Published in final edited form as:

Int J Tuberc Lung Dis. 2018 April 01; 22(4): 468–469. doi:10.5588/ijtld.17.0910-2.

In Reply Latent tuberculous infection testing among HIV-infected persons in clinical care

Erik J. Reaves, DO, MTM&H[*], **Sarita Shah, MD**[†], **Anne Marie France, PhD**[‡], **Sapna Bamrah Morris, MD**[*], **Heather Bradley, PhD**[‡]

[*]Division of Tuberculosis Elimination

[†]Division of Global HIV/AIDS and Tuberculosis

[‡]Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia, USA

Tuberculosis (TB) is the leading preventable cause of death among persons living with the human immunodeficiency virus (PLHIV) worldwide. The current US guidelines for the prevention of opportunistic infections in HIV-infected adults and adolescents recommend testing for latent tuberculous infection (LTBI) at the time of HIV diagnosis, regardless of other TB risk factors, and annually thereafter in PLHIV with initial negative LTBI testing results who are at continued high risk of exposure to *Mycobacterium tuberculosis*.[1] Evaluation of PLHIV for TB disease and infection reduces morbidity and mortality, and prevents future TB transmission.[2,3] However, we published a study in this *Journal* that evaluated a nationally representative sample of 2772 PLHIV in care in the United States during 2010–2012, and found that more than 30% of PLHIV diagnosed with HIV infection in the previous 5 years had no documentation of ever being tested for LTBI.[4]

While testing for LTBI among PLHIV in the Netherlands is not routine, the study by van Bentum et al. observed positive LTBI test results among 4.8% of their study population, highlighting the critical importance of screening PLHIV.[5]

Evidence supporting annual TB testing among PLHIV who are at continued high risk of exposure is limited to expert opinion and clinical experience. Our analysis identified characteristics of PLHIV that providers can use to inform the decision regarding annual, targeted testing for LTBI. Among those tested at least once since HIV diagnosis, PLHIV who had a positive LTBI test were more likely to be foreign-born, have lower educational attainment, or have a household income below the US federal poverty level. The Dutch study found African origin to be significantly associated with LTBI in their population.[5] We recommend that providers periodically evaluate risk for exposure to and transmission of *M. tuberculosis*, particularly if individual patients develop new risk factors.

A challenge with LTBI testing using the tuberculin skin test (TST) is loss to follow-up, as two clinical encounters are required to administer and interpret a TST. Among patients

ereaves@cdc.gov.

Conflicts of interest: none declared.

tested at least once in our study but without a documented result, 25.1% were reported as an unread TST. The increased use of IGRAs instead of the TST for LTBI testing in HIV care would result in higher test completion rates, as it involves only a single health care visit. Although prior testing data are not presented, the study by van Bentum et al. achieved LTBI testing results using an IGRA in 599 (80.7%) of 742 PLHIV during an 18-month study period.[5] Only 19% of PLHIV in our study were tested by an IGRA over a 5-year study period; an additional 2.7% of PLHIV would potentially have an LTBI test result had they been tested by IGRA instead of TST.

Given the similarities in HIV and TB epidemiology between the United States and the Netherlands, the findings from the Dutch study contribute to the evidence supporting the recommendations for LTBI testing among PLHIV at diagnosis and annually, based on risk. As low-incidence settings seek to accelerate progress towards TB elimination, improving LTBI testing and treatment for PLHIV will be an essential element of any comprehensive strategy.

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