

PEDIATRIC CONVULSIVE STATUS EPILEPTICUS PROTOCOL

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****

Assess Airway, Breathing, Circulation (full set of vitals)
Administer O₂ and get IV access

Get pre-hospital benzodiazepine totals, seizure history and current AED(s), if any from EMS or family/caregiver present

Glucose POC
If BG < 60 mg/dL OR < 40 mg/dL if on ketogenic diet, give:
< 2 yo: D10W 4 mL/kg IV
≥ 2 yo: D25W 2 mL/kg IV

Give **1st LINE TREATMENT**
****Unless patient received MAX TOTAL BENZODIAZEPINE dose in the last 30 mins, then move directly to 2nd LINE TREATMENT**

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

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**

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

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)

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)

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

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

References

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