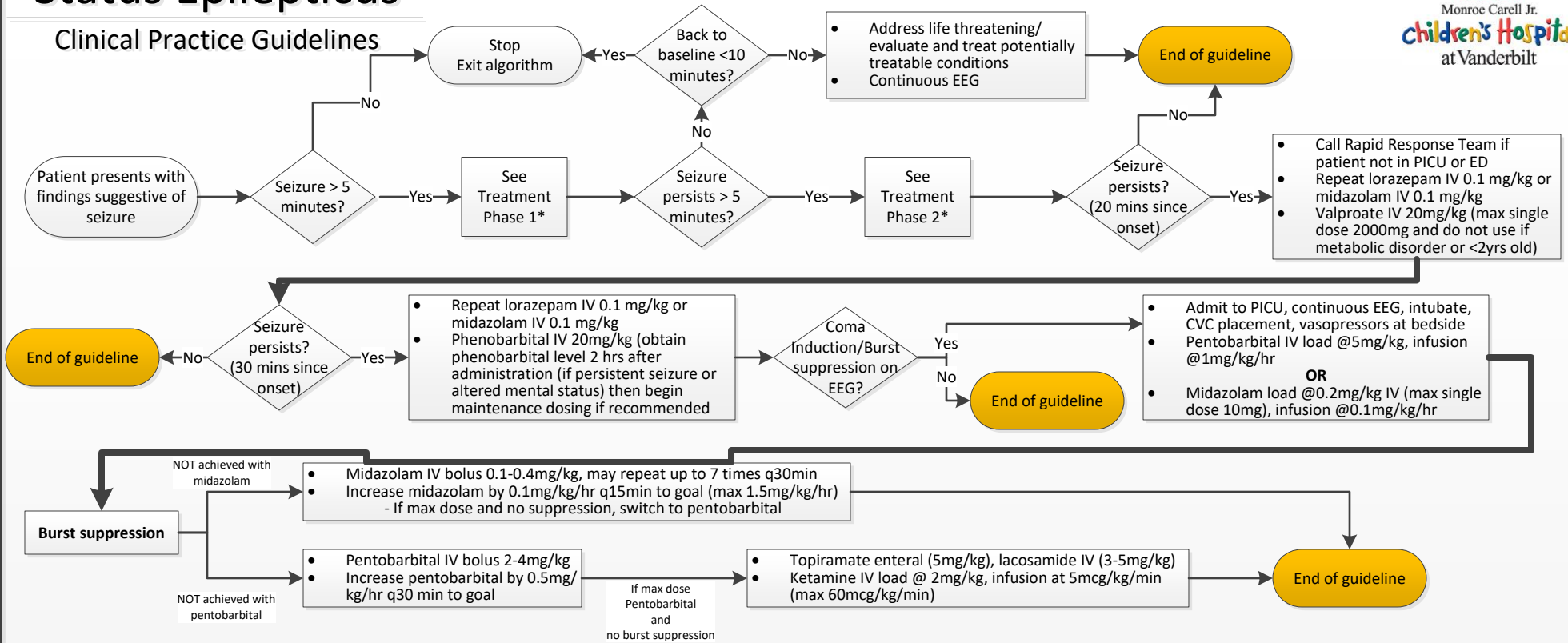


Status Epilepticus

Clinical Practice Guidelines



Inclusion Criteria

- Age > 1 month
- Generalized convulsive seizure > 5 minutes
- Patients in ED, PICU, floor
- Patients with or without history of epilepsy
- Patients with or without fever

Exclusion Criteria

- Age < 1 month

Anti-Epileptic Drug Sequence

- 1) Lorazepam IV 0.1mg/kg or midazolam 0.1mg/kg
- 2) Lorazepam IV 0.1mg/kg or midazolam 0.1mg/kg +levetiracetam IV 60mg/kg
- 3) Lorazepam IV 0.1mg/kg or midazolam 0.1mg/kg +fosphenytoin IV 20PE/kg
- 4) Lorazepam IV 0.1mg/kg or midazolam 0.1mg/kg +valproate IV 20mg/kg
- 5) Lorazepam IV 0.1mg/kg or midazolam 0.1mg/kg +phenobarbital IV 20mg/kg
- 6) Refractory Status Epilepticus: pentobarbital or midazolam continuous infusion to goal of burst suppression

Treatment Phase 1*

- Establish IV access
- Airway/breathing evaluation and support as needed
- HR/pulse ox monitor and vital signs
 - Oxygen or intubation if necessary
 - Support hemodynamics if necessary
- Fingertick glucose, BMP, CBC, anti-epileptic drug levels
- Lorazepam IV 0.1mg/kg (max single dose 4mg, may repeat 4 times q2min)
 - OR-----
 - Midazolam 0.1mg/kg (max single dose 4mg, may repeat 4 times q 2min)
 - If no IV: midazolam (IM/intranasal) 0.2mg/kg (max single dose 10mg)
 - If no IV: midazolam (buccal) 0.5mg/kg (max 10mg)
 - If no IV: diazepam (rectal)
- Dosing: 0.5mg/kg (age 1-5), 0.3mg/kg (age 6-11), or 0.2mg/kg (age > 12, max 20mg)
- If febrile, consider acetaminophen/ibuprofen
- Consult Neurology (unless simple febrile seizure)

Treatment Phase 2*

- Continuous EEG (Neurology resident will order and call EEG technician)
- Address life-threatening/evaluate and treat potentially treatable conditions
 - Hypoglycemia, hyponatremia, hypocalcemia, CNS infection, CNS hemorrhage (consult Neurosurgery if mass effect/increased ICP), intoxication, hypothermia, hypoxia
- Repeat lorazepam IV 0.1mg/kg or midazolam IV 0.1mg/kg
- Levetiracetam IV 60mg/kg (max single dose 4500mg)
 - Start maintenance dosing levetiracetam 40mg/kg/day divided BID 2 hour after load
 - OR-----
- Fosphenytoin IV 20PE/kg (max single dose 2000mg)
 - Obtain free phenytoin level 2 hours after administration complete if persistent seizure or altered mental status and start maintenance dose if Neurology recommends
 - Use with caution with suspected intoxication given potential to aggravate arrhythmogenic properties of some other drugs