Background. While the efficacy of Pre-Exposure Prophylaxis (PrEP) in the prevention of HIV is well established in clinical trials, its utility in clinical practice needs to be defined. In contrast to lifelong HIV treatment, the use of PrEP should be only for those who remain at continued risk of HIV infection. Using sexual transmitted infection (STI) diagnosis as an indicator of continued high-risk sexual behavior, this study aimed to evaluate risk factors associated with STIs in PrEP users in New York City.

Methods. This retrospective cohort study included electronic health records of patients who initiated PrEP at Mount Sinai Health System from 2013 to 2016. Patients were screened for syphilis and urethral, rectal and pharyngeal gonorrhea and chlamydia every 6 months with additional testing at providers' discretion.

Results. During the study period, 599 patients (95% male) initiated PrEP at 34.3 years of age on average (SD=9.8; range=17–75). Of the 516 with information on sexual orientation, 91% were MSM; 38% Black. Nearly 35% of the 450 tested for STIs had at least one STI with 9% receiving 3 or more positive results. A total of 278 STIs were detected over 460 person-years of follow-up among 328 patients with a known PrEP initiation date; STI incidence was 39.7/100 person-years (95% CI: 48.68–70.63). There were no significant differences by race or ethnicity. Rectal STIs were significantly higher among those aged 25–30 (P < .01) than the other age groups and among those with PrEP-AP or Medicaid insurance coverage (P < .05) compared with private insurance. A greater number of men who reported alcohol or drug use tested positive for STIs than men who did not report substance use (P < .05). Adjusted logistic regression analysis showed the odds of being diagnosed with any STI or a rectal STI were 1.78 (95% CI: 1.14–2.77) and 2.56 (95% CI: 1.30–5.05) times among those reporting substance use.

Conclusion. STI incidence, including rectal STIs, was significantly higher among men who reported alcohol or drug use. This study highlights a group within this cohort of PrEP users that remain at high risk for HIV and would benefit from continued adherence to PrEP as well as enhanced counseling on substance use and reducing high-risk sexual behaviors.

Disclosures. All authors: No reported disclosures.

2259. High Rate of Asymptomatic Bacterial Sexually Transmitted Infections (STIs) in Men Who Have Sex with Men on Pre Exposure Prophylaxis (PrEP)

Lucas La Fata, MD; Laurent Cotte, MD; Matthieu Godinot, MD; Aymeric Pansu, MD; Carole Grosaille, MD; Djamilia Makhlofi, MD; Andre Boibeix, MD; Tristan Luyckx, MD; Alexandre Chapelet, MD; University Claude Bernard Lyon 1, Lyon, France; Infectious Diseases, Hospices Civils de Lyon, Hopital de la Croix-Rousse, Lyon, France, Lyon Teaching Hospitals HCL GHN Croix Rouse, Lyon, France, Infectious and Tropical Diseases - AIDS Referral Center, Teaching Hospitals and University Claude Bernard Lyon1, Lyon, France

Session: 248. HIV: Sexually Transmitted Infections Saturday, October 7, 2017: 12:30 PM

Background. High rates of bacterial STIs have been reported in high-risk MSM receiving tenofovir/emtricitaine (TDF/FTC) pre-exposure prophylaxis against HIV (PrEP) in clinical trials. However, systematic screening for STIs may amplify the diagnosis of asymptomatic infections in this population. We report the results of STI incidence in MSM enrolled in a PrEP program in Lyon University Hospital, France.

Methods. All patients addressed for PrEP in the department were enrolled. Baseline assessment included HIV serology, serum creatinine and STI screening (syphilis, HAV, HBV and HCV serology and N. gonorrhoeae/C. trachomatis PCR assay on urine, anal and pharyngeal swabs). HIV test, creatinine, bacterial STIs and HCV screening were repeated every 3 months. Incidence rates were determined per 100 patient-years (1/00PY).

Results. From January to September 2016, 211 patients were enrolled. All patients were MSM reporting unprotected anal sex (median age 36.4 years). Median condom use was 50%. 6% were escorts or prostitutes, 46% participate in sex parties, 53% used chemsex. Nine patients did not start PrEP, including 3 patients with HIV primary infection at baseline. 32 patients were lost to follow-up (FU). Median FU was 6.3 months for the remaining 170 patients (97 PY). No patient acquired HIV and 3 patients had acute HCV during FU.

