Background. Diabetes mellitus (DM) is an important cause of mortality and morbidity in the US. There are limited data on DM prevalence among HIV infected patients (HIV+ patients). A recent study found that DM prevalence was higher among HIV+ patients (10.3%) vs. the general US population (8.3%), and was higher regardless of age, sex, and obesity status. We report on the prevalence of pre-DM/DM in our HIV clinic and outcomes.

Methods. Cross-sectional study by retrospective medical record review of patients ≥18 years who received HIV primary care at the Peter Krueger Clinic (PKC) at Mount Sinai Beth Israel, NY during October 2015–September 2016. The endocrine clinic is located outside PKC. Data collected include prevalence of pre-DM (Hgb A1c 5.7–6.4) and DM, demographics and HIV disease characteristics. Inadequate glycemic control was defined as Hgb A1c ≥7.0 ± 50% of measures during study.

Results. There were 1137 HIV+ patients during the study period. The population was mostly Black or Hispanic; mean age was 52.6 ± 11.2 years; 70% were male. Pre-DM prevalence was 301/1137 (26.5%) and DM prevalence was 176/1137 (15.5%). In uni-variate analysis, patients with DM were more likely to be older, female, Hispanic, HCV co-infected, had higher BMI, longer duration of HIV infection, and family history of DM (all p values <0.05). Almost 40% of those with DM were also HCV co-infected. Of the 176 with DM, 91 (52%) had inadequate glycemic control. Only insulin use and referral to endocrinology were associated with poor control (P<0.05).

Conclusion. Rates of DM in our HIV clinic were almost twice the rate reported in the general US population. DM should be considered a major public health concern in our setting. Given the high prevalence of DM and pre-DM, our endocrine referral rates are lower than expected. Further investigation is necessary to determine correlation and/or causation.

Disclosures. All authors: No reported disclosures.

582. Opportunistic Infections in Patients with HIV/AIDS at the Hospital Universitario de Santander: An Anatomopathological Study in the Period 2013–2016

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Background. HIV/AIDS-related infections are commonly presented in a disseminated form, compromising a high variety of organs and systems, mainly the Respiratory and Central Nervous System (CNS). In developing countries, the opportunistic agent

580. The Prevalence and Outcome of pre-DM/DM in an Urban HIV Primary Care Clinic

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Background. There was, however no
spectrum varies from what is reported in the rest of the world, being the anatomical compromise also different from developed countries reports. In Colombia there has not been published any study that characterizes the anatomopathological findings of opportunistic infections in a sample of HIV/AIDS patients this size.

Methods. Descriptive retrospective study, adjusted to the current regulations on human research ethics. The study was performed in the Department of Pathology of the Universidad Industrial de Santander (UIS) between 2004 and 2016 was selected, executing those with HIV/AIDS and at least one opportunistic infection as the final diagnosis, of these there were evaluated the pathological findings and demographic variables.

Results. Among 1996 patients, autopsy protocols were found 249 cases of HIV/AIDS associated to opportunistic infections, 183 men (73.5%) and 66 women (26.5%), with an average age of 37.9 ± 12.56 years. The main compromised systems were the Lower Respiratory Tract (LRT) with 184 cases (73.8%), mainly by M. tuberculosis (176 cases; 41.3%), followed by the Central Nervous System (CNS) with 95 cases (38.1%), mainly by Toxoplasma gondii (38 cases; 20.6%), and in third place the Lymphoreticular System (LRS) with 92 cases (50%), mainly by Histoplasma capsulatum (39 cases; 21.1%). Less prevalent agents like Trypanosoma cruzi were found compromising multiple systems, with 6 infecting the CNS and 7 causing Chagas myocarditis.

Conclusion. Disseminated forms and simultaneous multiple agent compromise of one system are common features in HIV/AIDS patients, because of this the clinician must have a high level of suspicion for diagnosing infection when approaching a disseminated infection or system compromises by an infectious agent.

Disclosures. All authors: No reported disclosures.

583. Strongyloidiasis Epidemiology and Treatment Response in Patients with HIV Infection

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Background. We sought to characterize the epidemiology of HIV and S. stercoralis coinfection in an urban HIV cohort, and to investigate the effect of S. stercoralis infection on HIV virologic control and immune recovery.

Methods. We reviewed the medical records of all HIV-infected patients diagnosed with strongyloidiasis who received care at Thomas Street Health Center (Houston, TX) between 2000 and 2015. For each case we included up to two matched HIV-infected patients without strongyloidiasis (controls). Matching was based on age, sex, race, baseline CD4, percentage, and HIV viral load at the time of strongyloidiasis diagnosis in the case patient. We recorded patient demographics, comorbidities, CD4 count and percentage, HIV viral load, and absolute eosinophilia count (AEC) at the time of HIV diagnosis, strongyloidiasis diagnosis, and six and twelve months after ivermectin treatment.

