Study Title
DETECT: A novel device to assess how HIV affects neurocognitive decline and postural instability in older adults at risk for Alzheimer’s Disease

Study Summary
We are conducting a research study to determine if a brief virtual reality (VR) assessment among older adults living with HIV can help us better screen for changes in cognition and balance. Participants will be asked to come to the HNRP for six different visits over a two-year period. These visits will include completing surveys and cognitive tests. Three of these visits (once/year) will include a blood draw and medical visit. We are also interested in understanding how hearing relates to cognition and balance, so participants will also be asked to complete three hearing evaluations at San Diego State University’s Recreational Noise Exposure and Hearing Lab.

Study Eligibility
We will be enrolling 40 HIV+ and 20 HIV- men and women. Participants will be aged 60 and older with varying degrees of cognitive functioning, although all will have some cognitive impairment.
Participants will be recruited at UCSD and at Emory University. At UCSD we will follow a cohort of 60 participants:
1) 20 HIV+ with a diagnosis of HAND with aMCI (HAND+/aMCI+)
2) 20 HIV+ with a diagnosis of HAND without aMCI (HAND+/aMCI−)
3) 20 HIV- with aMCI (HIV−/aMCI+). These participants will be referred from UCSD’s Alzheimer’s disease Resource Center (ADRC)
Inclusion Criteria:
1) HIV+ and HIV- men and women, aged 60 years and older
2) Fluent in English
3) Diagnosis of cognitive impairment at time of referral or screening visit (HAND for PLHIV*; aMCI for HIV- participants)
a) GDS ≥ 0.5 at recent comprehensive visit; or
b) Probable HAND based on scores from 11-item screen (9-item for remote VRS); or
c) T-score criteria for screening tests
1) At least 2 tests with T ≤ 40
2) 1 test with T < 35 and 1 test with borderline (T = 41-44)
3) 1 test with T < 40 and at least 2 tests with borderline (T = 41-44)
4) HIV+ will be on cART with plasma HIV RNA <200 copies/ml* for at least 6 months
5) Able to provide informed consent to participate in research
*HAND and plasma HIV RNA <200 copies/ml will be confirmed at the baseline visit (000). Should a participant not meet these criteria, they will be discontinued from the study.
Exclusion Criteria:
1) All participants: Diagnosis of HIV-Associated Dementia (HAD) at screening via a score of 10 or less on the HIV Dementia Scale
2) Persons in hospice that cannot be followed longitudinally
3) Plans to move out of the area (San Diego County or Atlanta) within the following 3 years
4) Neurological confounds (e.g., seizures, stroke) or head trauma with unconsciousness >30 minutes
5) Serious mental illness (e.g., schizophrenia, schizoaffective disorder, bipolar disorder)
6) Non-HIV related NP confounds that could be associated with cognitive ability (e.g., developmental learning disability)
7) Significant visual impairments (blindness or uncorrectable vision loss)
8) Severe hearing impairments (unable to hear with a hearing aid)
9) Meets criteria for substance abuse or dependence diagnosis within the last 30 days.

Study Enrollment Dates
9/24/2019 - 3/31/2022

URL for information on study and/or enrollment
https://hnrp.hivresearch.ucsd.edu/index.php/research/studies/current-research

Contact Name
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