Recognition and Management of Late Stage Dementia

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Objectives

- Health care practitioners play a key role in supporting patients and families through the transition to late stage dementia and end-oflife care.
- Learn how to recognize and manage the symptoms and signs of late stage dementia, support and prepare families to anticipate transitions and clarify goals of care.

Outline

- Stages of Dementia
- Problems and Management in Advanced Dementia
- Terminology EOLC, ACP, GOC
- Dying with Dementia
- Prolonging Life in End-Stage Dementia
- ACP Practical Tips

Introduction

- Dementia is common − 8-10% of those over 65, >35% over 85
- New official term for dementia is "Major Neurocognitive Disorder"
- Dementia not directly 'fatal' like cancer or cardiac arrest, but is a terminal illness like ALS
- People with late stage dementia have a high mortality and also limitation to quality of life

Stages of dementia

- Reisberg scale, stages 1-7
- Stage 1 Normal
- Stage 2 Normal aged forgetfulness
- Stage 3 Mild cognitive impairment
 - Worse short term memory, possible other symptoms (concentration, word finding)
 - Still little or no effect on day to day functioning, but family notice changes
 - New term "Minor Neurocognitive Disorder"

Stages

- ■Stage 4 Mild dementia
 - Worsening memory, executive, language and other symptoms, possible mood, behavior change
 - Affects daily function earliest functions are work, driving, finances, medications, sometimes neglect of hygiene
 - Family worried, physician can diagnose

Stages

- Stage 5 Moderately severe dementia
 - Major forgetfulness, language problems, trouble recognizing people, objects or places, behavior changes
 - Unable to manage most or all household tasks, trouble with some basic tasks e.g. bathing, dressing
 - Some may be in community with family and home care support, many in nursing home

Stages

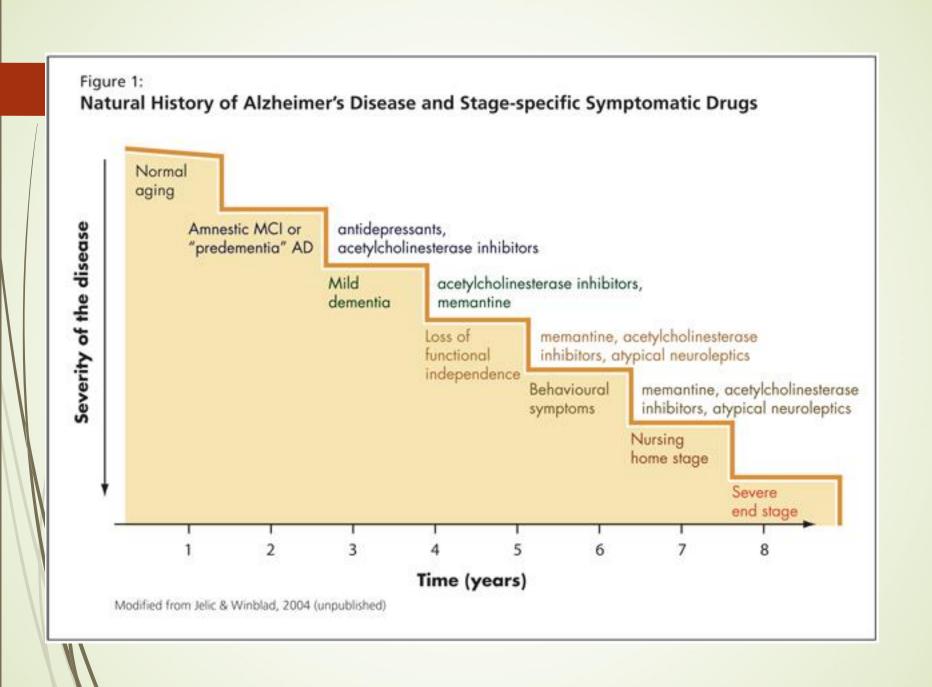
- Stage 6 Severe dementia
 - Severe problems with memory, communicating, and dependency with daily care
 - Often personality and behavior changes ranging from withdrawal through types of anxiety or agitation and/or delusions or hallucinations
 - Fewer manage in community even with supports

Stage 7

- Very severe or advanced dementia
- Little or no verbal communication
- Dependent for all daily activities, incontinent
- Lose ability to walk bed- or chair-bound
- Løse ability to swallow food and fluids
- Most people in nursing home
- Late, terminal complications include:
 - Pneumonia (with or without aspiration)
 - Weight loss from difficulty swallowing and immobility

Duration

- Duration of dementia and of each stage varies widely
- On average, about 2 years per stage, but range less than one up to 5 years
- Also varies with cause of dementia and with co-morbidities
 - Generally shorter with Lewy Body dementia, widely variable with vascular dementia



