

POSTER PRESENTATION

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The value of interferon-gamma blood tests for the diagnosis of tuberculosis in HIV patients

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Background

Tuberculosis is the most common opportunistic infection in HIV patients in Romania, but the diagnosis is often difficult because of its many atypical forms.

Objectives

The aim of this study was to evaluate the value of whole interferon-gamma assay, QuantiFERON TB.Gold in Tube (QFT) for the diagnosis of tuberculosis (TB) in HIV patients.

Methods

We performed QFT in 80 HIV patients with suspected latent or active TB, between January 2008 to December 2010.

Results

We enrolled in the study 80 HIV patients (10 children and 70 adults); M:F = 36:44. All subjects were previously BCG vaccinated, 24 (30%) had positive family contact and 16 (20%) had a history of tuberculosis. 45 (56.2%) patients were in stage C3 (CD4<200 cells/ μ L), 32 (40%) in stage C2 (CD4 = 201-400) and 3 (3.8%) patients in stage B1 (CD4>400). We diagnosed 52 (65%) patients with active or latent TB, out of which 2 cases of pleural effusion, 7 military, 22 with pulmonary forms, 8 TB meningitis, 2 lymph nodes TB and one intestinal tuberculosis. Tuberculin skin test (TST) was performed in all patients. Sixteen patients were TST positive: only 2 patients in the group with CD4<200, 10 patients in the group with CD4 between 200-400 and 4 subjects with CD4>400. The QFT test was positive in 27 (33.75%) patients, negative in 44 (55%) and indeterminate in 9 (11.25%). We obtained 14 (31.1%) QFT positive results in patients with CD4<200, 10 (31.25%)

QFT positive results in group with CD4 = 201-400 and 3 (100%) positive results at patients with CD4>400. In stage C3 (CD4<200) the positive TST tests was significantly lower (4.4%) compared to positive QFT (31.1%).

Conclusions

The QuantiFERON TB.Gold test is a useful tool for the diagnosis of tuberculosis in HIV patients, even in those in terminal stage; it is more specific than TST, and it could replace TST in the near future.

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