Minimizing the Risks of Choking Death in Nursing Home Residents

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Overview

Between 2007 and 2010 in the United States, 2,214 deaths among people 65 years or older were attributed to choking on food. The death rate for this cause is higher among the elderly than among any other age group. The three most common causes of death associated with choking on food among the elderly were dementia (including Alzheimer’s disease), Parkinson’s disease and pneumonitis. ¹ Choking deaths appear to be on the rise in nursing homes and other health care settings, and have raised the following quality assurance issues:

1. Whether all facility staff is knowledgeable of their responsibility for balancing residents’ rights and residents’ safety;
2. Whether the facility properly assesses and/or reassesses each resident on admission and effectively communicates changes to the resident’s plan of care;
3. Whether the facility’s policies and procedures regarding diet, meal consistency and meal service are clearly communicated to nursing and dietary staff;
4. Whether the facility has sufficient staffing levels;
5. Whether the facility staff receives training regarding choking risks in nursing home residents; and
6. Whether the facility has a protocol for managing choking emergencies.

A Balancing Act

For many care givers, caring for the nursing home resident is a balancing act. On one scale is an endless list of things that must be done to protect residents from harm, and on the other scale is an endless list of things that must be done to maintain and enhance their quality of life. Somewhere is the middle ground that creates a balance. A nursing home may be found negligent if it fails to properly balance the scales by ensuring each resident receives care that promotes his or her psychosocial wellbeing in a setting that is free from accidents. Before a resident is admitted to a nursing home, generally the facility will determine whether it is able to meet the resident’s unique needs. Once the facility makes a decision to admit the resident, it signals the intent to maintain the balance between protecting that resident from harm and enhancing his or her quality of life.

¹ Warner, Margaret et al. Food-related choking deaths among the elderly. CDC, Hyattsville, MD: PubMed 2013
Admission Assessment and Re-Assessment

When a resident is admitted or re-admitted to a nursing home, one of the first things that is done is a nursing assessment. Essentially, the admitting nurse will begin an overall physical, psychological and social assessment of the resident covering things, such as the resident’s ability to perform certain tasks independently, with some degree of assistance or supervision. Generally, the assessment process is ongoing, although there are certain assessments that are timed as initial, quarterly or annually, and others are done when there is a significant change in the resident’s condition. One such initial assessment is an Oral Assessment. On admission, an oral assessment is done to determine whether the resident has his or her own teeth, missing teeth, has no teeth or the resident has partial dentures or full dentures. Additionally, the nurse assesses the condition of the resident’s teeth and oral cavity, including the gums and tongue. The alert and oriented resident may be able to answer many of the questions regarding his or her teeth, and family members often provide additional pertinent information.

Included in the oral assessment is the resident’s ability to eat. The nurse reviews the hospital records and interviews the alert and oriented resident and their family to gather information regarding usual eating capabilities. Oftentimes, the diet the resident was on in the hospital is carried forward on the hospital discharge summary to the nursing home, and the nurse will verify the diet order with a physician. If the resident has a diagnosis or history of swallowing difficulties, dementia or other cognitive deficits, such information are “red flags” that must be communicated to the physician who typically has not yet seen or evaluated the resident. Once the physician verifies the diet order, the nurse completes a diet slip and sends it to the dietary department.

Policies and Procedures Regarding Diet, Meal Consistency and Meal Service

A nursing home should have policies and procedures in place that tell the nursing staff how to verify each resident’s diet and how to communicate diet changes to the dietary staff. The dietary staff should then know how to ensure each resident’s tray is set with the appropriate meal and correct meal consistency.

The nurse will enter the resident’s diet on the Certified Nurses’ Aides (C.N.A) Care Card, or equivalent document, as well as develop a nursing care plan for dental/oral care and diet. Information regarding diet includes the type of diet (regular or mechanically altered, such as mechanical soft or pureed), and any special instructions required when the resident receives the meal, such as whether the resident needs supervision, oversight, encouragement, cueing during meals, one bite at a time, slow pace or alternate liquids and solids. It also is important to note whether the resident has a history of rapid eating, stuffing food, pica or food stealing.

