

Performances on verbal and visual-spatial memory tasks in a group of patients presenting with alzheimer's disease, vascular dementia, and parkinson's disease.

Gelardi D., Di Francesca M., Muratore S., Ferrara M., Prestianni G., Musso S., Ravidà L., Tasca D., Panerai S.¹

Dementia is a clinical syndrome characterized by multiple cognitive impairments, especially in memory. It's difficult to distinguish between different forms of dementia, since several overlappings may take place.

This is a retrospective study. The objectives are to establish whether there are typical and pathognomonic memory profiles of the most common forms of dementia (AD, PD and VaD), and to analyze, by inter-group and within-group comparisons, the evolution of memory impairment. 151 patients were recruited: 40 presenting with AD, 39 with VaD, 36 with PD, while 36 were normal controls, who did not present with statistically significant differences by age, education and gender. The following scales were administered: MMSE (for the assessment of global cognitive functioning), Rey's 15 Words, Bi-syllable Word Repetition, and Corsi's Test (for the assessment of verbal and visuo-spatial memory).

The sample was further divided into subgroups having different levels of dementia, matched by age, education, gender and cognitive functioning. Comparison between subgroups were carried out using the Kruskal-Wallis' Scale; a couple comparison by Mann Whitney's U test was also carried out. Results show different patterns of memory impairment for AD, VaD and PD in the initial phases of deterioration.

The profile of AD patients substantially confirm what was already written in literature. The profile of VaD patients is characterized by a visuo-spatial deficit – versus normal subjects ($p < .002$) as well as versus other groups of diseases (AD: $p < .04$; PD: $p < .05$) – and by an immediate recall impairment – versus normal subjects – with performances similar to PD patients' and higher than AD patients'.

The profile of PD patients show an immediate recall deficit versus normal subjects ($p < .001$), while delayed recall did not differ from that of normal controls; the novelty is the primacy effects: PD patients, indeed, seemed to recall the first words of a list better than last words, showing a trend differing from that of ADs. The hypothesis is that memory impairment is due mostly to recall and time of recalling of information deficit, and not to storing problems.

¹*IRCCS Oasi Maria SS, Dipartimento per l'Involuzione Cerebrale Senile, Troina (En).*

E-mail: spanerai@oasi.en.it