

## Title: Treatment options and electroclinical outcome in children with electrical status epilepticus in sleep

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**Background:** Electrical Status Epilepticus during Slow-wave sleep (ESES) is a rare, age-related, self-limited epilepsy syndrome with sleep-induced epileptic discharges manifested as epilepsy with different seizure types and typical Electro-Encephalo-Graphic (EEG) findings of continuous epileptic activity occupying  $\geq 85\%$  of nonrapid eye movement sleep. Despite there is little evidence to guide treatment, steroid therapy and benzodiazepines are most commonly used, but also intravenous gamma-globulin, the ketogenic diet and surgical therapy. Although epilepsy resolves with time in most cases, many children are left with significant cognitive or language impairment.

**Aims:** Our aim was to examine the clinical and electrophysiological findings and treatment modalities of children with ESES and to evaluate the outcome of the disorder.

**Materials and methods:** Eleven patients aged 3-10, with a diagnosis of ESES and followed-up at least 1 year were included.

**Results:** Steroids were used as first treatment for ESES in 9/11 (82%). Electrical status epilepticus in sleep initially resolved in all patients, but 27% had subsequent relapse. All patients were on two or more Anti-Epileptic Drugs (AED) at ESES diagnosis. None of them had normal mental development before ESES. After at least 1 year of follow-up, three patients were seizure free, still taking AED. Better seizure control was established in seven patients, in one patient there was no reduction of seizures despite antiepileptic therapy.

**Conclusion:** Sleep EEG should be performed in children with unexplained regression or stagnation of development associated with seizures. Early recognition and effective therapy are necessary to improve long-term prognosis in this condition.

### Biography

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