

Clinical profile and outcome of 19 patients with acute necrotizing encephalopathy of childhood (ANEC): A single Indian center experience.

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Abstract

Background- ANEC is a potentially devastating illness characterized by fever, abrupt onset encephalopathy, seizures, vomiting, and hepatic dysfunction with bilateral symmetrical lesions in thalami. Indian data on outcome is limited.

Objectives:

- 1) To study the clinico-radiological profile and outcome in ANEC.
- 2) To study the factors influencing survival and neurological outcome.

Methods: All children < 18 years of age admitted from January 2010 to March 2019 with a diagnosis of ANEC were included. Clinical, laboratory, radiology, and factors predicting outcome were analyzed. Study design: A retrospective observational study

Results: Nineteen children 8 months to 13 years of age were evaluated. Male: female was 1.4:1. All presented with fever and abrupt onset altered sensorium; median duration being 2 days. Seizures were reported in 12, vomiting in 8, abnormal posturing in 5 patients; 12 had hypotension. Dengue was identified in 7, H1N1 in 1, and influenza A in 1. Liver enzymes were elevated in 14. Neuroimaging was done in all (CT - 7, MRI - 14). Thalamic involvement was seen in all, brainstem 12, cerebral white-matter 17, cerebellar white-matter 10. ANE severity score was high in 12 patients. There were 73.7% survivors. Neurologic outcome at discharge was poor in 9. At follow-up, of 14 survivors, 1 had poor, 3 fair, and 8 good neurologic outcomes. Persistent neurodeficits were seen in 100% < 48 months versus 30.7% ≥ 48 months of age. There was no relation between ANE severity score or use of steroids within 24 hours with neurological outcome.

Conclusion: Age influenced outcome with younger children <48 months fairing worse. Continued neurologic improvement was seen in a majority of the survivors.

Biography:

Senior Pediatrician & intensivist, IAP Accredited Teacher for PICU with expertise in different domains of Pediatric critical care like Pediatric Cardiac critical care & ECMO, Liver transplant, Pediatric Emergency, Critical Care Renal Replacement therapy, Peritoneal Dialysis, and Pediatric Retrieval services.

Trained in some of the best Pediatric Departments in India like Sir Gangaram Hospital, New Delhi and Manipal Hospital, Bangalore and Narayana Hrudayalaya, Bangalore.

Currently, working as a Senior Pediatrician & pediatric intensivist at Aster CMI Hospital, Bangalore. This unit is one of the best-equipped ones in South India.

It is especially known for its excellent Pediatric Liver Transplant

program and provides the full range of intensive care support including Non-invasive, Conventional, and High-frequency ventilation, Hematopoietic stem cell transplant, cardiac critical care & RRT. My area of Special Interest is Pediatric Point of Care Ultrasound and ECMO.

References :

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