

Status Epilepticus

TIME

0

3 Min

8 Min

20 Min

Witnessed or suspected seizure
GOAL IS TO PREVENT seizure from lasting > 5 minutes

STABILIZE AND ASSESS THE PATIENT

- Check ABC's**
 Evaluate and secure the airway
 Provide 100% oxygen (non-rebreather)
 Assess and support ventilation
 Check and establish monitoring of vital signs
- Check vascular access**
- Note the time and check time of seizure onset**
- Check bedside glucose**
 If glucose <60 mg/dl, administer 2 ml/kg D25%W or 5 ml/kg D10%W
- Administer antipyretics as indicated**

SEIZURE DURATION NOW 5 MINUTES

- LOREZAPAM IV or IO
 0.05- 0.1 mg/kg Maximum 2 mg/dose
OR
- MIDAZOLAM
 IM or IN 0.2 mg/kg Maximum 10 mg/dose
 IV OR IO 0.1 mg/kg Maximum 5 mg/dose
Repeat as needed every 3-5 minutes if seizure continues

SEIZURE CONTINUES

- LOAD with:**
 - Levetiracetam 40-60 mg/kg (Max 4500 mg)**OR**
 - Fosphenytoin 20 mgPE/kg (Max 1500 mg)
 - If home medication 10mgPE/kg
- ASSESS NEED FOR INTUBATION
- RE-ASSESS ABC's
- PAGE NEUROLOGY

SEIZURE CONTINUES

- LOAD with a 2nd medication**
 - Levetiracetam 40-60 mg/kg (Max 4500 mg)**OR**
 - Fosphenytoin 5-10 mgPE/kg (Max 1500 mg)**OR**
 - Phenobarbital 20 mg/kg (Max 1500 mg)
 - Neonates: 20 mg/kg; repeat 5-10 mg/kg x 1 if persists
- CALL PICU
- Consider Intubation

General Principles

- Remember ABC's**
- Get a good history and description from a witness
- Determine **time of onset** of seizure and **whether this is a seizure**
- Follow sequence of benzodiazepine, fosphenytoin, midazolam.
- Substitute phenobarbital for fosphenytoin in neonates.

Key to effective treatment

- Begin treatment early, within 3-5 minutes of seizure onset
- Use adequate doses of effective drugs
- Prepare next line drug

Select initial labs

- Electrolytes (Glucose, Na, Ca, Mg). Consider blood gas for STAT electrolytes
- AED levels
- CBC

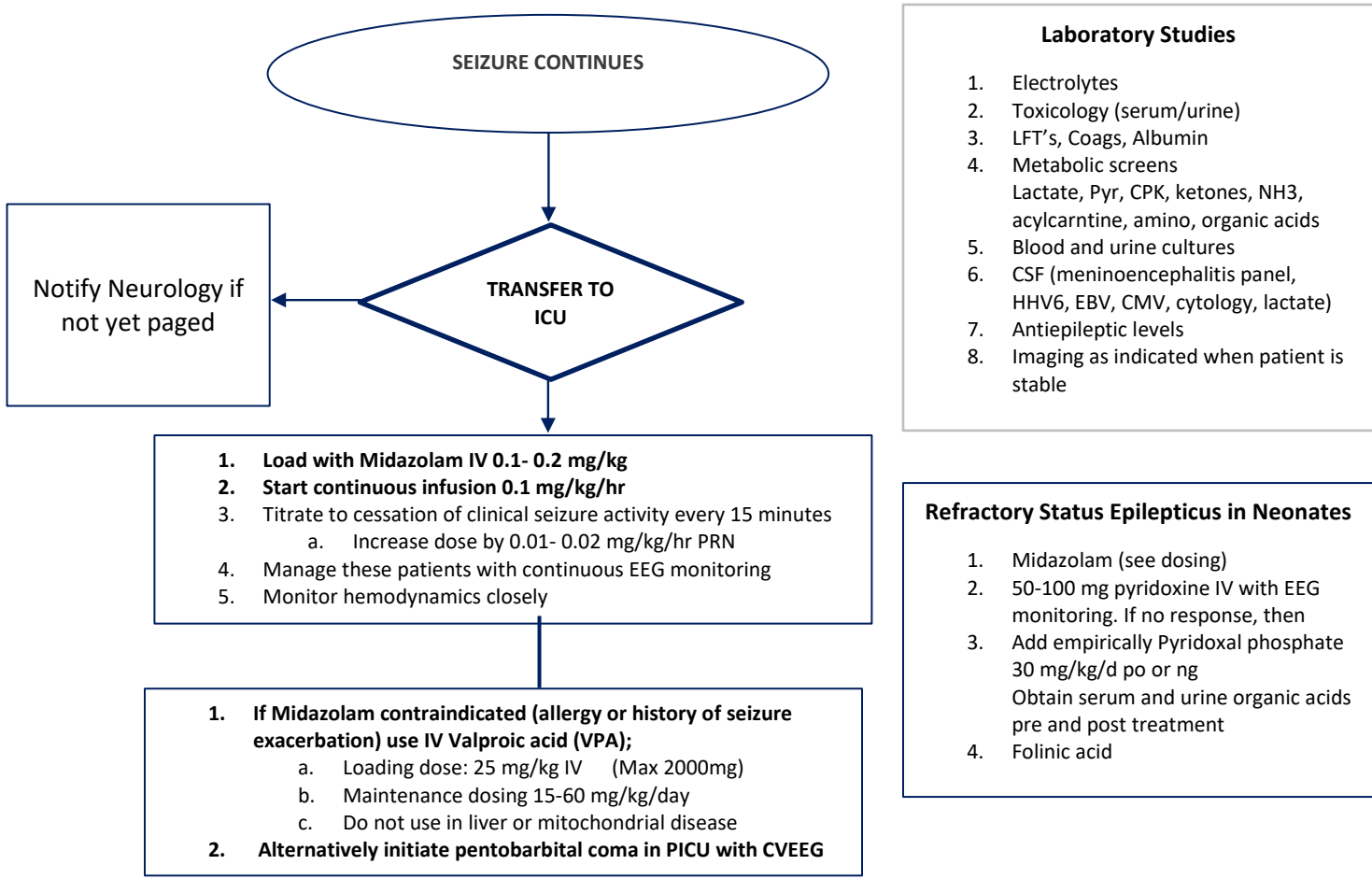
Neonates (<1 month age)
 Load with Phenobarbital 20 mg/kg IV

