Understanding Dementia

Practical Treatment Considerations for the Speech Language Pathologist

Norma Jo Majerus, MS, CCC-SLP
Clinical Specialist, Aegis Therapies

Course Objectives

• Understand role of Speech Language Pathologist in treating patients with Dementia
• Describe elements of comprehensive assessment and treatment planning for patients with Dementia
• Understand basic concepts of Cognitive Disability Model and Allen Cognitive Levels to use in development of appropriate treatment strategies to impact patient functioning
• Describe key elements of documentation in order to convey medically necessity and skilled level of care
Overview of Dementia

- Dementia is a general term for a decline in mental ability severe enough to interfere in daily life
- Dementia is not a specific disease but is an overall term that describes a wide range of symptoms
- Dementia is NOT a normal process of aging, therefore terms like senility and senile dementia are no longer widely used
- Alzheimer’s disease is the most common type of dementia and accounts for 60-80% of cases
- Vascular dementia, which occurs after stroke, is the second most common type
- Most dementias are progressive in nature, and irreversible
  - Alzheimer's Association, 2014 (www.alz.org)

Overview of Dementia

- Symptoms of Dementia can vary greatly
- At least two of the following core mental functions must be significantly impaired to be considered dementia:
  - Memory
  - Communication and language
  - Ability to focus and pay attention
  - Reasoning and judgment
  - Visual perception

  - Alzheimer's Association, 2014 (www.alz.org)
Classifications of Dementia: What do they mean?

Cortical vs Subcortical
• General origin of disease

Primary vs Secondary
• Primary disease or secondary co-morbidity/medical complexity

Reversible (Secondary) vs. Irreversible (Primary)
• Treatable or Progressive

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Cortical vs Subcortical (clinical implications)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Cortical</th>
<th>Subcortical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech</td>
<td>Normal</td>
<td>Dysarthric</td>
</tr>
<tr>
<td>Language</td>
<td>Aphasic</td>
<td>Normal</td>
</tr>
<tr>
<td>Cognition</td>
<td>Acalculia, poor judgment and poor abstraction</td>
<td>Slowed</td>
</tr>
<tr>
<td>Memory</td>
<td>Amnesic (learning deficit)</td>
<td>Retrieval deficit, forgetful</td>
</tr>
<tr>
<td>Affect</td>
<td>Unconcerned, disinhibited</td>
<td>Apathetic, depressed</td>
</tr>
<tr>
<td>Posture</td>
<td>Normal</td>
<td>Stopped</td>
</tr>
<tr>
<td>Gait</td>
<td>Normal</td>
<td>Abnormal</td>
</tr>
<tr>
<td>Movement</td>
<td>Normal</td>
<td>Tremor, chorea</td>
</tr>
<tr>
<td>Tone</td>
<td>Normal</td>
<td>Increased</td>
</tr>
</tbody>
</table>
Primary vs. Secondary Dementia

Primary Dementia (tends to be irreversible)
- Dementia is the only evidence of disease (e.g., Alzheimer’s disease)

Secondary Dementia (can be reversible or irreversible)
- Dementias associated with medical illness
- If treated appropriately, some can be reversed (e.g., infection such as UTI)

Normal Aging—physical, mental, and/or emotional slowing dependent on lifestyle and attitude.

Role of Speech Language Pathologist

Of the core mental functions mentioned in the definition of dementia, which one(s) are within scope of SLP?

- Memory
- Communication and language
- Ability to focus and pay attention
- Reasoning and judgment
- Visual perception
ASHA Position Statement – Cognitive Communication

It is ASHA's position that speech-language pathologists play a primary role in the screening, assessment, diagnosis, and treatment of infants, children, adolescents, and adults with cognitive-communication disorders. This position statement defines the roles of speech-language pathologists in the evaluation and management of individuals with communication disorders associated with cognitive impairments and clarifies the scope and rationale for these services. Cognitive-communication disorders encompass difficulty with any aspect of communication that is affected by disruption of cognition. Communication may be verbal or nonverbal and includes listening, speaking, gesturing, reading, and writing in all domains of language (phonologic, morphologic, syntactic, semantic, and pragmatic). Cognition includes cognitive processes and systems (e.g., attention, perception, memory, organization, executive function). Areas of function affected by cognitive impairments include behavioral self-regulation, social interaction, activities of daily living, learning and academic performance, and vocational performance.

ASHA Guidelines for Dysphagia with Dementia

Individuals progressing through different stages of dementia may demonstrate difficulty feeding and swallowing. For example, individuals with moderately severe cognitive decline often demonstrate difficulty using a knife; individuals with severe cognitive decline may demonstrate difficulties discriminating between utensils; and individuals with very severe cognitive decline may be easily overwhelmed and require cues to locate food on the plate and to swallow (Voyzey, 2010). Swallowing function may also be affected by reduced muscle strength and coordination. Once appropriate feeding and swallowing strategies, postures, and consistencies have been identified, the clinician can train caregivers to provide feeding support and cuing as appropriate.