Results. We identified 15 cases of HIV and S. stercoralis coinfection; 13 had at least one available matched control. The mean age of coinfected patients was 45; all were Hispanic, 84.6% were male, and the mean CD4 nadir was 146 cells/μL. At the time of strongyloidiasis diagnosis, the mean CD4 count was 466 cells/μL, HIV RNA viral load 2.07 logs/mL, and AEC was 1,360 cells/μL. At 6 and 12 months after treatment, CD4 counts were 514 and 464 cells/μL, HIV RNA viral loads 1.78 and 2.31 log/mL, and AECs 319 and 362 cells/μL, respectively. Although CD4 counts increased 6 months after ivermectin treatment, there was no significant change achieved over statistical significance. The reduction in AECs after ivermectin treatment was statistically significant (P < 0.001). Matched controls without S. stercoralis had lower AECs at baseline, 6 months, and 12 months; otherwise, there were no differences between cases and controls.

Conclusion. Strongyloidiasis treatment in HIV-infected patients led to normalization of the AEC at 6 months in most cases, but AECs remained higher than in control patients. Persistently elevated AECs may suggest treatment failure or treatment on HIV virologic suppression or immunologic recovery; larger studies are warranted to investigate the effect of strongyloidiasis on HIV disease.

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584. Varicella zoster Virus IgG Antibody Levels in HIV Infected Patients Managed at Ryan White Clinics in Three South Carolina Counties

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Background. Infections due to Varicella-zoster virus (VZV) are common in HIV infected patients (HIVP), yet antibody levels to VZV are not routinely measured. Although VZV infection can compromise the immune system, few studies report on HIVP managed at Ryan White Clinics in Three South Carolina Counties.

Methods. We performed a descriptive retrospective chart review of all HIVP with ART initiated 2000–2016. We recorded patient demographics, CD4 count and percentage, HIV viral load, and absolute eosinophilia count (AEC) at baseline, 6 months, and 12 months; otherwise, there were no differences between cases and controls.

Results. Among 667 HIVP, there were 249 cases of HIV/AIDS associated to opportunistic infections, 183 men (73.5%) and 66 women (26.5%), with an average age of 37.9 ± 12.56 years. The main compromised systems were the Lower Respiratory Tract (LRT) with 184 cases (73.8%), mainly by M. tuberculosis (176 cases; 41.3%), followed by the Central Nervous System (CNS) with 95 cases (38.1%), mainly by Toxoplasma gondii (38 cases; 20.6%), and in third place the Lymphoreticular System (LRS) with 92 cases (50%), mainly by Histoplasma capsulatum (39 cases; 21.1%). Less prevalent agents like Trypanosoma cruzi were found compromising multiple systems, with 6 infecting the CNS and 7 causing Chagas myocarditis.

Conclusion. Disseminated forms and simultaneous multiple agent compromise of one system are common features in HIV/AIDS patients, because of this the clinician must have a high level of suspicion for diagnosing infection when approaching a disseminated infection or system compromises by an infectious agent.

Disclosures. All authors: No reported disclosures.

585. Incidence of Herpes Zoster in a Large Cohort of Persons Living with HIV

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Background. Herpes Zoster (HZ) incidence has decreased over 40% in the United States but remains elevated in persons living with HIV (PIWH). HZ vaccine is not routinely recommended for PIWH and provider-prescribing patterns vary greatly. Updated incidence information in this population is needed to guide vaccine strategies. Using data from the US military HIV Natural History Study (NHS), we evaluated the incidence of HZ (hemorrhagic and HZV) in PIWH at baseline and at six months, 12 months, and at six and twelve months after ivermectin treatment.

Methods. NHS subjects undergo bi-annual visits with laboratory testing, examinations, and records reviewed for clinical diagnosis, including HZ. Analysis was restricted to subjects contributing to follow-up after 2001. Risk factors for HZ (hemorrhagic and HZV) were determined in multivariate models, adjusted to baseline characteristics and HIV control. Risk factors for HZ were determined at baseline and at six, 12, and 24 months.

Results. Of the 2949 subjects meeting inclusion criteria, 237 (8%) were diagnosed with HZ. At HZ diagnosis, the median age, CD4 count, and viral load were 38.6 years [IQR: 30.8, 45.8], 461 cells/μL [IQR: 333, 638] and 1900 copies/mL [IQR: 50, 19580] respectively. The incidence of HZ was highest prior to 1996 at 3.24 cases/100 person-years (PY) of follow-up (2.96–3.54) and declined significantly over time with 1.9 (1.6–2.3), 1.4 (1.2–1.8), 1.4 (1.1–1.7), and 0.9 (0.7–1.2) cases/100 PY recorded in 1996–2000, 2001–2005, 2006–2010, and 2011–2016, respectively.

Conclusion. Herpes Zoster (HZ) incidence has decreased over 40% in the United States but remains elevated in persons living with HIV (PIWH). HZ vaccine is not routinely recommended for PIWH and provider-prescribing patterns vary greatly. Updated incidence information in this population is needed to guide vaccine strategies. Using data from the US military HIV Natural History Study (NHS), we evaluated the incidence of HZ (hemorrhagic and HZV) in PIWH at baseline and at six months, 12 months, and at six and twelve months after ivermectin treatment.

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