ACOFP: Dementias and the Caregivers

Donald E. Jablonski, DO, FACOFP
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Please check where applicable and sign below. Provide additional pages as necessary.
Name of CME Activity: 2015 AOA*/ACOFP Osteopathic Medical Conference & Exposition (OMED)

Dates and Location of CME Activity: October 17 - October 21, 2015 Orange County Convention Center Orlando, Florida
Topic: ACOFP: Dementias and the Caregivers Tuesday, October 20, 2015 2:00-3:00pm
Name of Speaker/Moderator: Donald E. Jablonski, DO, FACOFP

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<th>Organization With Which Relationship Exists</th>
<th>Clinical Area Involved</th>
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Signature: Donald E. Jablonski, DO, FACOFP Date: 9/21/15

Please fax this form to ACOFP at 866-328-1835, or e-mail to joank@acofp.org as soon as possible.
Deadline: Friday, September 11, 2015
The Dementias
“A Physician and a Caregiver’s Prospective”

Dementia Learning Objectives

- Recognize there are multiple types of dementias
- Diagnostic Tools Available
- Prevention, Treatment options of the dementias
- Osteopathic Approach to Patient and Family, Treating Patient and the Family, Not a Disease
- Audience Participation in Their Approach to Diagnosis and Treatment
- Case presentation (What was I thinking?)
Have you ever heard the following?
By the way Doctor,

- I think there is something wrong with my husband’s/wife’s memory!
- I think I’m getting Alzheimer’s!
- I can’t remember s——!
- I am having trouble remembering names!
- I can’t remember where I put things!

What do you do?

- Do you say that’s probably normal?
- Do you begin a work-up?
- Where do you begin?
Subtle

- “so delicate or precise as to be difficult to analyze or describe” (Oxford Dictionary”)
- “fine or delicate in meaning or intent; difficult to perceive or understand, delicate or faint or mysterious” (Dictionary.com)

- Hypothyroidism
- Weight loss
- Hair loss
- Chronic fatigue
- Fibromyalgia
- Vision changes (macular degeneration)
- Polymyalgia rheumatica
- Depression
Dementia

Definitions—Dementia

- **Dementia**: defined as “mental deterioration of organic or functional origin”.
- **Dementia**: defined as the *progressive* decline in cognitive function due to damage or disease in the brain beyond what is expected during the course of *normal* aging
  - Not a disease itself, but rather a group of symptoms that may accompany certain diseases or conditions
Dementia

“is the development of multiple cognitive deficits that includes memory impairment and at least one of the following—aphasia, apraxia, agnosia or disturbances in executive functioning.”

Background

- Dementia is Reversible or Irreversible depending on etiology
- If not reversible, decline is broad-based and can affect memory, attention, concentration, speech, judgement and personality
Background

- Dementia has always been somewhat common, but is becoming even more common among the elderly in recent history.
- Not clear whether this increased frequency of dementia reflects a greater awareness of symptoms, or if people are simply living longer and thus are more likely to develop dementia in their older age.

Epidemiology of Dementia

- 1% of Americans 60 years old, with percentage doubling every 5 years to nearly 50% by 85 years old.
- By 2030 nearly 20% of US population will be over 65.
- 6% will have severe dementia; 10–15% will have mild to moderate impairment.
- Early dementia frequently goes undiagnosed by Primary Care Physicians.
- 60–70% of progressive dementia cases are due to Alzheimer’s disease.
Definition Insanity

- Insanity defined as “relative permanent disorder of the mind”.

