Early Post Traumatic Seizures In Infants With Traumatic Brain Injury; A Study Of Risk Factors And Outcome

Noufal Basheer¹, Jacob P Alapatt¹

¹Department Of Neurosurgery/ Aster Mims Hospitalcalicut/ India

Introduction:
Occurrence of a seizure during early post traumatic period is alarming and concerning event as they may cause significant secondary damage to the brain. Multiple factors have been described in literature for occurrence of early PTS, but significance of these factors remains questionable.

Materials and Methods:
This is a retrospective, observational cohort study of infants admitted to pediatric intensive care unit of Malabar institute of medical sciences, Calicut, India from January 2009 to December 2013 with traumatic brain injury

Results:
A total 62 infants were included in the study. Incidence of EPTS was 29.03% (18/62). Most of the seizures occurred in first 24 hours and were GTCS. A significant proportion had recurrent seizures (one third of those who had EPTS) and 4 of them (22.2%) needed multiple AEDs for seizure control. Overall neurological outcome was worse in patients with EPTS as 44.4 % had good outcome and 55.6% had worse outcome as compared to infants with no EPTS.( 90.9 % and 9.1% respectively).

Conclusion:
Incidence of EPTS in infants is very high. Fall from height, younger age group (<6 months), Severe traumatic brain injury and parenchymal hemorrhagic contusions were found to be statistically significant factors in predicting the incidence of seizure.