Alzheimer’s 101

Comprehensive Review of Clinical Staging and its Impact on Plan of Care Development

What is Alzheimer’s Disease?

Dementia
Deterioration of intellectual faculties resulting from an organic disease or a disorder of the brain.

Alzheimer’s Disease (Primary Degenerative Dementia)
Vascular
Other
Retro-genesis

High Level Processing

- Improved Communication/ Memory
- Fine Motor Skills
- Speech/Walking
- Responds to Environment

Decreased Communication/ Memory

- Decreased Fine Motor Skills
- Loss of Speech/ Gait
- Responds to environment

Global Deterioration Scale

- Stage 1: No Cognitive Decline
- Stage 2: Very Mild Cognitive Decline
- Stage 3: Mild Cognitive Decline
- Stage 4: Moderate Cognitive Decline
- Stage 5: Moderately Severe Cognitive Decline
- Stage 6: Severe Cognitive Decline
- Stage 7: Very Severe Cognitive Decline

Typical Living Situations by GDS

<table>
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<tr>
<th>GDS Stage</th>
<th>Independent Community Living</th>
<th>ALF/Adult Day Care or Other Supervision</th>
<th>Appropriate for SCU, ENG or ALF</th>
<th>SNF Care</th>
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GDS Stages 1-3

- GDS Stage 1: No memory deficit on clinical interview
- GDS Stage 2: Subjective complaints of memory deficits. Similar to experiences when under stress.
- GDS Stage 3: Deficits with concentration/memory, word finding, problem solving, higher executive function. Denial and mild anxiety begins.
Stage 3

• May be referred to as **Mild Cognitive Impairment (MCI)**
• Earliest clear-cut deficits with intensive interview
• Forgetfulness often noticeable to others who are intimate (spouse).
• May be able to mask deficits from those who are not intimate (neighbors)
• Poor work performance in cognitively demanding jobs.

Stage 3: Caregiver Responsibility

• Rule out potential causes for the changes in cognition
• UTI, Vitamin Deficiency, Dehydration, other forms of infection, changes in hearing acuity, etc.

Introducing...

Stage 4

• Needs Autonomy and Control
• Functions best in a familiar environment
Stage 4: Behavior

- Denial: you are the problem
- Flattened expression
- Withdrawal from challenging situations/or activity in general
- Very focused
- Anxious, angry, wants autonomy
- Depression

Stage 4: Behavior

- Tends to refuse things that are new or not their own idea
- It is important for people to establish a relationship or rapport to earn trust.

Stage 4: Communication

- Very functional and socially appropriate
- Communication may be self centered
- Able to make needs known
- Able to participate in conversation
- Difficulty naming objects, people, places
- Limited reading comprehension
- May need cues for word finding deficits
- May take as long as 2 hours in conversation for the patient to demonstrate overt symptoms

Stage 4: Caregiver Approach

- Be Creative
- Spend time to develop a relationship
  - Be reassuring
  - Collaboration with patient to allow respectful participation during decision-making
- VALIDATE
Stage 4: Treatment Strategies

- Rigid routine
- Reduce distractions
- Provide more time to respond and process
- Give them opportunity for success
  - Use written, visual and environmental cues
  - Allow multiple attempts for success

Stage 4: Intervention Opportunities

- Bathing
  - Repetition of tasks for carryover
- Dressing
  - Group clothing with easy closure
- Feeding
  - May require adaptive equipment
- Toileting
  - Manageable clothing
  - Cues for hygiene

Stage 4: Goal Starters

- Patient will complete toileting task independently when all supplies are set up, with 1 verbal cue every 2 hours from staff.
- Patient will perform UE dressing with supervision and <25% verbal cues with all necessary items placed in sight in seated position.
- Patient will collect supplies for self care tasks from labeled closet with supervision for balance and <3 verbal cues to sequence

Eye for an Eye
Introducing…

Stage 5

• “I’m on a mission”
• I gotta be me!”
• All dressed up and no place to go! Appearance changes slightly
• Can’t survive without assistance.
• Admitted to SNF due to cognitive deficits