Once the diet slip goes to the dietary department, the cook supervisor and dietary staff should review the order and seek clarification as needed. In a nursing home, the resident’s meal is either served on a tray that arrives to the unit on a dietary cart, or as more nursing homes move to tray-less service, a staff member may take the resident’s order restaurant style, and the meal is placed directly on a plate.
and provided to the resident. Traditionally each resident has a tray ticket or guide with the resident’s name, diet consistency, likes/dislikes and other pertinent information. The nursing staff, usually the C.N.A., will distribute the trays. Regardless of the method of services used, a resident may receive the incorrect meal or meal consistency resulting in choking and possibly death.

**Staffing Levels and Supervision**

It is not uncommon for some nursing home residents to remain in their rooms for meals by choice or due to illness that precludes them from co-mingling with others. A nursing facility should determine the level of supervision each resident’s needs and ensure such supervision is provided. While all clinical staff who serve and assist with residents’ meals must be trained in various protocols, nursing homes also should ensure non-clinical staff who assist with serving residents’ meals receive the necessary in-service regarding how to identify the resident, read the tray ticket and ensure the meal served is the correct one for that resident.

**Choking Risks in the Nursing Home Residents**

Choking is blockage of the upper airway by food or other objects, which prevents a person from breathing effectively. Choking can cause a simple coughing fit, but complete blockage of the airway may lead to death.\(^2\) When food blocks the resident’s airway, it cuts off the supply of oxygen to the lungs. The brain is very sensitive to lack of oxygen and begins to die within four to six minutes. If First Aid is not started during this time, hypoxia will lead to brain damage and ultimately death.\(^3\) Many of us experience some degree of choking in our lives. However, choking in nursing home residents is viewed differently because the nursing home has a duty of care for the residents. This duty is not the same as the duty we have for ourselves in our private homes because care givers, by virtue of their specialized training, are held to a higher standard than the general public.

Human error accounts for the vast majority of choking deaths in nursing home residents, as staff may have given the wrong diet (regular diet instead of required altered consistency). While no caregiver wants a resident to choke, the caregiver must exercise due diligence in meal preparation and service. Nursing home staff also should be mindful of “red flags” that should put them on notice that a resident may be at a high risk for choking, including but not limited to:

- Cognitive deficits (forgetful or confusion, especially where resident has Alzheimer’s Dementia);
- Difficulty swallowing;
- Inability to chew;
- Poor dentition;
- Lack of teeth (edentulous);
- Ill-fitting dentures;

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\(^2\) [www.emedicinehealth.com](http://www.emedicinehealth.com)

\(^3\) [www.emedicinehealth.com](http://www.emedicinehealth.com)
• Excessive coughing during meals; and
• An episode of acute illness, such as pneumonia or urinary tract infection.

Emergency Management During Choking

Choking is an emergency that can quickly result in the death of a resident if not treated promptly. The nursing home staff should be trained to recognize choking in the elderly and immediately summon help internally, as well as activate 911. The facility’s emergency protocol for choking incidents should, at a minimum, include:

• Staff education and training regarding the Heimlich maneuver;
• Availability of resuscitative equipment (crash cart);
• Staff education in administering CPR; and
• Protocol for obtaining additional help. For example, using a code word, such as “code blue.”

Case Study

Ms. Geri Atrics has resided at Compassionate Care Skilled Nursing Facility for more than five years. She is 87 years old, and is alert with periods of confusion. She has a diagnosis of early onset Dementia, CHF, Insulin Dependent Diabetes Mellitus (IDDM) and a history of esophageal stricture due to Esophageal Varices from previous years of heavy drinking. She is on a 1,800 calorie diet, regular consistency, and has had no difficulty eating. She loves hotdogs and her daughter, Devouta, who is also her POA, often remarks, “mom has been eating hot dogs all her life. Don’t deprive her now. Give it to her. She knows how to chew and swallow.” The staff is fond of Ms. Atrics and lets her eat in her bedroom, as she does not like the crowd in the dining room. Staff often sets up her tray and leaves her as she is able to feed herself.

