care and 38 (32.5%) were referred to the state for linkage. Of the patients linked to care, 49 (62.0%) attended their first appointment and 30 (38.0%) required additional PN outreach. Men who have sex with men (MSM) (OR = 17.2, p = 0.002) and heterosexual contact (OR = 6.3, p < 0.001) were predictive of LTC.

Conclusion. Our protocol resulted in LTC for the majority of newly diagnosed PWH. Among those linked to care, over a third required additional PN outreach after missing their first appointment, highlighting the importance of PN follow-up. MSM and heterosexual contact, the two highest risk factors for HIV in New Jersey, were predictive of LTC. Their successful LTC may be explained, in part, by the fact that PNs were demographically similar and lessened perceived stigma associated with entry into care.

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

969. TNF-alpha inhibition in the setting of undiagnosed HIV infection: a call for enhanced screening guidelines

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Session: P-45. HIV: Epidemiology and Screening

Background. Despite the risks of immunosuppression, recommendations regarding screening for HIV infection prior to initiation of biologic therapies targeting common autoimmune disorders, including inflammatory bowel disease (IBD) and inflammatory arthritides, are limited. Few cases of patients started on biologics while living with undiagnosed HIV have been reported.

Methods. We report 3 cases of patients initiated on biologics in the absence of recent or concurrent HIV screening who developed refractory disease or unanticipated complications and were later found to have undiagnosed chronic HIV infection.

Results. In Case 1, a 53-year-old man who has sex with men (MSM) with negative HIV testing 10 years prior presented with presumed rheumatoid arthritis. He did not respond to methotrexate (MTX), so adalimumab (ADA) was started. HIV testing to evaluate persistent symptoms was positive 9 months later; CD4 was 800 cells/uL. Antiretroviral therapy (ART) resulted in resolution of symptoms, which were attributed to HIV-associated arthropathy.

In Case 2, a 55-year-old woman with injection drug use in remission and no prior HIV testing presented with Hidradenitis Suppurativa (HS). She was initiated on infliximab (IFX) and MTX with good response. After she developed weight loss and lymphopenia, an HIV test was positive; CD4 was 334 cells/uL. Biologic HS therapy was discontinued, with subsequent poor HS control.

In Case 3, a 32-year-old MSM with no prior HIV testing presented with presumed IBD; IFX and steroids were started. Symptoms progressed despite IBD-directed therapy, and he was diagnosed with extensive Kaposi Sarcoma (KS) with visceral and cutaneous involvement likely exacerbated by immunosuppression. HIV testing was positive; CD4 was 250 cells/uL. KS initially worsened due to ART-associated immune reconstitution inflammatory syndrome. He is now improving with systemic chemotherapy and ART. HIV-associated KS is presumed to be hte underlying diagnosis.

Conclusion. All 3 patients had elevated risk for HIV infection, and 2 had final diagnoses attributed to chronic HIV infection, not warranting therapeutic immunosuppression. Screening for HIV infection prior to initiation of biologic therapy should be incorporated into clinical practice guidelines.

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

970. Transmitted Antiretroviral Drug Resistance Over a Period of 11 years at a Single Center in Southeast, USA

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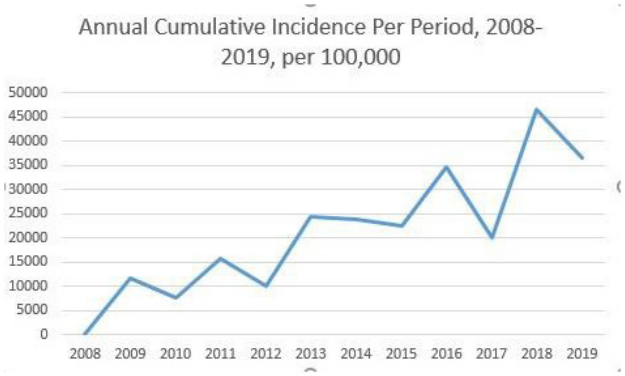
Session: P-45. HIV: Epidemiology and Screening

Background. In the United States, the prevalence of TDRMs is approximately 20%. As newer agents have become available, INSTI-based therapies have become the standard first-line treatment. The objectives of this study were to: (1) examine the incidence of TDRMs during 2008-2019 at a single institution and, (2) examine the association between TDRM and year as well as type of therapy.