Stage 5: Behaviors

• Not oriented to reality
• Delusion is their perception of reality
• Not goal directed
• **Perceive that he/she is 20 to 40 years old**
• Wandering with an agenda, on a mission
• Upset if you are not part of his/her reality
• Impatient, paranoid, suspicious
• Depression

Stage 5: ADL

• Begin to decline slightly
• Benefits from verbal prompts, modeling, manual
• Independent in toileting and eating
• Losing ability to choose clothing
• Senses completion of an activity when materials are used up.
• Make activities failure proof
Stage 5: Communication

- Difficulty being understood, often repeats self
- Complex language is hard to understand; does better with use of nouns versus pronouns, concrete words versus abstract words, simple statements versus complex stories
- Not able to answer detailed questions
- Able to name familiar objects

Stage 5: Caregiver Approach

- 24 hour care
- Additional time to perform tasks (2-3 times)
- Adapt communication style to meet the needs of the patient

Stage 5: Treatment Strategies

- Provide functional/rote activities – meaningful activity
  - Will not respond to tasks without purpose
- Engage and communicate with the patient
  - Be consistent with messaging
  - Use nonverbal communication
- Utilize familiar environment with limited stimuli
- Incorporate family caregiver/education

Stage 5: Intervention Opportunities

- Bathing
  - Cues to wash body parts
  - Key items within reach
- Dressing
  - Routine that does not vary
- Feeding
  - Must monitor diet restrictions
  - Pre cut foods
- Toileting
  - Marked assistive devices
  - Sequencing routine must remain consistent
Stage 5 Goal Starters

- Pt will indicate meal preferences utilizing visual cues provided by caregiver 80% of the time.
- Pt will participate in (name functional task) with one verbal cue and gestures from caregiver 90 percent of the time.
- Pt will utilize personal communication book to remain engaged and promote conversation 90% of trials.
- Pt will locate own room via utilization of signage and visual cueing with caregiver prompts 8/10 trials to increase independence and decrease catastrophic events.

Late Stages

- GDS Stage 6
- GDS Stage 7

Okay, you can back up now.

Introducing...
Stage 6

- Removes trappings
- Doesn’t like to change clothes
- Abilities mimic that of a young child

Stage 6: Behaviors

- Wandering pattern: self-stimulation (Without verbalized agenda)
- Delusions, suspiciousness, anxiety
- Tearfulness, agitation/aggression
- May begin “talking to themselves”
- Visual hallucinations - 20 - 50% have delusions and hallucinations
- May become paranoid or formally delusional
- Obsessive symptoms: gets involved in repetitive tasks from the past

Stage 6: Behaviors

- Environmental stimuli prompts behaviors
- Much resistance to caregiver with unfamiliar person
- Nurtures stage 7 and follows stage 5
- May fear being alone

Stage 6: Behaviors

- Act on what they think, feel, hear, sense, taste.
- Loss of will power
- Diminished sense of self
- Rummages, no boundaries, everything is mine
- Being cold or experiencing discomfort can facilitate hostility
- Increase in negative behaviors/catastrophic events
Stage 6: Mobility

- Loss of trunk rotation
- Loss of righting reactions
- Loss of peripheral vision
- Downward gaze

Stage 6: ADL

- Unable to recognize everyday objects
- Unable to sequence dressing or do fine manipulation, needs assistance both cognitively and physically with self care, except possibly self feeding
- Motor Apraxia - Unable to sequence
- Agnosia - Inability to recognize what is seen; Unable to recognize everyday objects.

