

ANALYSIS OF GLOBAL COGNITION AND VERBAL FLUENCY IN MEXICAN PATIENTS WITH FRONTOTEMPORAL DEMENTIA

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INTRODUCTION

Although specific language deficits often coexist with the typical symptoms of behavioral frontotemporal dementia (bvFTD), difficulties with language production and comprehension are not mentioned in the current international consensus criteria for bvFTD. We compare global cognition and verbal fluency to elucidate the cognitive impairment and language deficits in bvFTD and its variants: non-fluent variant primary progressive aphasia (nfvPPA) and semantic variant primary progressive aphasia (svPPA).

METHODS

We studied the demographic and clinical characteristics of 47 patients who met the diagnostic criteria for bvFTD, nfvPPA and svPPA. Global cognition was measured using the MMSE, and language functioning was investigated using phonemic and semantic fluency measurements.

REFERENCES

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RESULTS

Of the total of participants, 27 (57.5%) were male and 20 (42.5%) were female. The most frequent diagnosis was bvFTD (59.6%), followed by semantic variant (23.4%), and lastly the non-fluent variant (17.0%). The mean age of participants was 61.4 years (p=0.625). The average age at symptom onset was 56.6 years (p=0.557). Similar scores were observed in global cognition (p=0.503) and verbal fluency (p=0.821 for phonemic and p=0.843 for semantic). Comparisons of age at diagnosis, disease duration, and cognitive scores by variant can be found in table 1. Average scores of global cognition (p=0.335), semantic verbal fluency (p=0.225) and phonemic (p=0.302) were also higher with shorter disease duration, but the differences were not statistically significant either. A comparative analysis of the scores was conducted, considering the time of evolution; patients were grouped into two categories: those with zero to three years of evolution and those with four or more years of evolution; no significant differences were observed (table 2).

Table 1. Clinical and cognitive data from patients with nfvPPA, svPPA and bvFTD				
Mean ± standard deviation	nfvPPA	svPPA	bvFTD	p value
Number (n)	8	11	28	
Age at symptom onset	56.4±10.2	54.9±6.5	57.3±9.1	0.557
Disease duration (y)	5.1±3.2	4.9±2.4	4.7±3.3	0.504
Initial MMSE	12.8±10.2	11.4±6.7	13.1±8.7	0.503
Phonemic fluency “P”	5.5±4.1	4.0±3.6	5.6±5.3	0.821
Semantic fluency “animals”	3.6±3.6	3.6±3.7	3.8±4.6	0.843

Table 2. Cognitive scores by evolution time (mean values ± standard deviation)			
Values at the beginning of attention	0-3 years n=15	4 or more years n=32	p value
MMSE	14.4±8.0	11.8±8.5	0.335
Phonemic fluency “P”	6.5±5.6	4.7±4.2	0.225
Semantic fluency “animals”	4.7±5.0	3.3±3.7	0.302

CONCLUSION

Our results suggest that language should be considered an important part of the initial assessment of patients with FTD. Low cognitive test scores in all groups may indicate the presence of these impairments in the early stages of the disease or a delay in seeking or initiating care. In both cases, this has significant economic and psychological implications for patients and caregivers.

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