## Disseminated tuberculosis and human immunodeficiency virus infection

Dear Editor.

I read with interest the recent case on severe disseminated tuberculosis in a 4-year-old girl by Rey et al., and have the following comments to offer:

Human immunodeficiency virus (HIV) testing was not done in the case described by the authors. As per the World Health Organization, more than 39 million people worldwide were living with HIV infection at the end of 2004.<sup>2</sup> More than 90% of HIV-infected individuals live in developing countries. Thus, in the current era of HIV, one needs to rule it out in all cases of disseminated tuberculosis. Although the treatment for disseminated tuberculosis is the same for seropositive and seronegative patients, certain point merits consideration:

- 1) Seropositive patients are more likely to present with disseminated tuberculosis as compared to seronegative patients.<sup>3</sup> Disseminated tuberculosis has been accepted as an AIDS-defining criterion. The WHO clinical staging of HIV/AIDS is used in many countries to determine eligibility for antiretroviral therapy, particularly in settings in which CD4 testing is not available. Presence of disseminated tuberculosis puts a patient in stage 4 which is an indication for starting ART.<sup>4</sup> WHO recommends HIV testing for patients of all ages in whom tuberculosis is suspected or already confirmed.
- 2) Paradoxical reactions occur more frequently in seropositive as compared to seronegative patients. They are triggered by the reconstitution of immune response, either as a result of antiretroviral therapy or of the tuberculosis treatment itself. These include: appearance of new lymph nodes or an increase in the size of existing lymph nodes; worsening of central nervous system lesions; and increase in pleural effusion.<sup>5</sup>

Through this letter, I would like to re-emphasize our readers that HIV testing should be done in all cases of disseminated tuberculosis.

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