Stage 6: Late Loss ADL

- May become incontinent, first nighttime then daytime fecal incontinence
- Performs mechanics of toileting with structure
- Days and nights mixed up
- Hard time sitting for meals

Stage 6: Communication

- May be no longer capable of speaking in sentences
- Responses limited to 1 or a few words
- May revert to using words from languages acquired earlier in life
- Decreased communication of wants/needs
Stage 6: Communication

- Connects with others through touching, shadowing
- Body language and tone of voice are key
- Responds only to those directly in front
- Aphasic (word salad)
- May be able to respond to simple yes no questions with regards to comfort
- Sings with sense of Intonation

Stage 6: Caregiver Approach

- Provide consistency in CNA/Staff assignments
- Decreased communication of wants/needs
  - Anticipate needs such as toileting, pain, and eating.
- Don’t convey frustration/negative emotion to the patient
  - Be mindful of nonverbal communication
- Use manual, visual, tactile cues

Stage 6: Treatment Strategies

- Consider visual deficits
  - Loss of peripheral vision and exhibits downward gaze
- Scheduling
  - Days and nights are confused
- May revert to using words from languages acquired earlier in life
- Simplify ADL tasks into segments
  - such as grooming, dressing, and bathing
- Use modeling, mirroring or bridging techniques

Stage 6: Interventions Opportunities

- Bathing
  - Reduce stressor
  - Sensory stimulation
- Dressing
  - Back closure for disrobing patient
- Feeding
  - Positioning
  - Cues for attention
- Toileting
  - Cues to sequence
Stage 6: Goal Starters

- Pt. will follow simple verbal commands with manual cues 90% of the time to facilitate functional performance in all tasks and activities and reduce combative behaviors during communication breakdowns.
- Pt. will indicate wants and needs via responses to concrete yes/no questions (related to self) provided by caregivers 80% of the time to increase functional communication.
- Pt. will respond to verbal and gestural greetings by achieving eye contact 7/10 trials to increase functional communication.
- Pt. will alternate liquids and solids with maximum caregiver assistance 100% of the time.

Find the Sticker

Introducing...

Stage 7

- Wears clothing inappropriately, takes off shoes/socks, fidgets with items
- Doesn’t wear supportive devices
- Loss of social grace
- Poor ability to sit-up, hold head up and swallow
Stage 7: ADL

- Unable to manage physical needs.
- Dependent on others for survival.
- Incontinent
- Dependent for all ADL’s including self feeding.
- End of Life Dysphagia issues/Weight Loss
- Malabsorption

Stage 7: Communication

- Basic verbal abilities lost
- May respond with facial change, oral motor change, some repetitive words
- May express self with yelling or grunting
- May respond to stimulus of high contrast with increased tone, may turn head to track, may pinch or hit
- May respond to touch
- Difficulty establishing eye contact

Stage 7: Caregiver Approach

- Total Care, with comfort as focus
- Provide sensory stimulation
- Diligent about falls prevention, skin management, positioning, contractures
- Monitor swallowing function and weight/hydration
- All needs must be anticipated

Stage 7: Treatment Strategies

- Offer all types of cueing styles to stimulate senses
- Teach others to stand directly in front when making contact and communicating as peripheral vision is poor
- Communicate with multisensory approaches (verbal, tactile, tone of voice, expression) – facilitate positive response to others or at least minimally no negative responses
- 1:1 intervention in distraction free environment
- Provide information slowly, waiting 30 seconds for a response
Stage 7: Interventions

- Bathing
  - Sensory stimulation – warm wash cloth to initiate
- Dressing
  - Loose fitting
  - Maintain dignity
- Feeding
  - Positioning crucial
  - Possible tube feed
- Toilet
  - Incontinent
    - Positioning and staff education

Stage 7: Goal Starters

- Patient will have non-verbal expressions of pain and discomfort identified by trained caregivers 100% of the time.
- Patient will decrease oral defensiveness to allow oral intake via desensitization techniques in 4/5 therapeutic trials.
- Patient will not pinch caregivers during transfers 75% of the time following caregiver approach that utilizes soft voice, direct eye contact and positive facial expression prior to transfer.

Documenting Cognitive Impairments

- Cognitive Status
- Safety Awareness
- Behavior
- Cues and compensation strategies
- Education and training
- Comprehensive Assessment
- OT impact on quality of life and function

References

- Alzheimer’s Association: http://www.alz.org/index.asp