



**Texas School Nurses Organization
Conference 2021**

**The ISD's of Pediatric Emergencies
(Identify, Stabilize, Dispo)**

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1

Disclosures

- Managing Partner, PEMQBook LLC



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2

Why did you become a school nurse?

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Texas School Nurses Organization



Mission:
To enhance whole student wellness and learning by strengthening school nursing practice.

Vision:
Student access to health and learning.
All day.
Every day.

Commitment:
Voluntary and self-motivated ongoing pursuit of knowledge, competence and excellence for personal or professional growth.

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4

Objectives

- Review common school based clinical scenarios
 - **A**sthma, anaphylaxis, and respiratory difficulty
 - **B**elly (Abdominal) pain and chest pain
 - **C**oncussion and minor head injury
 - **S**eizures, syncope, and altered mental status
- Identify red flag situations
- Stabilize and initiate care
- Determine appropriate disposition

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5

Introductions



Jo-Ann Nesiama, MD, MS
Associate Professor
Pediatric Emergency
Medicine Fellowship
Program Director



Megan Street, MD
Assistant Professor
Associate Medical
Director - Dallas



Craig Huang, MD
Associate Professor
Medical Director –
Trauma Services,
Transport, and
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Pamela Okada, MD, MS
Professor
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6



Seizures, Syncope, and Altered Level of Consciousness

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7

Scenario 1

10 year old boy suddenly slumps over in his chair and falls to the ground. The teacher immediately responds and sees the child shaking with eyes rolled back, completely unresponsive.

You are called to the classroom because the child continues to seize.

What should you do first?

- a. Pick up the child and move him to the nurse's office.
- b. Place a tongue depressor in his mouth to keep it open.
- c. Clear the area so he does not injure himself.
- d. Call 911.



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 Text **PAMOKADA959** to **22333** once to join

What should you do first?

- a. Pick up and move
- b. Use a tongue depressor
- c. Clear the area
- d. Call 911

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9

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Identify:

The epilepsies affect children and men and women of all ages, races and ethnic groups. It is the fourth most common neurological disease.

3.4 million
People live
with active
epilepsy



150,000
New cases of
epilepsy
every year



1 in 26
Will develop
epilepsy
at some point



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11

Seizure First Aid

How to help someone having a seizure

1

STAY with the person until they are awake and alert after the seizure.
✓ Time the seizure ✓ Remain calm
✓ Check for medical ID



2

Keep the person **SAFE**.
✓ Move or guide away from harm



3

Turn the person onto their **SIDE** if they are not awake and aware.
✓ Keep **airway clear**
✓ Loosen **tight clothes** around neck
✓ Put **something small and soft** under the head



Call 911 if...

- ▶ Seizure lasts longer than 5 minutes
- ▶ Person does not return to their usual state
- ▶ Person is injured, pregnant, or sick
- ▶ Repeated seizures
- ▶ First time seizure
- ▶ Difficulty breathing
- ▶ Seizure occurs in water

<https://www.epilepsy.com/living-epilepsy/schools-and-seizure-preparedness>



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12

School Awareness

- According to the CDC, 49% teachers want professional development on seizures/epilepsy, only 18% have received such training
- School personnel training
- School nurse training – includes developing seizure action plan, rescue therapies, and seizure emergencies
- Take charge programs – for students from kindergarten to 12th grade
- Ensuring a seizure action plan is part of student's file
- Safeguards physician directed care at school – allows children access to life-saving medications

<https://www.epilepsy.com/living-epilepsy/schools-and-seizure-preparedness>
https://www.epilepsy.com/sites/secure/files/atoms/files/SCHOOL%20Secure%20Action%20Plan%202022-04gr17_FILLABLE_0.pdf



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Stabilize: Rescue Medications

- Preparation:
 - Know the student's seizure type, pattern, triggers
 - Know the action plan
- Indication: Status epilepticus – lasting longer than 5 min
- Medications:
 - Safe in doses recommended
 - Potent in small amounts
 - Quick and easy to administer
 - Effective



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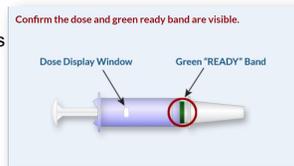
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14

14

Stabilize: Rescue Medications

- Class of medications: Benzodiazepines (enhance GABA)
- Diastat® rectal gel (AcuDial™ or generic)
 - Easy to use
 - Rapidly absorbed
 - FDA approved since 1997 in children > 2 years
 - May cause drowsiness
 - Follow your school policies



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What would be the least helpful to the child?