Methods. A retrospective chart review was conducted at a single center in the Southeast United States. Resistance was defined on the basis of the International AIDS Society 2019 definition and Stanford University's HIV Drug Resistance Database. Relative risk and multivariable logistic regression were used to analyze data.

Results. Among 456 treatment-naïve patients who entered care 2008-2019 (80% male, 86% African American, mean CD4 count 359 cells/mm^3), the cumulative incidence rate of >1 TDRM was 19.3% (n=88). There has been a steady increase in annual cumulative incidence in TDRMs since 2008, with the highest incidences in 2018 (46,667/100,000) and 2019 (36,585/100,000). Over the 11-year study period NNRTI resistance was most common (67/88; 76%), followed by NRTI (9/88; 10%), PI (4/88; 5%), and INSTI (2/88; 2%). Dual class resistance was noted in 6 (7%) patients, one of whom had TDRMs in the INSTI and NNRTI classes. The relative risk (RR) for TDRMs was 1.76 (95% CI=1.42-2.17). According to the regression model, compared to patients whose initial treatment was NNRTI-based, patients who started treatment on PI-based therapies (OR=5.34, 95% CI=2.17-13.11) or INSTI-based therapies (OR=4.00, 95% CI=1.43-11.20) had significantly greater odds of TDRMs, controlling for age, gender, race, baseline CD4+ count, HIV RNA, hepatitis B status, hepatitis C status, and time period of testing. The time period was not significantly related to TDRM incidence in this model.

TDRM Incidence 2008-2019



Conclusion. The overall incidence of TDRMs in our clinic mirrors national surveillance data, with notably higher incidences in the last 2 years. Prescribing of the newly available INSTI-based regimens reflects the continued increase in the incidence of NNRTI TDRMs.

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

971. Unmasking the Undetectable: Identifying and Troubleshooting a Series of Falsely Elevated HIV Viral Load Results in a Group of Patients in a Community Clinic in San Antonio, Texas

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Session: P-45. HIV: Epidemiology and Screening

Background. Using effective antiretroviral therapy to consistently suppress plasma HIV RNA levels to < 200 copies/mL is known to improve morbidity and mortality at all stages of HIV infection and prevent transmission to sexual partners. Logistical challenges such as transporting, processing, and storing samples may threaten the accuracy of the test results. Plasma Preparation tubes (PPT) or Ethylene Diamine Tetra Acetic Acid (EDTA) tubes can be used for this test. PPT tubes contain an inert gel that migrates during centrifugation, forming a barrier between the plasma and cellular elements. Adequate separation of cellular elements may not always occur, and this can result in falsely elevated HIV Viral load (VL) due to measurement of integrated intracellular virus. It is therefore routine practice to centrifuge samples twice when PPT tubes are used. This is not necessary with EDTA tubes. In addition, there are reports that HIV RNA levels may be higher with PPT tubes are used, compared to EDTA tubes.

Methods. This is a quality improvement project that reviews a series of falsely elevated HIV VL in a group of patients who reported adherence and had been previously virologically suppressed.

Results. A total of 20 unexpectedly elevated HIV VL were identified from January to March of 2020 after introduction of a new phlebotomist in our clinic. VL ranged from 200-2530 copies/ml. Most patients (18/20) had history of virologic suppression and reported adherence. We standardized our process by using only PPT tubes and centrifuging samples twice prior to processing. Our nurses reported visible residual cellular elements in some of the plasma specimens in the tubes even after appropriate