Conclusion. A high prevalence and incidence of bacterial STIs were observed in high-risk MSM engaged in a PrEP program. All prevalent STIs and 80.3% of incident STIs were asymptomatic. Frequent screening and treatment of asymptomatic STI are warranted to reduce the spread of STIs in this population.

Disclosures. L. Cotte, GILEAD: Scientific Advisor, Consulting fee

2260. Improving Extra-genital GC/CT Screening Among HIV-positive Patients at the University of North Carolina Infectious Diseases Clinic

Timothy Menza, MD; Anita Holt, RN; Trelave Hankins, CMA; Ellen McAngus, MSW; Amy Heine, MSN; FNP; and Claire Farel, MD, MPH; Infectious Diseases, University of North Carolina, Chapel Hill, North Carolina; Mason Farm Rd CB 7030, University of North Carolina at Chapel Hill Division of Infectious Diseases, Chapel Hill, North Carolina

Session: 248. HIV: Sexually Transmitted Infections Saturday, October 7, 2017: 12:30 PM

Background. Asymptomatic rectal and pharyngeal gonococcal (GC) and chlamydial (CT) infections are common among HIV-positive men who have sex with men (MSM) and women. However, screening for extra-genital gonococcal and chlamydial infections among HIV-positive patients is low. While ural screening is more common, this method may miss more than 70% of extra-genital infections among MSM and more than 15% of rectal infections among women.

Methods. We initiated a quality improvement project with 4 plan-do-study-act (PDSA) cycles beginning in 3/2016, to increase screening for extra genital infections among HIV-positive patients attending the UNC Infectious Diseases clinic by 10%. The first PDSA cycle initiated nurse-based counseling on GC and CT testing. The second PDSA cycle increased verbal nursing prompts to providers about screening for extra genital GC and CT. The third cycle placed screening supplies out on Mayo stands in each examination room. The final PDSA cycle introduced a self-screening program for extra-genital sample collection. Our outcome of interest was the percentage of patients seen in clinic in the prior 12 months who had screening for GC and CT in that same 12-month period. We also assessed the acceptability of self-collection of extra-genital samples with an anonymous survey.

Results. For the year prior to the initiation of PDSA cycles, 33% of patients were screened for GC and CT at any anatomic site. Since the initiation of the PDSA cycles, screening at any site increased to 40%. For MSM, screening increased from 44% in the year prior to project initiation to 52%. Of 35 patients who underwent self-screening and completed an acceptability survey, over 90% agreed or strongly agreed that screening was easy, that they preferred to collect their own samples, that they would collect their own samples at home, and that they would recommend self-screening to a friend.

Conclusion. We observed a 7% increase in GC and CT screening since the initiation of our quality improvement project. Self-collection of extra-genital GC and CT samples is an acceptable screening method and may have potential to further increase screening with both in-clinic and at-home sample collection, especially when combined with interventions that prompt routine screening.
2261. High-risk Behavior Among U.S. Military HIV-Infected Active-Duty and Retired Personnel
Danielle Pannebakker, MD1; Derek Larson, DO2; Xun Wang, MS3; Anuradha Ganase, MD, MPH4; Jason Okulicz, MD5; Christina Schofield, MD FACP FIDSA6; Thomas O’Bryan, MD7; Brian Agan, MD8 and Robert Deiss, MD9,10,11
1Department of Internal Medicine, San Diego, California, 2Division of Infectious Diseases, Naval Medical Center San Diego, San Diego, California, 3The Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, Maryland, 4Department of Preventive Medicine and Biostatistics, Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Rockville, Maryland, 5Infectious Disease, San Antonio Military Medical Center, Fort Sam Houston, Texas, 6Madigan Army Medical Center, Tacoma, Washington, 7Infectious Disease Clinical Research Program, Department of Preventive Medicine and Biostatistics, Uniformed Services University of the Health Sciences, Bethesda, Maryland, 8Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Rockville, Maryland, 9Division of Infectious Diseases, Naval Medical Center of San Diego, San Diego, California, 10Henry M. Jackson Foundation for the Advancement of Military Medicine, Bethesda, Maryland
Session: 248. HIV: Sexually Transmitted Infections
Saturday, October 7, 2017: 12:30 PM

