Results. Six patients received DAA as alone as first-line management of their NHL. Most patients (5/6 (83%)) did respond to such treatment avoiding or delaying the use of chemotherapy (Table).

Conclusion. As described with IFN-containing therapy, the oncologic outcome of HCV-infected patients with indolent NHL could also improve by using only DAs.

Table: Characteristics of six patients with indolent NHL treated with DAs.

| Number of patients (%) N = 6 | Median age (IQR), years | Gender, male | NHL subtype | Marginal zone lymphomaa | HCV genotype | 1 | 2 | rs12979860 genotypeb | CC | CT | TT | Cirrhosis | History of HCV treatment | DAA therapy | Sofosbuvir + ribavirin | Sofosbuvir + simeprevir | Sofosbuvir + daclatasvir | Sofosbuvir + ledipasvir | DAA treatment duration of 12 weeks | NHL response after SVR | Complete response | Partial response | Stable disease | Persistent disease | Chemotherapy needed after SVR |
|-----------------------------|-------------------------|--------------|-------------|------------------------|--------------|---|---|---------------------|----|----|----|-----------|----------------------|-------------|------------------|------------------|---------------------|------------------|----------------------|-------------------|------------------|-------------------|-------------------|-------------------|----------------------|
| 60 (55–65)                  | 4 (67)                  | 6 (100)      | 3 (50)      | 2 (33)                 | 3 (50)       |

Abbreviations: IQR, interquartile range; NHL, Non-Hodgkin lymphoma; HCV, hepatitis C virus; DAA, direct acting agents; SVR, sustained virologic response.

aNodal (n = 1), Extranasal (n = 2) splenic (n = 1), and mucosa-associated lymphoid tissue lymphomas (n = 2).
bFormerly known as interleukin 28b genotype.

disclosures

54. Stroke Outcomes Among HIV-infected Patients in a Large, Urban, Tertiary Hospital in the USA, 1999–2016
Darrell McBride II, DO,1 Qinglei Hu, PhD2; Alex Wong, PhD, DPhil2; Carolyn Baum, PhD, OTR, FAOTA2; William Powderly, MD3; Rachel Presti, MD, PhD2; David Clifford, MD2; Beau Ances, MD, PhD, MSc2; Alexis Young, BA2; Cyoji Agbo, BS2 and Gereome Escota, MD1; 1Division of Infectious Diseases, Washington University in St. Louis, St. Louis, Missouri, 2Program in Occupational Therapy, Washington University in St. Louis, St. Louis, Missouri, 3Department of Medicine, Division of Infectious Diseases, Washington University School of Medicine, Saint Louis, Missouri, 4Department of Neurology, Washington University, St. Louis, Missouri, 5Department of Neurology, Washington University in St. Louis, St. Louis, Missouri

Session: 60. HIV and Central Nervous System
Thursday, October 5, 2017: 12:30 PM

Background. HIV infection is an independent risk factor for stroke. However, patient-level data on stroke outcomes among HIV-infected patients are limited. We compared stroke outcomes between HIV-infected and -uninfected patients in a large tertiary hospital.

Methods. We used data from the Stroke Management and Rehabilitation Team, a patient-level database of all stroke admissions among adult patients at Barnes-Jewish Hospital, St. Louis, Missouri. All patients hospitalized with a first stroke episode from 1999 to 2016 were included. Variables between groups were compared using independent samples t-test or the Wilcoxon rank-sum test for continuous variables and the chi-square or Fisher’s exact test for categorical variables when applicable. Spearman’s test was used for correlation analyses.

Results. Of 20,268 patients, 81 were HIV-infected. The median CD4+ count was 148 cells/µL and 38% had HIV viral load < 200 copies/mL at stroke presentation. Compared with HIV-uninfected patients, HIV-infected patients were significantly younger (49 vs. 65 years, P = 0.010) and had higher rates of smoking, alcohol and illicit drug use (table). Comorbid conditions, stroke severity, length of hospital stay, and rates of inpatient mortality and hospital complications between the two groups were similar. The proportion of stroke admissions among HIV-infected patients peaked in 2010–2011 (figure). From 1999 to 2016, the age of HIV-infected patients at presentation increased (r = 0.40, P < 0.010) while it remained stable for HIV-uninfected patients. Conversely, the HIV viral load at presentation declined over time (r = −0.53, P < 0.001) while there was no correlation between CD4+ count and year of admission. The proportion of comorbid conditions among HIV-infected patients was also not statistically different before and after 2010–2011.

Conclusion. In this large cohort, we found that HIV-infected patients had comparable stroke outcomes and comorbid conditions as HIV-uninfected patients who, on average, were 16 years older. Our finding that HIV-infected patients present with a nadir CD4 count >200 (IRR 19.1 (95% CI 2.93 to 802.8), P < 0.0001) (Figure 1). None receiving AZT/3TC developed CSF-VE, while 16 out of 686 receiving TDF/FTC developed CSF-VE (P = 0.001). ART was optimized in all patients with a median CPE score of 10.5 (7–13). All patients had rapid neurological improvement after change in ART.

Conclusion. Symptomatic CSF-VE with ART-containing regimen was a rare but clinically significant condition in this single-center study. Nadir CD4 count > 200 was associated with substantially increased risk of symptomatic CSF-VE, further strengthening efforts to diagnose and treat patients early in disease.

Disclosures. All authors: No reported disclosures.
stroke at older ages and with lower viral load over time suggests a potential change in the pathogenesis of stroke from viral-driven processes to more aging-related risk factors.

