2254. Adherence to Cardiovascular Disease Risk Management Guidelines Amongst HIV Providers at an Academic HIV Clinic

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Background. Cardiovascular disease (CVD) among HIV-infected individuals contributes significantly to morbidity and mortality, accounting for one third of non-AIDS defining illness and 11% of deaths. Compared with the general population, HIV-infected individuals are known to have elevated risk for CVD with chronic infection, regardless of HIV RNA levels and studies suggests that clinicians are not appropriately managing ASCVD risk in HIV-infected patients.

Methods. This retrospective cross-sectional study evaluated provider adherence to American College of Cardiology and American Heart Association guidelines for cardiovascular risk assessment and management, as well as risk factors associated with inadequate management. Data were extracted from electronic medical records at a single institution in Detroit, Michigan. Criteria for inclusion were >39 years of age, HIV infected, and clinic visit during June 2017.

Results. Of 209 patients evaluated at the infectious disease clinic, 175 patients (84%) qualified per guidelines for statin therapy. Only 44% of these patients were taking a statin. Statin users were older and more likely to be nonsmokers than nonusers (P = 0.0022). Amongst patients on statin therapy, 77% receive appropriate intensity therapy; these patients tend to be older (P = 0.0012) and receive a high intensity regimen (P = 0.0001). CVD count and viral load were not associated with statin eligibility or appropriate intensity therapy.

Conclusion. Despite high rates of patients qualifying for statin therapy, a majority of patients do not receive statins to manage cardiovascular disease risk. Of note, patients at elevated risk for cardiovascular disease due to smoking are less likely to receive therapy. However, amongst patients receiving statin therapy, treatment tends to be appropriate, especially with older patients on high intensity therapy.

Disclosures. J. Yelm, Janssen: Speaker’s Bureau, Speaker honorarium.

2255. Fibroblast Growth Factor 23, a Potential Risk Factor for Cardiovascular Diseases Is Associated with Abacavir/Lamivudine Use in HIV Patients

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Background. The fibroblast growth factor (FGF) 23 is a hormone-like molecule that secretes from osteoblasts and has the function of suppressing the reabsorption of phosphorus in the distal renal tubule and lowering serum phosphorus. It has been shown that renal dysfunction increases serum FGF23 levels. Although the mechanism remains to be determined, it is also reported that the elevation of serum FGF23 might increase the risk of coronary vascular diseases (CVD). Nevertheless, there are very few reports related to FGF23 in patients with HIV. The goal of the present study was to investigate the relationship between serum FGF23 levels and clinical factors HIV patients.

Methods. Male HIV patients who visited the outpatient clinic of Teikyo University Hospital, Tokyo, Japan in 2015 and had been treated with anti-retroviral therapy for more than six months were enrolled. In addition to serum FGF23, clinical factors, including age, ART regimen, and laboratory data, and Framingham Coronary Heart Disease Risk Score (FHRS). To study correlations with FGF23, spearman coefficients were used. To identify factors independently related with FGF23, multiple regression analysis was used.

Results. Sixty-seven patients were enrolled. The median age was 43.7 years old. Median CD4 cell counts was 529/μL, and the median serum FGF 23 level was 36.0 pg/mL. According to spearman coefficients, serum FGF23 levels correlated with HIV RNA > 50 copies (r = 0.3911, P < 0.0011), serum cystatin C level (r = 0.3199, P = 0.0097), and some specific anti-HIV drugs; abacavir (ABC)/lamivudine (3TC) use (r = 0.3345, P = 0.0057). FHRS was not correlated (P = 0.9655). According to multiple regression analysis, ABC/3TC use (P = 0.00990) and HIV RNA >50 copies (P = 0.00002) were significant factors related with the increase of serum FGF23 levels.

Conclusion. Poor neurologic control and ABC/3TC use were significant factors that elevated serum FGF23 levels. Considering that ABC/3TC is a well-known factor in the increase of the risk of CVD, FGF23 might be one of the factors that increases the risk of CVD in HIV patients receiving ABC/3TC, though FGF23 was not significantly related with FHS in our all study patients.

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2257. Noninfectious Comorbidities Associated With High RDW in HIV-Infected Patients: A Cross-Sectional Study in Miami, Florida

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Background. Red blood cell distribution width (RDW) is a hematologic parameter that may reflect an underlying inflammatory state. It has been linked to cardiovascular disease, metabolic syndrome, and increased mortality in the general population. However, little is known about the comorbidities associated with high RDW in HIV-infected patients.

Methods. We conducted a retrospective review of HIV-infected patients treated in the Ryan White Clinic of Jackson Memorial Hospital from January to December 2016. Of the 2,065 patients who attended our clinic in 2016, a sample of 317 patients was obtained. Our aim was to determine the noninfectious comorbidities associated with high RDW (241%) in patients with undetectable HIV viral load. Data were analyzed in SPSS 22, New York, USA.

Results. Our study included 317 HIV patients with undetectable HIV viral load, 123 (38.8%) females and 194 (61.2%) males with a mean age of 54.3 (SD ±9.94). Most patients were African American (52.4%) and Hispanic (39.4%). The mean CD4 count was 609.9 cells/μL (SD ±213.48) with a mean CD4/CD8 ratio of 1.04 (SD ±0.38). The mean CD4 count was 13.6% (SD ±2.08). High RDW was observed in 94 (29.7%) patients. Hepatitis B and C coinfection were found in 7.6% and 11.4% of patients, respectively. 74 (23.3%) patients reported alcohol use and 103 (32.5%) patients disclosed smoking. Most patients were on antiretroviral therapy (98.4%). The preferred regimen was 2 NRTIs plus an integrase inhibitor (53%). The most frequent noninfectious comorbidities were dyslipidemia (56.8%), hypertension (52.4%) and diabetes mellitus (19.6%). In comparison with the rest of the study cohort, the patients with high RDW had a higher proportion of hypertension (61.7% vs. 48.4%, P = 0.031), stroke (7.4% vs. 9.9%, P = 0.001), congestive heart failure (10.6% vs. 2.7%, P = 0.003) and chronic kidney disease (26.6% vs. 10.3%, P < 0.001). They also had significantly lower CD4 count (555.8 vs. 632.7, P = 0.039). No difference was found in myocardial infarction, peripheral vascular disease, dementia, COPD, asthma, cancer, liver disease, dyslipidemia, depression or gastric disease.