SEIZURE DISORDERS

RISK OF MORTALITY AFTER STATUS EPILEPTICUS

Researchers at University College and Great Ormond Street Hospital, and other members of the North London Epilepsy Research Network investigated the mortality within 8 years following an episode of childhood convulsive status epilepticus and its predictors in a prospective, population-based study from north London, UK. The overall case fatality was 11%; 7 children died within 30 days of the episode of status and 16 during follow-up. The mortality rate was 46 times greater than expected in the reference population, and was predominantly due to pre-existing clinically significant neurological impairments at time of the episode of status. This was the only independent risk factor for mortality. Children without prior neurological impairment who survived status were not at increased risk of death during follow-up. No deaths occurred in children following prolonged febrile convulsions and idiopathic convulsive status epilepticus. One quarter of deaths during follow-up were associated with intractable seizures/convulsive status, and the remainder died as a complication of an underlying medical condition. The high risk of death within 8 years following childhood convulsive status epilepticus was generally not seizure related. The role of convulsive status on mortality remains uncertain, but is less than generally perceived. (Pujar SS, Neville BGR, Scott RC, Chin RFM, North London Epilepsy Research Network. Death within 8 years after childhood convulsive status epilepticus: a population-based study. **Brain** 2011;134:2819-2827). (Respond: Dr Rod C Scott, Neurosciences Unit, UCL Institute of Child Health, 4-5 Long Yard, London WC1N 3LU, UK. E-mail: rscott@ich.ucl.ac.uk).

COMMENT. Recovery after severe refractory status epilepticus and 4 months of coma is reported in a previously healthy 29-year-old man with no epilepsy risk factors who experienced 2 weeks of upper respiratory symptoms followed by lethargy, fever and vomiting with multiple generalized convulsions requiring intubation. Continuous EEG showed electrographic status epilepticus. The etiology was not identified. By 18 months post-illness, the main residual complications were contractures of distal limbs, attributed to phenobarbital, and refractory complex partial seizures. (Bausell R et al. **Neurology** Oct 14, 2011;77:1494-5). Refractory status epilepticus without severe brain injury should be treated aggressively, since a favorable outcome is possible.

TREATMENT OF SUPER-REFRACTORY STATUS EPILEPTICUS

Researchers at University College, Queen Square, London, UK have evaluated the world literature on the treatment of super-refractory status epilepticus (SRSE) and proposed a protocol and flowchart for management. SRSE is defined as status epilepticus that continues or recurs 24 hours or more after the onset of anesthetic therapy or after reduction or withdrawal of anesthesia. Stages of treatment are as follows: Stage 1. Early status; first 30 min; treat with iv lorazepam, iv or rectal diazepam; Stage 2. Established status; 30-120 min; treat with iv antiepileptic drugs, phenytoin, phenobarbital or valproate; Stage 3. Refractory status; >120 min; treat with general anesthesia (eg.