Role of Speech Language Pathologist

• Given degenerative nature of most Dementias, role of therapy is to help maximize functioning and independence at whatever stage they are in the disease process
• There may be a few impairments which can be restored through intervention, but majority of focus is on compensation or adaptation
• What is the patient still able to do? How can maximum functioning be facilitated through appropriate set up and cueing?

Typical Clinical Course

• Early Stage
• Middle Stage
• Late Stage

Should progress slowly unless there are interfering medical complications/complexities

Have you seen Dementia progress rapidly? Why did that happen?
Early Stage

Completes 60-75% of self-care
- Can self-sequence routine but not set up or clean up
- May need cues for thoroughness
- May wear same clothes
- May not comb back of head
- Poor safety awareness

Short-term memory deficits
Very social

Middle Stage

Short attention span
Loss of ability to complete basic ADLs
Random actions with partial task completion
Limited visual field
Follow one-step directions
Speaks in short phrases
Distractible
Possible behavior problems
Decline in motor skills
Constantly doing things with hands
Late Stage

Focus on postural action
  • Fear of falling, balance issues
Agitated if hurried
Cognitively processes 2-3 times slower
Disrobes if discomfort
Wanders, resists confinement
Follow people or goes where pointed to

Cognitive Disability Model

Model for evaluation and intervention
Hierarchy of cognitive processing skills
Measures the severity of cognitive disability
Measures what a person can do
Predictive assessment

Developed by Claudia Allen, OTR
Allen Cognitive Levels

Level 6 Planned Activities
  Level 5 Independent Learning
    Level 4 Goal Directed Activities
      Level 3 Manual Actions
        Level 2 Postural Actions
          Level 1 Automatic Actions
            Levels 0 and 0.8 Coma

Based on NDT timeline reversal
Initially based on psych population and later applied to dementia
Evidence Based
6 levels
52 modes
Big Leaps (.4-.6 and .8 to .0)
ACL 5.0-5.8

5.8 Consults with other people – anticipates secondary effects, reads directions, asks questions about problems, follows time constraints, follows recipe
5.6 Considers social standards – reads directions and labeling before starting, can deal with hazards, integrates routines, generates new ideas
5.4 Engages in self directed learning – can plan around priorities, learns easier and faster, scans directions for information, doesn’t read precautions on labels
5.2 Improves fine details of actions – able to perform duel attention tasks, uses higher level memory aid, able to learn some harmful effects
5.0 Learns to improve effects of actions – reads portions of written instructions, blames errors in instructions, stops working to talk, learns functional problem solving

ACL 4.0 – 4.8

4.8 Memorizes new steps – learns new steps but follows inflexibly, reads simple directions with errors, estimates in 5-15 minutes, follows schedule w/o cues
4.6 Scans the environment – ignores written directions and diagrams, performs ADLs safety and effectively, recognizes different and inferior
4.4 Completes a goal – has new learning ability with previous task association, takes turns, corrects own errors, visual awareness is 3-4 feet, won’t cross midline, won’t recall safety precautions
4.2 Differentiates between parts of an activity – gross orientation to time, scans left and right, recognizes errors, visual awareness if 24 inches, don’t understand what they read
4.0 Sequence self through task to do short term activity – oriented to self, place and daily routine, can comprehend basic communication board, recognizes size, shape and color as cued, possessive about belongings
### ACL 3.0 – 3.8

3.8 Uses all objects and senses completion of an activity – follows verbal cues to continue, understands when finished with tasks “I'm Done”, able to learn priority destinations, follows 1 step directions

3.6 Note effect of actions on objects – remembers an action that was done a minute ago and understands “in a minute”, comprehends basic memory wallet, Places and sees objects around the edge, follows a demonstration of an object

3.4 Sustains actions on objects – learns in approx 3 weeks, can sustain an action on an object for 1 minute, will talk to self about an action

3.2 Distinguishes between objects – writes names with dominant hand, speaks in short phrases, distinguishes between size, shape and color

3.0 Grasps objects – feels and names objects, states name when asked, takes 3-4 times longer to process information

### ACL 2.0 – 2.8

2.8 Using railing and grab bar for support – names in categorization, holds objects in both hands but releases slowly if at all, will kick or hit a target, like rhythm

2.6 Walks to self identified location – likes to sing, likes to disrobe, nutrition is a problem (food on the run), 2-3 times longer to eat

2.4 Walk – uses one word to initiate conversation, will spit things out, bends at the waist, goes to pointed location, hates confinement