Recently Ms. Atrics developed Pneumonia for which she was hospitalized. While in the hospital, she complained of pain when swallowing and said she felt a lump in her throat. An upper endoscopy and biopsy of an esophageal mass was positive for cancer. Her daughter declined invasive surgery and instead opted for hospice and palliative care. Ms. Atrics was readmitted to Compassionate Care Skilled Nursing Facility on Saturday, Sept. 29 at 6:45 p.m. following a 10 day hospitalization.

Nurse Proper completed the admission assessment, verified all the re-admission orders, including a change in diet consistency from regular to mechanical soft, and sent the dietary slip to the dietary department. Complacent, the weekend cook told the dietary aides that Ms. Atrics was readmitted. However, she neglected to review the dietary slip. Assuming there were no changes to Ms. Atrics’ diet, the dietary aide proceeded to prepare her tray.

When Ms. Atrics’ tray arrived on the unit, it was left on the cart for a while, as one C.N.A was on break, and the other was still providing care to other residents. Her daughter, Devouta, visited and, as usual, proceeds to help because they are short staff again on the weekend. She got her mother’s tray from the cart and gave it to her mom. She was about to feed her mom when her cell phone rang and Devouta became engaged in a conversation with her sister, Doolittle.
Unable to wait much longer, and seeing her favorite food, Ms. Atrics reached for a hotdog and began to eat it. Her partial upper denture was still in the denture cup on her night stand. She managed to take two bites of the hot dog. Devouta ended her conversation and turned to feed her mother, except her mother’s head was slumped over to the side. She yelled for help. Nurse Proper promptly responded, and noticing a piece of hotdog on Ms. Atrics shirt, started the Heimlich as she yelled, “call 911.” The lone C.N.A. on the unit did not hear the call for help, as she was at the other end of the hallway. Devouta dialed 911 from her cell phone.

The paramedics arrived and took over CPR. Ms. Atrics was pronounced dead at the hospital. The Medical Examiner’s report listed cause of death as choking asphyxiation.

**Case Study Analysis**

The nursing home staff should be alert to the increased episodes of choking and choking deaths among nursing home residents. Examine the scenario above and contemplate the following questions:

1. What acts and/or omissions of the nursing home staff, if any, contributed to Ms. Atric’s death?
2. Is the daughter, Devouta, partially liable? Should she be?
3. What were the cook’s and dietary aide’s responsibilities?
4. Is Nurse Proper liable? Why or why Not?
5. How could this event be prevented?
6. How confident are you in your facility’s policies and procedures for resident’s meal service and supervision during meals?
7. For residents who chose to eat in their room, how would you rate the level of supervision they receive? Do they need closer supervision?
8. What is your facility’s policy and procedure regarding family members/visitors assisting a resident with his or her meal?

**Conclusion**

Nursing homes should consider having protocols in place to minimize breaks in the chain of accountability regarding preparing and serving the residents’ meals. The nursing home staff should be mindful of:

- An identified swallowing disorder in a resident;
- A healthcare practitioner’s order for an altered textured diet;
- Behavior plan that addresses eating behaviors, including but not limited to rapid eating, stuffing food, pica or food stealing;
- Altered mental status in a resident;
- Progression of Dementia; and
- Possible change of condition due to an acute illness or hospitalization.

As with medication administration, nursing homes may need to formulate the “five rights” for residents’ meal service, which include:
1. Right resident;
2. Right diet;
3. Right consistency;
4. Right eating location (dining room, feeding room, or bedroom); and
5. Right level of assistance and/or supervision.

By working together, everyone can help decrease the likelihood of choking and choking related deaths in nursing homes.

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