

Clinico-pathological study of status epilepticus: A developing country perspective

P Satishchandra, B Bipinchandra, *A Mahadevan, *SK Shankar

*Department of Neurology and *Neuropathology, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India*

Objective and Methods: Status epilepticus is an acute neurological emergency with heterogeneous aetiopathologies, which differ in developing countries. Eighty autopsied cases of status epilepticus seen at NIMHANS, India, were studied retrospectively with emphasis on clinicopathological characteristics and their correlation.

Results: Two-thirds of our series (63.8%) presented as 'de novo' status epilepticus. A prior history of epilepsy was evident in 36.2%. Among the latter, poor drug compliance was evident in 80%. Primarily generalised status epilepticus was seen in 78.7%. The median delay before treatment institution was 18 hours, which contributed significantly to the poor prognosis. Mean Glasgow Coma Scale score at admission was 4.5. Symptomatic aetiology was observed in 68.7% of cases with neuro-infection and stroke as most common aetiologies. Neurocysticercosis and tuberculosis with vascular complications were the common infections in the developing country. Frontal lobe was the most commonly involved site (51.7%) in localised and multilobar pathology. About two-thirds of cases (62.5%) had clinico-pathological correlation at autopsy. Clinico-pathological discordance seen in the remaining 37.5% was due to low index of suspicion for additional insults or wrong neuro-imaging interpretation.

Conclusion: Prolonged duration of status epilepticus, time delay before treatment, poor Glasgow Coma Scale score at admission and symptomatic aetiologies were commonly observed in this cohort of fatal status epilepticus. Delay in instituting proper treatment and neuro-infections were potentially preventable factors. High index of suspicion about the aetiology and aggressive management are required in the management of status epilepticus in the developing countries.