Background. Despite a high incidence of sexually transmitted infections (STIs), sexual behavior among U.S. military personnel remains understudied. Since 2014, the U.S. Military HIV Natural History Study has administered a behavioral questionnaire that duty status would be correlated with age and race. We assumed a priori that duty status would be correlated with age and race and selected the former as our variable of interest, hypothesizing that AD would engage in a higher number of risk behaviors.

Results. Selected demographics and behavioral data are summarized below.

| AD (n = 731) | RP (n = 734) | Univariate Odds (95% CI) | Multivariate Odds (95% CI) |
|-------------|-------------|------------------------|--------------------------|
| Demographics |
| Median Age (IQR) | 30 (26.37) | 51 (46.57) |
| Race |
| White | 32.7 | 45.0 |
| Black | 46.1 | 43.0 |
| Hispanic/Other | 21.2 | 11.4 |
| Behavioral Data |
| Consumed > 6 drinks on a single occasion (past year) | 50.9 | 32.1 | 2.2 (1.72, 2.8) |
| Ever experienced injury from drinking | 84.5 | 72.9 | 2.0 (1.62, 2.6) |
| Ever used hard drugs | 73 | 176 | 0.4 (0.30, 0.5) |
| High self-perceived risk for STI |
| > 2 new sexual partners in past three months | 22.6 |
| Ever had sex with man | 65.9 | 82.8 | 0.4 (0.30, 0.5) |
| Ever had sex with woman | 82.1 | 79.8 | 1.2 (0.91, 1.5) |
| Condomless anal intercourse in last 3 mos (casual partner) | 29.5 | 27.2 | 1.1 (0.81, 1.5) |
| Condomless anal intercourse in last 3 mos (anonymous partner) | 22.3 | 18.2 | 1.3 (0.91, 1.8) |

AD had significantly (P < 0.01) higher rates of gonorrhea (6.4) and chlamydia (6.0) per 100 person-years (py) than RP (2.2 and 1.6, respectively); syphilis rates did not differ between the groups (AD 1.2/100 py; RP 1.3/100 py).

Conclusion. In contrast with our hypothesis, we found a high prevalence of sexual risk behavior among both AD and RP, and only lifetime use of hard drugs was independently associated with duty status. Despite high STI rates, ~20% in either group reported high self-perceived risk for STIs and/or recent condomless sex with an anonymous partner. Our findings demonstrate a need for intensive STI screening and counseling among HIV-infected military personnel in multiple career stages.

Disclosures. All authors: No reported disclosures.

2262. Extrapulmonary Nontuberculous Mycobacterial Infections in Southern Arizona: A Retrospective Study of Disease and Treatment
Catalin Florita, MD1; Tirdad Zangeneh, DO2 and Anca Georgescu, MD3
1Department of Medicine/Division of Infectious Diseases, University of Arizona College of Medicine, Tucson, Arizona, 2Department of Medicine, Division of Infectious Diseases, University of Arizona College of Medicine, Tucson, Arizona
Session: 249. Non-Tuberculous Mycobacteria - Epidemiology and Management
Saturday, October 7, 2017: 12:30 PM

Background. Nontuberculous mycobacteria (NTM) are a diverse group of environmental bacteria which cause a wide range of pathology, from lung disease to skin and soft tissue (SST) infections and disseminated disease, mostly in immunocompromised individuals. The antimicrobial susceptibility is variable with high rates of resistance for some subspecies. Distinction between pathogenic and non pathogenic isolates is often difficult.

Methods. We conducted a retrospective review of medical records of patients older than 18 who had an NTM isolated in specimens other than lung, sputum, bronchial lavage, pleural fluid/tissue, between January 2012 and December 2016 at Banner University Medical Center Tucson, Arizona.

