Conclusion. Among women with CIN2+, HIV infection was not significantly associated with non-16/18 HPV types. However, WLWH had a higher number of high-risk HPV types detected. Our study was limited by the small number of WLWH included.

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

827. High KSHV Seroprevalence Among MSM with HIV Associated with Oral Intercourse and Methamphetamine Use in the Southern United States

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Session: P-46. HIV: Complications and Co-infections

Background. Despite a decrease in Kaposi's sarcoma (KS) cases in much of the US, the incidence of KS and associated mortality is increasing in specific subpopulations, particularly young, African American men in the South. To further understand this disparity, we sought to describe the seroprevalence and risk factors associated with Kaposi's sarcoma herpesvirus (KSHV) among men who have sex with men (MSM) and transgender women (TGW) with HIV in Dallas, Texas.

Methods. We enrolled MSM and TGW with HIV and without known KSHV-related disease from a large urban safety-net clinic in Dallas. Blood samples were collected from participants for IgG testing (K8.1 and ORF73), followed by KSHV PCR on blood and saliva samples for those with positive IgG results. We also collected demographics, sexual history, sexual practices, HIV history, substance use, and insurance status. Multivariate logistic regression modeling was performed to identify associations with KSHV seropositivity.

Results. Of 159 participants, 110 (69.2%) were seropositive for KSHV. Seroprevalence varied by race/ethnicity, with 27/34 (79.4%) Hispanic, 27/37 (73.0%) white, and 54/84 (64.3%) black participants testing positive for KSHV IgG, though this difference was not statistically significant. 31/104 (29.8%) seropositive participants had detectable KSHV in saliva and 10/104 (9.6%) seropositive participants had detectable KSHV in blood. Risk factors independently associated with KSHV seropositivity include oral-anal sex (OR 4.02, 95% CI 1.89 – 8.54), oral-penile sex (OR 3.66, 95% CI 1.16 – 11.57), and methamphetamine use (OR 2.73, 95% CI 1.23 – 6.04). Current CD4 count, HIV viral load, history of intravenous drug use, tobacco or alcohol use were not associated with KSHV seropositivity.

Table 1. Patient Characteristics

	KSHV Seronegative (N=49)	KSHV Seropositive (N=110)	P-value
Age (median)	51	44	0.23
CD4 (median)	555	484	0.75
HIV Viral Load (median)	29	19	0.94
Race/Ethnicity			0.28
White	10 (20.4%)	27 (24.6%)	
Black	30 (61.2%)	54 (49.1%)	
Hispanic	7 (14.3%)	27 (24.6%)	
Other	2 (4.1%)	2 (1.8%)	
IVDU	12 (30.0%)	29 (31.5%)	0.85
Drug use			
Meth	13 (26.5%)	59 (53.6%)	<0.01
Cocaine	30 (61.2%)	61 (55.5%)	0.50
Heroin	3 (6.1%)	17 (15.5%)	0.10
Sex practices			
Oral-anal	20 (40.8%)	85 (77.3%)	<0.01
Oral-penile	39 (79.6%)	104 (94.6%)	<0.01
Anal, insertive	34 (69.4%)	97 (88.2%)	<0.01
Anal, receptive	36 (73.5%)	96 (87.3%)	0.03
Vaginal	24 (49.0%)	49 (44.6%)	0.60

Conclusion. We found that over two-thirds of MSM and TGW with HIV in Dallas are KSHV seropositive, which is relatively high compared to other studies of US MSM with HIV (30-70%). In our study, KSHV was more common among Hispanic and white individuals, and was associated with higher rates of oral sex and methamphetamine use. Differences in KSHV seroprevalence alone are unlikely to explain racial disparities in the incidence of KS. Further study is needed to better understand drivers of KSHV infection and KSHV-related diseases in highly impacted groups in the US.

