

# Japanese Encephalitis Virus – Common Cause of Viral Encephalitis in Paediatric Age Group in Bellary, Karnataka, India

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## ABSTRACT

**Background:** A study was conducted in VIMS hospital at Bellary during the epidemic of August 2004 to July 2005.

**Objectives:** To know the hospital based incidence of J.E and to study the age and sex pattern of the infection in the paediatric age group.

**Materials and Methods:** 82 children admitted to the Paediatric ward, VIMS, Bellary with clinical diagnosis of acute viral encephalitis, during the epidemic of August 2004 to July 2005 were studied. After pooling the samples, they were subjected to J.E. MAC ELISA.

**Results:** Out of 82 patients tested by J.E. MAC ELISA, 19 (24%) were positive for J.E. and 12 (14.63%) were positive for flaviviral infection. CSF was positive in all 19 cases with 100% positivity.

Serum was positive in 10 cases with 15.87% positivity. This indicates that there are significant number of J.E. cases in Bellary emphasising the rampant nature and stressing the measures to be taken to overwhelm this devastating disease.

**Conclusion:** The hospital based incidence of J.E. was found to be significant in the area of the study. The paediatric age group, between 4 to 6 years was found to be most predisposed to J.E., probably because of low immunity in the age group. Male predominance was seen with male to female ratio of 1.42:1. Illiteracy, low socio economic status and living in unhygienic conditions near rice fields contributed to the high incidence of J.E. in and around Bellary. The serological results clearly establish the etiology. Isolation of JEV from specimens would have strengthened the diagnosis.

**Key Words:** Japanese encephalitis, MAC ELISA

## KEY MESSAGE

- Japanese encephalitis is endemic in Bellary
- MAC ELISA helps in rapid and specific diagnosis of Japanese encephalitis
- Isolation of JEV would have strengthened the diagnosis