**Disclosures.** B. Ances, *Journal of Neurovirology: Editorial Board* but not compensation. Nothing.

549. MoCA Utility as a Quick Testing Tool for Neurocognitive Disorders in HIV Patients: Analysis of a Prospective Cohort

Vanina Stanek, MD1; Marisa Del Lujan Sanchez, MD1; Maraiana De Paz Sierra, MD1; Cecilia Losada, MD1; Ines Zerboni, BSc(Psych); Maria Antonieta Gomez, BSc(Psych); Maria Mercedes Cegarra, BSc(Psych);; Maria Cecilia Fernandez, MD2; Angel Golimstok, MD3 and Waldo Bellosio, MD2; 1Internal Medicine, Hospital Italiano de Buenos Aires, Ciudad Autónoma de Buenos Aires, Argentina; Hospital Italiano de Buenos Aires, Ciudad Autónoma de Buenos Aires, Argentina, 2Neurology, Hospital Italiano de Buenos Aires, Ciudad Autónoma de Buenos Aires, Argentina, 3Fundacion IBIS CICAL, Buenos Aires, Argentina

**Session:** 60. HIV and Central Nervous System

**Thursday, October 5, 2017: 12:30 PM**

**Background.** Since the introduction of highly active antiretroviral therapy, asymptomatic and mild neurocognitive impairment are the main clinical manifestations of HIV-associated neurocognitive disorders (HAND), compromising adherence to treatment, daily quality of life, and even increasing the risk of mortality. We do not have validated screening tools for early detection of HAND applicable to the routine medical visit. The Montreal Cognitive Assessment test (MoCA) is a simple and valid tool as a screening test for early detection of HAND in asymptomatic patients. A cut-off of 26 was found to be a good compromise between sensitivity and specificity for HAND detection, with 96% sensitivity (CI 89–100), 82% specificity (CI 71–93), 93% positive predictive value (PPV) and 96% negative predictive value (NPV).

**Methods.** We designed a prospective study to establish MoCA's usefulness as a rapid and sensitive tool for early detection of HAND in ART naïve HIV-positive patients, in the age group 20-50 years attending ART center of the hospital from July to December 2016 were included in the study. All patients underwent evaluation using MoCA of left frontal white matter (FWM) and left basal ganglia (BG). Levels of N-acetyl aspartate (tNAA), choline (tCho), creatine (tCr), lipids and macromolecules at 0.9ppm were measured. Cognition was tested using a battery validated for Indian population. Localized normalized z-scores were used to calculate brain dysfunction score. Spearman correlation coefficient was used to assess the correlation between two continuous variables. There were 28 (29% female and 71% male) cases and 30 (37% female and 63% male) controls.

**Results.** The mean age was comparable in the 2 groups (33 and 34 years). There was a significant difference (P < 0.05) in the concentration (mmol/kg) of tNAA (9.24 ± 3.11 vs. 9.73 ± 6.94), tCho (2.08 ± 0.70 vs. 1.74 ± 0.25), tCr (6.95 ± 2.56 vs. 5.43 ± 0.61), in the FWM and Lip09 + MM09 (5.87 ± 1.05 vs. 4.80 ± 0.35) in BG, with higher levels in controls. There was no significant correlation between CD4 count and metabolic changes in brain metabolites using MRS.

**Conclusion.** MoCA's performance as a screening test was adequate compared with GST and far superior to MMSE for early detection of HAND. Although specificity could be optimized, MoCA test remains a valuable screening tool in the routine medical visit in our HIV population.

**Disclosures.** All authors: No reported disclosures.

550. Neurocognitive Decline in People Living with HIV in India and Correlation with 3T Magnetic Resonance Spectroscopy

Kartik Gupta, M.B.B.S.1; Virendra Kumar, Ph.D2 and Sanjeev Sinha, M.D.3; 1Medicine, All India Institute of Medical Sciences, New Delhi, India, 2NMR, All India Institute of Medical Sciences, New Delhi, India

**Session:** 60. HIV and Central Nervous System

**Thursday, October 5, 2017: 12:30 PM**

**Background.** Neurocognitive decline in asymptomatic HIV patients and its correlation with metabolic changes in brain has not been studied in developing countries like India. In the present study we aim to examine the correlation between cognitive decline and changes in brain metabolites using MRS.

**Methods.** ART naive HIV-positive patients, in the age group 2050 years attending ART center of the hospital from July to December 2016 were included in the study. All patients underwent evaluation using MRS of left frontal white matter (FWM) and left basal ganglia (BG). Levels of N-acetyl aspartate (tNAA), choline (tCho), creatine (tCr), lipids and macromolecules at 0.9ppm were measured. Cognition was tested using a battery validated for Indian population. Localized normalized z-scores were used to calculate brain dysfunction score. Spearman correlation coefficient was used to assess the correlation between two continuous variables. There were 28 (29% female and 71% male) cases and 30 (37% female and 63% male) controls.

**Results.** The mean age was comparable in the 2 groups (33 and 34 years). There was a significant difference (P < 0.05) in the concentration (mmol/kg) of tNAA (9.24 ± 3.11 vs. 9.73 ± 6.94), tCho (2.08 ± 0.70 vs. 1.74 ± 0.25), tCr (6.95 ± 2.56 vs. 5.43 ± 0.61), in the FWM and Lip09 + MM09 (5.87 ± 1.05 vs. 4.80 ± 0.35) in BG, with higher levels in controls. There was no significant correlation between CD4 count and metabolites or overall dysfunction score and metabolites except Cr in FWM with more dysfunction associated with lower concentration (see Table 1).

**Conclusion.** The results show that HIV-associated changes are present in asymptomatic people which may be contributing to the early neurocognitive decline. Knowledge of metabolic changes within studied brain regions can help understand the pathology and design interventions to cater to this unmet need in people living with HIV.