Delirium vs. Dementia

**Delirium**
- Acute onset, waxing/waning
- Almost always reversible
- Arousal level fluctuates
- Poor attention
- Often accompanied by hallucinations
- Possible causes: systemic infection/neoplasm, alcohol/drugs (narcotics, benzodiazepines), stroke, heart disease, electrolyte imbalance, hyper/hypoglycemia, uremia

**Dementia**
- Progressive onset, constant
- Usually not reversible
- Arousal level normal
- Attention usually unaffected
- Usually not accompanied by hallucinations
- Possible causes: Alzheimer’s, multi-infarct, Pick’s disease (or related), alcohol, brain infection tumor, malnutrition (B12/thiamine deficiency)
Role of the Family Physician

- Systematically evaluate any cognitive complaints
- Recognize cognitive impairment that exceeds normal aging memory lapses
- Identify and screen for potentially reversible diseases
- Distinguish from other more specific cortical deficits -- aphasia (disorder of language), agnosia (disorder of recognition), isolated memory deficit
- Prompt identification of dementia can protect the patient from further avoidable harm (falls, drug overdose, fires, inadequate nutrition, money management)
- Follow patients closely who present with mild cognitive changes

Role of the Family Physician

- **Follow patients closely:**
- Do they drive? Are they having accidents in general? Will parents allow the grandchildren go with grandparent(s)?
Clinical Presentation

- Generalized and sustained *progressive decline in intellectual functioning* from a previously stable attained level
- Patients may notice that they are more “forgetful”, and family members may notice increasing inconsistencies in behavior and personality are possible

Clinical Presentation

- Because of frequency of office visits can the family physician perceive the changes?
- Do we miss the signs?
- Patients themselves may notice that they are more “forgetful”
- **Family members or acquaintances** may notice increasing inconsistencies in behavior and personality (friends who see patient infrequently may be more objective)
- Are family members too close to see the subtle changes?
Clinical Presentation Progression

- Increasingly impaired judgment
- Inability to think abstractly
- Generalized personality changes (rigidity, irritability, confusion with minor environmental changes)

History and Physical Exam

- History
  - Usually involves both patient and family member or other knowledgeable informant
  - Initial questions should target common functional lapses that occur early in dementia
    - Names, important events
    - Finding words to express thoughts
    - Lost in familiar places
    - Forgetting how to use familiar gadgets and tools
    - Inability to keep up with day-to-day responsibilities previously done without trouble
  - Inquire about mood, personality, behavior changes or disturbances
History and Physical Exam

- Perform general physical exam including complete Neurological exam
- Perform complete Mental Status exam
  - General description
  - Mood
  - Affect
  - Thought
  - Perception
  - Memory and Cognition

Mental Status Exams

- AMTS (Abbreviated Mental Test Score)
  - Sensitivity 73% to 100%
  - Specificity 71% to 100%
- MMSE (Mini Mental Status Examination)
  - Sensitivity 71% to 92%
  - Specificity 56% to 96%
- Others
  - Clock drawing test
  - Ask the informant (relative or other supporter) to fill out a questionnaire about the person’s everyday cognitive functioning. The best known questionnaire is the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)
Introduced by Hodkinson in 1972 to rapidly assess elderly patients for the possibility of dementia.

Each question correctly answered scores one point.

A score of less than 6 suggests dementia
Mini Mental Status Examination

- Systematically and thoroughly assesses mental status
- It is an 11-question measure that tests five areas of cognitive function
  - Orientation, Registration, Attention and Calculation, Recall and Language
- Normal >30
- Mild dementia: 20–26
- Moderate dementia: 10–19
- Severe dementia: <10

<table>
<thead>
<tr>
<th>Maximum Score</th>
<th>Score</th>
<th>ORIENTATION</th>
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<tbody>
<tr>
<td>5</td>
<td>( )</td>
<td>What is the (year) (season) (date) (day) (month)</td>
</tr>
<tr>
<td>5</td>
<td>( )</td>
<td>Where are we? (state) (country) (town) (facility) (floor)</td>
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<tr>
<td>REGISTRATION</td>
<td>3</td>
<td>Name three objects and have person repeat them back. Give one point for each correct answer on the first trial. 1 2 3 Then repeat them (up to 5) until all three are learned. (Number of trials)</td>
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<tr>
<td>ATTENTION AND CALCULATION</td>
<td>5</td>
<td>Serial 7s. Count backwards from 100 by serial 7s. One point for each correct answer. Stop after 5 answers. [93 86 79 72 65] Alternatively spell “world” backwards. [D - L - R - O - W]</td>
</tr>
<tr>
<td>RECALL</td>
<td>3</td>
<td>Ask for the names of the three objects learned above. Give one point for each correct answer.</td>
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<td>LANGUAGE</td>
<td>9</td>
<td>Name a pen (1 point) and a watch (1 point) Repeat the following: “No ifs, ands, or buts” (1 point) Follow a three-step command: “Take this paper in your [non-dominant] hand, fold it in half and put it on the floor.” (3 points) (1 point for each part correctly performed) Read to self and then do: “Close your eyes” (1 point) Write a sentence (subject, verb and makes sense) (1 point) Copy design (5 sided geometric figure, 2 points must intersect) (1 point)</td>
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Score: /50 Alert Owenly Anxious Concentration Difficulty Droopy

