Abstract Category:
Cross cutting theme

Title

The two-step tuberculin skin test should be considered in HIV infected patients where TB is endemic

Authors

KCW CHAN, FA BOGNAR, WK CHAN, KH WONG
Integrated Treatment Centre, Centre for Health Protection, Department of Health, Hong Kong

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Background

Annual tuberculin skin tests (TST) are recommended to diagnose latent tuberculosis in HIV disease. However, it is unclear if the baseline TST should be a two-step test.

Methods

TST with 2 units of PPD-RT23 were placed annually for HIV infected patients in Hong Kong. Five millimeters of induration was the cutoff. Two-step TST was not performed.

Results

From 2001 to 2006, 858 baseline TSTs were done, of which 137 (15.9%) were positive. A positive result was associated with a higher CD4 cell count and lower viral load (mean 441 vs. 310 cells/mm^3 $p<0.05$; 30,248 vs. 126,534 copies/ml $p<0.05$). Of those with negative results, 457 continued to have at least 1 repeat annual TST. The cumulative incidence of conversion was 18.8%, after a median of 2 repeat tests. Sixty percent of conversion occurred at the second TST. Higher CD4 cell counts were associated with conversion at all times, but a lower viral load continued to be significant only for those converting at second TST.

Conclusion

TST positivity and conversion were associated with virologic and immunologic improvement. It also occurred mostly at the second test. A two step TST should be considered for baseline testing where tuberculosis is endemic.

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