Supporting the Patient with Dementia

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Learning objectives

• Understand basic techniques to identify dementia in your patients
• Understand how to provide support to the patient and their caregivers over the course of dementia including specific situations such as:
  • Agitation
  • Delirium
  • Sleep disorders
  • Wandering
  • Weight loss
  • Wandering
  • End of Life
Dementia Diagnosis

• Dementia is common
  • 24 million people worldwide over age 60 with dementia
  • Prevalence increases with age
    • 25% of 80 year olds
    • 33% of 85 year olds
    • 50% of 90 year olds

• Physicians often do not recognize dementia or mild cognitive impairment in their patients
  • Physicians unaware of cognitive impairment in >40% of patients (Chodosh JAGS 2004)
  • > 50% of patients with dementia had not received a clinical cognitive exam by their physician (Kotagal Neurology 2014)
Conflict of interest

- No conflict of interest
What is “normal” cognitive decline with aging?

- Mild changes in memory-decline in learning
- Mildly Slower Rate of information processing
- These changes are not progressive
- These changes do not affect function

Petersen Neurology 1992
Small Neurology 1999
Dementia Diagnosis

• DSM-5 Criteria (2013) for Major Neurocognitive Disorder (Dementia)
  • Significant cognitive impairment in at least one cognitive domain
    • Learning and memory
    • Language
    • Executive function
    • Complex attention
    • Perceptual-motor function
    • Social cognition
Dementia Diagnosis

• Significant decline in previous function
  • Activities of daily living (ADLs)
    • Feeding, dressing, grooming, bathing, toileting, continence, transferring/ambulating around home
  • Instrumental activities of daily living (IADLs)
    • Use of telephone, shopping, housework/laundry, meal preparation, taking medications, taking care of finances, traveling outside home
Dementia Diagnosis

- Impairment must be acquired
- Disturbances must not occur exclusively during a course of delirium
- Disturbances must not be better accounted for by another mental disorder (e.g., Depression, Bipolar disorder, schizophrenia)
Cognitive Screening tools

- Mini-Cog (very quick screen)
- Mini Mental Status Exam (well known but now proprietary and does not measure executive function well)
- Montreal Cognitive Assessment (MOCA) mocatest.org
- St Louis University Mental Scale (SLUMs)

www.nia.nih.gov/research/cognitive-instrument
Mini-cog

- One of the quickest screening tool (3-5 min)
- 3 word recall plus a clock drawing test
  - Have patient listen to and remember 3 words
  - Have patient draw the face of a clock (on blank paper or with circle previously drawn) and set hands to a specific time
  - (eg. 11:10, 1:10, 2:45)
  - Have patient try to recall the 3 words

- Scoring: 1 point for each recalled word after clock test, clock is “normal” if all numbers are in correct order and in correct location and hands are set to correct time.
Figure 1. The Mini-Cog scoring algorithm. The Mini-Cog uses a three-item recall test for memory and the intuitive clock-drawing test. The latter serves as an “informative distractor,” helping to clarify scores when the memory recall score is intermediate.
VAMC
SLUMS Examination

Name: __________________________ Age: ____________

Is patient alert? __________ Level of education ____________

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1. What day of the week is it?
2. What is the year?
3. What state are we in?

4. Please remember these five objects. I will ask you what they are later.
   Apple  Pen  Tie  House  Car

5. You have $100 and you go to the store and buy a dozen apples for $3 and a tricycle for $20.
   How much did you spend?
   How much do you have left?

6. Please name as many animals as you can in one minute.
   0-4 animals  5-9 animals  10-14 animals  15+ animals

7. What were the five objects I asked you to remember? 1 point for each one correct.

8. I am going to give you a series of numbers and I would like you to give them to me backwards.
   For example, if I say 42, you would say 24.
   87  649  8357

9. This is a clock face. Please put in the hour markers and the time at
   ten minutes to eleven o’clock.
   Hour markers okay
   Time correct

10. Please place an X in the triangle.
    Which of the above figures is largest?

11. I am going to tell you a story. Please listen carefully because afterwards, I’m going to ask you
    some questions about it.
    Jill was a very successful stockbroker. She made a lot of money on the stock market. She then met
    Jack, a devastatingly handsome man. She married him and had three children. They lived in Chicago.
    She then stopped work and stayed at home to bring up her children. When they were teenagers, she
    went back to work. She and Jack lived happily ever after.
    What was the female’s name?
    What work did she do?
    When did she go back to work?
    What state did she live in?

TOTAL SCORE

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<table>
<thead>
<tr>
<th>High School Education</th>
<th>Less than High School Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-30</td>
<td>Normal</td>
</tr>
<tr>
<td>21-26</td>
<td>MNCD*</td>
</tr>
<tr>
<td>1-20</td>
<td>Dementia</td>
</tr>
</tbody>
</table>

* Mild Neurocognitive Disorder

SH Tariq, N Tumosa, JT Chibnall, HM Perry III, and JE Morley. The Saint Louis University Mental Status
(SLUMS) Examination for Detecting Mild Cognitive Impairment and Dementia is more sensitive than the Mini-
How can you support your patient with dementia?

