



## **VIRAL ETIOLOGY OF ASEPTIC MENINGITIS AMONG CHILDREN, SOUTHERN IRAN**

*Ali hosseininasab, Abdolvahab Alborzi, Mazyar Ziyaeyan, Gholamreza Pouladfar  
Pediatrics Department, Kerman University of Medical Sciences, Kerman, Iran and Professor  
Alborzi Clinical Microbiology Research Center, Shiraz, Iran*

**Key words:** aseptic meningitis, viral disease, polymerase chain reaction, children, Iran

### **Abstract**

**Background:** Aseptic meningitis refers to a clinical syndrome of meningeal inflammation, in which common bacterial agents cannot be identified in the cerebrospinal fluid (CSF).

**Aims:** The viral etiology and the epidemiological, clinical and laboratory characteristics of aseptic meningitis among children aged 2 months to 15 years in Shiraz, southern Iran were determined.

**Methods:** From May 2007 to May 2008, 65 patients were hospitalized with aseptic meningitis. Having extracted nucleic acid from CSF samples, the seven viruses; were investigated by commercially available polymerase chain reaction (PCR) methods.

**Results:** The viruses were detected in 30 (46.2%) patients of which NPHEV and mumps virus were detected in 13 (43.3%) and 11 (36.7%), respectively. The remaining 6 (20%) of the cases were caused by HSV, VZV, HCMV and HHV-6. Haemophilus influenzae type b and NPHEV were detected in one patient simultaneously. The viral meningitis was found more frequent during spring and summer. The majority (66.6%) of the patients had been hospitalized for 10 days and received antibiotics as the cases of bacterial meningitis.

**Conclusions:** In this region, NPHEV are the most common etiology of viral meningitis and mumps is the second. Rapid diagnosis of viral meningitis using PCR on CSF can help shorten the hospitalization, avoid unnecessary use of antibiotics and thus, could be cost effective.

Abstract No. PIDC-vi-00003