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

828. Short- and Long-Term Metabolic Changes in Virologically Suppressed Patients Switching from TDF to TAF Containing Antiretroviral Therapy

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Session: P-46. HIV: Complications and Co-infections

Background. Switching from tenofovir disoproxil fumarate (TDF) to tenofovir alafenamide (TAF) containing antiretroviral therapy (ART) may negatively influence weight, cholesterol, and atherosclerotic cardiovascular disease (ASCVD) risk. The timing, duration, and extent of these changes and their definitive associations with TAF remain unclear.

Methods. This retrospective observational study evaluated weight, body mass index (BMI), cholesterol, and ASCVD risk score changes in virologically suppressed patients living with HIV infection (PLWH) who switched from TDF to TAF without switching any other ART regimen components. Adult patients on TDF and no HIV viral load values > 200 copies/mL for ≥ 2 years prior to and following a TAF switch were included. Body weight, BMI, cholesterol and other variables were collected for the 2 years before and after the switch. The Wilcoxon signed-rank test compared median values for each measurement pre and post switch in a univariate analysis. Longitudinal linear mixed effects models evaluated changes for each outcome measure at 1 and 2 years after the switch. Models were built with random effects for patients and included covariates such as time on TAF, age, sex, race, time with HIV, diabetes, smoking status, and concomitant medications associated with weight gain or loss.

Results. A total of 86 patients met study criteria (table 1). In the univariate analysis, there were significant increases in weight, BMI, total cholesterol, LDL, HDL, triglycerides, and ASCVD risk scores 2 years after switching to TAF (each $p \leq 0.05$, table 2). However, after controlling for covariates, only the increases in total and LDL cholesterol were associated with switching to TAF and significantly different from expected changes predicted in the linear model. In terms of weight gain with TAF, patients gained an average of 4.3 pounds in year 1 and 3.8 pounds in year 2 after the switch. Neither of these increases were statistically different from the expected changes in weight predicted in the linear model (3.1 pounds/year, 95% CI: 1.6-4.6).

Table 1. Descriptive Summary of Patient Characteristics, n = 86.

		All (n=86)	Min	Max
Age at switch, mean (SD), min max		47.1 (11.3)	23.0	75.0
Sex, n(%)	Female	28 (32.6)		
	Male	58 (67.4)		
Race, n (%)	White	29 (33.7)		
	African American	48 (55.8)		
	Hispanic	5 (5.8)		
	Asian	4 (4.7)		
Height (in), mean (SD), min max		68.2 (4.0)	58.0	76.0
Time with HIV (years), median (IQR), min, max[1]		11.0 (7.5, 16.5)	2.0	32.0
Time on ART (years), median (IQR), min, max[2]		8.0 (6.0, 12.0)	2.0	25.0
# of previous ART regimens, median (IQR), min, max[3]		1.0 (1.0, 2.0)	1.0	7.0
Pre-switch CD4 count, median (IQR), min, max[3]		659.0 (535.0, 923.0)	145.0	6981.0
Other ART (Yes), n (%)	Integrase	43 (50.0)		
	Protease	16 (18.6)		
	NNRTI	32 (37.2)		
	Other	0 (0.0)		

[1] There are 2 (2.3%) missing.
[2] There are 7 (8.1%) missing.
[3] There are 5 (5.8%) missing.

Table 2. Descriptive Summary of Pre- and Post- measurements and the median change, n = 86.

