ADVANCED DEMENTIA AND FALLS

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HOW MOST OF THE WORLD THINKS OF FALLS
HOW WE THINK OF FALLS

And the ever popular... CASPER report!
THE REALITY OF FALLS

• One in four Americans aged 65+ falls each year.
• Every 11 seconds, an older adult is treated in the emergency room for a fall; every 19 minutes, an older adult dies from a fall.
• Falls are the leading cause of fatal injury and the most common cause of nonfatal trauma-related hospital admissions among older adults.
• Falls result in more than 2.8 million injuries treated in emergency departments annually, including over 800,000 hospitalizations and more than 27,000 deaths.
• In 2015, the total cost of fall injuries was $50 billion; Medicare and Medicaid shouldered 75% of these costs.

Source: Center for Disease Control and Prevention

THE REALITY OF DEMENTIA

• Alzheimer's is the 6th leading cause of death in Americans
• Every 65 seconds someone develops the disease
• Cost to Americans is $277 billion
• A study by Allan, et. al showed 65% of residents with dementia in their study had at least 1 fall in a year’s time and the residents with dementia were 8 times more likely to fall from the same predictors as those without. Why?
  – cardioactive medications
  – autonomic symptoms
  – symptomatic orthostatic hypotension
  – depression
  – limitation of physical activity

UNFORTUNATE TRUTH

FALLS RELATED TO DEMENTIA ARE...

VERY HURTFUL
VERY EXPENSIVE
VERY EXPECTED

But not hopeless...

BREAKING IT DOWN

1. Physiology of falls
2. Nursing smarts and open forums with families
3. Interventions
4. Care planning
PHYSIOLOGY OF FALLS...WHY FALLS IN DEMENTIA?

With brain deterioration, particularly in advanced dementia the synapses that go from brain to body are either gone or have deteriorated enough that they aren't synapsing any more.
THEN WHY DO PEOPLE WITH DEMENTIA THINK THEY CAN STILL GET UP?

Because deterioration usually starts from the frontal lobes and head back.

First memories - walking, standing up, parents, soothing sounds, smells, textures… these are tucked away in the back and are the last to go…

NORMAL GROWTH CYCLE

- **Infants** - cry to make their needs known; **nonambulatory**, dependent for all ADLs

- **Toddlers** - throw fits, **no** often means yes, hit, scream, often have difficulty in calming down, starts using words but sometimes incorrectly, **walking on their own but can be unsteady, especially when upset**, at least assist x1 in most ADLs

- **Young Child** - gets frustrated easily, walking normally, generally very active, beginning to form own opinions, assist x1/supervision ADLs

**WITH DEMENTIA YOUR BRAIN STARTS GOING BACKWARDS IN THE CYCLE...**
NORMAL AGING RELATED TO FALLS

- Less connection between brain and optic and balance systems (proprioreception, vestibular system)
- Less ability to rapidly and efficiently contract muscles in the legs
- Fluctuations in blood pressure, at risk of orthostasis, changes in total body water affecting kidney regulation of blood pressure
- Leading to falls through impaired postural control or cerebral hypoperfusion in association with syncope.
- Decreased muscle mass


THEREFORE...

If it’s hard to get up from the chair without using your arms, your legs are weak, you have poor depth perception, poor visual contrast, lousy balance, orthostatic hypotension, you have to pee, AND... half your brain is gone...

YOU’RE PROBABLY GOING TO FALL!
A 2010 study by Van Newsbergen and Nawrot showed the top chronic medical conditions associated with NH admission were dementia and stroke, followed by diseases of the circulatory system (35%) [2/3 sequels of stroke and 1/5 heart failure], diseases of the nervous system (15%) [mainly Parkinson’s disease] and the musculoskeletal system (14%) [mainly osteoarthritis]. Symptoms (functional limitations without specific disease) like dizziness, impaired vision and frailty are of relevance as an indicator of admission.

CONCLUSION?

A BIG RECIPE FOR FALLS BEFORE THEY EVER GET IN YOUR DOOR!

SO HOW DO YOU HANDLE IT?

**BE UP FRONT! TALK ABOUT THE ELEPHANT IN THE ROOM!**

1. How long have they noticed symptoms of dementia?
2. What were their routines at home? Are they a morning person? Do they frequently get up to use the bathroom?
3. How many times have they fallen in the past month? Was it doing a specific activity?
4. How well (and with what) do they ambulate? How far?

PS: This is a great time to talk about side rails, alarms, restraints, low beds, mats, and how your goal will be to prevent injury from falls rather than completely prevent falls themselves.

TYPES OF FALLS TO TALK ABOUT

1. **Accidental** - nothing you could have done, all the correct interventions were in place, it just happened
2. **Physiological** - something was off inside (orthostatic hypotension, dizziness, dehydrated)
3. **Unanticipated** - something you weren’t expecting in that situation or with that person

All of these kinds of falls happen and this is a good time to have a candid conversation. Your home isn’t really different than theirs when it comes to falls... except with dementia, they are less familiar with the environment.
WHEN ARE THEY THE MOST VULNERABLE?

- On admission - new environment, new people, new routines \rightarrow none of it familiar!
- Change of medication(s)
- Progression of the disease
- With dehydration
- When they're stressed

This is what makes managing falls with dementia so tough, particularly in a nursing home where you have multiple residents with dementia, each with their own agendas, a limited number of staff, and a million things going on at one time. The key is to be proactive!

