



POSTER PRESENTATION

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# Tuberculosis with pulmonary involvement in HIV patients

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## Background

Tuberculosis (TB) is a leading cause of death worldwide and is closely associated with HIV-infection. The higher probability of spreading TB in patients with pulmonary involvement is always a great concern and demands immediate action.

The aim of this study is to analyze, retrospectively, cases of TB with confirmed pulmonary involvement in the HIV infected population observed in an Infectious Diseases Unit and diagnosed from January 2000 to December 2008.

## Results

The study included 87 patients: 96.5% HIV-1; 92.0% Caucasian; 79.3% male; mean age 41 years [25-76]; 9.2% were foreigners (5,7% from Sub-Saharan Africa); HCV co-infection in 49.4% and 51.7% with history of drug addiction.

TB was the initial manifestation of HIV infection in 52.9% and AIDS-defining in 71.3%. TB predominately occurred in late stages of HIV infection (74.7% had CD4 + T cells  $\leq$  200/mm<sup>3</sup>). The average time between diagnosis of HIV infection and TB was 3.9 years. Clinical features were mainly respiratory (71.8%) and fever (66.3%). Chest – ray most frequently showed multifocal involvement (50.6%). Tuberculin test was reactive in 14 cases (n = 27). Respiratory secretion culture was positive in 83.9% - of these, 36.8% had positive Ziehl-Neelson (ZN) staining. Resistance to 1 or more anti-TB drugs was found in 12.6% (n = 11). There were 2 cases of multiresistance and 1 extensively resistance (XDR). Other pulmonary diseases were associated in 13.8%. HRZE was the most frequent treatment regimen and 14.9% did not

complete it due to loss in follow-up. The average time of treatment was 7 months. Mortality rate was 18.4%.

## Discussion

Most TB cases occurred with severe immunosuppression and were the first manifestation of HIV infection and AIDS defining in most of the patients. ZN stain of respiratory secretions was negative in a considerable number of cases (63.2%) whose culture was positive. Mortality and loss to follow-up rates were relevant.

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