# **Seizure Care in School**



## **Objectives**

- Upon completion of this presentation learners will~
- Be able to identify when a student is having a seizure
  - Petit Mal or Absence
  - Tonic clonic or grand mal seizure
- Steps to take when a seizure occurs
- Administration of emergency medication for seizures
- Site specific plan of action

## **Causes of Seizures**

- Fever
- Metabolic Disturbance
- Hemorrhage
- Drug Withdrawal
- Structural Lesions
- Genetic Disorders
- Idiopathic
- Trauma
- Poisoning
- Brain injuries before, during and after birth



#### **Seizure Disorders**

#### What is a Seizure?

- A neurological condition, usually chronic
- Abnormal, excessive electrical discharges from the neurons in the cerebral cortex which may cause loss of consciousness and violent and sudden contractions
- Seizures can also be called convulsions

**Epilepsy** – a chronic neurological condition in which clusters of cells signal abnormally



### **Petit Mal or Absence Seizures**

- Non-life-threatening
- Can be subtle
  - Eyes twitching or blinking
  - Blank stare
  - Sudden stop in motion without falling
  - Lip smacking
  - Chewing motions
  - Finger rubbing
  - Small movements of both hands
- Following seizure there is no memory of the event(s)



## Tonic Clonic or Grand Mal Seizures

- The tonic phase comes first.
  - All the muscles stiffen.
  - Student loses consciousness and may fall.
  - Student may bite their tongue or inside of their cheek. If this happens, saliva may look a bit bloody.
- After the tonic phase comes the clonic phase.
  - Student arms and usually the legs begin to jerk rapidly and rhythmically.

- Student's face may look dusky or a bit blue if they are having trouble breathing or the seizure lasts too long.
- The person may lose control of their bladder or bowel as the body relaxes and they may vomit.
- These seizures generally last 1 to 3 minutes. Afterwards, the person may be sleepy, confused, irritable, or depressed.



#### Focal or Simple Partial Seizures

- Involves one part of the brain
- May remain alert and able to interact, but not always.
- May be unable to move but still aware of surroundings.
- Involuntary movements like:
  - Rubbing hands
  - Lip smacking
  - Bicycling movement of legs
  - Last 30 seconds to 3 minutes
  - Can have multiple in a day

- <u>Psychogenic Nonepileptic</u>
  <u>Seizures or PNES</u>
- Looks like epileptic seizure but isn't
- Caused by a psychological factor
- Can be result of a traumatic experience
- Diagnosis is hard, requires an EEG and must include ruling out any physical disorder as cause.

Treatment can include:

- \*Counseling
- \*Cognitive Behavioral Therapy
- \*Mindfulness
- Activities
- \*Family Therapy
- \*Medication to treat mental health condition



#### Seizure First Aid



- Notify office immediately, call eSchool Nurse
- Stay calm and track time and type of seizure, what body parts are involved
- Keep student safe
  - Lower to floor if needed
  - Place soft item under head if needed
  - Keep airway open and monitor breathing
- Do not attempt to restrain or hold them still
- Do not put anything in mouth
  - Other than Dr. ordered emergency medication



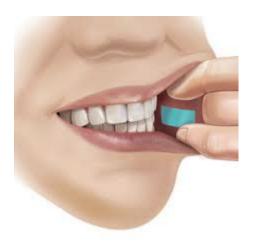
#### Seizure First Aid: After Care

- Turn on their side when seizure stops
  - They may vomit, this will help prevent choking
- Stay with student and continually monitor
  - Breathing, level of consciousness, additional seizure activity, any injury that may have occurred
- Give emergency medication as directed, if needed
  - eSchool nurse will help direct this care and administration
- Call 911 as needed
  - eSchool nurse will help determine if and when this may be needed
- Inform parent of all seizures





#### Emergency Medication Administration: Oral



- Buccal administration of Emergency
  Medication
  - Can be done with tablets or liquid
  - Can be given even if teeth are clenched
  - Insert syringe or tablet between teeth and check, along the gum line and allow to absorb.

