

Seizure Safety and Precautions

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DISEASE/SKILL OVERVIEW

A diagnosis of epilepsy includes efforts to protect the person from any harm. Depending on the seizure type, seizure safety may require more effort and skill. As care is rendered before, during, or after a seizure event, the skills needed to promote safety and protection from harm or injury must be performed in a competent manner. Precautions involved with protection from injury are a top priority for patients with epilepsy. Therefore, being able to prevent harm, administer early treatment interventions, and demonstrate an appropriate skill are all keys to successful care of the patient with epilepsy. Education related to seizure precautions should include details about appropriate interventions for any seizure type.

NEURO EXAM PEARLS

Describe clinical presentation of seizure event.

Ex. Seizure First Aid — Stay, Safe, Side (refer to the Seizure First Aid Flier listed under “Additional Resources”)

Ex. Seizure precautions / SUDEP (sudden unexplained death in epilepsy patients) — Review policy and guidelines set by Seizure Clinical Practice Guideline (CPG), American Epilepsy Society (AES), National Association of Epilepsy Centers (NAEC), etc.

Ex. Neuro assessment

Ex. Rescue medications on standby, such as Lorazepam

Ex. Know when and to whom to escalate suspicions of status epilepticus, a neurological emergency

MANAGEMENT STRATEGIES/ NURSING IMPLICATIONS

- Observation of the surroundings is important to assess for any signs of potential danger.
- Proper set-up of the patient room to prevent any danger or harm should be assessed and completed with each interaction. (Ex. Side rails padded, suction, oxygen equipment.)
- Safety should be a focused priority for all care rendered.
- Awareness and scanning of the seizure event will determine actions needed at any given moment. (Ex. Turn patient on their side to prevent aspiration.)
- What are included with seizure and SUDEP precautions? (Ex. IV access, suction at bedside if hospitalized, padded side rails, prevent aspiration etc. Follow evidence-based guidelines included with the definition of seizure precautions.)
- Prevent injuries (Ex. Shoulder dislocation)
- Assess cardiac monitoring (Ex. Arrhythmias, Ictal asystole)
- Recognize when supplemental oxygen might be needed. Remember principles of first aid.
- Assess and observe for a VNS (vagal nerve stimulator) or other implanted devices. Is the magnet nearby for easy access? Should I use the magnet to attempt to abort the seizure event? Do I need instructions/orders for its use?
- Think about and plan nursing actions depending on the seizure type: (ex: prevent wandering into the street, keep away from stove while cooking, walking without assistance driving, etc.)
- What do I do for post-ictal aggression? Avoid restraints and prepare for non-violent interventions.
- Always remember principles of CPR to provide care as needed.

- Learn about post-ictal aggression and how to deescalate the situation with nonviolent interventions while avoiding restraints.
- When do I begin to think about Status epilepticus (SE) as I am promoting safety and continuing precautions?
- Assess for continuing seizure activity. Follow definition and guidelines to determine propensity for Status Epilepticus (SE), especially if activity continues for more than 5 minutes. Think ahead about continued safety and precautions to prevent injury. Continue to plan for nursing actions (ex. Rapid response, medication administration, etc.)
- Provide ongoing education and support for the patient and/or family (physical, emotional, etc.).
- Is the person febrile? Do they need medication for treatment?

MEDICATION/SPECIALIZED LABS

- Blood work may be ordered to be drawn for anti-seizure medication (ASM) levels, tox screen, or electrolytes. Be prepared to draw blood specimen if needed during or after seizure event.
- Rescue medications should be easily accessible. Be proactive if needed to obtain provider orders. Possible medications needed to abort seizure activity: Ex. Lorazepam, Levetiracetam, Valproic Acid, Lacosamide, Phenytoin, rescue medications: (Nayzilam, Valtoco, etc.)
- Ensure rescue medications are available in the correct formulation. (ex. IN, IV, IO, PO, etc.)

TEAM QUESTIONS/COMMUNICATION

- Continue to round for patients with known seizure history.
- Continue to assess the situation and the surroundings to protect and promote safety.
- Follow an established protocol for seizure intervention(s).
- Review and discuss as a team what interventions worked well after an event and what are the areas for improvement.

PATIENT/FAMILY/CAREGIVER TEACHING SUPPORT

- Nurses should attend daily rounds whenever possible. Involve the patient at their bedside as often as possible to promote understanding and mutual agreement with the plan of care.
- Communication techniques: Verbal, Video, Written, Email
- May I show you what to do or give pointers of what to do in the event of a seizure?
- What resources are available? (Ex. Epilepsy Foundation, CDC, AES, etc.)
- Education should be provided about any additional tools or resources related to safety (ex. home renovations or repairs, seizure tracking apps, seizure monitoring devices)

TOOLS/SUPPLIES

- Vital signs machine (with pulse oximetry)
- Cardiac telemetry if available
- Electronic medical record for documentation
- Signage for review of seizure interventions
- Pad side rails or surrounding areas
- Simulation or role playing whenever available for review and education for both the nurse and patient families.
- Video reviews of actual events and responses to the event by a clinician.

ADDITIONAL RESOURCES

1. <https://www.aesnet.org/clinical-care/emus>
2. <https://www.epilepsy.com>
3. Classification of seizure types: <https://www.epilepsy.com/article/2016/12/2017-revised-classification-seizures>
4. Seizure First Aid Flier: https://www.epilepsy.com/sites/core/files/atoms/files/SFA%20Flier_HQ_8.5x11_PDF.pdf

All Neuroscience Nursing Primer references listed on special reference page.