

P1196 **Overall survival of cryptococcal disease in a cohort of patients with HIV in an urban clinic in Guatemala City**

Blanca Samayoa^{1,2}, José Miguel Salazar¹, Narda Medina¹, Juan Carlos Pérez^{1,3}, Danicela Mercado¹, Dalia Lau-Bonilla¹, Ana Alastruey-Izquierdo⁴, Juan Luis Rodríguez-Tudela⁵, Eduardo Arathoon*^{1,3}

¹Asociación de Salud Integral, Ciudad de Guatemala, ²Universidad de San Carlos de Guatemala, Facultad de Ciencias Químicas y Farmacia, Guatemala, Guatemala, ³Clínica Familiar "Luis Ángel García", Guatemala, ⁴Instituto de Salud Carlos III, National Centre for Microbiology; Mycology Reference Laboratory, Madrid, Spain, Madrid, Spain, ⁵Global Action Fund for Fungal Infections, Genève, Switzerland

Background: Cryptococcosis is one of the most common life-threatening fungal opportunistic infections (OI) occurring in patients with HIV. Published burden of the disease reported 2.2 cases per 100,000 inhabitants in Guatemala, almost certainly an underestimate. The purpose of the study was to describe a cohort of patients with cryptococcal disease (CD) and their survival rate.

Materials/methods: This retrospective cohort study was conducted at an HIV clinic, housed within a public teaching hospital in Guatemala City. We included 653 patients who were tested for CD between January 2012 and September 2016 with a follow-up of 30, 90 and 365 days. CD was defined as a positive cryptococcal antigen (CrAg) test (lateral flow assay or latex agglutination) or a positive culture in serum or cerebrospinal fluid. We used descriptive statistics and Kaplan-Meier survival analysis (significance level 0.05).

Results: Eighty six patients were diagnosed with CD; 65 (76%) were male with a mean age of 39 years old [range, 17 – 66]; 72 (84%) patients were heterosexual. Two thirds of the patients proceeded from an urban area. The median CD4 cell count at HIV diagnosis was 42 cells/mm³ (interquartile range [IQR], 33 to 226) for the CD cases, and 95 cells/mm³ for non-cases [IQR, 34 – 235] ($P < 0.001$); CD4 cell count at the time of CrAg test or culture was 35 cells/mm³ [IQR, 16 – 61] and 101 cells/mm³ [IQR, 34 - 235] ($P < 0.0001$), respectively. Among the CD cases, 51 (59.3%) were recently diagnosed with HIV. The overall survival rate at 1 year was 69.7% for CD cases, and 83.0% for non-cases ($p = 0.003$); at 90 days survival was 74.4% and 87.3% ($p = 0.001$), respectively. Survival at 30 days was not significant between cases and non-cases (87.2% vs 90.1%) ($p = 0.4097$).

Conclusions: High mortality was observed in patients with CD during the first 3 months after diagnosis. At the time of CD diagnosis CD4 cell count was low compared with non-cases; CD must not be excluded in patients with higher CD4 cell count. Diagnostic algorithms should include CrAg test in new HIV cases and existing cases as Point of Care (POC) and part of the cascade of HIV attention.