**Results.** There were 369 newly-HIV diagnosed patients. Of these, 182 patients (49.3%) presented with AIDS-defining illnesses. TB was the most common (80 patients), followed by PCP (49 patients), cryptococcal meningitis (13 patients) and invasive salmonellosis (6 patients). Medical records of 29 HIV-TB patients were incomplete and were excluded from the study. Out of 51 HIV-TB patients, the median age was 41 (range 18–63) years and 39 (76.5%) were male. The median CD<sub>4</sub> counts was 62.5 (range 7–773) cells/µL. Twenty-six (51.0%) had only pulmonary TB, 13 (25.5%) had only extra-pulmonary TB, and 12 (23.5%) had disseminated TB. Among extra-pulmonary TB, TB lymphademitis was seen in 13, followed by intraabdominal TB in 8, TB meningitis in 4, and TB pleura in 3 patients. The mortality rate of HIV-TB is out study was 11.8%.

**Conclusion.** TB is the most common OIs that occurs among patients with advanced HIV disease. The outcome was unfavorable, with death in 11.8%. Strategies to improve early diagnosis and treatment are warranted.

Disclosures. All authors: No reported disclosures.

## 372. Prevalence of Urethral, Rectal, and Pharyngeal Gonorrhea and Chlamydia among Newly Diagnosed Filipino HIV Patients

Kingbherly L. Li, MD<sup>1</sup>; Jose Carlo B. Valencia, MD<sup>1</sup>;

Florida F. Taladtad, MD<sup>1</sup>; Mary Grace T. Hernaez, RMT<sup>2</sup>;

Vivienne V. Luzentales, RMT<sup>2</sup>; Cybele Lara R. Abad, MD<sup>1</sup> and

Edsel Maurice T. Salvana, MD, DTM&H, FIDSA; <sup>1</sup>University of the Philippines – Philippine General Hospital, Manila, National Capital Region, Philippines; <sup>2</sup>National Institutes of Health, University of the Philippines, Manila, National Capital Region, Philippines

## Session: 47. HIV Complications: Opportunistic Infections

Thursday, October 3, 2019: 12:15 PM

**Background.** The Philippines has the fastest-growing HIV epidemic in the Asia-Pacific. Concurrent sexually-transmitted infections increase the risk of HIV transmission and complications. The prevalence of *Neisseria gonorrheae* (NG) and *Chlamydia trachomatis* (CT) infection among Filipino HIV patients is unknown and screening is not universal. A symptom-based approach likely underestimates the prevalence of NG and CT among men who have sex with men (MSM). We determined the rectal, pharyngeal, and urethral prevalence of gonorrhea and chlamydia infection in our patient population using nucleic acid testing (NAT).

*Methods.* This is a single-center, prospective cross-sectional study at Philippine General Hospital. Following ethical approval and informed consent, pharyngeal, rectal, and urine samples from newly-diagnosed, treatment-naïve HIV adult patients were tested using the Xpert\* CT/NG assay (Cepheid, Sunnydale, CA). Patients with recent (<21 days) antibiotic use with activity against NG or CT were excluded. Demographic and clinical data were also collected.

**Results.** 46 subjects were enrolled. Mean age was 31 years (range 19–49), 83% (38/46) were male, 96% (44/46) were asymptomatic, and 92% (35/38) of the males were MSM. Median CD4 count was 225 cells/ $\mu$ L (range 0–1,335). The overall prevalence of CT/NG was 33% (15/46). Table 1 shows the prevalence of CT and NG by site. Four patients had both genital and rectal CT. More patients had rectal NG/CT compared with urethral and pharyngeal sites. No gonorrhea was found in the urine specimens; no chlamydia was found in the pharynx.

**Conclusion.** The prevalence of CT and NG among newly diagnosed Filipino HIV patients at 33% is sufficiently high to warrant routine NAT screening. Urine testing alone will miss a significant number of cases in an MSM-predominant population. We recommend NAT screening of both urethral and rectal sites for newly-diagnosed Filipino HIV patients.

