Jo Wilmshurst

Professor Jo Wilmshurst is Head of Paediatric Neurology at the Red Cross War Memorial Children’s Hospital, University of Cape Town, in South Africa. She is a member of the executive board of the Paediatric Neurology and Development Association of Southern Africa (PANDA-SA) and the African Child Neurology Association (ACNA). She is Secretary of the International Child Neurology Association. She is chair of the Commission on Paediatrics for the International League Against Epilepsy (ILAE) (2013-2016) and Education officer for the Commission on African Affairs. She is director of the African Paediatric Fellowship Program – a training program under the auspices of the University of Cape which aims at developing skills in paediatric disciplines of doctors from across Africa. She is an associate editor for Epilepsia and on the editorial board for the JICNA, the Journal of Child Neurology, Epileptic Disorders, Seizure and is a regional co-Editor for Epileptology. She has over 60 peer reviewed publications. She has interests in rare neurological disorders, such as neuromuscular diseases and neurocutaneous syndromes, and common high impact diseases, such as epilepsy and neuroinfections. Her work ethos is aimed towards developing improved care for children with neurological diseases in South Africa through the specialist services in her centre, training of health care specialists, the development of rational management templates which are viable in the African context, and the adaption of international recommendations.

E-mail: Jo.wilmshurst@uct.ac.za
Abstract

Recommendation for the management of neonatal and infantile seizures

Jo Wilmshurst

Guidelines exist for children with seizures which are of onset in the neonatal and infantile age range. These have devolved to more expert opinion, and recommendations, since evidence based data is lacking. Major understanding relating to neonatal seizures support the concept that abnormal electrical activity has adverse effects on brain maturation, and that ideally all abnormal activity should be closely monitored for, using continuous screening, and responded to acutely. Unfortunately optimal antiepileptic drugs, and other therapeutic interventions, are lacking, as well as adequate resources in most settings. Research continues to target both the effects of seizures in this group and to examine alternative interventions. In the infantile age group one of the greatest challenges is the misdiagnosis of seizures when events are in fact non-epileptic paroxysms. Good clinical assessment and witnessed descriptions are essential. Whilst seizures in the infantile age group are of greatest prevalence of all ages, many of the seizure types represent rare entities for specific syndromes. The development of orphan drugs and registries to monitor the efficacy of these syndromes remains an important tool to develop better management and, as such, outcomes for these children. The major epilepsy affecting the infantile age group is epileptic spasms, various interventions are recommended and this disorder has been studied extensively.

How to cite this:


Abstract

Approach to status epilepticus in resource poor countries

Jo Wilmshurst

Status epilepticus is defined as generalised convulsions lasting 30 minutes or more, beyond this the risk of brain damage is established. The greater the time taken to control seizures, the greater the secondary sequelae. The underlying aetiologies influence the ability to control seizures and the neurological outcome further. In the developed world various forms of brain monitoring are increasingly utilised to attain optimal seizure control. This has lead to more targeted care for these patients. Treatment of status epilepticus can be divided into pre-hospital treatment, emergency ward treatment, in-hospital treatment and anaesthesia (intensive care). Numerous recommendations exist for the management of status but none are evidence based beyond the standard first line therapy with benzodiazepines. These interventions are driven by the capacity of the facilities that the children present to. Newer generation agents (e.g. intravenous levetiracetam) are increasingly replacing the previously used standard agents (e.g. phenytoin, phenobarbitone). Most facilities throughout the world do not have access to brain monitoring, or to the newer agents, let alone the most basic of resuscitation equipment (e.g. saturation monitors, syringe drivers). As a result, some of the most needy and complex children are managed in settings with the least capacity to care for them. Various initiatives are underway in such resource poor settings to optimise the management of status epilepticus in the most effective way.

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