GW Status epilepticus protocol

Applies to:

Any adult patient (>40 kg) with:

Generalized tonic clonic seizures or focal seizures with altered awareness and at least one of following:

- Witnessed seizure lasting > 5 mins or ones with unwitnessed onset ongoing at the time treating physician assesses the patient
- 2 seizures occurring over >5 min without intervening recovery of baseline mental status

0-5 mins	Supplemental O2, ABCs, IV access, EKG, VS
	Comprehensive metabolic panel, CBC, Anti-Seizure Medication (ASM) levels, tox screen, hCG, troponins
	Consider thiamine 100 mg IV+ 50 mL D50 blood glucose (if applicable)
	Emergent initial therapy - IV lorazepam 0.1 mg/kg, OR - IM or IV midazolam 0.15 mg/Kg AND Order IV Anti-Seizure Medication
5 – 15 mins	IV Anti seizure medication: 1. Levetiracetam – 3000 mg IV load (if renal function is normal, 2 g for Cr between 1 and 2, and 1 g for Cr >2), If status/seizures is still ongoing after 5 minutes of LEV, give 2. Lacosamide – 400 mg IV load and Order Propofol or midalozam
15- 20 mins	Secure airway Vasopressor support if needed Non contrast head imaging Give propofol IV OR Midalozam (see doses below) Transfer patient to ICU Order cEEG Consult neurology
Ongoing SE on cEEG (refractory)	Maximize iv anesthetic/ add ketamine to midazolam Add third anti seizure medication – Valproate – 30 mg/kg IV load
Ongoing SE (super-refractory	If seizures still persists despite 2 anesthetics and 3 anti-seizure medications Switch to pentobarbital Add 4th ASM fosphentoin

	Phenobarbital *failure to wean pentobarb Clobazam Topamax ** Consider alternative therapy - ketogenic diet or immune therapy (to be recommended by epilepsy)

Status resolved on cEEG

Maintain seizure freedom for 24 – 48 hours followed by slow wean of cIV medications

Weaning protocol

Midazolam: over 6-12 hr

Propofol : over 12-24 hr

Pentobarbital : over 12-24 hr or stop the cIV

Ketamine: wean over 12 hours prior to starting midazolam wean

Failure to wean

(Frank clinical seizures resume Or continuous or frequent electrographic seizure resume (>1 sz/hr)) .

Immediate resume prior cIV at prior dose

AED dosing

Levetiracetam : 2000 mg IV load, may repeat if necessary (followed by 1.5 g IV BID)

Lacosamide :400 mg IV load (followed by 200 mg IV BID)

Valproate :30 mg/kg IV load over 10 mins (followed by 15 mg/Kg IV BID)

Level – 80 – 100 mg/ml

Foshenytoin :20 mg/kg IV load up to 50 mg/min

Maintainence : 5 mg/mg in 3 divided doses every 8 hours

Level :15-20 mcg/ml

Topiramate :no load , 200-400 mg pNG q12 h,

Level : 20 – 20 mcg/ml, watch HCO3

Phenobarbital :*consider if failure to wean pentobarbital

Load 15-20 mg/kg

Maintainence :1-4 mg/kg/d PO/IV div q6 or q8h

Level – 30 – 50 mcg/ml

Clobazam : No load, 20 mg q12h pNG

cIV dosing

Propofol : Load - 1-2 mg/kg over 3-5 min; repeat every 5 mins until clinical seizures have resolved (max 10mg/kg)

Initial cIV rate – 20 mcg/kg/min;increase by 10mcg/kg/min after each bolus

cIV range 10 – 80 mcg/kg/min

Midazolam: Load : 0.2 mg/kg; repeat every 5 mins until clinical seizures resolve (max 1mg/kg)

Initial cIV rate : 0.2 mg/kg/hr; incrase by 0.2 mg/kg after each bolus

cIV range : 0.2-2 mg/kg/hr

Pentobarbital: Load : 5mg/kg upto 50 mg/min: repeat as needed until cEEG shows bursts suppression

Initial cIV rate : 0.5 mg/kg/hr

CIV range : 0.5-10 mg/kg/hr

Ketamine: Load 1 mg/kg as Bolus; repeat every 5 minutes as needed

Initial cIV rate 5 mcg/min

cIv range 5-100 mcg/min