Table 1. Frequency and prevalence of *Chlamydia trachomatis* and *Neisseria gonorrheae* infection by

	Chlamydia trachomatis	Neisseria gonorrheae	Both NG/CT	Either NG/CT	
Site (N=46 each)	n (%)	n (%)	n (%)	n (%)	
Urethral only	2 (4)	0(0)	0 (0)	2 (4)	
Rectal only	4 (9)	1 (2)	2 (4)	7 (15)	
Pharyngeal only	0 (0)	1 (2)	0 (0)	1 (2)	
Urethral and rectal	4 (9)	1 (2)	0 (0)	5 (11)	
At least urethral	6 (13)	1 (2)	0 (0)	7 (15)	
At least rectal	10 (22)	4 (9)	2 (4)	12 (26)	
At least pharyngeal	0 (0)	1 (2)	0 (0)	1 (2)	
Overall prevalence	10 (22)	3 (7)	2 (4)	15 (33)	
NG. Neisseria aoi	orrheae: CT. Chlamydia trach	nomatis			

NG, Neissena gonormeae, C1, chiamyala trachomatis

Disclosures. All authors: No reported disclosures.

## 373. Immune Reconstitution Inflammatory Syndrome in Patients with HIV/AIDS and Histoplasmosis: A Case Series

Afroditi Boulougoura, MD<sup>1</sup>; Elizabeth Laidlaw, PA<sup>2</sup>; Gregg Roby, RN<sup>3</sup>; Yolanda Mejia, RN<sup>4</sup>; Alice Pau, PharmD<sup>5</sup>; Virginia Sheikh, MD<sup>5</sup>; Irini Sereti, MD<sup>6</sup> and Maura Manion, MD<sup>7</sup>; <sup>1</sup>MedStar Georgetown University Hospital, Washington, DC; <sup>2</sup>National Institute of Allergy and Infectious Diseases, Bethesda, Maryland; <sup>3</sup>National Institutes of Allergy and Infectious Diseases, Bethesda, Maryland; <sup>4</sup>Leidos, Washington, DC; <sup>5</sup>NIAID, Washington, DC; <sup>6</sup>Laboratory of Immunoregulation, NIAID, Bethesda, Maryland; <sup>7</sup>Division of Clinical Research, NIAID, Bethesda, Maryland

Session: 47. HIV Complications: Opportunistic Infections

Thursday, October 3, 2019: 12:15 PM

Background. Immune Reconstitution Inflammatory Syndrome (IRIS) in HIV infection is the unexpected clinical deterioration due to worsening (paradoxical) or uncovering (unmasking) of an infection or malignancy upon initiation of antiretroviral therapy (ART). *Histoplasma capsulatum* (*H. capsulatum*) is the most common endemic mycosis in patients with AIDS, usually manifesting as disseminated disease at CD4 counts < 150 cells/µl. In the ART era, histoplasmosis IRIS has been described in case reports, but there has been a limited description regarding clinical presentations and pathogenesis in the United States.

**Methods.** ART-naive HIV+ patients with a CD4<sup>+</sup> T-cell count < 100 cells/ µL enrolled in prospective studies at the National Institutes of Health (NIH) (NCT00286767, NCT02147405) were evaluated to identify those with histoplasmosis and followed after ART initiation to identify those who would eventually develop IRIS.

**Results.** From a total of 271 patients, we identified 9 patients with histoplasmosis. The median age, CD4+ count and HIV VL of these 9 patients was 36 years, 40 cells/mm<sup>3</sup> and 193,184 copies/mL, respectively. Two patients developed IRIS only to histoplasmosis (1 unmasking and 1 paradoxical), 2 patients developed IRIS to both histoplasmosis and non tuberculous mycobacteria (NTM) and 3 patients developed IRIS to other infections (1 VZV, and 2 NTM). The manifestations of histoplasmosis IRIS in our cohort ranged from worsening lymphadenopathy to small bowel obstruction and worsening pulmonary symptoms.