- Support needs vary depending on severity of cognitive decline

<table>
<thead>
<tr>
<th>Mild Dementia</th>
<th>Moderate Dementia</th>
<th>Severe Dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor short term memory-missing appts</td>
<td>Worse memory-repeating/perseverating</td>
<td>Loss of remote memory</td>
</tr>
<tr>
<td>Decreased insight</td>
<td>Difficulty with IADLs/some ADLs</td>
<td>ADLs lost including continence</td>
</tr>
<tr>
<td>Less organized</td>
<td>Delusions/agitation/Aggression/sundowning</td>
<td>Unable to recognize familiar people</td>
</tr>
<tr>
<td>Problems managing meds</td>
<td>Gait/balance issues falls</td>
<td>Swallowing issues/aspiration</td>
</tr>
<tr>
<td>Lost in new places</td>
<td>Lost in familiar places</td>
<td>Agitation/sundowning</td>
</tr>
<tr>
<td>Problems managing finances</td>
<td>Restless/wandering</td>
<td>Less mobility bedbound</td>
</tr>
<tr>
<td>Personality/mood changes</td>
<td>Apathy/depression</td>
<td>Mute or little speech</td>
</tr>
</tbody>
</table>
Support with Different Dementia types

• Support is needed no matter the etiology of Dementia
• Only some subtle differences in support needed
  • Alzheimers Disease
  • Vascular Dementia—may be more likely to remain stable
  • Mixed dementia (Alzheimers + Vascular)
  • Fronto-temporal Dementia—occurs at younger ages, disinhibition & impaired judgement, some forms with aphasia/language issues predominant
  • Parkinson’s Dementia—also dealing with motor issues of Parkinsons
  • Lewy Body Dementia—hallucinations predominant
  • Chronic traumatic encephalopathy—can occur at younger ages, other traumatic brain injury issues (agression, impulsiveness)
Support options?

• Treatments

• Prevention

• Long term planning

• Supporting the caregiver
Support options?

• Support for common dementia related issues
  • Agitation
  • Delirium
  • Sleep disorders
  • Wandering
  • Weight loss
  • Safety concerns- staying in the home, driving
  • End of life/palliative care
Treatments-FDA approved

- Cholinesterase inhibitors- none are disease modifying, small symptomatic effect in small %
  - Donepezil- all levels of severity
  - Galantamine-mild to moderate severity
  - Rivastigmine-all levels of severity
- NMDA (N-methyl-D-aspartate)receptor antagonist, not disease modifying, small symptomatic effect in small %
  - Memantine-moderate to severe severity
Treatments-
herbals/supplements

Caprylic acid (medium chain triglyceride) **
Coconut oil **
Coenzyme Q **
Coral calcium **
Ginkgo biloba *
Huperzine A *
Omega 3 fatty acids **
Phosphatidylserine **
Tramiprosate **
Turmeric **
Cinnamon **
Vitamins (D**, E #, B **)  

* No effect in RTC  ** Not adequate research    # mixed findings in trials
Prevention

• Exercise
• Healthy diet
• Social engagement
• Cognitive stimulation

• Controlling/preventing vascular risk factors
• Avoid head trauma
• Avoiding things that can precipitate delirium
• Avoiding smoking, alcohol, drugs
Long term planning

• Discovering a dementia diagnosis makes long term planning critical
  • Name POA for healthcare
  • Discuss advanced directives
  • Consider current or future need for assistance with IADLs (medication management, finances, transportation, shopping, housework)
  • Consider future living arrangements
  • Educate patient and family about disease progression/prognosis
Supporting the caregiver

• Critical to support caregiver in order to support patient
• Caregiver burden is risk for elder abuse
• Respite, Respite, Respite!

• Sources of support:
  • Have caregiver consider support from family, friends, religious organizations/churches (catholic charities, Jewish services)
  • Area Agency on Aging in each county
    www.alleghenycounty.us/Human-Services/About/Offices/Area-Agency-on-Aging.aspx
  • Alzheimers Association    www.alz.org
  • VA benefits for Veterans and Veterans’ spouses
Supporting the caregiver

- Respite care
  - Inpatient respite to give caregiver a longer break/vacation from caregiving
  - Adult Daycare- more supervised Senior Center – provides day long respite for caregiver plus activities/meal for patient
  - In-home respite- nurses aid, neighbor, friend- sits with patient at home to allow caregiver free time

- Income based services for dually eligible (have Medicaid and Medicare) patients (administered through AAA)
  - Community Life (PACE program)
  - PDA waiver program
Agitation

