

Pediatric Seizure Pathway- ED

Includes: Patients $\geq$ 1 month corrected age with ongoing epileptic seizure

Excludes: Neonates < 1 month corrected age, patients with non-epileptic or suspicion for non-epileptic event (pseudo-seizure), presumed simple febrile seizure no longer ongoing

History on Arrival:

- Determine how long patient has been seizing, seizure history
- Determine if/which medications have been given prior to arrival or en route (family or ambulance). If yes, start at appropriate point in pathway

Known epilepsy:

Ask family of seizure action plan

**Seizure Onset:
Minute 0-5**

Stabilization

- **Focused assessment:** Airway, Breathing (start O₂), Circulation (CR monitoring, BP Q5 min)
- **POC Glucose:** Treat if <60 mg/dL
- **Attempt IV access, infection history, trauma history, lab work, prepare 1st line medication**

**Seizure
Minute 5**

**Give 1st Line
Therapy**

1st Line Therapy

IV Access:

- Lorazepam IV 0.1 mg/kg (max 4 mg)

No IV Access:

- Midazolam intranasal (IN) 0.2 mg/kg total (max 10 mg) using an atomizer; give 0.1 mg/kg (max 5mg) into EACH nostril. Concentration 5mg/ml

OR

- Diazepam rectal gel (PR): Ages 1-5: 0.5 mg/kg, Ages 6-11: 0.3 mg/kg, Ages 12+ 0.2 mg/kg (max 20 mg)

**Seizure
Minute 10**

**Give 2nd dose of
1st Line Therapy**

2nd Line Therapy

IV Access:

- Levetiracetam IV 50 mg/kg (max 4500 mg) over 15 minutes

OR

- Fosphenytoin IV 20 mg PE/kg (max 1500 mg PE) over 15 minutes

**Seizure
Minute 15-20**

**Give 2nd Line
Therapy**

Seizure Continuing $\geq$ 30 min:

- Contact ICU level care
- Discuss with above for further medication administration
- Continue airway, breathing circulation assessments & interventions

Admit Criteria if seizure breaks:

Not returning to baseline neurologic status, acutely recurring seizures, unstable cardiorespiratory status, underlying infection or trauma, lack of safe home or transport

Lab work-up:

- STAT glucose (treat if <60 mg/dL)
- Complete metabolic panel, iCal, Mg, Phos

Diagnostic considerations:

- CT scan (focal seizure, concern for hx of trauma)
- Urine Drug Screen
- CBC
- LP (if fever, concern for meningitis)
- Antiepileptic levels (if appropriate)
- EEG if available