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OBJECTIVE

To describe the epidemiological behavior of the co-infection with HIV/Cryptococcosis in Costa Rica in the period of 2002 to 2015.

METHODS

This is a retrospective descriptive study of incidence, based on hospital discharge registries of the Social Security Health System, and data from the Ministry of Health of Costa Rica. The annual incidence of HIV infection per 100.000 inhabitants was established, as well as the percentage of AIDS cases. Incidence and annual mortality of cryptococcal infection per 1000 HIV-infected patients, and per 100 cases of AIDS were also analyzed. Distribution by age, sex and site of infection were documented.

RESULTS

Incidence of HIV/AIDS in Costa Rica. 2002 - 2015



The incidence of HIV for the first quinquennium was 11.4 cases per 100.000; in the second it was 12.4, and the third we found it increased to 15.8. In contrast, the percentage of AIDS decreased progressively from 11.5%, to 4.3% and 1.2% respectively.

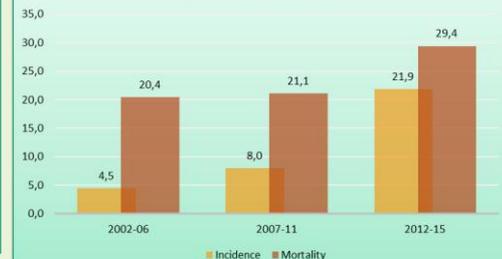
Incidence of cryptococcosis in persons living with HIV



During this period, a total of 193 cases of cryptococcosis were identified in persons living with HIV, giving an accumulated incidence of 3.38 cases per 1000 patients HIV-infected per year. Analysis of the three quinquennia showed a progressive decrement in the incidence of cryptococcosis of 5.13, 3.43, and 2.63 cases per 1000 patients per year. Such a reduction was statistically significant ($p < 0.001$).

Cryptococcosis affected men more than women (RR=2.42; CI 95% 1.53-3.84). Median age was 34 years with an interquartile interval of 29 to 40 years. Cryptococcal meningitis was the most common presentation.

Incidence and mortality of cryptococcosis in patients with AIDS



The incidence of cryptococcosis in patients with AIDS during the different quinquennia demonstrated an increment from 4.47% to 8% and up to 21.86% respectively; this finding was statistically significant ($p < 0.001$). Mortality of patients with AIDS showed an increasing trend comparing the first with third quinquennia, from 20% to 29% ($p = 0.27$).

Conclusion:

The incidence of HIV infection is increasing in Costa Rica, but the incidence of AIDS is decreasing. However, the incidence of cryptococcosis in patients with AIDS increase progressively with a correlative increase in mortality.