**Conclusion.** Histoplasma-related IRIS can present with worsening lymphadenopathy, small bowel obstruction, and worsening pulmonary symptoms. The emergence of IRIS appears to be very common in people with HIV and disseminated histoplasmosis but the underlying trigger may be histoplasma, other co-infections or both.

Patient	IRIS	Pathogen related IRIS	Age	Sex	CD4+T-cell count (cells/mm <sup>3</sup> )	HIV viral load (copies/mL)	Other Infections
1	Yes	H. capsulatum	38	Male	49	90,502	CMV
2	Yes	VZV	41	Male	40	114,732	VZV
3	No	N/A	36	Male	42	90,058	None
4	Yes	H.capsulatum and MAC	32	Female	5	50,131	MAC, HSV, Strongyloidosis
5	No	N/A	51	Male	65	>500,000	Strongyloidosis
6	Yes	H.capsulatum	29	Male	11	193,184	Toxoplasma
7	Yes	MAC	40	Male	3	1,846,741	PCP, MAC
8	Yes	Mycobacterium Marinum	36	Male	60	392,253	Mycobacterium Marinum, HCV,cryptosporidium, staph.aureus lungdunensis, HSV
9	Yes	H.capsulatum and Presumed MAC	36	Male	19	276,644	PCP, Thrush

Disclosures. All authors: No reported disclosures.

## 374. Lymphogranuloma Venereum (LGV) Outbreak Among People Living with HIV (PLWH): Michigan, 2015–2018

Christine Convery, MPH and James B. Kent, MS; Michigan Department of Health and Human Services, Detroit, Michigan

Session: 47. HIV Complications: Opportunistic Infections Thursday, October 3, 2019: 12:15 PM

**Background.** Sexually transmitted infections (STIs) have increased in recent years both nationally and in Michigan. At the same time, HIV prevention is shifting toward intense efforts to "ending the epidemic." Detecting and mitigating outbreaks, as well as monitoring co-infections in people living with HIV (PLWH), will be critical in these efforts. Lymphogranuloma venereum (LGV) is a sexually transmitted infection caused by a serovar of Chlamydia trachomatis and may present with proctitis, lymphadenopathy, or genital ulcers.

**Methods.** While not nationally reportable, LGV remains on the list of reportable conditions in Michigan. No cases were reported between 2009 and 2014, but from August 12, 2015 to December 4, 2018, 68 cases of LGV were identified in 66 patients and reported by providers and laboratories through the Michigan Disease Surveillance System (MDSS). These reported cases were analyzed by specimen collection date and matched to other comunicable disease databases for HIV co-infection status and STI history using SAS 9.4.

**Results.** The outbreak was local to Southeast Michigan where all but three patients resided; 72% cases lived in Detroit (Figure 1). 94% of cases were co-infected with HIV, including 4 who were co-diagnosed within 30 days of LGV diagnosis. Among the 60 cases of PLWH (excluding co-diagnoses), 62% were virally suppressed (VS) and 32% were in care but not suppressed at the time of LGV diagnosis. The majority (88%) of outbreak patients had between 1 and 7 additional bacterial STIs in the two years prior to LGV. All reported cases were men who have sex with men (MSM) with two patients also reporting injection drug use (MSM/IDU).

**Conclusion.** Testing for LGV is not routine and in some settings not available so there are likely unreported cases missing from this outbreak analysis. HIV care outcomes differed from statewide estimates with outbreak patients more likely to be receiving care but not sufficiently engaged compared with all PLWH (Figure 2). A high proportion of cases with additional STI history combined with lower than average VS rate means transmission of HIV is likely. This highlights a need to integrate HIV care support with STI services. Additional analyses of HIV co-infection with syphilis or other STIs are needed to further inform these strategies.

