Outbreak of Killer Brain Disease in Children

Dr. Jocob John has presented some of his personal views based on some personal communications and a few on experiences of past report under 'Viewpoint'(1). He has described all these cases were due to epidemics of Reye's syndrome. This preformed individual opinion cannot be accepted by scientific world, as in none of the epidemics there were proofs for diagnosis (namely - serum ammonia, liver function tests or Liver biopsy).

Further in the recent epidemic in Andhra Pradesh, the epidemic of encephalitis appeared too soon in first week of June either before rain or immediately after 1st rain of the season. All the cases, which were admitted at the district H.Q. hospital and later referred to institutional care had three features consistently; namely fever (high or medium) loss of consciousness and seizures either general or focal. Some have recovered with neurological sequalae like postural disturbance, hemiplegia, monoplegia or paraplegia. No doubt the suddenness of onset, the high mortality occurring within 36-48 hrs is surprising. I do not think if it were to be Reye's syndrome, there would be recovery with neurological sequelae. In Reye's syndrome there would be total recovery or mortality. There was no chance to think and do a liver biopsy in 24-48 hrs of admission and as majority of children did not have hepatic enlargement. Serum ammonia estimations done in a few cases did not show any abnormal level and trasminases were normal. C.S.F. examination done in cases showed normal protein, normal glucose, normal chloride, and nil or mild pleocytosis, which go more in favor of acute encephalitides in the early phase of the illness. (Our consistent experience in the all the years since 1977).

As far as mortality is concerned every 4th year (since 1977 to 2003) the mortality has been high and over 50% a phenomenon which is peculiar to Japanese Encephalitis in endemic areas of Andhra Pradesh. It is nowhere mentioned in literature that Reye's syndrome in endemic. It is mostly sporadic. it may be precipitated by drugs, chemicals, toxins, and preceded by illness like chicken pox and influenza. In Andhra Pradesh all chicken pox cases occur between December to March and there were no cases of influenza in an epidemic form. In the months of April and May 2003 hyperpyrexia case due to extreme heat occurred. Mosquitoes disappear in extreme heat.

Further I have to point out this year the NIV Pune has reported that the epidemic is likely to be a virulent mutant strain of Chandipur virus as they have found serological and virological evidence in tissue cultures. This virus disease has been quoted in ICMR bulletins and cases have been reported from Nagpur, Jabalpur, and Raipur way back in 1963 and 1985. It is surprising that this viral infection has shown up in a virulent form in Andhra Prasesh after a gap of 18 years.

I hope Dr. Jacob John and Indian Pediatrics will not mislead pediatricians all over the country before studying the epidemic in toto, with prefixed ideas.

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REFERENCES

1. John TJ. Outbreaks of Killer brain disease in children: Mystery or missed diagnosis? Indian Pediatr 2003; 40: 863-869.