asking an evaluation in the Memory Clinic had an objective cognitive impairment which fulfilled the criteria for Mild Cognitive Impairment diagnosis . Patients no cognitively impaired were in fact the 18% of the whole sample, those with very mild dementia were 10 % and all the other (72 %) were MCI. Inside the different groups the amnesic pure MCI was the less frequent while multidomain the most represented. The results have implications for pharmacological and no pharmacological treatments.

**Keyword:**

Mild cognitive impairment , amnesic MCI, multidomain MCI

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### Introduction

The term Mild Cognitive Impairment (MCI) originally introduced by Petersen<sup>1</sup> and subsequently modified<sup>2-3</sup> indicates subjects with some subtle but measurable cognitive impairment but no autonomy loss in basic life activities, even if some difficulties may be found in those most complex<sup>4</sup>. MCI includes different subtypes: two are characterized by a memory impairment that may be isolated (aMCI) or associated with some other dysfunctions (amdMCI). The non amnesic subtypes may concern only one cognitive function different than memory (naMCI) or more no memory functions (namdMCI). Then it refers to language, visuospatial, or executive functions. MCI subjects are at risk to develop Alzheimer Disease and more in general dementia. Here we evaluated the proportion of subjects having MCI and the different subtypes among all the subjects asking a consultation to our Memory Clinic because of some cognitive complaint, and where the difficulty was confirmed by a close relative. The neuropsychological assessment included the evaluation of mood disturbances showed that.

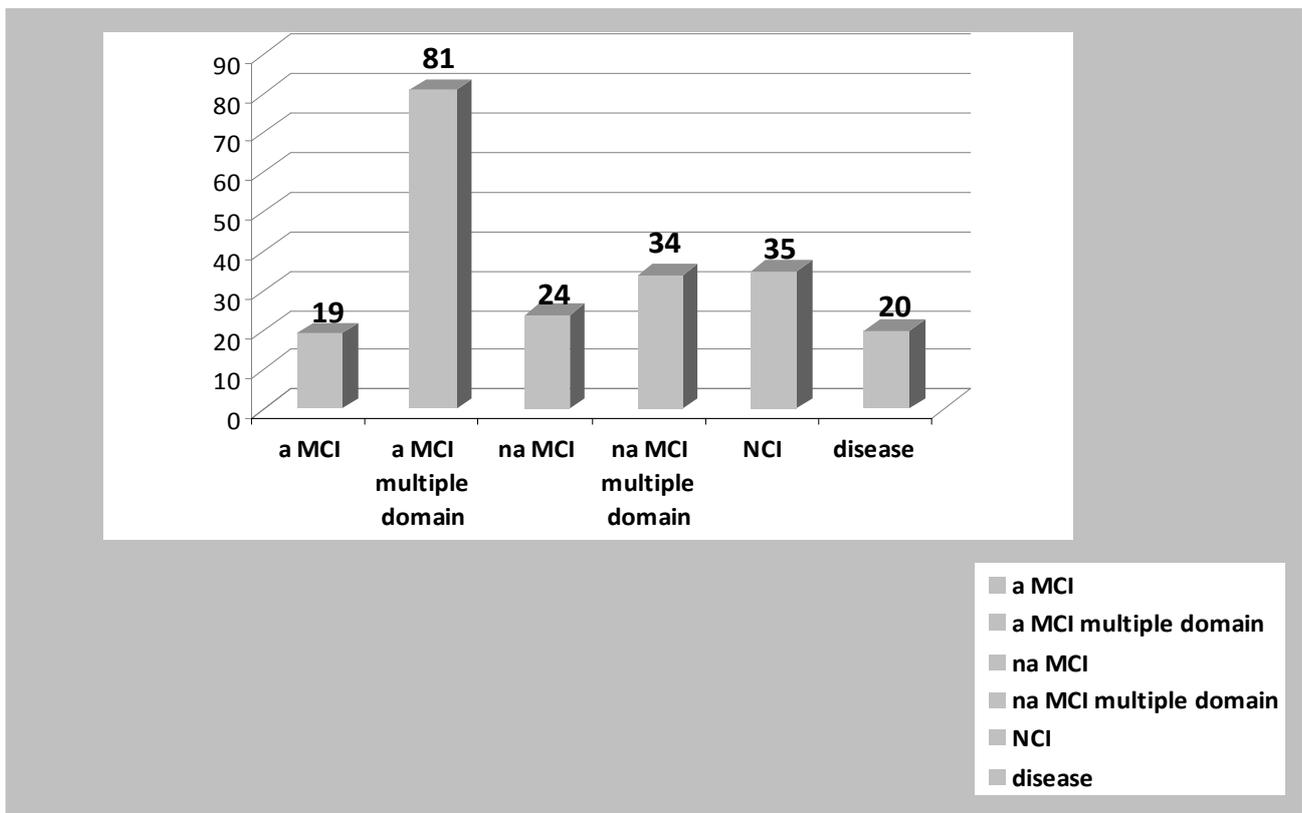
To evaluate within the subjects with cognitive complaints but without autonomy loss the proportion of those with MCI. To evaluate which was the proportion of the different subtypes of MCI and its different subtypes.

