Diagnosis and Management of Cognitive Disorders in LTC

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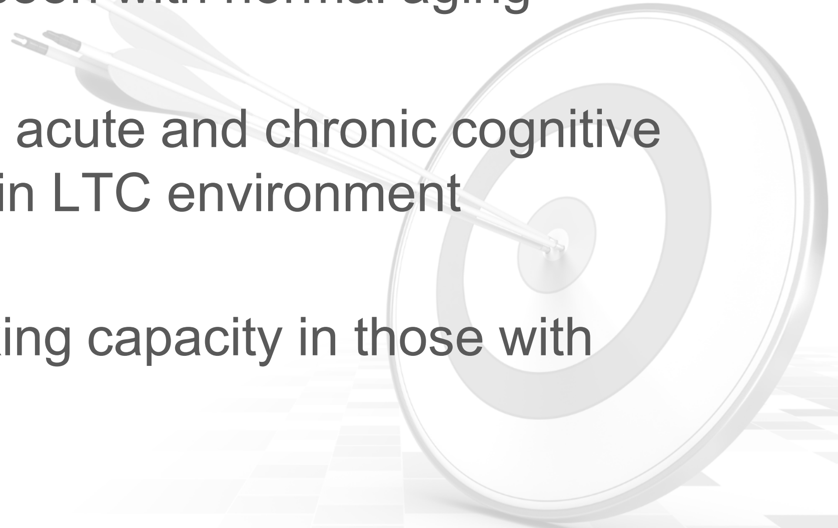
Case Presentation

- 87 yr old female with limb-threatening left lower leg ulceration has been LTC resident for 3 years
- PMHx includes stroke, diabetes, atrial fibrillation, osteoporosis, advanced peripheral vascular disease
- Usually oriented to person and place, but dependent for most IADLs
- Wound care specialist has recommended amputation and she refuses to consent

Learning Objectives

- Understand cognitive changes seen with normal aging
- Be able to differentiate between acute and chronic cognitive dysfunction cognitive disorders in LTC environment
- Be able to assess decision-making capacity in those with cognitive impairment



Cognitive Changes with Normal Aging

- Decline in total capacity of working memory
- Episodic memory (particular events in time) declines starting in the 6th decade of life
- Memory retrieval takes longer
- Processing and communication of information in the brain takes longer
- More difficulty disregarding irrelevant or distracting information

Key is *ability to adjust*, making accommodations while maintaining quality of life and independence

Acute and Chronic Cognitive Dysfunction

- Delirium is a disorder of attention and awareness that develops acutely and tends to fluctuate
- Dementia tends to develop more insidiously and leads to cognitive and functional decline over the course of many months to years
- Also common to see a person with dementia who develops superimposed delirium

Delirium

Need to meet criteria for *1 and 2* **and** *3 or 4*

1. Acute onset and fluctuating course

2. Inattention

3. Disorganized thinking

4. Altered level of consciousness

Confusion assessment method (CAM) developed by Dr. Sharon Inyoue

Acute Onset and Fluctuating Course

- Imperative to have input from those who know the patient best (caregivers, NH staff)
  - "What are they like 2 weeks ago?"

- Knowing the individual's "baseline" is invaluable when baseline cognitive impairment is present
  - Collateral history is best means for this

Inattention

- Ability to follow a conversation
- Digit span – up to 5 forwards and 4 backwards
- Months of the year backwards

Delirium

Disorganized thinking

Does the patient have rambling or irrelevant conversations, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

Altered level of consciousness

Is the patient anything besides alert?

Hypervigilant, lethargic, stuporous, comatose

Major Neurocognitive Disorder (Dementia)

Group of various disorders that cause significant decline in one or more cognitive domains severe enough to result in functional decline

- Memory, language, orientation, calculation, visuospatial, executive function, attention

Mild Neurocognitive Disorder (aka MCI) is cognitive decline with preserved function

Instrumental Activities of Daily Living

- Using the telephone *
- Shopping
- Doing housework
- Doing laundry
- Preparing meals
- Driving
- Managing medications
- Managing finances*

* More pertinent to LTC residents

What is most important in LTC setting?

- Delirium is often reversible and should be evaluated promptly
- Most LTC residents have assistance with IADLs already, so ADLs become more of the focus
- Current dementia medications only modestly improve symptoms
- Behavioral symptoms of dementia
- Decision making capacity and advanced care planning
  - Medical decisional capacity can be assessed by clinicians

Assessing Medical Decisional Capacity

- **Understanding** the nature of the decision and alternatives
- **Appreciation** that the decision being made will affect their body
- Able to explain **reasoning** and weigh options against personal values
- Have the capacity to articulate a **choice** and maintain this choice over time.

Assessing Medical Decisional Capacity

- What is your main medical problem right now?
- What treatment has been recommended ?
- If your receive this treatment, what will happen?
- If you don’t receive this treatment, what will happen?
- Why have you decided to/not to receive this treatment?

Mark Siegler MD “Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine,” 7th Edition (2010)

Case Conclusion

- She has a formal diagnosis of vascular dementia with impairment in short term memory, visuospatial, language (dysarthria) and executive function

- She remains able to paraphrase the decision around leg amputation, provides reasoning, understands consequences and is able to articulate her choice.

Project
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