Status epilepticus (SE) is a medical emergency that is associated with significant morbidity and mortality.

## TYPES OF STATUS EPILEPTICUS

| CONVULSIVE STATUS | NON-CONVULSIVE STATUS |  |  | AL STATUS | ABSENCE STATUS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\geq 5$ minutes of continuous convulsive seizure $\mathrm{OR} \geq 2$ discrete seizures between which there is incomplete recovery of consciousness. | $\geq 10$ minutes of continuous seizure $\mathrm{OR} \geq \mathbf{3 0}$ total minutes of ictal EEG activity in any given hour. These patients are at risk for convulsive status. |  | Focal ep 30 min epilepti with | ic seizure that lasts $\geq$ OR repeated focal izures ( $\geq 30$ minutes) mplete recovery een seizures. | Prolonged, generalized absence seizure that usually last for hours to days. Cardinal symptom is altered level of consciousness. |
| Convulsive status is the most common type of status epilepticus (SE). $>50 \%$ of SE episodes occur in children with no prior seizure history. |  |  |  |  |  |
| COMMON ETIOLOGIES OF STATUS EPILEPTICUS |  |  |  |  |  |
| ACUTE SYMPTOMATIC (17-52\%) |  | REMOTE (16-39\%) |  |  | OTHER |
| CNS infection <br> Metabolic (hypoglycemia, hyperglycemia, hyponatremia, hypocalcemia) Stroke | $>$ Hemorrhage <br> > Non-compliance with AEDs <br> > Overdose <br> $>$ Toxins | $>$ Progressive $>$ Perinatal hypoxic- <br> neurodegenerative ischemic <br> disorders encephalopathy <br> $>$ Cerebral migrational <br> disorders  |  |  | $>$ Idiopathic (5-19\%) <br> > Trauma <br> $>$ Prolonged febrile convulsions (23-30\%) <br> Sleep deprivation |

## HISTORY

- Seizure history: preictal, ictal, and postictal phases.
- Past medical history: previous seizures or history of epilepsy.
- Illness symptoms: fever, nausea, vomiting, or diarrhea.
- Trauma or injury
- Medications (AED) Toxins


## PHYSICAL EXAM

ABCs, vitals, level of consciousness, GCS
Rule out CNS infections General physical exam: source of infection (eg: otitis media, upper respiratory tract, lungs, GI tract, or urinary tract).
Neurological exam Toxidrome indications

## INVESTIGATIONS

- Glucose
- CBC with differential
- Electrolytes
- $\mathrm{Ca}^{2+}, \mathrm{Mg}^{2+}, \mathrm{P}$
- Liver function tests
- Toxicology screen
- Anticonvulsant level
- EEG
- Head CT or MRI

Urine, blood, CSF cultures

## MANAGEMENT OF STATUS EPILEPTICUS IN HOSPITAL

GOAL: stop the seizure and prevent brain injury. Then determine the underlying cause.


May 2020

