This protocol is appropriate for convulsive status epilepticus defined by convulsions lasting > 5 minutes or multiple convulsive seizures without return to baseline.

This protocol does not apply to patients in focal status epilepticus with conserved mentation or one seizure lasting < 5 min

This protocol is appropriate for pediatric patients < 18 years old

CONSIDER ABCs AT EACH STEP OF THE PROCESS; INTUBATE IF PATIENT IS EXHIBITING ANY SIGNS OF AIRWAY COMPROMISE, BUT AVOID PREEMPTIVE OR PROPHYLACTIC INTUBATION.

MAX TOTAL BENZODIAZEPINE DOSES

Lorazepam IV 0.2 mg/kg or 8 mg
Midazolam IV 0.2 mg/kg or 20 mg
Midazolam IM 0.4 mg/kg or 20 mg
Diazepam IV 0.4 mg/kg or 20 mg

**Max of 2 doses of ANY benzodiazepine**

1st LINE TREATMENT

Lorazepam (preferred) 0.1 mg/kg IV
4 mg max single dose

-OR-

Midazolam 0.1 mg/kg IV
0.2 mg/kg IM
10 mg max single dose

-OR-

Diazepam 0.2 mg/kg IV
10 mg max single dose

IMMEDIATELY ADMINISTER

MONITOR EFFECT FOR 5 MINUTES AND IF CONVULSION CONTINUES

2nd LINE TREATMENT

Fosphenytoin* 20 mg PE/kg IV
1000 mg PE max single dose

-OR-

Phenytoin* 20 mg/kg IV
1000 mg max single dose

-OR-

Levetiracetam 50 mg/kg IV
4500 mg max single dose

-OR-

Phenobarbital 20 mg/kg IV
1000 mg max single dose

*Avoid in Dravet syndrome

MONITOR EFFECT FOR 5 MINUTES AND IF CONVULSION CONTINUES

3rd LINE TREATMENT

Midazolam 0.1 mg/kg IV bolus followed by 0.05-2 mg/kg/hr titrated to clinical effect/EEG suppression (rebolus 0.1 mg/kg with increases in continuous infusion)

-OR-

Pentobarbital 5 mg/kg IV bolus followed by continuous infusion at 0.5-5 mg/kg/hr (rebolus 5 mg/kg with increases in continuous infusion)

NOTE: ADDITIONAL SUPPORT AS NEEDED, SUCH AS VENTILATOR ASSISTANCE

**CONSIDER ADDITIONAL MEDICATIONS FOR CLASS 3 OR 4 SEIZURES INCLUDING GLUCOSE, INOTROPES, OR OXYGEN.**

REPEAT benzodiazepine dose, unless MAX TOTAL BENZODIAZEPINE dose already given

Consider CBC, CMP, Mg, Po4, AED levels, ABG, UDS, UA

Antipyretics and cooling PRN
If fever/meningeal signs, consider blood cx and when patient stabilized, LP if no contraindication

Order 2nd LINE TREATMENT

Notify Neurology and transfer patient to PICU

Administer alternate 2nd LINE TREATMENT
Monitor effect and if still actively convulsing,
Move to the 3rd LINE TREATMENT and Be prepared to intubate (if not done previously)

Pediatric Clinical Management Team Approval: 8/2019
Pediatric Subcommittee Approval: 8/2019
Neurosciences Subcommittee Approval: 8/2019
Pharmacy & Therapeutics Committee Approval: 9/2019

THIS PROTOCOL IS NOT INTENDED TO REPLACE INDIVIDUALIZATION AND THE JUDICIOUS USE OF CLINICAL REASONING

DRUG-DUomat INTERACTIONS ARE COMMON FOR FOSPHENYTOIN, PHENYTOIN AND PHENOBARBITAL.
References


7. JN Friedman; Emergency management of the pediatric patient with generalized convulsive status epilepticus Canadian Paediatric Society, Acute Care Committee. Paediatr Child Health 2011;16(2):91-7


9. Kurtz and Goldstein . 2015. Status Epilepticus in the Pediatric Emergency Department; 16(1)
