Handout

SEIZURES: NUTS AND BOLTS

- Understand the importance of initial assessment of patients who have seizures
- Be able to initiate treatment for patients who have seizures
- Know alternatives to first line treatments for status epilepticus

INITIAL ASSESSMENT IS **ABC**

- Airway – consider suctioning, supplemental oxygen, intubation
- Breathing – watch for chest rise, listen for breath sounds
- Circulation
- Reassess your patient after interventions

DEFINING STATUS EPILEPTICUS

- A patient is in status epilepticus if seizure activity has lasted > 30 minutes or there are multiple seizure episodes with failure to regain consciousness between episodes. This is an arbitrary definition.

MEDICATIONS FOR THE MANAGEMENT OF STATUS EPILEPTICUS

- BENZODIAZEPINES
    - LORAZEPAM – 0.05-0.1 mg/kg IV q10-15 min, max 4 mg
        - First line if IV access is available
    - MIDAZOLAM – 0.15 mg/kg IV then continuous infusion of 1 mcg/kg/min
        - IM, buccal are useful when IV access has not been established
    - DIAZEPAM -0.05-0.3 mg/kg IV q15-30 min, max dose 10 mg
        - Rectal formulation is available and currently first line as a home medication for prolonged seizure
- FOSPHENYTOIN
    - 15-20 mg PE/kg IV/IM, may infuse at 3 mg/kg/min (max 150 mg/min)
        - Can cause cardiac arrhythmias
        - Avoid for status associated with myoclonic seizures, absence seizures or seizures associated with illicit drugs
- PHENOBARBITAL
    - 15-20 mg/kg IV/IM, may repeat 5 mg/kg IV q15-30 min, max dose 40 mg/kg
        - Can cause prolonged sedation, respiratory depression and hypotension
        - Generally used after the failure of benzodiazepines and fosphenytoin

CONSIDER ETIOLOGY OF STATUS EPILEPTICUS TO TREAT THE ROOT CAUSE!!!!!

- Infection, acute hypoxic ischemic insult, metabolic disease (hypoglycemia, inborn error of metabolism), electrolyte imbalances, traumatic brain injury, drugs/intoxication/poisoning, cerebrovascular event

USE YOUR RESOURCES: DO NOT FORGET TO CALL FOR HELP – CONSIDER HOSPITALIST/NEURO/PICU

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