Dementia Seizure Guide for Caregivers

Using an evidence-based approach to enhance seizure management in dementia care, particularly for Alzheimer's disease (AD), this guide aims to translate complex academic findings into practical knowledge for care teams and families. It seeks to improve seizure detection, response, documentation, and risk reduction, aligning with protocol improvements through real-world application.

Introduction

Seizures are an often overlooked risk for people living with dementia, especially AD. Research indicates that residents with dementia are much more likely to have seizures than those without cognitive decline. These events are frequently missed because the signs are subtle and can look like typical dementia behaviors.

This guide aims to help care teams and families understand how seizures can occur in dementia, why they happen, and how early detection can enhance safety and quality of care. It translates clinical research into practical advice for observing, documenting, and alerting the clinical team to concerns.

Why Seizures are Common in Dementia

The same brain changes that cause dementia also disrupt regular electrical activity in the brain. In AD, for example, the buildup of abnormal proteins and damage to nerve cells can lead to hyperactivity in the brain, which increases the risk of seizures..

Research has shown that:

- People with AD are up to 10 times more likely to experience seizures than older adults without dementia.
- Seizure risk is highest in the later stages of dementia, but can happen anytime during the disease's progression.
- Subtle, non-convulsive seizures are the most common type and are often mistaken for confusion, fatigue, or typical dementia behavior.

Recognizing this increased risk is essential. Unrecognized seizures can worsen cognitive decline, raise the likelihood of falls, and cause unnecessary hospital transfers.

Seizure Types and Presentation in Dementia

Seizures in dementia often appear very different from the dramatic convulsions most people picture. They are usually brief, subtle, and easy to overlook without training.

The most common types include:

- **Focal Seizures:** These seizures start in a specific part of the brain, usually the temporal or frontal lobes. They can appear as sudden staring, brief unresponsiveness, or repetitive movements, such as lip-smacking or hand rubbing.
- **Non-convulsive Seizures:** These can look like a sudden pause in activity, confusion, or a blank stare, lasting just a few seconds.
- **Subtle Motor Signs:** Small muscle jerks, stiffness, or twitching may occur. These are often mistaken for tremors, fatigue, or age-related weakness.

Since these seizures are often subtle, they are frequently mistaken for typical dementia behaviors or brushed off as brief lapses in attention. Monitoring for and recording these signs can help the medical team identify patterns and take action earlier.

Importance of Early Recognition

Seizures in residents with dementia are often overlooked or misunderstood, which can cause preventable harm. Identifying early warning signs enables staff to respond promptly before complications arise.

Why early recognition matters:

- **Prevention of Injuries:** Many unexplained falls and sudden changes in alertness are linked to seizure activity. Identifying these events early can prevent falls and related hospitalizations.
- **Improved Care Planning:** Documenting and reporting suspected seizures helps clinical teams adjust care plans, monitor medications, and conduct timely evaluations.
- **Reduced Cognitive Impact:** Repeated seizures, even subtle ones, can accelerate cognitive decline if left untreated.
- **Family and Staff Confidence:** When staff recognize and respond appropriately,

families gain trust in the facility's ability to keep residents safe.

Early recognition does not mean diagnosing seizures. It means noticing unusual behaviors, documenting them clearly, and escalating concerns to nursing or clinical staff.

What to Look For - Subtle Signs

Seizures in dementia are often subtle and may manifest as everyday behaviors, making them easy to overlook. Training staff to recognize these signs is crucial to improving resident safety.

Common signs include:

- **Sudden Staring or "Zoning Out":** The resident may stop mid-task, stare blankly, and not respond to verbal prompts.
- **Repetitive Movements:** Lip-smacking, chewing motions, shirt tugging, hand wringing, or other unusual repeated actions.
- **Sudden Drop in Alertness:** Appearing unusually tired, disengaged, or "checked out" for a short time.
- **Brief Jerking Movements:** Sudden twitches or small muscle jerks, often mistaken for tremors or normal aging.
- **Unexplained Falls or Near-Falls:** A sudden loss of balance without a clear environmental cause.

Why These Signs Are Missed:

- They are brief, often lasting only a few seconds.
- They can look like typical dementia behaviors.
- Staff may not be sure what to report or how to describe what they observed.

What To Do:

You don't need to diagnose a seizure. Your role is to watch, document, and report unusual behavior. Record what you saw, how long it lasted, and what the resident was doing before and after the event. This information is crucial for clinical teams to review patterns and risks.

Understanding Seizure Triggers

Certain factors can increase the likelihood of seizures in residents with dementia. Being

aware of these triggers helps staff stay alert to subtle changes and take preventive action.

Common triggers include:

- **Medication Changes:** Certain medications, particularly antibiotics, antidepressants, or antipsychotics, can lower the seizure threshold.
- **Infections:** Urinary tract infections, pneumonia, or other acute illnesses can trigger seizure activity.
- **Metabolic Imbalances:** Low sodium levels, dehydration, or blood sugar fluctuations can increase the risk of seizures.
- **Sleep Deprivation or Fatigue:** Disrupted sleep patterns can increase the likelihood of seizures.
- **Stress or Overstimulation:** Sudden environmental changes or emotional stress may act as triggers.

Staff should monitor residents closely during and after any of these situations. When changes in behavior occur with the introduction of new medications or illnesses, it's critical to document and notify the nursing staff.

Further Support & Resources from SeizureSafe™

By utilizing these tools, care teams can create a comprehensive and accurate record of observations. This enhances communication with families, facilitates clinical evaluations, and strengthens regulatory compliance.

SeizureSafe is continuously updated with new evidence-based materials to help facilities reduce risk and improve outcomes for residents with dementia.

Understanding seizures in dementia is the first step toward improving resident safety and care quality. SeizureSafe provides practical tools, training resources, and guidance designed specifically for senior living teams.

Available resources include:

- **Seizure Observation Checklist:** Helps staff document subtle signs with accuracy and consistency.
- **Seizure Event Documentation Form:** Ensures critical details are captured and

communicated effectively.

- **Seizure Response Flowchart:** Offers a clear, step-by-step guide for responding to a seizure.
- **Additional Learning Materials:** Targeted content for administrators, clinical leads, and direct care teams to support ongoing staff education.

Key References

Introduction

- Vöglein J, et al. Seizures are three times more frequent in Alzheimer's patients compared to healthy controls. *Epilepsy & Behavior.* 2020;102:106728.
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- Kalyvas AC, et al. Alzheimer's disease and epilepsy: Shared pathways and biomarkers. *Journal of Clinical Medicine.* 2024;13(13):3879.

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Understanding Seizure Triggers

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- Lewy Body and Alzheimer disease-related seizure prevalence study: Mariane Vicente et al. *Frontiers in Neurology.* 2024.

Next Steps

- Download the Dementia Seizure Guide PDF for offline reference and share it with your care team and families.
- Review the Seizure Observation Checklist and practice documenting subtle signs during daily care.
- Revisit Module 1: Seizure Recognition and Module 2: Seizure Response for additional training that complements this guide.
- Use this guide as part of team huddles or in-service discussions to reinforce early recognition and reporting.
- Provide feedback from staff and families to SeizureSafe so updates can reflect real-world challenges and needs.