	Pre			Post			Change			
	Median	IQR		Median	IQR		Median	IQR		p-value
Weight (lb)	185.7	162.0	213.6	191.7	162.6	222.0	4.5	0.2	10.2	<.001
BMI	27.9	23.9	33.1	29.2	24.9	33.9	0.7	0.0	1.6	<.001
Total Cholesterol	173.0	147.0	196.0	194.8	168.0	210.0	19.5	1.7	36.3	<.001
HDL	50.5	40.0	60.5	52.0	43.8	66.5	3.0	0.0	9.0	<.001
LDL	96.0	75.0	116.0	109.3	83.4	129.3	13.0	-5.0	21.0	<.001
Triglyceride	106.0	76.3	151.0	121.3	79.0	169.0	13.0	-13.5	48.5	0.011
TC:HDL ratio	3.5	2.8	4.4	3.7	2.8	4.4	0.1	-0.2	0.4	0.081
Systolic Blood Pressure	128.5	118.0	134.6	128.9	120.3	136.5	2.0	-3.1	5.7	0.030
Diastolic Blood Pressure	80.0	73.0	84.2	79.6	75.5	83.7	0.6	-2.2	4.4	0.108
Fasting Blood Glucose	93.7	87.0	103.4	97.0	91.0	107.5	3.6	-1.5	11.0	<.001
A1C	5.9	5.4	6.7	5.5	5.2	6.1	0.0	-0.2	0.2	0.845
ASCVD risk score	4.9	1.8	10.2	6.4	2.5	13.3	1.2	0.3	3.3	<.001

*p-value from Wilcoxon signed-rank test

Conclusion. Despite observing significant increases in weight, BMI, cholesterol and ASCVD risk scores after switching to TAF, only the changes in cholesterol were significantly associated with TAF and different from changes expected in PLWH over time.

Disclosures. **Jason J. Schafer, PharmD, MPH**, **Gilead** (Research Grant or Support)**Merck** (Advisor or Review Panel member, Research Grant or Support)**ViiV** (Advisor or Review Panel member)

829. Incidence of Low BMD and Barriers to Routine Screening for Osteoporosis in HIV Patients in Eastern North Carolina

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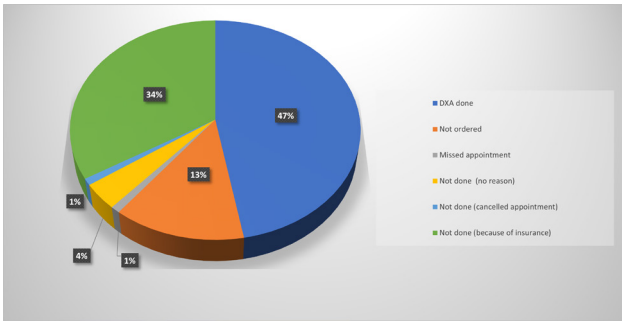
Session: P-46. HIV: Complications and Co-infections

Background. With HIV therapy, the life expectancy of persons with HIV (PWH) has improved and complications associated with long-standing HIV and antiretroviral drugs have become more apparent. Low bone mineral density (BMD) (defined by T score < -1) and osteoporosis (defined by T-score < -2.5) are common in PWH. In a meta-analysis of 884 HIV-infected patients, 67% had reduced BMD, of whom 15% had osteoporosis which is 3 times greater than HIV uninfected controls. IDSA guidelines recommend routine screening for osteoporosis in PWH aged ≥ 50 years, yet the rate of screening for osteoporosis in these patients remains low (7.4%-17%). This QI project aimed to estimate the frequency of and identify the barriers to screening for osteoporosis in eligible HIV patients.

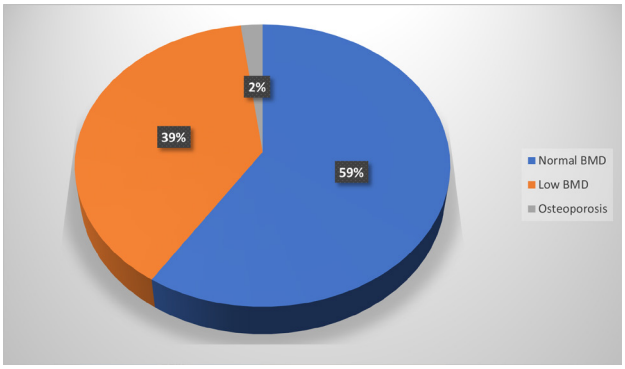
Methods. This prospective observational study was conducted in the HIV clinic at East Carolina University from 2018-2019. A sample of 104 HIV patients, ≥ 50 years were selected randomly. Data regarding referral for DXA (dual X-ray absorptiometry) scan, its results, and their insurance provider was collected. The plan was to analyze the barriers associated with guideline-recommended BMD screening and implement it in eligible patients.