Results. We identified a total of 33 patients meeting our inclusion criteria. Most common sources were SST in 9 cases (27%), bone and joint in 9 (27%), followed by stool -5/33 (15%), blood - 4 (12%), sinus 4 (12%) and disseminated (blood and bone marrow) in 1 case and brain and tissue in 1 case. The predominant isolates were Mycobacterium (M.) chelonae- 6/33 (18%), M. avium complex- 5/33 (15%), M. abscessus - 5/33 (15%). None of the stool and sinus isolates were considered pathogenic and treated. Most common presentation was fever 7/33 (21%) and skin rash 7/33 (21%). Only 13/33 (39%) patients received specific treatment for the NTM (SST infection 5/9, bone and joint 3/9, blood 3/34, disseminated 1/1, brain tissue 1/1). Of the 13 treated infections, 9/70% were foreign body associated; the hardware was removed in all cases except 2 (1 blood isolate associated with prosthetic valve endocarditis and 1 brain tissue). Susceptibilities were available for 19 isolates. All M. abscessus were resistant to at least 4 drugs but none were resistant to amikacin. For the rapid growers, no standard starting treatment was identified. No pattern of laboratory abnormalities (WBC, hemoglobin, AST, alk phos, ESR, CRP) could be identified.

Conclusion. Our study shows that extrapulmonary NTM infections remain rare. There was no correlation between the NTM species and clinical significance or severity of disease. Furthermore, in the absence of specific clinical or laboratory features, the decision to treat is largely based on clinical judgment.

Disclosures. All authors: No reported disclosures.

2263. Disseminated Mycobacterium hemophilum Presenting as Leprosy-like Cutaneous Lesions in an Immunocompromised Host
Jean Sim, MRCP. Infectious Diseases, Singapore General Hospital, Singapore, Singapore
Session: 249. Non-Tuberculous Mycobacteria - Epidemiology and Management
Saturday, October 7, 2017: 12:30 PM

Background. Mycobacterium hemophilum is a slow growing non-tuberculous mycobacterium that has predilection for lower temperatures and extremities. It presents commonly as a cutaneous infection but can have a variety of clinical presentations in immunocompromised patients.

Methods. We present a patient found to have disseminated Mycobacterium hemophilum infection with a presentation similar to lepromatous leprosy.

Results. A 60-year-old man with a history of psoriasisform dermatitis and end stage renal disease. He received a deceased donor renal transplant in 2005 from China, complicated by chronic allograft dysfunction. He previously worked as an architect and apart from travel to China in 2005 did not travel to other leprosy endemic regions nor have contact with patients known to have leprosy. Despite medical therapy, he was reinitiated on dialysis 11 years after transplantation via a permanent catheter. He was on prednisolone, cyclosporin and MMF that ceased at time of reinitation of dialysis.

He presented 4 months later with bilateral foot gangrene and an erythematous macular rash over his face and right upper limb. This was deemed to be drug related initially and he was treated with topical agents. His rash worsened with new nodular lesions over his chest, torso and lower limbs with facial and ear lobe involvement. He was also noted to have flattening of his nasal bridge that appeared saddle like. He was also noted to have wasting of bilateral intrinsic muscles of his hands with a right ulnar claw. This was deemed to be tuberculous leprosy and the patient was started on rifampicin, ciprofloxacin and isoniazid. One month later, a biopsy of facial skin lesion showed numerous acid fast bacilli with no formed granulomas. This grew Mycobacterium hemophilum and PCR for Mycobacterium leprae was negative. Nasal swabs and blood cultures also grew Mycobacterium hemophilum. Tissue cultures from his foot gangrene also grew Mycobacterium hemophilum. He was started on rifampicin, ciprofloxacin and isoniazid. Tissue cultures from his face and right upper limb also grew Mycobacterium hemophilum. He was then started on isoniazid and clarithromycin. He did not improve. A biopsy of right foot lesion grew Mycobacterium hemophilum. He was then started on ciprofloxacin, clarithromycin and isoniazid. He improved with these therapies.

Conclusion. The clinical presentation of disseminated Mycobacterium hemophilum infection may mimic that of leprosy. The diagnosis of this unusual infection is made only with thorough investigation of the patient's medical history and appropriate clinical correlations.