ACUTE REPETITIVE SEIZURES AND STATUS EPILEPTICUS

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Status epilepticus is characterized by a prolonged, self-sustaining seizure or repeated seizures without return to baseline. The clinical manifestations of status epilepticus in children and adults range from overt generalized convulsions to more subtle behavioral manifestations, including unresponsiveness in the setting of the intensive care unit. Status epilepticus is the most common neurologic emergency of childhood. A large proportion of these episodes are the result of a prolonged febrile seizure or an acute symptomatic etiology. Fortunately, status epilepticus occurs without consequence for many children, but for others, it is correlated with long-term neurologic dysfunction or death. Treatment of status epilepticus should commence promptly upon its recognition, using predefined treatment protocols. The goal of treatment is the rapid termination of the seizure, to minimize the acute and chronic effects of this emergency and to allow for the prompt assessment and management of the underlying precipitant. Currently, the drug class of first choice in the in-hospital and out-of-hospital treatment of status epilepticus is the benzodiazepines, which may need to be quickly followed by a next-line agent, as the efficacy of the benzodiazepines is negatively correlated with seizure duration. Traditionally, these next-line agents have included phenobarbital and phenytoin, but emerging evidence supports the use of intravenous formulations of other antiepileptic drugs. If the first two agents fail, high-dose intravenous midazolam or anesthetic therapy should be rapidly initiated. This paper reviews the current treatment options and strategies for pediatric patients with status epilepticus.

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