

Japanese Encephalitis in Orissa

Japanese encephalitis (JE) occurs worldwide and is reported from various states of India(1). However, there are no reports of its occurrence from Orissa. We report the findings of a prospective study undertaken during 1992 and 1993 to find out the prevalence of JE in Cuttack district.

Thirty five children with a diagnosis of encephalitis admitted to the above two institutions were studied. Two ml of CSF and serum (paired whenever possible) were collected and transported on ice to Neurovirology Department of NIMHANS, Bangalore. The samples were analyzed for the presence of JEV specific IgM antibodies by ELISA and a titer of 1:625 or rising in serum and a titer of 1:125 in CSF was considered positive (2).

The mean age of occurrence was 5.6 and 7.5 years, with a male: female ratio of 2.1:1 and 3:1, respectively for encephalitis and JE. They all belonged to rural areas and had contact with domestic animals. Four of the 35 had positive titers for JE (3 in CSF, 1 in serum) of who 2 belonged to the same village and were admitted on the same day. The mortality rate was 14%; full recovery occurred in 20% and some neurological sequelae remained in 66%. None with JE died. The clinical picture and outcome was more or less similar to the reports from other places.

The primary objective of this study was to find out whether JE occurred in Orissa

and it was indeed found to be so. All the cases of JE occurred in November, 1992, and there was history of similar illness in the neighborhood. Since the ratio of apparent to in apparent infection is estimated to be 1:300 to 1:1000(2), it may be taken as evidence for an outbreak of JE in Orissa during November, 1992 and it formed 11.4% of encephalitis admitted. An ongoing study by the same authors at M.K.C.G. Medical College, Berhampur, Orissa revealed that out of 33 cases of encephalitis admitted to the Department of Pediatrics from May to September, 1995, 45% were JE.

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**P. Suvarna Devi,
P.L. Behera,
Arakhita Swain,**

*S.V.P. Institute of Pediatrics and
S.C.B. Medical College, Cuttack, Orissa.*

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