Dementia

Caring for the Aging patient (and ourselves)

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Disclosure

Board certified in Adult and Addiction Psychiatry

Not Geriatric Psychiatry

No financial arrangements related to the content of this activity

Mild Neurocognitive Disorder(CIND)

Decline in cognition "(complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. Concern of" person, provider, or informant

2. "Modest impairment in cognitive performance"

preferably demonstrated in standardized testing

Symptoms do not interfere with ADL's

Not in context of delirium, or due to another disorder (e.g., depression)

Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, D.C., American Psychiatrric Association, 2013, pp. 605-606.

Kimchi, Eitan Z., and Constantine G. Lyketsos. "Dementia and Mild Neurocognitive Disorders." *The American Psychiatric Publishing Textbook of Geriatric Psychiatry.* 5th ed. Steffens, David C., Don G. Blazer, Mugdha E. Thakur, eds. Washington, D. C.: American Psychiatric Publishing, 2015. 177-242. Print.

Mild Cognitive Impairment (MCI)

- Most common subtype of cognitive impairment/no dementia (CIND)
- Amnestic or nonamnestic
- Amnestic subtype is precursor to Alzheimer's dementia
- Estimated 16% of 70-89 year olds have MCI
- 46% develop dementia within 3 years vs. 3% of cohorts without MCI
- 1/3 appear to recover

Mild Cognitive Impairment Conversion to Dementia

Increased risk for never married, male, older, less educated, APOE*E4 carriers, CSF markers (lower β-amyloid peptide 1-42, higher p-tau and t-tau), PET scans with lower temporoparietal activity, amyloid deposition, neuropsychiatric impairments (NPI's)

Neuropsychiatric Symptoms (NPI's)

1. Affect and Motivation changes are present in 50% of dementias (depression, apathy)
2. Psychosis (hallucinations, delusions)
3. Change in drives (appetite, sex, sleep)
4. Disinhibition (aggression, sex, wandering, verbal): "executive dysfunction syndrome"

Neuropsychiatric Impairments continued

Nighttime NPI's increase risk of all dementias

Hallucinations increase risk of vascular dementia

Anxiety and depression increase risk of conversion from CIND/MCI to dementia

NPI's increase risk of caregiver depression and mortality, nursing home placement of elder

Dementia

Cognitive decline is “significant” in 1 or more of these: complex attention, executive function, learning and memory, language, perceptual-motor, social cognition

Concern noted by patient, informant, or provider AND substantially affects cognitive performance, ADL’s

Does not occur only during delirium, is not better explained by other disorder (e.g., depression)

Delirium

Disturbed attention (ability to sustain or shift focus)

Develops quickly (hours to days)

Disturbed cognition (memory, language, orientation, perception, visuospatial skills)

Changes are due to medical, drug, toxin substance/withdrawal

Changes are not from evolving neurocognitive disorder or coma

Normal Changes in the Aging Brain

Increased time to retrieve data from memory

Increased time to learn new data

Slower complex reaction time, including response and movement (driving)

Maintenance of attention declines

Ability to multitask declines

Dementia Assessment

1. Are changes greater than expected for age?
2. Do they meet criteria for dementia?
3. Are deficits cortical or subcortical?
4. Are deficits progressive or static?
5. How severe are the deficits?
6. What are the functional impairments?
7. Are there neuropsychiatric symptoms?
8. Are there motor/neurological symptoms?

Clinical evaluation

Family history of dementia, late-life behavior changes

Gait, ability to stand, orthostasis, tremor

Fluidity of movements, hx of falls

Personality, behavior changes

Serial 3’s from 20, similarities, differences

Draw a clock face

Describe a multi-step task

Review pill bottles, supplements

Speak with family, if possible

Assessment of Dementia

Interview with informant, if possible

Frontal Assessment Battery

Mental Alternation Test

Severity: Mini mental status exam (or equivalent): 20-24/30 is mild, 13-20 moderate, 12 or less is severe

Occupational therapy can measure functional impairment by evaluating ADL's

Dementia Workup

CBC, SMAC, Thyroid function tests, B12, folate

Consider: urinalysis, HIV, RPR/VDRL, toxicology, ECG, CXR, heavy metal screen, homocysteine

EEG for myoclonus, gait changes

Cerebrospinal fluid studies in special cases

Types of Dementia

Alzheimer's disease, Frontotemporal lobar degeneration, Lewy body disease, Vascular disease, Traumatic brain injury, Substance/medication-induced, HIV infection, Prion disease, Parkinson's disease, Huntington's disease, Another medical condition, Multiple etiologies, Unspecified

What about Resveratrol?

Antioxidant produced by plants to “shield against stress from the environment”

In dark chocolate, berries, red grapes, red wine

“Activates sirtuins…family of deacetylases” that “link energy metabolism to gene expression”, and may “transmit resilience to stress”

Calorie restriction also activates sirtuins in animals

Resveratrol

119 w mild-moderate Alzheimer's dementia

Followed 1 year. Oral resveratrol increased to 2000mg daily

Recipients had lower brain volume on MRI, more Aβ40 in CSF and plasma vs. placebo

Resveratrol and metabolites found in CNS and plasma

No difference in cognitive decline

Ability to Consent to Treatment

1. The decision is VOLUNTARY: free from undue influence of providers, family, friends

2. The decision is INFORMED: there is understanding of the potential risks, benefits, and alternatives of treatment

3. There is CAPACITY to decide

Capacity to Consent Requires:

1. The ability to “COMMUNICATE a stable choice” through speech, sign language, qualified interpreter
2. The ability to UNDERSTAND the information required to make that particular decision
3. The ability to “USE that information to make a decision”
4. The ability to WEIGH (and REMEMBER) risks, benefits, alternatives of that decision

Capacity to Consent

Is specific to the situation

Can fluctuate with time

Standard increases with increasing risk of proposed treatment (basic lab tests vs. bone marrow studies)

Is determined by health care providers related to health care (court decides ability to make decisions related to finances, etc)

Power of Attorney

Durable Health Care Power of Attorney is NOT a guardian

Makes health care decisions that can be specified in the document IF the person becomes incapacitated

May be specific for mental health (for chronic illness that is episodic)

“The patient continues to make decisions while clinically judged to have the capacity to do so”

Guardianship

Can be appointed by a will, petitioned by “an interested person”, requested by the incapacitated person, family

May not be needed with “valid Health Care Power of Attorney, Mental Health Care Power of Attorney, and Living Will”

But may STILL be needed with the above, example: need for inpatient psychiatric treatment

What to talk about:

- When you think about the last phase of your life, what's most important to you? How would you like this phase to be?
- Do you have any particular concerns about your health? About the last phase of your life?
- What affairs do you need to get in order, or talk to your loved ones about? *(Personal finances, property, relationships)*
- Who do you want (or not want) to be involved in your care? Who would you like to make decisions on your behalf if you're not able to? *(This person is your health care proxy.)*
- Would you prefer to be actively involved in decisions about your care? Or would you rather have your doctors do what they think is best?

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