2.2 Standing and righting reaction – stands up and moves, able to name body parts, can answer yes no questions related to comfort, spontaneously drinks from a cup, tolerates finger foods and pre-cut foods

2.0 Overcome gravity – responds with yes no, responds to name, comprehends basic leading questions related to comfort and foods or loved ones, provides 75% effort to move
ACL 1.8 and below…

1.8 Raises body parts – often responds in negative “no”, strikes out
1.6 Moving in bed – drinks from cup held to lips, manages sticky foods, continuous cues to move
1.4 Locating stimuli – reflexive swallow is present, controls lips and tongue
1.2 Responding to stimuli – all 5 senses respond, some facial expressions
1.0 Withdraws from stimuli – responds to noxious stimuli, usually on eyes widen, non verbal
0-.8 comatose or semi comatose,

Let’s Practice….

Find a partner….

- Discuss a current patient and estimate cognitive level based on known deficits and level of functioning. Share your rationale for deciding that ACL

- ACL 4’s – oriented to person, place and time or routine, memory impairments, safety concerns but may be able to “hide” deficits
- ACL 3’s – oriented to person, needs intermittent to constant cues, attention span approximately 1 minute, may be exit seeking
- ACL 2’s – death grip or limited use of hands, resistance to cares, wandering
What does ACL mean to you as SLP?

- ACL establishes a realistic expectation for POC
- Allows you to determine if patient is functioning within their level of Dementia (or is staff providing excessive cueing which promotes dependence and high burden of care)
- Allows prediction for safety concerns and risks to patient
- Helps objectify ability to live alone, or what type and amount of support person would need
- Helps with analysis of behaviors, including triggers which may cause or escalate negative interactions
- Assists in comprehensive language or swallow assessment

Crosswalk of ACL with Common Assessments

Please refer to separate handout
Treatment Strategies for Early Stage

- Interventions for memory, including spaced retrieval, as well as compensatory strategies such as memory books
- Schedules and establishing routine to promote independence
- Checklists or spaced retrieval for safety or sequencing, promoting error awareness
- Transition strategies for ACL 4.6 or higher to ALF, including analysis of specific support needs
- Focus on orientation to promote orientation to person, place and time/passage of time vs orientation to person, place and routine
- Behavior modification strategies
- Goals and sub-goals to meet targeted skills and improve participation

Treatment Strategies for Middle Stage

- Education with caregivers around appropriate type and frequency of cueing
- Procedural memory to promote participation with ADLs
- Behavior analysis and education of caregivers to reduce “triggers”
- Establish consistent approach to promote learning new routine or adjustment to new environment
- Attention tasks
- Reminiscence activities and other linguistic based techniques to promote recall and functional communication
- Basic memory wallets
Treatment Strategies for Late Stage

- Environmental triggers and sensory stimulation to promote awareness and optimize functioning
- Behavior analysis and education of caregivers to reduce “triggers”
- Food on the go and finger foods, FMP for feeding techniques
- Modification of caregiver approach to include more modeling and tactile cues to replace verbal bombardment
- Simplification of cueing strategies
- Establish routines to reduce resistance to care
- Train caregivers the affect of tunnel vision and limited field of conscious awareness

Let’s Discuss Your Patient....

- Find your partner again....
- Determine one problem and discuss possible treatment interventions with your partner given examples. What success have you had in therapy so far? Where are you stuck?
- Do you have ideas for treatment focus that is different than your current plan of care based on what you have learned so far?

- We will discuss 3-5 examples in group setting, depending on time constraints. If you want additional suggestions for therapy, please speak up and share your example
Documentation Considerations

• Documentation must demonstrate medical necessary and show that skills of a therapist are needed at this time
• Documentation of analysis and adjustments are key to ensure services to not appear repetitive

Other considerations...
• Slow therapy progression
• Goals supported by consideration of cognitive level
• Adaptation and caregiver education is usually primary focus of the plan of care, especially in later stages of disease process

Let’s Practice

• Write one STG for your patient that is supported by the ACL you established
• Write a LTG based on best ability to function
• Be specific, include functional change

• What are you analyzing and adjusting from week to week which represent the skill of a speech language pathologist?

...let's share a few examples
Wrap Up

- Role of SLP is diverse with patients with Dementia
- Some impairments may be restored but primary focus of treatment will be on compensation and adaptation
- Objective of treatment is not to make the person “normal” again but instead to facilitate highest level of functioning within their level of dementia
- Progression of dementia is predictive based on ACL and treatment interventions can be developed based on residual skills
- Burden of documentation is the same so components of appropriate goal setting, treatment focus and ongoing analysis and adjustment are key.

Questions???

norma.majerus@aegistherapies.com