

## Erratum

# Neuropsychological deficits in human immunodeficiency virus type 1 clade C–seropositive adults from South India

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Most studies of cognitive functioning in human immunodeficiency virus type 1 (HIV-1)–seropositive (HIV-1+) subjects have been done in the United States and Europe, where clade B infections predominate. However, in other parts of the world such as South India, where clade C HIV is most common, the prevalence of HIV-1 is increasing. Standardized neuropsychological tests were used to assess cognitive functioning in a sample of 119 adults infected with clade C HIV-1 who were not on antiretroviral medications. The subjects did not have neurological or psychiatric illness and were functioning adequately. Neuropsychological test performance was compared with gender-, age-, and education-matched normative data derived from a sample of 540 healthy volunteers and a matched cohort of 126 healthy, HIV-1–seronegative individuals. Among the seropositive subjects, 60.5% had mild to moderate cognitive deficits characterized by deficits in the domains of fluency, working memory, and learning and memory. None of the subjects had severe cognitive deficits. The HIV-1+ sample was classified into groups according to the level of immune suppression as defined by CD4 count (<200, 201–499, and >500 cells/mm<sup>3</sup>) and viral load (<5000, 5001–30,000, 30,001–99,999, 100,000–1,000,000, and >1,000,001 copies). Although the most immunosuppressed group (CD4 count <200 cells/mm<sup>3</sup> or viral load >1,000,001 copies) was small, their rate of impairment in visual working memory was greater when compared to groups with better immune functioning. Mild to moderate cognitive deficits can be identified on standardized neuropsychological tests in clade C–infected HIV-1+ adults who do not have any clinically identifiable functional impairment. The prevalence of cognitive deficits is similar to that reported in antiretroviral treatment–naïve individuals infected with clade B virus in the western world. *Journal of NeuroVirology* (2007) 13, 397–398.

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**Table 1** Comparison of deficits in HIV+ subjects with seronegative controls and difference in cognitive functioning across immune suppression groups

Test variable	X <sup>2</sup> (Based on number of deficits in HIV+ and HIV-groups) df = 1	Level of significance	Differences across CD4 count groups		Differences across plasma viral load groups	
			ANCOVA (Based on raw test scores) F ratio (df = 2)	Level of significance	ANOVA (Based on raw test scores) F ratio (df = 4)	Level of significance
FT LH	2.10	0.15	0.08	0.92	0.38	0.83
FT RH	3.59	0.06	0.29	0.75	0.44	0.78
AF	0.69	0.40	0.86	0.43	0.17	0.95
PF	6.44	0.01	1.82	0.83	1.23	0.30
VM 1	0.14	0.71	0.67	0.52	1.22	0.31
VM 2	9.18	0.00	0.00	0.99	0.07	0.99
VIM 1	0.13	0.72	0.60	0.55	3.06	0.02
VIM 2	0.25	0.62	4.31	0.01	1.92	0.11
AVLTI-V Total	11.39	0.00	0.62	0.54	0.66	0.62
AVLT IR	7.33	0.00	1.06	0.35	0.55	0.70
AVLT DR	6.97	0.00	0.39	0.68	0.34	0.85
TNPMM	0.00	0.95	0.85	0.43	0.68	0.61

Note: PF = Phonemic Fluency, AF = Animal Fluency, FT LH = Finger Tapping Left Hand, FT RH = Finger Tapping Right Hand, VM1 = Verbal Working Memory 1-back hits, VM2 = Verbal Working Memory 2-back hits, VIM1 = Visual Working Memory 1-back hits, VIM2 = Visual Working Memory 2-back hits, TNPMM = Total number problems solved with minimum moves on Tower of London Test, AVLT = Auditory Verbal Learning Test, IR = Immediate Recall, DR = Delayed Recall.