### Methods

193 subjects complaining cognitive difficulties that were confirmed by a close relative, but performing normally in daily activities and having a normal MMSE, were assessed through an accurate neurological and neuropsychological assessment. The nps tests were the following: Clock Drawing Test (CDT), Rey figure copy and drawing by memory, PM47, Short Story Test, Frontal Assessment Battery (FAB), Constructional Apraxia, Semantic and Phonemic Fluency. In all cases depression was excluded with the Geriatric Depression Scale (GDS). Only the equivalent scores of 0 on test was considered as a deficit. The mean age of the subjects was 66 years, their mean education 8,7 years.

### Results

On the 193 subjects 34 (18,2%) had no cognitive impairment (NOCI) and 20 (10.3%) very mild dementia. Mild Cognitive Impairment (MCI) was found in 138 subjects (71.5%). Inside the group of subjects having MCI we found that 27, 2% had a single domain MCI and 72,8% a multiple domain. Within those with single domain 19 had amnesic MCI (aMCI) and 24 non amnesic MCI (naMCI). Within those with multiple domain, who were 115 we found no memory damage in 34 (namdMCI) and in 81 both memory and other functions impaired (amdMCI). The mean age was 68,7 yrs in aMCI subjects and 63,1yrs in naMCI subjects; in amdMCI and namdMCI individuals mean age was 65,9 and 65,6 respectively. Subjects with aMCI had a mean education of 12,4 years and those with naMCI 5,6 years; amdMCI and namdMCI subjects had a mean education of 9,3 and 8,3 years respectively.



### Conclusions

We found that the large majority of subjects asking for an evaluation in the Memory Clinic had an objective cognitive impairment which fulfilled the criteria for Mild Cognitive Impairment diagnosis. Patients no cognitively impaired (NOCI) were in fact 18% of the whole sample, those showing very mild dementia were 10% and all the other (72%) were MCI. Inside the whole MCI group the different subtypes were represented in different proportions. The single amnesic MCI was rare while the multidomain MCI was the most frequent. These results confirm other literature data<sup>5</sup>. We also found that aMCI subjects were significantly older than other groups, a feature suggesting the close connection between this subtype and Alzheimer disease, an aspect recently emphasized and leading to the proposal to consider amnesic MCI<sup>6</sup>, if subjects have a typical pattern of hippocampal damage and fulfill CSF and neuroimaging criteria, a prodromal AD. Amnesic MCI multidomain was the most frequent, and these subjects are prone to convert in AD or vascular dementia. Globally the results highlight the importance of perform a careful investigation on those complaining some cognitive difficulty as MCI is a potentially revertible condition and should therefore be the target of therapy and social interventions<sup>7</sup>.

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