Correspondence

Acute Encephalopathy in Western Uttar Pradesh

During the months of September to November 2004, we observed a sudden increase in cases admitted with diagnosis of encephalitis/ encephalopathy. Of 42 admitted cases during this period, 21 were from Baghpat, 9 from Muzaffarnagar, 7 from Ghaziabad and 5 from Bulandshahar districts of Western Uttar Pradesh. Clinical presentation was almost uniform and most striking feature noticed was a high mortality; 31 (73.8%) expired, majority (n = 23) within 24 hours of admission. Age group involved was 2-12 yrs while 30(71.4%) were between 2-5 years. The clinical features were fever (97.6%), vomiting (54.8%), abnormal behavior (95.2%), convulsions (47.6%), bleeding (11.9%), jaundice (9.5%), raised ICT (40.5%), brisk DTR (54.8%), extensor plantar (71.4%) and hepatomegaly (7.1%). There was no rash, or focal neurological manifestations.

Lumbar puncture done within 24 hours of admissions was by and large normal and inconclusive. Hematological and biochemical investigations revealed hypoglycemia in 28 (66.7%) and elevated liver enzymes in 7/21(33.3%) cases. CT scan was done only in 4 cases, one showed mild cortical atrophy, rest was normal. CSF and serum for arboviruses were sent in 11 cases, only one out of them was positive for antibodies against JE virus. Detailed serology, serum ammonia, liver biopsy could not be done. All those children who had coma, bleeding manifestations or shock at time of admission expired within 24 hour of admission. Survivors were discharged within 5-6 days without any neurological sequel.

As it was only a retrospective analysis, it was difficult for us to pin point a particular etiology. Viruses which could be implicated in causation of this encephalitis like picture, other then Japanese encephalitis virus include Nipah, Chandipura, West Nile, Dengue, Measles, Paramyxovirus, Coronavirus, Enterovirus and Influenza virus. Other than encephalitis, possibility of encephalopathy like Reye's syndrome could be considered in these cases, as similar picture has been described in few other studies also(1).

The seasonal distribution favors Reye's syndrome, the clinical presentation favor Nipah virus, the epidemiological factors points to Japanese encephalitis(2) or some other viral illness with a common source(3). Therefore, all the presenting features could not be explained on the basis of one specific illness.

This disease entity has been occurring in months of September to November year after year in districts of Western Uttar Pradesh since 1998(4,5). Our study is probably a continuation of the same. The causative factor and the mechanism, which is triggering the disease process year after year in this particular geographical region, needs a systematic epidemiological study.

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