New Clinical Practice Guidelines Released for the Diagnosis of Tuberculosis in Adults and Children
Treatment of Drug-Susceptible Tuberculosis

Prompted by advances in tuberculosis (TB) diagnostic tests, including the availability of interferon-gamma release assays (IGRAs) and molecular diagnostics, new 2016 Clinical Practice Guidelines for the Diagnosis of Tuberculosis in Adults and Children were published on Dec. 8, 2016. The guidelines were developed by the Centers for Disease Control and Prevention (CDC), American Thoracic Society (ATS) and Infectious Disease Society of America (IDSA), and they update the previous TB diagnostic standards published by CDC/ATS/IDSA in 2000. The new guidelines provide recommendations on the diagnosis of latent TB infection (LTBI), pulmonary TB, and extrapulmonary TB in adults and children.

The CDC, ATS and IDSA are also collaborating on the development of a companion guideline that addresses who to screen for LTBI and how to treat LTBI. As of this writing, the publication date for the companion guideline has not been finalized.

The new guidelines were developed using the GRADE (Grading of Recommendations Assessment, Development and Evaluation) methodology, which involves an extensive literature review, meta-analyses of combined data, and expert discussion to assess the extent and quality of the evidence and the resultant strength of each recommendation.

The diagnostic guidelines include 23 evidence-based recommendations, with six characterized as strong recommendations, meaning “the right thing to do for the vast majority of patients.” The 17 conditional recommendations are defined as the right thing to do for most patients, “but maybe not for a sizeable minority of patients.” Examples are provided in the full text of the guidelines.

The most significant change from the 2000 standards is the strong recommendation to use an interferon-gamma release assay (IGRA) rather than a tuberculin skin test (TST) to test for LTBI “in individuals 5 years or older who meet the following criteria: (1) are likely to be infected with mycobacterium tuberculosis (Mtbt), (2) have a low or intermediate risk of disease progression, (3) it has been decided that testing for LTBI is warranted, and (4) either have a history of bacille Calmette-Guerin (BCG) vaccination or are unlikely to return to have their TST read.” The authors acknowledge, however, that the “TST is an acceptable alternative, especially in situations where an IGRA is not available, too costly, or too burdensome.”

The remaining recommendations in the new guidelines are generally consistent with current policies and practices in Pennsylvania, but TB program personnel will review the recommendations in greater detail and make any changes as needed.

It should be noted that “these guidelines target clinicians in high-resource countries with a low incidence of TB disease and LTBI, such as the United States.” For countries with a medium to high incidence of TB, “guidance documents published by the World Health Organization may be more suitable.”

Finally, “these guidelines are not intended to impose a standard of care. They provide the basis for rational decisions in the diagnostic evaluation of patients with possible LTBI or TB [disease].”