

# DISSEMINATED HISTOPLASMOSIS IN A POPULATION WITH AIDS IN PEREIRA-COLOMBIA

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## BACKGROUND

- Histoplasmosis is an endemic mycosis considered worldwide as an orphan disease, which has a very variable clinical presentation and usually is disseminated in the population with HIV/AIDS. Knowing that clinical suspicion and early treatment are important for a successful outcome and there is usually a delay in diagnosis, there is a need to identify early signs and symptoms associated with the definitive diagnosis of disseminated histoplasmosis.

## METHODS/DESCRIPTION

- Retrospective cohort study that included patients diagnosed with HIV/AIDS and suspicion of disseminated histoplasmosis in a population attended in a reference hospital in Pereira, Colombia, between January 2015 to May 2018. Clinical and laboratory variables were taken and univariate, bivariate and multivariate analyzes were performed to determine the characteristics associated with the diagnosis of disseminated histoplasmosis. A survival analysis was performed.

## RESULTS

Of 147 patients with HIV and clinical suspicion of histoplasmosis who underwent antigenuria for histoplasma, 37 had positive antigenuria and 110 negative antigenuria. 75.5% were male, 78.9% came from urban areas, 53% had HIV recently diagnosed, while 47% were diagnosed during hospitalization. The mean hemoglobin was 9.8mg/dL; CD4 count with a median of 55 cells/mL and viral load of 258.727 copies/mL. The most common clinical manifestations were constitutional symptoms 89.1%, fever 71.4% and weight loss 82.3%. The most common abnormal tests were the presence of anemia 89.1%, lymphopenia 82.9%, lactate dehydrogenase elevation 44.9%. Others infections were present in 70%, the most common was tuberculosis in 69.9%. Of the total population, 69.4% received antifungal therapy and 25.2% died in the hospital.

## CONCLUSION

- The behavior of histoplasmosis in our population establishes some differences with the behavior reported in studies from other regions, such as less skin involvement and lymphadenopathy, but with greater hematological manifestations. The adequate analysis of these clinical and laboratory findings can facilitate decision-making to suspect the presence of disseminated histoplasmosis in patients with HIV/AIDS in our region. According to the high mortality found in this population, new studies are required to determine the factors associated with mortality

1. Nacher M, Adenis A, Mc Donald S, Do Socorro Mendonca Gomes M, Singh S, Lopes Lima I, et al. (2013) Disseminated Histoplasmosis in HIV-Infected Patients in South America: A Neglected Killer Continues on Its Rampage. *PLoS Negl Trop Dis* 7(11): e2319.
2. Nacher M, Adenis A, Blanchet D, Vantilcke V, Demar M, Basurko C, et al. (2014) Risk Factors for Disseminated Histoplasmosis in a Cohort of HIV-Infected Patients in French Guiana. *PLoS Negl Trop Dis* 8(1): e2638. <https://doi.org/10.1371/journal.pntd.0002638>
3. Adenis, A.A., Aznar, C. & Couppié, P. Histoplasmosis in HIV-Infected Patients: A Review of New Developments and Remaining Gaps. *Curr Trop Med Rep* (2014) 1: 119.

In the bivariate analysis, the conditions associated with the diagnosis of disseminated histoplasmosis were leukocytosis ( $p=0.001$ ), thrombocytopenia ( $p=0.001$ ), elevated alkaline phosphatase ( $p=0.03$ ), AST/ALT ratio ( $p=0.002$ ) and lactate dehydrogenase elevation ( $p=0.11$ ). In a logistic regression analysis the conditions associated were the elevation of alkaline phosphatase ( $p=0.015$ ) and lactate dehydrogenase elevation ( $p=0.035$ ), and in a Poisson regression analysis the conditions associated with the diagnosis were lactate dehydrogenase elevation ( $p=0.001$ ). Figure 1 shows the global survival function, with a probability of being alive at day 82 of 47.8%. Figure 2 compares survival in patients with and without histoplasmosis.

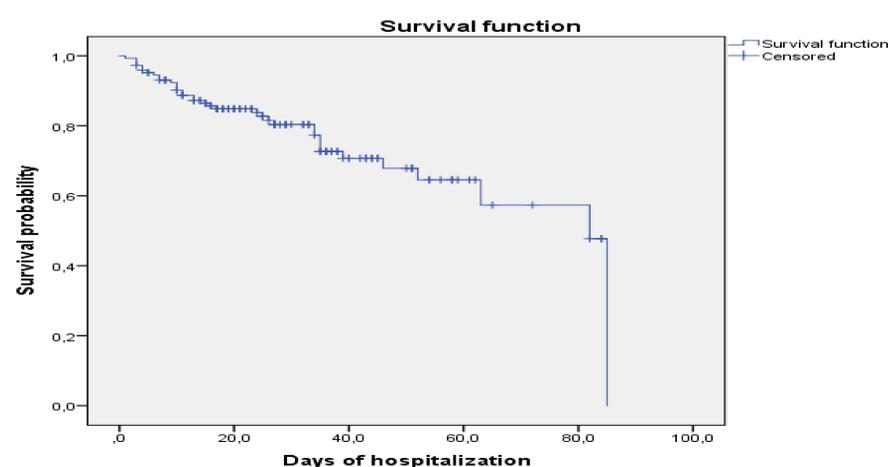


Figure 1. Global survival function

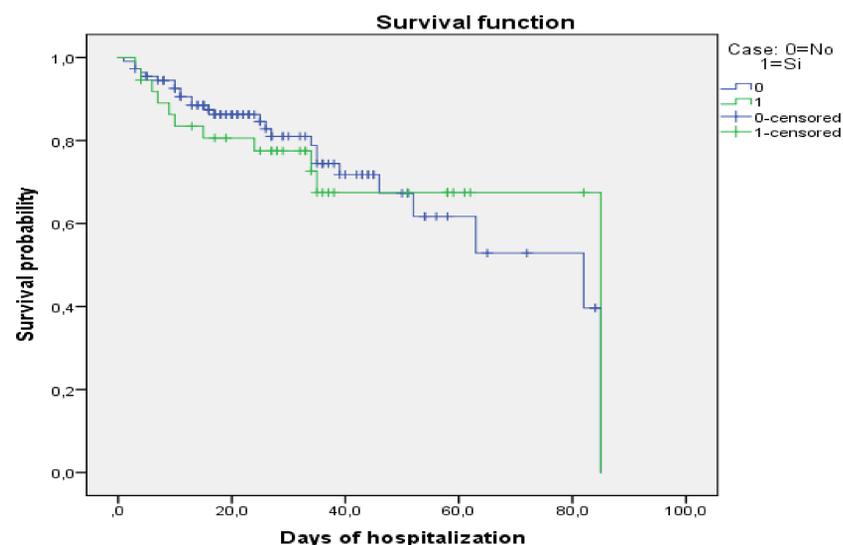


Figure 2. Survival in patients with and without histoplasmosis. Long rank  $p=0.87$ .