

Letters to the editor

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Resistance to first-line antiretroviral therapy

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Dear Editor:

Among 2000 and 2015, the implementation of highly active antiretroviral therapy (HAART) has led to a reduction of 28% in human immunodeficiency virus (HIV) related mortality [1],[2]. In 2016, 18.2 million patients were receiving HAART, of which 13.5 million were for developing countries, accounting for 46% of the world's HIV-infected individuals [1].

However, viral load monitoring in HIV-infected persons in some countries is below the guidelines recommended by clinical guidelines. In this way, new challenges and strategies are presented, including the 90-90-90 proposal put forward by WHO towards 2020, which includes that 90% of patients with HIV know: 1) Their diagnosis, 2) Receiving HAART and 3) Achieving viral suppression [3].

Simultaneously to the administration of HAART, virus mutations appear and subsequently resistance to treatment. This is due in large part to low adherence, non-tolerability of drugs, suboptimal doses, consumption of prohibited substances, sexual promiscuity among others [4]. In developing countries, there are more factors such as opportunistic infections (especially tuberculosis), few establishments that offer treatment and distance between them, and delay in the detection of resistance and the design of special schemes [5].

It is clear that primary resistance to HAART is greater in western areas than in Latin America, but with migration and factors dependent on people and drugs, it is likely that over the years, primary resistance to antiretroviral drugs will increase. Similarly, when there is a failure of first-line treatment, percentages of resistance to reverse transcriptase inhibitors are above 35% for tenofovir, 2% for lamivudine and 74% for non-nucleoside reverse transcriptase inhibitors in our region [5],[6].

In Peru, studies aim to complement existing information with reviews of the last five years, due to the appearance of new first and second line drugs [7], focusing not only on viral suppression but CD4 count in the analysis and the effectiveness of antiretroviral treatment and the emergence of resistance. Similarly, studies in the population that fail to achieve viral suppression and monitoring of factors dependent on the patient and their environment for the appearance of resistance, since according to geographical accessibility, location of establishments providing HAART, follow-up, the rate of achievement of viral suppression and occurrence of resistance to HAART varies.

For this reason, the integral care of HIV-infected patients is essential to achieve therapeutic success. In addition, factors related to the achievement of viral suppression and the emergence of resistance to treatment should be constantly studied and monitored, as this leads to greater expense, greater efforts and difficulty in attainment the eradication of the disease.

Notes

From the editor

The authors originally submitted this article in Spanish and English. The Journal has not copyedited this English version.

Declaration of conflicts of interest

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Abstract

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