

Poster presentation

Cognitive impairment among outpatients whose first complaint was memory disorder

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Background

Failure to detect cognitive impairment can result in a domino effect of medical and psychosocial problems, while cognitive dysfunction can have a significant impact on decision-making capacity [1].

Materials and methods

A retrospective study was carried out among 126 outpatients aged 74.5 ± 7.6 years old, seen in the Neurology Department of Venizeleion General Hospital of Heraclion, between April 2005 and May 2007. A complete history, physical and neurological examination, CT scanning and neuropsychological tests including the Mini-Mental State Examination (MMSE) [2], the Clock Drawing Test (CDT - the Sunderland method) [3], the Geriatric Depression Scale (GDS) [4] and the Instrumental Activities of Daily Living Scale (IADL), were performed.

Results

61.1% of patients showed cognitive impairment (MMSE<24), while 74.6% revealed with CDT (score<6). According to the MMSE and the CDT, there wasn't a statistical significant correlation between cognitive impairment and gender or educational level; a statistically significant difference ($p<0.05$) was found in relation to the age according the CDT, but not with the MMSE. We found a moderate correlation ($r=0.408$) between functional dis-

ability (IADL score) and the CDT. 11.7% of men and 9.1% of women had mild or moderate depression (GDS?7), but there were not statistically correlated with cognitive impairment or functional disability ($p>0.05$).

Conclusions

Memory complaints must be carefully assessed, as these results reaffirm that there is a high prevalence of the studied mental disorders in outpatients and especially in elderly. The CDT seems to be even more sensitive in revealing cognitive impairment in patients who have an MMSE within the normal limits.

References

1. Juby A, Tench S, Baker V: **The value of clock drawing in identifying executive cognitive dysfunction in people with a normal Mini-Mental State Examination score.** *Cmaj* 2002, **167**(8):859-864.
2. Fountoulakis KN, Tsolaki M, Chantzi H, Kazis A: **Mini Mental State Examination (MMSE): A validation study in Greece.** *American Journal of Alzheimer's Disease and Other Dementias* 2000, **15**(6):342-345.
3. Sunderland T, Hill JL, Mellow AM, Lawlor BA, Gundersheimer J, Newhouse PA, Grafman JH: **Clock drawing in Alzheimer's disease A novel measure of dementia severity.** *J Am Geriatr Soc* 1989, **37**(8):725-729.
4. Fountoulakis KN, Tsolaki M, Iacovides A, Yesavage J, O'Hara R, Kazis A, Ierodiakonou C: **The validation of the short form of the Geriatric Depression Scale (GDS) in Greece.** *Aging (Milano)* 1999, **11**(6):367-372.