• Little data showing benefit of any medication for agitation—significant potential adverse effects from benzodiazepines, antipsychotics
  
  Exception—citalopram (SSRIs), perhaps cholinesterase inhibitors

• Avoid physical restraints—significant adverse effects

• Behavioral techniques **most** effective in the literature
  
  • Redirection
  
  • Adjusting environment and interactions to avoid “triggers”
  
  • Determining unmet daily needs
  
  • Structured environment, avoiding change in environment
  
  • Consistent daily schedule
Delirium

- Patients with low cognitive reserve are at risk for delirium
- Delirium in these patients can linger for long periods of time (weeks to months)
- In some cases it is difficult to distinguish between delirium effects and decline in cognition and function because of dementia progression
- Avoid things that may lead to delirium, treat conditions causing delirium
  - Anticholinergic medications, sedating medications
  - Infections
  - Low or high glucose
  - Hypothyroid, hyperthyroid
  - High calcium
  - Hypoxia
  - Urine retention
  - Constipation
  - Changes in environment/schedule
Sleep disorders

- Common - 25-35% of dementia patients - greater than in age matched controls
- Reversed sleep-wake cycle is common
- Likely multi-factorial etiology
- Adds to caregiver burden - meds usually prescribed at request of caregiver but no data that any class of med solves problem

Non-pharmacologic - sleep hygiene:
- Avoid daytime naps
- Avoid ETOH, avoid caffeine & excess fluids at night
- Consistent sleep-wake times
- Exposure to morning light
- Exercise during day
Safety Concerns

- **Driving**
  - No one test can define when patient should stop driving
  - Be aware of family concerns noted during driving
  - Issues with executive function (impaired Trails B test and clock drawing test) strongly related to higher crash risk
  - Other important cognitive areas for driving: attention, visual-spatial, and processing speed.

- **Living Alone**
  - Poor memory can lead to issues with forgetting to pay bills, forgetting medications, forgetting appointments, forgetting pot on stove
  - Poor executive function will entail poor organization, poor judgement, poor problem solving skills- patient may not be able to cope during an emergency situation

- **Financial Capacity**
  - Executive function and memory often are critical in managing finances appropriately
Wandering

- All persons with dementia are at risk for getting lost even if they never wandered before (6 out of 10 patients)
- Risk increased when unattended but 65% are in the presence of a caregiver
- Increased risk of death if patient wanders into secluded natural areas in hotter or colder times of year 46% will die if not found in 24 hours
- Modify environment to help prevent patient leaving the home:
  - Alarms on bed, doors
  - Locks on doors (which patient cannot open)
  - Camouflage doors. “Stop” sign on door.
  - Child proof door knob covers
  - Interesting items kept by door to distract patient from leaving
- Have someone with patient at all times- Respite for fatigued caregivers
- Regular exercise for patient
- Alzheimers Association Safe Return program alz.org/Services/SafeReturn.asp
  - ID tags, bracelet/necklace, GPS tracking devices
Weight loss

• Failure to Thrive Syndrome
• In moderate dementia generally related to inadequate calorie intake “forget to eat” or unable to obtain food
• Consider whether depression may be contributing
• In severe dementia can have oral dysphagia (pocketing or spitting out food), pharyngeal dysphagia (delayed swallowing, aspiration), & and inability to perform the task of eating

• Benefits from increased support, monitoring of meals, “cueing” to take a bite and chew, adding high calorie meals & snacks, eliminating dietary restrictions
• Little data that megestrol is beneficial, dronabinol only very small studies. Both with significant adverse effects in elderly
Weight loss in advanced dementia

- In end stage dementia patients often are unable to feed themselves, aspiration common
- PEG tubes not recommended
  - studies show no difference in mortality, nutritional status, healing of pressure ulcers, or preventing aspiration
  - higher morbidity- tube dislodgement & tube blockage common and lead to ER transfer, use of restraints higher, pressure ulcers higher
- Slow hand feeding recommended to minimize adverse events
- This is time intensive (45-90 min/day)
- Palliative goals-
  - abandon specific calorie intake and dietary restriction
  - Feed for comfort and pleasure of tasting food
End of Life/Palliative Care

• Advanced dementia is a state of profound physical and cognitive disability
• Common complications with high related mortality
  • Infections (pneumonia, UTI, septicemia)
  • Eating problems (weight loss, aspiration)
  • Pressure ulcers

• Discuss goals of care with POA/family
  • Consider eliminating medications without clear benefit for patient
  • Slow hand feeding if possible for pleasure. No PEG tubes.
  • Careful consideration if courses of antibiotics are beneficial
  • Avoid repeated hospitalizations
  • Palliative care/hospice care
Conclusion

• Dementia is a common condition among older patients that is under recognized
• The issues for the patient and caregiver can change as the disease progresses
• Understanding how to support the patient and their caregivers at different stages is critical to providing the best care for the patient