

EFAVIRENZ-ASSOCIATED RISK OF FALL IN PEOPLE LIVING WITH HIV

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Background:

Successful Antiretroviral therapy (ART) leads to improvement of life expectancy among People Living with HIV (PLWH). However, the chronic inflammation due to virus infection, ART side effects, combined with increasing age implicated in early aging PLWH. We explored risk of fall as an aging symptoms that can be detected before fall events.

Methods:

Cross sectional study was conducted between December 2019 to May 2020. PLWH aged 40 years or older who had treated with ART regimens for at least 6 months were included consecutively. We excluded patients who are not capable to walk or having neuromusculoskeletal disorder. Timed Up and Go (TUG) test result >10 seconds indicated risk of fall. Independent variables were assessed using demographic questionnaires: Indo-BDI-II to determine depression, MiniCog to screen dementia, Toronto scoring system to determine neuropathy, and Fried criteria to define frailty status.

Results:

Among 102 subjects, 24.5% reported had fall during ART and 51.9% needed longer time to perform TUG. Subjects were predominantly middle aged male (median 45 years) with mean duration of ART 94 months, median CD4 nadir 71 cell/mm³ and median current CD4 count was 495 cells/mm³. First-line ART was used in 89,2% subjects. Multivariate models showed Efavirenz (EFV) use was associated with risk of fall with OR 5.87 (95% confidence interval 1.083-31.90, *p* 0,040), along with prefrail or frailty status (OR 6.39, 95% CI 2.348-17.417 *p*<0,001) and history of previous fall (OR 3.162 95% CI 1.085-9.212, *p* 0,035),. Among fallers, complains of lightheaded, dizziness, and off-balance preceeded the events.

Conclusion:

Efavirenz as a backbone in first-line ART regimen had been proved of its good efficacy in treating PLWH. However, EFV side effects in balance disturbance are needed to be concerned, as the aging PLWH were mostly at risk to fall. Evaluation in EFV prescribed patients might give considerations for phycisians in planning fall-reduction intervention.

Disclosure of Interest Statement:

No pharmaceutical grants were received in the development of this study.