Long-term Care (LTC)

- CIHI data reports that 61% of all Canadians with dementia live outside of LTC
 - Terminology and rates varies across provinces
 - Higher use of LTC with more severe dementia, age over 80, with more ADL dependency, with wandering, after hospitalisations
- 50 to 90% of all LTC residents have dementia

Problems in Advanced Dementia

- Dependency for personal care
- Immobility high risk of bed sores
- Difficulty having interpersonal interaction or participating in activities
- Responsive behaviors
- Swallowing difficulties aspiration pneumonia and difficulty maintaining nutrition and hydration

Personal Care and Mobility

- Require assistance with most or all ADL
- Often require assistance with transfers and mobility
- High incidence of incontinence
- Care provided by family members, professional caregivers (health care aides, nurses)

Personal Care

- High risk of caregiver burden, both physical and emotional
- Assessments by Physio, OT for adaptive aids, techniques and equipment may assist
- Community supports, respite, caregiver training
- Attention to high risk of skin breakdown

Meaningful Activities

- Traditional activity programs in LTC require some verbal and/or motor activity by the person
- Persons with advanced dementia may lack the ability to participate, remain bored and isolated
- Activities tailored to those with advanced dementia are needed

Activity for Advanced Dementia

- Programs with weak evidence of benefit:
- Snoezelen
- Multisensory and motor group activity
- Garden experience
- Namaste program

Snoezelen

- Related to Montesorri method
- designed to stimulate the senses of sight, sound, touch, smell, and movement
- equipment may include:
 - bubble tubes that change color and speed in response to sound,
 - swing chairs with colorful wall murals around it,
 - music systems,
 - projectors with colored light wheels that rotate slowly, providing gently changing colors and designs.

- mirrored balls,
- aroma diffusers,
- mobiles of fish,

Snoezelen

- Evidence of benefit to reduce agitation is mixed
- Equipment often under-used
- Staff often receive little training how to use it
- May be expensive for room and equipment

Multisensory and Motor Based Group Activity Program

- designed to stimulate the senses of sight, sound, touch, smell, movement, and taste, using natural items
- Presented in a certain order, increasing complexity, 1 to 3 sessions per week
- Requires staff training, also in managing certain behaviors
- Evidence of increased engagement

Multisensory and Motor Based Group Activity Program

Table 2

Sample of Motor and Multisensory Care sessions (reprinted from Trudeau SA. Bright Eyes: a structured sensory-stimulation intervention. In: Volicer L, Bloom-Charette L, editors. Enhancing the Quality of Life in Advanced Dementia. Philadelphia: Taylor & Francis; 1999. p. 93–106) [40].

Sense	The Beach	Trains	Baseball	Fishing	Gardening
Olfactory	Coconut suntan lotion	Ground coffee	Fresh-cut grass	Sardines	Garden fresh tomato
Kinesthetic	Beachball toss	Balloon volley	Soft baseball toss	Casting with rod and reel	"Digging" with shovel
Tactile	Terrycloth towel	Conductor's cap	Felt baseball hats	Fishing flies (feather and thread)	Potting soil and trowel
Visual	Photos from Hawaiian calendar	Black and white train photos	Photo of local ballpark	Calendar of trout flies	Seed catalogs
Auditory	Ocean-waves tape	"Atchinson Topeka and the Santa Fe"	"Take me out to the Ballgame"	Seagull sounds	Tape of crickets at dusk
Gustatory	Cold lemonade	Chocolate cookies	Nonalcoholic beer	Sardines on saltine crackers	Peeled tomato

Garden Experience

- Being in a garden
- Few studies in Japan showed improved relaxation, behavior and lower heart rate
- Biggest problem is weather, especially here

Namaste Program

- Namaste "I honour the spirit within you"
- Principles creating a comfortable environment with the presence of others, and
 - a loving touch approach to all activities
- Namaste care in a reserved space,
 2hours twice a day 7 days a week
- Relaxing environment, music, scent, seating
- Individualized greeting, conversation

Namaste

- Individualized hands-on care e.g. massage, applying face cream, shaving
- Some weak evidence of: improved quality of life
 - Decreased behavioral symptoms of dementia and discontinuation of antipsychotic medications
 - Decreased rejection of care the loving touch during Namaste Care may make people less likely to resist care activities involving touch even outside of Namaste
 - Stimulation during the sessions reducing sleep during the day and decreasing need for hypnotic medications
 - May decrease depressive symptoms, improve the ability to communicate with family members and staff, and decrease complaints of pain.
 - Namaste Care is well received by both family members of persons with dementia and by