#### Emergency Medication Administration: Rectal

- Rectal Administration
  - The rectum is the opening in the body where stool is passed.
- To Administer:
  - Gather supplies: Diastat rectal gel and lubricating jelly.
  - Remove cap from medication syringe and lubricate tip.
  - Lay child down and turn onto their side facing you.
  - Bend upper leg forward to expose rectum.
  - Separate buttocks and gently insert rectal tip into rectum.
  - Rim of they syringe should be snug against the rectal opening.
  - Slowly count to 3 while pushing the plunger until it stops.
  - Count to 3 again before removing syringe from rectum.
  - Count to 3 again while holding buttocks together to prevent medication from leaking out.
  - Keep child on their side, facing you and continue to monitor.
  - <u>https://www.youtube.com/watch?v=R6gVnyi34\_g</u>



### Emergency Medication Administration: Nasal

- Open, check dose with order.
- Remove from blister pack.
- Hold medication between your ringers with your thumb on the plunger. Do Not Push Plunger.
- Place the tip into one nostril until your fingers touch the outside of the nose.
- Press the plunger firmly with your thumb to deliver the dose.
- Remove from nose after dose is give and discard.
- Video:
  - <u>https://www.youtube.com/watch?v=j4Z7T64JHoE</u>



~VEL

#### **Nasal Administration**

- A second way to deliver nasal medication for a seizure is demonstrated in the video below:
- <u>https://www.google.com/search?q=videos+how+to+give+nasal+midazolam+for+seizures&r</u> <u>lz=1C1GCEU\_enUS1040US1040&oq=videos+how+to+give+nasal+mid&aqs=chrome.4.69i57j3</u> <u>3i160l2j33i299l2.13877j0j7&sourceid=chrome&ie=UTF-8#kpvalbx=\_m-sAZMbPJcaV0PEPgP</u> WPCA\_55



## **School Specific Response Plan**

- Medication trained response team
- How to notify them
- Back up if primary person is gone
- Keep Emergency Seizure Plan in the classroom, easily accessible by substitute staff and in office with emergency medication





#### Video Example

Here is a brief video of a tonic clonic or grand mal seizure and the initial care needed. <u>https://www.youtube.com/watch?v=FBEj9H42fa4</u>



#### References

- Lepkowski, A. (2018). School Nursing Evidence-based Clinical Practice Guideline: Students with Seizures and Epilepsy. Retrieved from NASN (National Association of School Nurses) website: <u>https://cdn.fs.pathlms.com/RL3wHnwQ8ax9cepx5y3g?cache=true</u>.
- Absence seizure. Retrieved from Mayo Clinic Web Site: <u>https://www.mayoclinic.org/diseased-conditions/petit-mal-seizure/symptoms-causes/syc-</u> <u>20359683</u>.
- Tonic-clonic Seizures. Retrieved from Epilepsy Foundation website: <u>https://www.epilepsy.com/learn/types-seizures/tonic-clonc-seizures</u>.
- Focal Onset Impaired Awareness Seizures. Retrieved from Epilepsy Foundation website: <u>https://www.epilepsy.com/what-is-epilepsy/seizure-types/focal-onset-impaired-awareness-seizures</u>
- The Truth about Psychogenic Nonepileptic Seizures. Retrieved from Epilepsy Foundation
  website: <u>https://www.epilepsy.com/stories/truth-about-psychogenic-nonepileptic-seizures</u>
- Nasal Rescue Medicines. Retrieved from Epilepsy Foundation website: <u>https://www.epilepsy.com/treatment/seizure-rescue-therapies/nasal-rescue-medicines#How-is-it-given</u>?
- Anderson, K. (2023) Mosby's textbook for medication assistants, 2<sup>nd</sup> Ed. Elsevier Inc.



# Thank You



