Epidemiological surveillance of herpesvirus encephalitis in Cordoba, Colombia 2009-2011

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We conducted a cross-sectional descriptive study of cases compatible with viral encephalitis in three hospitals in the city of Monteria. We included 265 specimens of cerebrospinal fluid (CSF) of adults (n=118) and pediatric (n=147) patients with clinically suspected of encephalitis. Cytochemical analysis and microbiological tests (Gram stain and culture) were performed; multiplex and nested PCR detection using 16 oligonucleotides for herpes simplex virus 1 and 2 (UL30 DNA polymerase) were done. The primers used were: Epstein Barr virus (gp71 DNA polymerase), Cytomegalovirus (UL54 DNA polymerase) and Varicella zoster virus (DNA polymerase). Herpesvirus DNA was detected in 57 (21.5%) samples, with the following distribution: 47 (17.7%) Herpes simplex virus 1 and 2, 7 (2.6%) Cytomegalovirus, 4 (1.5%) Varicella zoster virus and 2 (0.75%) Epstein Barr virus. Co-infection was seen in 3 patients, VZV+HSV1-2 (n=1) and CMV+HSV1-2 (n=2). A 52.6% (30/57) of adult patients shown viral DNA detection, the distribution was: HSV1-2 (n=22), CMV (n=4), VZV (n=1) and co-infections (VHS1-2+CMV (n=2), VHS1-2+VVZ (n=1). In a pediatric population 47.3% (27/57) DNA was identified with HSV1-2 (n=22), VZV (n=2), CMV (n=1), EBV (n=2). Three parameters of cytochemical analysis (glycorrhachia, proteinorhaquia and pleocytosis) were abnormal in 15.7% (9/57) of patients; 21% (12/57) of patients (adults n=11, pediatric n=1) were diagnosed with HIV. Patients sequelae were observed in 12.2% (7/57) and mortality was 10.5% (6/57). This is the first surveillance of herpes encephalitis conducted in Cordoba; the findings contribute to the epidemiology of encephalitis and clinical management of patients.

Biography
S. Mattar Ph.D, has research experience of 25 years on tropical infectious diseases. He actually is the director of Tropical Research Institute at University of Cordoba (http://web.www3.unicordoba.edu.co/es/iibt). He has published more than 100 papers in several peers journals. He is full professor of Microbiology and Immunology at University of Cordoba.

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