Responsive behaviors

- Behavioral and Psychologic Symptoms of Dementia
- Apathy, depression, withdrawal
- Anxiety, restlessness, agitation
- Psychotic symptoms: hallucinations, delusions
- Physical or verbal aggression, spontaneous or triggered
- Wandering, pacing

Responsive behaviors

- About 50% of LTC residents with dementia
- Varies considerably over time
- First line of management is adaptive personal care
 - Identify triggers
 - Modify environment
 - Reassure, redirect, re-engage
 - Delay care, retry later

Responsive Behaviors

- Historically, high use of physical and chemical restraints
- Successful large-scale efforts to reduce both over recent decades
 - Currently about 10% of LTC residents with dementia have a physical restraint
 - About 15-25% on antipsychotic medication without psychosis

Swallowing Difficulties

- Dysphagia difficulty moving food, liquids, medications, secretions through mouth and esophagus
- Increased likelihood as dementia progresses
- Earlier with Lewy Body, vascular dementia and other disorders which cause dysphagia
- Leads to dehydration, malnutrition, and aspiration of oral contents into lungs

Dysphagia

- Assessment by Dietician and Speech Language Pathologist
- Modified texture diets
- Supported feeding
- Invasive treatments (IV, Tube feeds) ineffective and burdensome
- In late stage dementia, a signal of the approach of end of life

Late Stage Dementia

- Often issues arise around intensity of care in the weeks and months prior to death:
 - Is it worth it for the person to struggle to live longer?
 - How is their quality of life?
 - Is it worth it for them to go to the hospital?
 - What to do if we disagree about intensity of care?

Terminology

- End-of-Life Care
 - Health care and supportive care at or near the end of life, especially with dementia
 - Often hard to predict exactly when someone is approaching the end of their life
 - EOLC may variably include months or even years prior to death, or just the last few days

Advance Care Planning

- A process of decision-making for health care contingencies before they happen
- Informed consent in advance
- Linked with 'DNR' (or ACP or Goals of Care) policies, living wills/advance health care directives, informed consent, capacity/competency issues, substitute decision-making

Advance Care Planning

- A consensus process through ongoing communication
- May be the wishes of a competent person, but usually the opinion of the family or a substitute decisionmaker
- Discussion may include members of interdisciplinary health care team and/or physician

Goals of Care

- Prolonging life
- Maintaining function
- Providing comfort

Aggressive medical care Comfort Prolongation of life Cholinesterase Dignity inhibitors Maintenance of function Memantine Caregiver and PWD support Bereave-Palliative care ment

DEATH

DIAGNOSIS

Quality vs Quantity

- Quality of Life (QOL) depends on factors such as pain, other distressing symptoms, sense of meaning or purpose, dignity, social interaction, and numerous other values
- Prolonging life often requires burdensome interventions that at least temporarily worsen comfort and QOL
- Trade-off is whether expected future QOL is good enough to be worth extra distress now

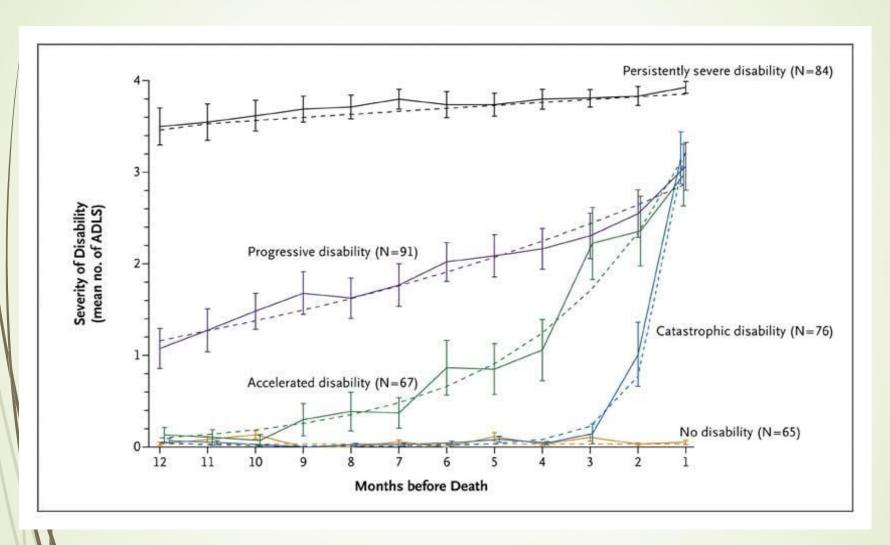
Quality vs Quantity

- Would the person want to live longer like this?
- How much extra pain and discomfort would they want in order to buy them longer survival?
- Would they already want an end to their life due to poor QOL and suffering?