- a. Turn on him on side
- a. Help him get up quickly
- c. Give him juice
- d. Elevate his legs

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19

Scenario 2

11 year old boy got up from his seat quickly and suddenly fell to the ground, losing consciousness briefly. There was no shaking or urinary incontinence. There is no history of trauma. Upon your arrival, he is pale but awake and more alert.

What would be least helpful to the child?

- a. Turn him on his side.
- b. Help him get up quickly.
- c. Give him some juice or water.
- d. If there is no signs of injury, elevate his legs.

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20

Syncope : Identify

- AKA fainting is caused by a lack of blood supply to the brain
- Results in falling to the ground with loss of tone or responsiveness
- Causes:
 - Hunger / hypoglycemia
 - Dehydration
 - Pain
 - Anxiety – hyperventilation syndrome
 - Sitting or standing still for extended time
 - Coughing, urinating, turning your head, hair combing
 - Pregnancy
- Less common causes:
 - Cardiac dysrhythmias – LongQT syndrome
 - Brugada syndrome, WPW, tachyarrhythmias

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21

Syncope: Stabilize and Disposition

- Check ABC's, if necessary start CPR, call 911
- If unconscious but breathing, roll student to one side
- Keep the student safe
- Gently raise the legs up to facilitate return of blood
- Loosen clothing, belts, collars
- Disposition: Call EMS for syncope
 - Associated with trauma, head injury
 - Difficulty breathing
 - Difficulty speaking
 - Acts confused
 - Slow or irregular heartbeat



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22

Scenario 3

17 yo male with no known medical history was found agitated and punching the bathroom walls during lunch. Police and paramedics were called to the school to assist. He is noted to be altered, aggressive, and febrile to 103 °F. He is clutching his chest in pain.

What could be the cause of his altered level of consciousness?

- School lunch did not agree with him
- Covid 19 infection
- Drug use
- Concussion during football practice

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23

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What would be the cause of his ALOC?

- Didn't like lunch
- COVID-19 infection
- Drug use
- Concussion during football

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24

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25

Altered Level of Consciousness (ALOC)

- ALOC is a spectrum
 - Confusion: disoriented with delayed or impaired response
 - Lethargy/Somnolent: Mild depressed LOC, but remains arousable
 - Obtundation: significantly difficult to arouse
 - Coma: no purposeful movement or awareness, not arousable

• Etiology of Altered LOC is broad!

Metabolic	Sepsis/Seizures
Oxygen insufficiency	Tumor/Trauma
Vascular	Uremia
Endocrine	Psychiatric
	Infection
	Drugs

26

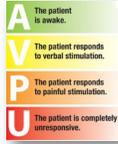
Unusual Causes of ALOC or Syncope

- Atypical migraine
- Cerebral Vascular Accident (Acute stroke)
- Cerebral AVM or aneurysm with hemorrhage
- Posterior reversible encephalopathy syndrome (PRES)
- Acute disseminated encephalomyelitis (ADEM)
- Psychogenic non-epileptic seizures (PNES)

27

Altered Level of Consciousness (ALOC) Initial Stabilization:

- ABC's – support and control ventilation
- If trauma is suspected, maintain cervical spine alignment
- Maintain perfusion
 - Vascular access
 - Administer isotonic fluid
- Quick check of pupils, AVPU
- Check temperature
- Check for hypoglycemia, give dextrose containing fluids
- Consider Naloxone for suspected opioid ingestion



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28

Altered Level of Consciousness (ALOC)

Disposition:

- Call 911
- Recommend all children with new onset acute loss of consciousness be evaluated.



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29

Summary

Through high-yield real life scenarios, we were able to:

- Identify red flag situations
- Stabilize and initiate care
- Determine appropriate disposition

for patients with Seizures, Syncope, and Altered Level of Consciousness.

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30

Questions?



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31
