Neurological Complications of HIV/AIDS: Case of Meningitis Caused by Cryptococcus neoformans and Tuberculous Meningitis

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Abstract: This research work focused on the analysis of the observations of tuberculous meningitis in HIV-positive patients who were treated by the Prince Regent Charles Hospital in Bujumbura. A number of 246 seropositive patients were examined by the laboratory of Prince Regent Charles in the period between 2010 and 2015. We did a retrospective study; we used data from the registers of the laboratories mentioned above; the objective was to approach the epidemiological, biological, clinical, and therapeutic characteristics of tuberculosis meningitis infection: 124 women (50.40% of AIDS patients) and 122 men (49.59% of AIDS patients) were subject to the diagnosis by identification of cerebrospinal fluid (CSF). The average age of the patients was 30 years for this period. The population at risk has an average age of between 34 and 42 years for the years between 2010-2015. From 2010 to 2012, cases of opportunistic diseases (e.g., tuberculous meningitis and Cryptococcus neoformans meningitis), often found in immunocompromised, were observed at a high rate; in this period, there was a disturbance of the rhythm providing antiretroviral drugs to people with AIDS. The rate of the two meningitis (tuberculous meningitis and Cryptococcus neoformans meningitis) remained above 10% to gradually decrease until 2015, with the gradual return of antiretrovirals. This period records an overall average of 25 cases of tuberculous meningitis, or a percentage of 10.16%. For the year 2015, there were 4 cases of tuberculous meningitis out of a total of 35 seropositive examined (11.42%). This year's percentage shows that the number of tuberculous meningitis cases has fallen from the rate in previous years. This is the result of the care given by associations against HIV/AIDS to HIV-positive people. This decrease in cases of tuberculous meningitis is due to the acquisition of antiretrovirals by all HIV-positive people treated by hospitals. For the moment, these hospitals are taking care of many AIDS patients by providing them permanently with antiretrovirals; Besides that, there are many patients who are supported by associations whose activities are directed against HIV/AIDS.

Keywords: Cryptococcus neoformans meningitis, tuberculosis meningitis, neurological complications, epidemiology of

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