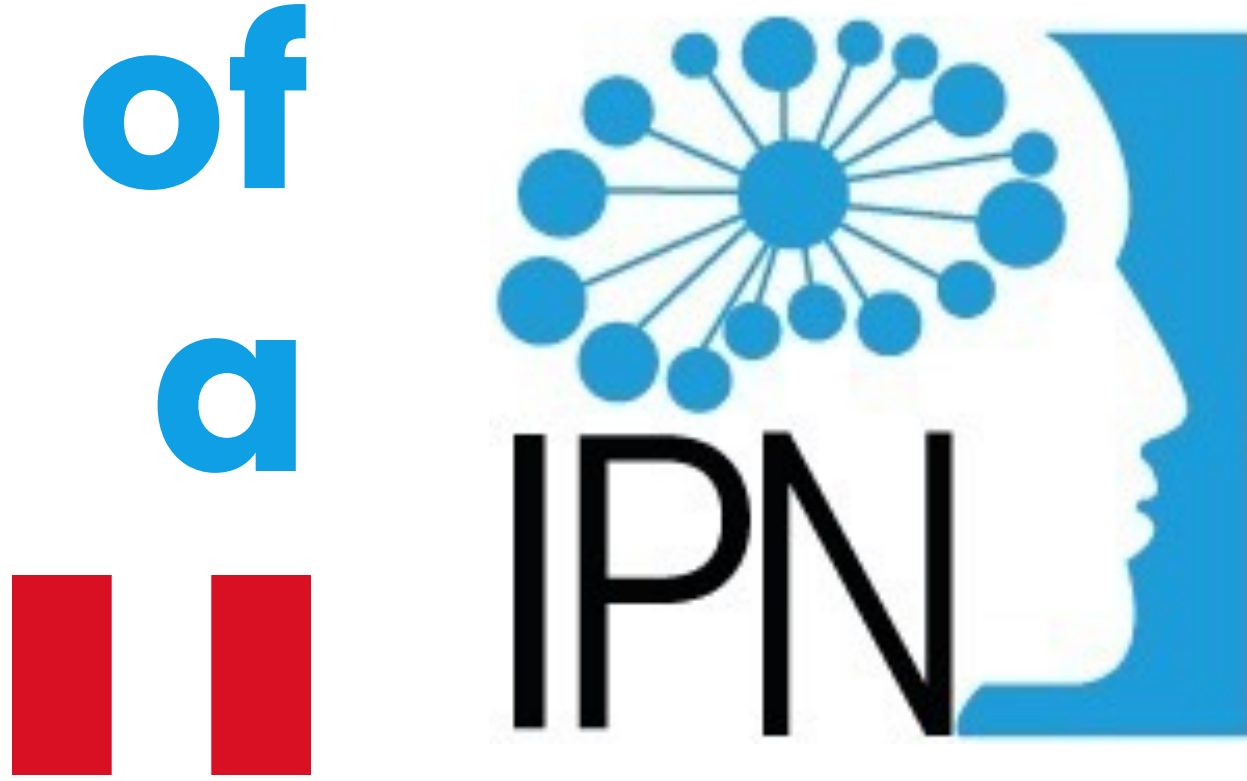


Clinical and Neuropsychological Profile of Posterior Cortical Atrophy: A Case Series in a Peruvian Specialized Center



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BACKGROUND

- Posterior Cortical Atrophy (PCA) is a clinical-radiological syndrome **characterized by a progressive decline in visuospatial and visual processing abilities**.
- Accurate characterisation requires informant-based reports and standardized neuropsychological batteries alongside brief cognitive screening tools (BCS).
- We describe the demographic, clinical, and neuropsychological profile of a PCA case series from a specialized cognitive impairment center.**

METHODS

- Eleven patients (mean age: 60.7 ± 7.5 years)** with a clinical diagnosis of PCA were included.
- Clinical staging and functional impact were assessed** using the Clinical Dementia Rating (CDR) scale and the Pfeffer Functional Activities Questionnaire (PFAQ). The BCS tools included the Mini-Mental State Examination (MMSE) and the Rowland Universal Dementia Assessment Scale (RUDAS).
- A comprehensive neuropsychological assessment was performed** using the Uniform Data Set Version 3 Neuropsychological Battery.

