EVOLUTION OF HAEMATOLOGICAL, IMMUNOLOGICAL AND VIROLOGICAL MANIFESTATIONS INDUCED BY ART IN HIV-INFECTED PERSONS

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Abstract: Sub-Saharan Africa constitutes only 10% of the world’s population, and paradoxically, it harbours about two-thirds of the world’s HIV infections. However, there is a steady increase in access to antiretroviral therapy (ART), rendering the quality of life improved for many AIDS patients. Nevertheless, several toxicities and side effects of these drugs have been reported which interfere with compliance and contribute to hampering ART efficacy and efficiency. Thus, it is indispensable to monitor various clinical and laboratory parameters for drug efficacy and efficiency in them. Thus, a 24-month hospital-based cohort study was carried out in patients aged over 15 years on ART. Socio-demographic data was obtained from all the study participants at baseline. Furthermore, anthropometric data, full blood count measurements, CD4 counts and viral load measurements were performed at baseline, between 6-12 months and then between 18-24 months of ART initiation, using standard methods. All data was analysed using appropriate statistical packages and P values < 0.05 were considered significant. There were 39 patients included in the study, 66.66% of whom were women. Their mean age was 39.56±7.69 years (range 25 – 66). Most participants (79.48%) were aged 25-46 years. Clinically, weight loss, prolonged fever and chronic cough were predominant (74.40%, 69.20% and 36.59% respectively) and, based on the 1993 CDC classification of AIDS, most of the participants were in category A3 and B3 (43.59% and 28.21% respectively). The various ART regimens used during the study included Lamivudine, Stavudine and Nevirapine (46.15% of cases); Zidovudine, Lamivudine and Efavirenz (33.33%) and Lamivudine, Stavudine and Efavirenz (20.51%). Concerning the haematological parameters, a significant difference was noted between baseline mean platelets and lymphocyte counts from baseline to 6-12 months, while at 18-24 months white cell counts, platelets and lymphocyte counts were significantly different from baseline. The mean CD4 counts were significantly higher from baseline to 6-12 months and to 18-24 months (p=0.0 respectively). The mean viral load measurements were respectively lower in the 6-12 months and 18-24 months period, compared to baseline (p=0.0 respectively). Thus, there was an overall improvement in haematological, immunological and virological parameters in the patients. Strategies to favour more access to ART and laboratory surveillance should be promoted.