Tuberculosis as an AIDS-Defining Illness between 1993 and 2014 in Lyon, France.

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Abstract

Objectives: To report the socio-demographic and biological characteristics of patients diagnosed with tuberculosis as an AIDS-Defining Illness (ADI) at Lyon University Hospitals (LUH) across five time periods corresponding to different antiretroviral eras, and assess the temporal trends.

Methods: AIDS cases aged ≥15 years and supported at LUH between 1 January 1993 and 31 December 2014 were included in the study. The information was collected by the AIDS notification of the French Institute for Public Health Surveillance. Tuberculosis cases were pulmonary (PT), extra-pulmonary (EPT), or disseminate (DT). The data were compared using the χ^2 test and one-way analysis of variance. Trends were tested and proportion for the most recent calendar period of the study (2011-2014) were compared with proportion observed in first period of the study (1993-1995).

Results: Overall, 1,888 patients were included in this study. The total number of tuberculosis cases without other concomitant infection was 189 (110 PT, 61 EPT and 18 DT); and its proportion increased by 15.7% during the eleven years of study. Tuberculosis was the second most frequent AIDS diagnoses in 2011-2014 (14.7%) after *Pneumocystis carinii* pneumonia (16%). Tuberculosis frequency was significantly higher in men (128/189, 67.7%; $P<0.001$), patients aged 30-39 years (74/189, 39.2%; $P<0.001$), people infected through heterosexual contact (112/189, 59.3%; $P<0.05$) and people with CD4 cell count <200/µl (61/189, 43.9%; $P<0.05$). The proportion of women increased significantly from 21.1% to 36.4%. A dramatic increase in the proportion of heterosexual born outside France (83/112, 74.1%; $P<0.05$) was observed over time from 14.3% to 93.8%. Median delay between HIV and AIDS diagnosis was significantly shorter in untreated people than in people treated with an antiretroviral (respectively 1 and 60 months; $P<0.05$).

Conclusion: Despite the decline in the number of AIDS patients since the introduction and spread of Highly Active Antiretroviral Therapy (HAART), tuberculosis remains a major condition as input mode in AIDS. This ascertainment persists as an important challenge for health care professionals and policy makers.

Keywords: HIV infection, AIDS-Defining Illnesses, AIDS diagnosis, Tuberculosis, Surveillance

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