RESULTS

- Patients demonstrated marked functional impairment and moderate global cognitive decline.
- Neuropsychological performance revealed a characteristic posterior cortical pattern**, with severe impairment in visuospatial construction and processing speed.
- Language functions were also affected**, particularly confrontation naming and semantic fluency, while phonemic fluency was relatively preserved.

Table 1: Characteristics of Patients with PCA (n=11)

	Measure	M (SD)	Range
Demographics	Sex (Female/Male)	6 / 5	-
	Age at entry (years)	60.7 (7.5)	51 - 78
	Education (years)	11.3 (4.3)	5 - 18
	Age at symptom onset (years)	56.7 (7.2)	50 - 74
	Symptom duration (years)	3.4 (2.0)	0 - 7
Global Staging	CDR (Global Score)	1.3 (0.5)	1 - 2
Functionality	PFAQ (Functional Activities)	14.5 (4.1)	8 - 21
Cognitive Screening	MMSE Total Score	18.9 (4.2)	10 - 24
	RUDAS Total Score	18.9 (2.9)	15 - 23

Table 2: Fully adjusted multinomial logistic regression model, assessing trajectory group membership by baseline predictors

Domain	UDS neuropsychological measure	M (SD)	Range
Attention	Number Span Test Forward, total correct	5.8 (2.0)	4 - 10
	Number Span Test Forward, longest span	5.3 (0.9)	4 - 7
	Number Span Test Backward, total correct	3.5 (1.1)	2 - 5
	Number Span Test Backward, longest span	3.2 (0.9)	2 - 4
Processing Speed	Trail Making Test Part A, time (s)	122.9 (36.8)	69 - 153
	Trail Making Test Part A, errors	0.8 (1.2)	0 - 3
Executive Function	Trail Making Test Part B, time (s)	224.2 (60.6)	128 - 300
	Trail Making Test Part B, errors	1.4 (1.2)	0 - 3
Language: naming	MINT, total score	23.2 (5.5)	8 - 30
Language: verbal fluency	Phonemic Fluency - M (total in 60s)	9.8 (3.4)	3-20
	Phonemic Fluency - P (total in 60s)	11.4 (5.2)	4 - 20
	Semantic Fluency, Animals, total in 60s	11.1 (2.5)	8 - 15
	Semantic Fluency, Vegetable, total in 60s	9.7 (3.1)	5 - 15
Visuospatial	Benson Complex Figure Copy, Immediate, total score	11.1 (1.8)	7 - 13
	Benson Complex Figure Copy, Delayed, total score	10.7 (4.8)	5-22
Memory	Craft Story 21, Immediate Recall, Verbatim, total units	7.2 (4.1)	2 - 12
	Craft Story 21, Immediate Recall, Paraphrase, total units	6.5 (3.8)	1 - 11
	Craft Story 21, Delayed Recall, Verbatim, total units	5.8 (4.7)	0 - 12
	Craft Story 21, Delayed Recall, Paraphrase, total units	3.5 (4.2)	0 - 12

Note. Higher scores indicate better performance except for the Trail Making Test (TMT). TMT times capped at 300s. Adjusted by age, sex and educational level. Abbreviations. MINT: Multilingual Naming Test; UDS: Uniform Data Set.

CONCLUSIONS

- The Peruvian PCA cohort showed a **predominantly visuospatial cognitive profile and early age of onset**.
- The UDS3-NB, complemented by informant-based functional measures, effectively captured the complex neuropsychological profile of this atypical AD variant.
- These findings underscore the need for specialized assessment tools in primary care to support earlier diagnosis and intervention.**

CONTACT INFORMATION



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