Changing Patterns of HIV-TB Coinfection Among Patients in a Public Health Department Ambulatory Care Setting: A 5-year Experience from a US Metropolitan Area

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**BACKGROUND**

- HIV-TB coinfection leads to a complex set of synergistic interactions in the epidemiology, risk of acquisition, pathogenesis and prognosis of both infections.
- We present here a 5-year experience at a public health department ambulatory care setting in Tampa, Florida, showing potentially changing patterns.
- Descriptive data and clinical aspect of HIV-TB coinfected patients is presented.

**METHODS**

- A retrospective review of all tuberculosis cases over the 5-year period ending December 2017 was performed.
- Those with HIV coinfection were included in the study.
- Clinical, microbiological and/or PCR based testing methods were used to make the diagnosis. SPSS was used to compile basic descriptive statistics.

**RESULTS**

- Total of 411 TB patients during the study period, 8% had HIV coinfection.
- The median age was 45 years (range 18-65) with a male to female ratio was 21:12.
- Twenty-four percent (83/33) were homeless and 24% were foreign born. Only 1 patient admitted to using injection drugs while 27% (9/33) used non-injection illicit drugs.
- Only 45% (15/33) had TB symptoms such as fever, night sweats, weight loss and cough; the rest had radiographic abnormality which led to the diagnosis.
- Only 12% (4/33) had CT scan abnormality reported as cavitary or miliary while the rest had non-specific infiltrates.
- 88% (29/33) had pulmonary TB while 6% had lymph node and 6% serosal (1 pleural and 1 peritoneal) infections. 79% (29/33) were treated with a combination of daily observed and self-administered therapy. 12% (4/33) did not complete therapy or were lost to follow up, whereas one person was diagnosed post mortem thus was not treated.

**Fig 1. Methods of TB Diagnosis**

**Fig 2. Anatomic site of TB diagnosis**

**Fig 3. Radiologic Description of Chest Imaging (CXR and CT)**

**Conclusions**

- The prevalence of HIV-TB coinfection in our cohort is slightly higher than the recent US average of 6%.
- Our patients were relatively older, most of them US born, and had predominantly pulmonary TB contrary to prior reports of HIV-TB coinfection.
- These patterns of HIV-TB coinfection in this cohort may have been influenced by the overall older age of HIV patients in general or they could be indicators of underlying fundamental changes in the HIV-TB coinfection state at large.
- Our finding could be a reflection of the setting and demographics of our patient population.
- Additional study is needed to further elucidate this variance.

**REFERENCES**