GUIDELINE FOR THE INITIAL MANAGEMENT OF SEIZURES

0 -5 Minutes

AIRWAY -- BREATHING – CIRCULATION

- Continuous pulse-Ox and monitoring of vital signs
- Administer oxygen to the actively seizing patient. Perform airway maneuvers and assist with respirations as indicated (i.e. BMV)
- Establish IV access and draw blood samples: Chem istry Panel, CBC with diff, toxicology screens and anti-epileptic levels if applicable.
- perform bedside glucose measurement with a glucometer
- ***If necessary at any time, activate Code Blue and secure the airway if gas exchange or airway protective reflexes are determined to be inadequate***
  - ***Code Blue****: call 3 -2 -1 and give location, floor and room number*

Avoid neuromuscular blockade to stop seizure activity!

- **Lorazepam** 0.1mg/kg/dose (usual MAX = 4mg/dose) IV / IM x 1 over 2-4 minutes
- If patient has no IV access, give **Diazepam** 0.5mg/kg/dose (MAX = 20 mg/dose) PR x 1
  - If Diazepam is not available, use undiluted injectable formulation of diazepam and give rectally

Consider Activating Rapid Response or Code Blue by calling 3-2-1

If seizures continue, REPEAT: **Lorazepam** 0.1 mg/kg/dose (usual MAX = 4mg/dose) IV / IM x1 over 2 -4 minutes **AND** Notify Pediatric Neurology

Depending on AGE (years):

Consider Activating Rapid Response or Code Blue by calling 3-2-1

If patient < 2 years

If patient ≥ 2 years

10 - 15 Minutes

Give **Phenobarbital** 20mg/kg/dose IV x1 over 20 minutes

Monitor for respiratory depression when giving loading dose of Phenobarbital.

May repeat dose: 10mg/kg/dose IV x 1 over 5 minutes

(Max dose per day = 40mg/kg)

Give **Fosphenytoin** 20 mg PE/kg/dose (usual MAX 1000 mg PE/dose) IV / IM x1 over 7 min (PE = Phenytoin Equivalents). Monitor for hypotension, vasodilatation, tachycardia, bradycardia

If seizures persist, may <u>*REPEAT*</u>: Fosphenytoin 10mg PE/kg/dose (usual MAX 500mg PE/dose) IV x 1 over 5 minutes

NOTE: high phenytoin levels (i.e. free phenytoin levels) can provoke seizure activity

20- 30 Min

After discussing case with Pediatric Neurology, consider the medication not given in the above steps (i.e. for pts. > 2 years old, consider Phenobarbital)

Remember !

<u>Treat Metabolic Derangements as quickly as possible:</u>

Hypoglycemia:

< 1 yr	Dextrose 0.5 – 1 gram/kg/dose (5 – 10 mL/kg/dose D10W) IV x1
≥1-12yr	Dextrose 0.5 – 1 gram/kg/dose (2– 4 mL/kg/dose D25W) IV x1
≥ 12yrs	Thiamine 100mg IV x 1 followed by Dextrose 0.5 – 1 gram/kg/dose (1 – 2 mL/kg/dose D50W) IV x1

NOTE: For Hyponatremia , 3% Sodium Chloride 2 mL/kg IV x 1 over 1 hr. If NO CENTRAL ACCESS is available, please write in order set Comments section: *" MD aware of high osmolality >500mEq and potential for peripheral venous injury. Pt actively seizing. Please give via PIV."*

Prepared by: R. Panesar, MD, L. Manganas, MD, G. Garra, MD, J. Farrell, RPh, M Andriola, MD. References available upon request. Last revised: 2/10/09