329. Health Disparities Among HIV-Positive Patients with Kaposi's Sarcoma

Sheena Knights, MD; Susana Lazarte, MD; Radhika Raintola, MD; Demi Krieger, MS4; Mitu Bhattatiry, MS4; Elizabeth Chiao, MD, MPH; Ank E. Nijhawan, MD, MPH; Gilead Sciences, Inc.: Research Grant.

Background. Kaposi's sarcoma (KS) is an AIDS-related condition that is mediated by HHV-8. Although incidence and mortality of KS in the United States have decreased over time since the advent of HAART, there may be disparities in mortality based on geographic location and race/ethnicity, particularly African-American men in the South.

Methods. A retrospective electronic medical record review was conducted using integrated inpatient and outpatient data in EPIC from PHHS. We included all individuals with a diagnosis of HIV and Kaposi's sarcoma between January 1, 2009 and December 31, 2018 based on ICD-9/10 codes. We collected demographic information, HIV history, variables related to HIV and KS diagnosis, treatment and outcomes data for each patient. We calculated hazard ratios using Cox proportional hazards modeling.

Results. We identified 252 patients with KS. 95% of patients were male, and the majority were MSM (men who have sex with men; 77% of all patients). 35% of patients were Hispanic, 34% were African-American and 31% were Caucasian. Over half (56%) of patients were funded through Ryan White or were uninsured. The median CD4 count and viral load at the time of cancer diagnosis were 44 and 73,450, respectively. 24% of patients were confirmed to have died by the end of the study. However, due to loss to follow-up, 35% of the cohort had an unknown vital status at the end of the study period.

Conclusion. We describe a large cohort of patients with HIV and HHV-8-related disease, who are predominantly of minority race/ethnicity, uninsured, and have advanced HIV disease. Factors associated with mortality include Black/African-American ethnicity, number of hospitalizations, IV drug use and T1 stage of KS. Our mortality analysis is limited due to high lost to follow-up rates, so we suspect overall mortality in our cohort is higher than currently reported.

Disclosures. All authors: No reported disclosures.
331. Five Cases of Hemophagocytic Lymphohistiocytosis in Patients with HIV: A Fulminant and Lethal Combination
Isha Bhatt, MD; Zeb Khan, MD; Paul Lam, MD and John M. Quale, MD; SUNY Downstate Medical Center, Brooklyn, New York
Session: 43. HIV Complications: Cancer
Thursday, October 3, 2019: 12:15 PM

Background. Hemophagocytic lymphohistiocytosis (HLH) is a rare disorder that can be either primary (genetic) or secondary (reactive) in etiology. Diagnosis can be elusive, especially in patients with HIV infection.

Methods. Medical records were reviewed for 5 patients with HIV infection and the diagnosis of HLH. Standard and alternative criteria were utilized to establish the diagnosis.

Results. Five patients with HIV infection had clinical criteria for the diagnosis of HLH. Ages ranged from 33–70 years and 4 were males. All five presented with fevers, cytopenias, and markedly elevated ferritin levels (table). All of the patients had CD4 levels of < 200 cells/µL. Evidence of hemophagocytosis was found on bone marrow examination in 3 patients. Inciting conditions included Pneumocystis jiroveci infection, EBV infection, lymphoma, and multiple myeloma. All patients received broad-spectrum antimicrobial as well as immunosuppressive therapy. Despite aggressive treatments, all patients died within one month of presentation.

Conclusion. In patients with underlying HIV infection, HLH can be a difficult diagnosis to establish. Mortality rates can be high, even with prompt recognition and therapy. The finding of fever and cytopenia in a patient with HIV infection should prompt the clinician to determine a ferritin level. If markedly elevated, the diagnosis of HLH should be aggressively pursued.

Disclosures. All authors: No reported disclosures.

332. Exploring the Prevalence and Characteristics of Weight Gain and other Metabolic Changes in Patients with HIV Infection Switching to Integrase Inhibitor Containing ART
Matty Zimmerman 1; Joseph DeSimone, MD 2 and Jason J. Schafer, PharmD, MPH 1; 1Jefferson College of Pharmacy, Philadelphia, Pennsylvania; 2Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia, Pennsylvania
Session: 44. HIV Complications: Cardiovascular, Metabolic, and Other Complications
Thursday, October 3, 2019: 12:15 PM

Background. Excessive weight gain in patients living with HIV (PLWH) can have considerable health-related consequences. Recent observational studies suggest that patients initiating or switching to integrase strand transfer inhibitor (INSTI)-based antiretroviral therapy (ART) may experience weight gain. The prevalence and extent of weight gain as well as the presence of other metabolic changes following switches to INSTI-based ART remain unclear.

Methods. This retrospective study evaluated changes in weight, body mass index (BMI), cholesterol and hemoglobin A1C in viremically suppressed PLWH who switched from non-INSTI to INSTI-based ART at a single academic medical center from May 2015 to December 2017. Adult patients on non-INSTI-based ART for 21 years before switching to INSTI-based regimens were included. Body weight, BMI, cholesterol and A1C values were collected for the year prior to and 18 months following the switch. The unadjusted distributions of pre- and post-switch values were compared with the Wilcoxon signed-rank test and predictors of weight gain were determined with simple linear regression.

Results. A total of 90 patients met criteria for analysis (Table 1). In unadjusted analyses, there were significant increases in weight and BMI (each P < 0.001, Table 2), but not cholesterol or A1C values following switches to INSTI-based ART (Table 3). On average, patient weight increased by 2.2 kg after switching, though 26% of patients gained ≥4.5 kg. Patients switching from non-nucleoside reverse transcriptase inhibitors vs. protease inhibitors had numerically greater mean increases in weight (Table 3). A similar trend occurred for those switching to elvitegravir as opposed to dolutegravir. In the linear regression model, neither pre-switch nor post-switch ART components were identified as predictors for weight gain. This was also true for differences in gender, race, and pre-switch BMI. Increasing age was protective against weight gain in the model.

Conclusion. Weight gain in patients switching to INSTI-based ART observed in this analysis did not correspond to changes in cholesterol or glycemic control. Some patients receiving INSTIs in this sample gained substantial amounts of weight. The mechanisms and risk factors for substantial weight gain require further study.

Disclosures. All authors: No reported disclosures.