Meningitis caused by mumps virus in children admitted to Gorgan’s Taleghani hospital

Abstract

Background and objectives: Mumps virus is one of the first known causative agents of meningitis in children. On-time diagnosis is the first step in treating meningitis. We aimed to evaluate Mumps virus meningitis in children in Gorgan, Iran.

Material and Methods: CSF and blood samples were taken from children with meningitis, Jun 2008 till Sep 2010. For 40 samples with negative bacterial culture, Extraction of viral RNA was carried out and Real-time PCR was performed for detection of Mumps virus. Demographic, clinical, biochemical and cytological data were collected. We run SPSS version 18 to analyze the data, using Chi Square (p<0.05).

Results: three (7.5 %) samples have Mumps virus, two boys and one girl. All three positive cases have 0.5-1 degrees Celsius fever and vomiting but no bulging fontanel. They have not Kernig, Rodor, Brudzinski’s sign, hepatosplenomegaly, lymphadenopathy, pharyngitis and rash. ESR is higher than normal in all positive cases and CRP is positive in two cases. Protein of CSF in one case is higher than normal range.

Conclusion: meningitis is an emergency condition; therefore, molecular diagnostic techniques are recommended for early diagnosis and intervention.

Key words: meningitis, mumps virus, cerebrospinal fluid, Real-Time PCR

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