QOL and ACP

- ACP R (Resuscitation)
 - Priority on prolonging life at cost of QOL
 - Person would accept the additional suffering of invasive treatments in order to have a chance of living longer
- ACP M (Medical Care, No CPR)
 - In between, still buys longer life with immediate suffering
 - Person would accept less invasive treatment to live longer
- ACP C (Comfort Care)
 - Priority on comfort at cost of foregoing longer life
 - Person would accept dying sooner to avoid suffering due to invasive treatments and/or poor QOL

Trajectories of Disability in the Last Year of Life among 383 Decedents.





Burdensome Interventions

- CPR rarely successful in advanced dementia
 - Quite invasive, need ICU and ventilator afterward
 - Most LTC residents do not have ACP R

Burdensome Interventions

- Tube feeding in advanced dementia does not:
 - Prolong life, Prevent aspiration or pneumonia, Improve function or nutrition, Decrease prevalence of decubitus ulcers
- Dialysis median 1 year survival 26-42%
 - Most have decline in function, cognition after start

Transfer to Hospital

- High degree of distress from unfamiliar hyper-stimulating environment, unfamiliar staff, burdensome interventions
- Many cases of pneumonia can be treated (if treatment indicated) in DLC especially if caught early
- For bed-bound people, even fractures can be managed conservatively with analgesia

Overall mortality

Risk of dying each year in general population:

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■ At age 60-69 1-1.5%
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- Age 70-79 3-4%
- Age over 80 9-11%
- Higher for:
 - Men
 - If more chronic health conditions (incl. dementia)
 - If worse dependency

Mortality from Dementia

- Annual dementia mortality 30-50/100,000 of whole Canadian population, increases by age
- Average life expectancy of a person in PCH in Manitoba is 2 years
- Every year ~135 Deer Lodge Centre Long Term Care residents die (85% on site)
 - ■2 or 3 per week

Prognosis of Advanced Dementia

- Among 323 PCH residents near Boston with advanced dementia followed for 18 months:
 - 55% died (25% within 6 months)
 - 40% had pneumonia
 - 85% had a feeding problem
- Chance of surviving 6 months:
 - After episode pneumonia ~ 50%
 - With feeding problem ~60%

Prognosis of Advanced Dementia

- Only 9% had any stroke, seizure, MI,
 GI bleed, fracture, other major
 illness, few led to death
- High prevalence of distressing symptoms:
 - Dyspnea > 5 days 46%
 - Pain 39%
 - Ulcers 39%
 - Agitation 54%

Burdensome Interventions

- Burdensome interventions (IV, ER/hospital, Tube Feed) in 34%
- Referral to hospice in 22% (30% of those who died)
- Less likely if caregiver thought resident had less than 6 months to live, or understood expected complications, or both

Summary

- Dying with advanced dementia is like dying with terminal cancer
- Appropriate to focus on comfort care
- Need to monitor for distressing symptoms
- Often appropriate to avoid burdensome interventions
 - Need to discuss prognosis and expected complications between family and health care team

Advance Care Planning

- High proportion of Winnipeg LTC residents have a ACP/GOC level indicated
- Many families choose 'M', many residents receive IV antibiotics and fluids, are transferred to hospital, but no tube feeds for dementia
- Low involvement of physicians in ACP discussions
- Variability in extent of discussion when eliciting ACP level

Practical ACP Discussion Tips

- When to discuss:
- At home, as early in the course of dementia (or before) as possible
- ■In LTC:
 - On admission,
 - Review at first family/team conference
 - AGAIN, when first significant complication arises
 - AGAIN, annually, or with further illnesses, or prn

Who should make an ACP?

- A patient and/or substitute decision-maker, with a health care team member
- Team member should be familiar with the process and the patient
 - Usually social worker, nurse +/- physician
- Involve all family and others appropriately involved in decisionmaking

What to consider

- Does the person have a Health Care Directive? If so, must follow it with rare exceptions
- What is the perceived Quality of Life? How would the person consider this QOL?
- Would the person want to live as long as possible with this QOL?
 - How much extra suffering from treatments would be worth it to have a chance to live longer with this QOL or worse?
 - Should we focus on comfort rather than trying to pull through another pneumonia or episode of dehydration...?

ACP principles

- Voluntary don't have to indicate an ACP level
- Non-binding can change your mind at the last minute
- Still important especially if staff can't reach anyone when something happens
- Will still get try to consent from family at the time
- Consensus process
- Substituted judgement: it's not what the caregiver wants, it's what the caregiver thinks the patient wants

Conclusion

- Advance Care Planning and End-of-Life Care discussions is an ongoing dialogue
- Substituted judgment we are trying to decide and do what the person would want, not what family or staff would want
- May often be appropriate to avoid burdensome interventions for unattainable goals, or if Quality of Life is so poor the person would not want to live longer