New guidelines for treatment of latent tuberculosis infection

New guidelines on the testing and treatment of persons with latent tuberculosis infection have been issued by the American Thoracic Society (ATS) and the Centers for Disease Control and Prevention (CDC). Prepared by a panel of 47 scientists, the document suggests several important changes from previous guidelines and practices (American Journal of Respiratory and Critical Care Medicine, 2000, **161**: 221–247).

After further analysis of earlier clinical trials, the new guidelines recommend nine months of daily treatment with isoniazid for adults with latent tuberculosis infection regardless of whether the patient is infected with human immunodeficiency virus (HIV). The document also strongly discourages widespread tuberculin screening or testing of persons at low risk of tuberculosis. Instead, targeted tuberculin testing is recommended for latent tuberculosis infection to identify individuals at high risk of tuberculosis who, if found to be infected, would benefit from the recommended treatment. Persons at highest risk include those with recent tuberculosis infection and those with clinical conditions that are associated with an increased risk for progression to active tuberculosis.

The guidelines include several criteria for different risk groups that define a positive tuberculin test. Children should be screened, if possible by use of a questionnaire, for risk factors for tuberculosis infection. Those at risk are candidates for tuberculin skin tests, which should be interpreted according to the criteria for adults with the exception that a reaction of greater than or equal to 10 mm of induration should be considered as a positive test in children of less than four years of age. The only recommended regimen for treatment for tuberculosis infection in infants, children and adolescents is nine months of isoniazid taken daily (self-supervision) or twice weekly (directly observed therapy).

According to the guidelines, no available data exist to support the use of the other adult regimens in children. Although isoniazid has been the mainstay of treatment for latent tuberculosis infection for more than 30 years, its application has been limited because of poor adherence and because of concerns about toxicity. Recent clinical trials in HIV-infected persons have evaluated shorter, rifampicin-based regimens for latent tuberculosis treatment. Based on these studies, the guidelines recommend a possible two-month regimen of rifampicin and pyrazinamide for use in both HIV-positive and HIV-negative adults.

Dr Cohn emphasized "more data will be needed to determine the acceptability of this regimen in HIV-negative patients". Dr O'Brien stressed that more work would be needed to determine if these guidelines work in practice and if they apply to developing countries. The ATS/CDC statement can be found on the Internet at http://www.thoracic.org/statementframe.html

Tudor Toma, New York