

June 13-14, 2019 Barcelona, Spain

J Neurol Neurosci 2019, Volume 10

JOINT EVENT 28th International Conference on **Neuroscience and Neurochemistry** & 28th Euro-Global Neurologists Meeting

Determining the Neurocognitive status and the functional ability of patients to screen for HIV-Associated Neurocognitive Disorder (HAND)

Ritika Agarwal

Chandra Laxmi Hospital, India

Statement: The aim of the study was to assess neurocognitive status and functional ability of people living with HIV.

Method: The study enrolled 160 Patient living with HIV (PLHIV) (80 pre-ART and 80 On-ART) fulfilling the inclusion and exclusion criteria. Neurocognitive assessment and an assessment of Functional ability was done by using the Montreal Cognitive Assessment (MoCA) and Lawton and Brody IADL Scale respectively.

Results: The study population consisted of 75.6% males and 24.4% females with mean age of 44±10 years. All of the subjects were literate (61.2% subjects had received up to High school level education), 76.2% were married. The mean duration of HIV infection among ART naive PLHIV and those on ART was 2±1.33 years and 3±2.10 years respectively. Most of the study subjects had WHO Stage 1 disease (Pre-ART 92.5% & ART 83.75%). The mean CD4 count of the study population at study enrolment was 361.46 ±187.28 cells/mm3 (range 34 - 844 cells/mm3). Only 5% of subjects were found to have mild impairment in ADL with the most common affected domain being food preparation (50%). The overall prevalence of HAND in the study subjects was 52.5%. Of these, 47.5% had ANI and 5% had MND. In MoCA, the most frequently affected domains were Language (97.6%), visuospatial ability (92.9%) and memory (71.4%).

Conclusion: The prevalence of HAND is high among PLHIV in India and one in two PLHIV have neurocognitive dysfunction. The prevalence of HAND among Pre-ART subjects (i.e. ART naive) and those on ART is similar suggesting that neurocognitive impairment starts early in HIV infection. Older age (>40 years) and fewer years of formal education (<12th standard/High school) were important determinants statistically associated with the presence of HAND. HAND involves both cortical and subcortical regions of the brain with sub cortical involvement being predominant. The most frequently affected neurocognitive domains were Language, Visuospatial function and Memory. Memory and Visuospatial function impairment had the most predictive potential for detecting the presence of HAND. HAND screening is recommended in all PLHIV at enrolment into care. Simple tools like MoCA can be used in busy outpatient settings by healthcare workers to screen for HAND.

aritika1994@gmail.com