Epidemiological, Clinical and Outcome Aspects of Patients with Histoplasmosis associated to HIV infection

Mario León Silva Vergara¹ ; Alessandro Henrique Damasceno Escoura Júnior¹; Delio José Mora¹; Renata Margarida Etchebehere²; Antônio Carlos Oliveira de Meneses²; Adilha Misson Rua Micheletti².

¹Infectious diseases unit, Federal University of Triângulo Mineiro, Uberaba, Minas Gerais, Brazil; ²Pathology Department, Federal University of Triângulo Mineiro, Uberaba, Minas Gerais, Brazil;

INTRODUCTION

Classically, histoplasmosis was considered an endemic mycosis, until the advent of AIDS era, when it was included as a defining disease of this syndrome. It occurs in approximately 5% of HIV-infected patients from endemic areas and often evolves as disseminated infection and poor outcome, especially in limited - resource settings. This report aims to present epidemiological, clinical and outcome aspects of patients with histoplasmosis associated to HIV-infection admitted in a teaching hospital from 2003 to 2016, including the *post mortem* findings of those who were submitted to necropsy from 1990 to 2016.

METHODS

Medical and diagnosis records of HIV-Infected patients with histoplasmosis confirmed by culture were reviewed. Necropsy records were also reviewed in order to register the main epidemiological, clinical and outcome aspects.

RESULTS

During the last 13 years, 30 HIV-infected patients with histoplasmosis were admitted. Of these, 19 (63.33%) were male, median age of 35.43 years. Of 20 patients with available data, 18 presented CD4 count < 100cells and high viral load values.. Fifteen (50%) were diagnosed with AIDS and histoplasmosis in the same year, whereas 11 presented histoplasmosis as the first opportunistic infection. The median time between the onset of symptoms and the diagnosis was 32 days while the median hospital stay length was 23 days. Overall 13 (43.33%) patients were cured, 16 (53.33%) died and 1 (3.33%) lost follow-up.

Clinical Findings in 30 HIV-infected Patients with Histoplasmosis

Antifungal therapy in 30 HIV- infected patients with histoplasmosis

For the last 26 years, 2185 necropsies were performed at the teaching hospital. Of these, 64 (2.92%) had histoplasmosis diagnosis of which 28 43.7% were of HIV-infected patients. Of the 28 cases, 25 (89.29%) were male, median age of 36.82 years. Only 8 (28.6%) had received antiretroviral therapy on a regular basis.. Other opportunistic infections were evidenced in 24 (85.7%) cases. Hepatosplenomegaly, fever, asthenia and weight loss were the most prevalent findings registered.. Of 28 cases, 21 (75%) had the histoplasmosis diagnosis *post mortem*. In 20 (71.43%) cases, disseminated fungal infection was evidenced.

Organ involvement at necropsy of 28 HIV-infected individuals

CONCLUSION

The epidemiological, clinical and outcome data of this case series of histoplasmosis in HIV-infected patients are in line with other previous reports, especially from poor resources settings where most individuals presented advanced immunodeficiency and fungal disseminated infection. Otherwise, the severity and high rate of disseminated histoplasmosis diagnosed at necropsy could be explained by the late admission associated to operational difficulties and often, clinical and laboratory similarities with other diseases. Thus, the necropsy exam is remarkable in the teaching hospitals in order to evaluate and improve the quality of clinical diagnosis as well.