SEIZURE RESOLVED

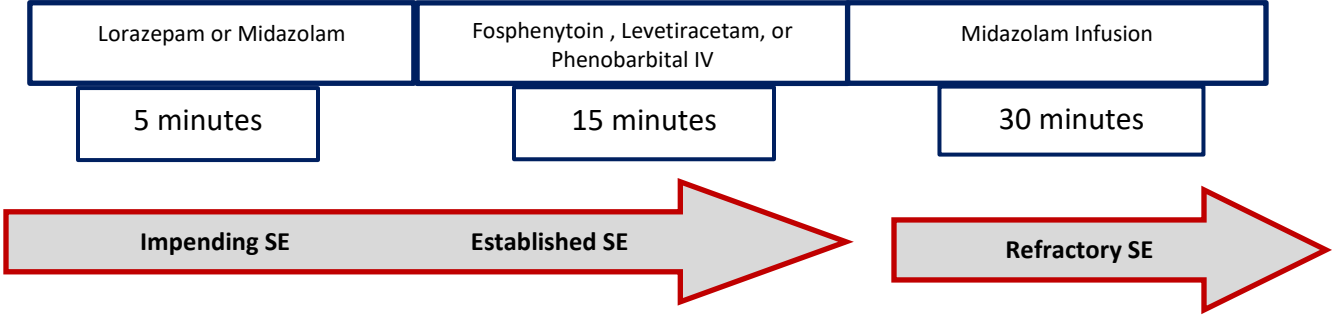
- Check vital signs
- Additional diagnostic testing
- Consider maintenance
 Fosphenytoin: 5mg/kg/d ÷q8 hr
 or Phenobarbital 3-5 mg/kg/d

Created by	Department	Creation Date	Version Date
S. Herron, R. Coates	Pediatric Emergency Department	May 2018	05/2023

Refractory Status Epilepticus



- RISK ASSESSMENT FOR STATUS EPILEPTICUS**
1. **Acute Symptomatic SE (eg. TBI, Meningitis, ICH, Stroke, Encephalitis, Toxin)**
Highest mortality and morbidity
 2. **Febrile Status Epilepticus or Complex Febrile Seizures**
Increased long-term risk of mesial temporal sclerosis
 3. **Remote Symptomatic Epilepsy – history of previous neurologic injury with new onset seizures**
 4. **Known Epilepsy**
Low mortality and morbidity
 5. **First Seizure in Idiopathic Epilepsy**



Secure airway, give oxygen, glucose (if indicated), monitor blood pressure, IV access, check electrolytes

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