Analysis of indicators for monitoring the efficacy of antiretroviral treatment in PLHIV aged 18 years and older on ARVs in 2019 in a reference center: the Nouakchott Outpatient Treatment Center

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January 12, 2023

Abstract

A prospective study involved a total of 361 HIV-positive patients on antiretroviral therapy (ART) initiated and followed at the CTA from January to December 2019, in order to evaluate the effectiveness of the therapy by monitoring the evolution of TCD4 lymphocytes, plasma viral load. The mean age was 37±12 years. Men were in the majority (62.3%) with a sex ratio (M/F) of 1.65. The first-line (ART) protocol combining 2INTIs + 1INNTI concerned 97.8% of patients. The immunological efficacy of the treatment was evaluated by comparing the initial and final CD4 counts (after 6 months of ART), for the first CD4 count, at the beginning of the treatment, 48.5% of patients had a CD4 count higher than 200 cells/μl against 51.5% who had a count lower than 200 cells/μl. But at the second evaluation six months later, 54.5% had CD4 >200 cells/μl against 45.5% of the patients who had their CD4 rate<200 cells/μl. As for the relationship between the immunological and virological status of the patients, the distribution of HIV patients in our series according to CD4 count and viral load was not significant but allowed us to establish the correlation between these two parameters with a correlation coefficient between -1 and 1. Thus, this correlation coefficient sought after six months of antiretroviral treatment is -0.04. From the analysis of the data, it appears that the antiretroviral drugs are effective in the population studied. The CD4 cell count and viral load changed in the opposite direction during treatment. The use of the correlation coefficient makes it possible to follow the effectiveness of the antiretroviral therapy.

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