INTERVENTIONS

- Annual medication review and with every significant change!
  - Are these drugs still necessary? Is it the right dose? There is significant over control of hypertension in people 80 y/o +
  - Reduce/eliminate high-risk meds
  - Decrease the total # of meds
INTERVENTIONS

• Actually train residents on the use of call lights.
• Hourly rounds (if not daily/routine AT LEAST when you have someone falling frequently or getting sick)
  – Some hospitals do hourly rounds, alternating the nurse and CNA. They also train all staff that could possibly be in the rooms (housekeeping, maintenance, dietary staff)

INTERVENTIONS

Personalize your fall program per person

– Many falls are based on need-driven actions. This is why knowing or determining an individual’s actions is so important. If we can figure out why they’re getting up (what they need), we might be able to anticipate those needs and prevent a fall.
– Reduce the amount of stress that person is under. As dementia progresses, the ability to cope with stress decreases, thereby increasing agitation and decreasing muscle control resulting in falls.
  • Take them to a quiet space…outside, their room. Add music via headphones, or sitting in the garden, or just wrapping a blanket around them and allowing them to lie down or sit in the Lazy-Boy. Yes, you might have to get them back up again before supper, but if they fall, you’re getting them up anyway. This way they don’t get hurt.
INTERVENTIONS/QAPI FALL REVIEW BY LOCATION

![Falls by Location graph]

INTERVENTIONS/QAPI CHART REVIEW

Resident - Emmalea Smith
BIMS: 12
Communication: Good
Dx: HTN, DM, depression
Meds: insulin, antidepressant
MDS notes: 2x assist bed, transfers, walking, occasionally incontinent
Careplan: need nonpharm interventions for psychotropics

Summary: Uncontrolled diabetes, general failure to thrive medically—nurse’s notes state → trouble falling asleep, trouble concentrating, delusions, “tired”—May try uninterrupted sleep strategies
**INTERVENTIONS/QAPI FALLS BY SHIFT**

![Graph showing falls by shift]

*More falls at shift change for this resident*

_Falls at shift change common trend_

**INTERVENTIONS/STAFF EDUCATION... LOTS AND LOTS OF EDUCATION!**

- By resource - pharmacist, medical director, online education via CDC Grand Rounds
- By topic - basic dementia, hypotension, dehydration, visual changes
  - (Resources Alzheimer’s Association, cardiology PA, NPs, hospital education sessions, ophthalmologists)
INTERVENTIONS/POST-FALL HUDDLE

Post-Fall Huddle: Essential Components

- A brief staff gathering, interdisciplinary when possible, that immediately follows a fall event
- Convenes within 15 minutes of the fall event
- Led by clinician(s) responsible for patient/resident during the fall event
- Involves the patient/resident whenever possible in the environment where the patient/resident fell
- Requires group discussion to learn what happened
- Uses discovery to determine the root cause/immediate cause of the fall (why the patient/resident fell)

Post Fall Huddle Guidelines

<table>
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<tr>
<th>Date</th>
<th>Time of Fall</th>
<th>Time of Huddle</th>
<th>Room</th>
<th>SHIFT (pm/3am)</th>
<th>D/PM/NOC</th>
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Pertinent Medical Info

LOCATION of FALL
- Bed
- Wheelchair
- Commode
- Chair
- Quay
- Hallway
- Room
- Restroom

BACKGROUND: Fall risk factors / risk for injury (check all that apply):

- Altered Mental Status
- Difficulty in seeing
- Difficulty in hearing
- Falls in or around the patient
- Medications (sedatives, narcotics, antihistamines, anticholinergics)
- Low blood pressure
- New blood pressure/medication changes

Information Related to Fall Event

1. Was patient on fall precaution? __________ YES ______ NO
2. Most recent Fall Risk Assessment date? __________
3. Was patient alone at the time of fall? __________ YES ______ NO
4. Describe in patient’s own words what they were doing prior to fall.
INTERVENTION/POST-FALL... THE NEXT STEP

IF they go to the hospital, COMMUNICATE more than just vitals and what they hit when they fell. Remember, dementia is a disease with individual characteristics.

- What is their baseline?
- What are their habits?
- Are they ambulatory?

2 key things to remember: a) Giving info up front can help prevent taking them off Seroquel later, b) Being in the hospital is another new environment - it’s going to be hard on them!

*One community’s hospital calls the nursing home to discuss their patients with dementia if the nursing home doesn’t call - they have a good open communication channel that benefits them both and truly benefits the patient.

Remember - Falls are EXPENSIVE!! If an injury occurs from a fall at the hospital, the hospital is responsible for the charges. So hospitals don’t like falls either!

- Cost of a CAT Scan: $1,200
- Cost of an MRI: $2,600
- Overnight on a Med-Surg floor: $2,000
- Cost of emergency room visit: $1,200

Without any major problems, fractures, lacerations, etc. a minimum cost can be around $7,000.
INTERVENTION/POST-FALL
THE NEXT STEP

Or maybe the first step???

• Keep them walking when they walk in the door.
• Keep your eye out for patterns.
• Think individual routines and actions.
• Get serious about passive range of motion and gentle exercise.
• DRINK!
• And, after the fact… try serious restorative therapy AND occupational therapy.

CAREPLANNING… COMMONALITIES

• “Call light within reach” - this is fine if they can actually use a call light
• Goal: Will have no falls within the next 90 days (nice but be realistic!) Try: will have no major injury from falls
• Do you have to put every fall on the careplan?
  – No, but they should be on a fall log that is part of the careplan, keeps it clean, and makes it easier to track patterns
QUESTIONS?

Feel free to reach out to your QIPMO team member for more information and help with a QAPI falls program.

www.nursinghomehelp.org