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VIRAL MENINGITIS OUTBREAKS BY ENTEROVIRUS IN THE SUMMER AND FALL SEASON 2007–2008 IN SÃO PAULO STATE, BRAZIL

Machado BC¹, Russo DH¹, Luchs A¹, Carvalhanas TRMP², Carmona RCC¹, Timenetsky MCST¹.

Laboratório de Vírus Entéricos, Instituto Adolfo Lutz, São Paulo, SP¹; Centro de Vigilância Epidemiológica do Estado, São Paulo, SP².

e-mail: bcmachado@ial.sp.gov.br

Meningitis is the most frequent clinical manifestation in viral Central Nervous System infections. The Human Enterovirus (HEV), mainly echovirus serotypes, are the most commonly related to non bacterial meningitis cases and responsible for more than 90% of these infections. This descriptive study has the aim to spread epidemiological and laboratorial data referring to meningitis outbreaks with viral suspicion, occurred in 3 different regions of São Paulo State in the period from December 2007 to May 2008. During this period a total of 6721 meningitis suspected cases were notified to the Epidemiological Surveillance Center of the State of São Paulo. The methodologies applied for the laboratorial diagnosis were viral isolation using two different cell lineages RD (Human Rhabdomyosarcoma) and HEp-2 (Human larynx carcinoma), RT-PCR (Reverse Transcription – Polymerase Chain Reaction) with primers directed to the conserved region of HEV genome (5'NTR), and IFA (Indirect Immunofluorescence Assay). Antibody titration in paired sera samples were also realized for the serological diagnosis. Echovirus 4 and 11 were identified in outbreaks occurred in Novo Horizonte and Icém municipalities, in the north region of the State. Echovirus 30 was detected in Bebedouro city (northern region) and also identified in Rio Claro and Araras cities (east central region). The results obtained show the circulation of different serotypes of Enterovirus concomitantly in distinct regions of São Paulo State originating outbreaks in schools and day nurseries. Outbreaks with different serotypes in the same locality are less frequent, but could appear in conformity with literature data. The epidemiological evaluation of related results demonstrates a changing in the epidemic pattern of HEV infections in the State. In the last ten years different cities presented viral meningitis outbreaks related more frequently to a specific serotype. and now in this study we constate different serotypes originating outbreaks in different regions in the same period.