Results. From a total of 104, 89 patients (85.6%) were referred for a DXA scan. The reasons for lack of referral were obesity, insurance barrier, wheelchair-bound, and test ordered by another provider. Of the 89 patients referred for DXA, only 49 (47% of total) underwent the scan. In terms of barriers, insurance limitation was the most common reason. Out of the patients that had DXA scans, 19 (39%) were found to have low bone density and 1 had osteoporosis. Low BMD was more common in men (63%) as compared to women (37%) in this group.

Percentage of patients who underwent a DXA scan and the barriers in those who didn't



Frequency of BMD screening
Incidence of Low BMD



BMD results

Conclusion. In our study, 47% of patients had a BMD assessment. This is better than what has been reported in other single-center studies, however, it is not ideal. About 34% of the patients had insurance coverage as the major barrier for routine screening, as has been mentioned in other similar studies. Of the patients who underwent the DXA scan, 41 % had a low BMD. Other studies have reported variable prevalence of abnormal BMD, from 47-93%. Interestingly, the prevalence of low BMD in our cohort was close to the national average in non-HIV patients.

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

830. Central Nervous System Involvement in Disseminated *Mycobacterium avium* Complex Infection in Patients with Newly Diagnosed HIV

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Session: P-46. HIV: Complications and Co-infections

Background. Disseminated Mycobacterium avium complex (MAC) infection occurs in 20-40% of patients with < 50 CD4/mm^3. Data describing central nervous MAC involvement (CNS-MAC) in disseminated infection is scarce.

Methods. We conducted a retrospective case series in the outpatient infectious diseases clinic in the hospital "Dr. Manuel Gea Gonzales" in Mexico City. We reviewed all records from October 2020 to May 2021 and identified all culture proven MAC infections.

Results. We found 7 cases of MAC, with disseminated infection (positive bone marrow cultures) with 3 out of those 7 meeting our definition for CNS-MAC (positive cerebrospinal fluid culture). All cases of CNS-MAC infection occurred in patients with < 50 CD4/mm^3 and recent HIV diagnosis (1-4 months) that were referred to our institution with consumptive syndrome and fevers. All patients were receiving antiretroviral treatment (ART) with BIC/FTC/TAF and initiated ART in less than 1 month since HIV diagnosis. Opportunistic infections were ruled-out at the moment of CNS-MAC diagnosis (criptococcal meningitis, cytomegalovirus retinitis, tuberculosis and histoplasmosis). All patients exhibited non-specific neurologic symptoms at arrival (headache and bradipsiquia) mixed with more severe symptoms (one case of ataxia, one case of vertigo, one case of III nerve palsy). All patients were treated with Clarithromycin/Levofloxacin/Ethambutol. Two patients achieved symptom remission and 1 patient was lost to follow-up. Of important note, all CSF analysis and CNS imaging studies carried-out were normal. No MAC bacilli were identified with direct Ziel-Neelsen staining of CSF.

Conclusion. We found a high proportion of CNS-MAC in patients with disseminated MAC infection (42.8%) during the study period. All patients presented CNS symptoms and normal CSF characteristics. In our setting, patients with suspected disseminated MAC infection CD4 counts < 50 cells/mm^3 might represent a specific population that could benefit from routine targeted diagnostic test at presentation in order to establish CNS involvement.

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

831. Hepatitis C Virus Micro-elimination Within a Human Immunodeficiency Virus Clinic: Challenges in the Home Stretch

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Session: P-46. HIV: Complications and Co-infections

Background. Hepatitis c virus (HCV) eradication among persons with HIV (PWH) is alluring since DAAs efficacy is high regardless of HIV status and PWH in care are usually screened for HCV. Despite the potential, barriers to care have prevented many from achieving sustained virologic response (SVR). We performed a pharmacist-led campaign to reduce the proportion of PWH with active HCV and describe the barriers to care.