CLOSE YOUR EYES
Mental Exam

Clock Drawing Test
- Draw a clock
  - Put in all the numbers
  - Set the hands at ten past eleven.

Scoring system for Clock Drawing test
- There are a number of scoring systems for this test.
- The Alzheimer’s disease cooperative scoring system is based on a score of five points.
  - 1 point for the clock circle
  - 1 point for all the numbers being in the correct order
  - 1 point for the numbers being in the proper spatial order
  - 1 point for the two hands of the clock
  - 1 point for the correct time.
- A normal score is four to 5 points.

Mental Exam IQCODE
- (Available) Short Form of the Informant Questionnaire on Cognitive Decline in the Elderly
- By A.F. Jorm
- Centre for Mental Health Research
  - The Australian National University
IQCODE

- Series of Questions asking Informant about Patient as compared to 10 years ago.
- 16 Questions
- 5 Categories
  - Much improved
  - A bit improved
  - Not much improved
  - A bit worse
  - Much worse
- Available on Internet—Short Form IQCODE

Types of Dementia—Cortical

- Alzheimer’s Dementia
- Vascular Dementia (multi-infarct dementia)
- Dementia with Lewy Bodies
- Alcohol Induced Dementia (Thiamine Deficiency)
- Frontotemporal Lobar Degeneration (Pick’s Disease)
  - Frontotemporal Dementia
  - Semantic Dementia
  - Progressive Non-Fluent Dementia
- Creutzfeldt–Jakob Disease
- Dementia Pugilistica
- Moyamoya Disease (rare cerebrovascular disease caused by blocked arteries at the base of the brain in the basal ganglia)
Ruling Out Treatable Causes

- Vitamin B12 deficiency
- Endocrine disorder (thyroid, parathyroid)
- Uremia
- Syphilis
- Brain tumor
- Normal Pressure hydrocephalus
- Thiamine deficiency (B1)

Laboratory Tests

- Performed to rule out *treatable* and *reversible* causes
- Tests Include:
  - B12
  - Folic Acid
  - TSH
  - C-Reactive Protein
  - CBC
  - Electrolytes
  - Calcium
  - Renal Function, LFTs
Vitamin B–12 Deficiency

- More than 25% of patients may present with neuropsychiatric findings:
  - Mental or Psychiatric Disturbances
  - Also paresthesias, sensory loss, ataxia, abnormal gait

Laboratory Tests

- Hypothyroidism
  - Slow speech
  - Slow cerebration
  - Poor memory
  - Numerous other physical findings
    - Weight gain
    - Hair loss etc.
  - TSH, T3, T4
Imaging

- **CT and/or MRI**
  Does NOT have great **sensitivity** for diffuse metabolic changes associated with dementia in a patient who shows **no gross neurologic deficits**. May yield important information regarding certain **reversible causes of dementia such as infarction or normal pressure hydrocephalus**.
- **PET imaging** may be superior to clinical exam in differentiating vascular dementia from Alzheimer’s dementia and FTD.

Consult a Neuropsychologist

Personal experiences and suggested by neurologists and neurosurgeons.

How many in this audience have used a Neuropsychologist?
Neuropsychology

- What is a Neuropsychologist
- He/She is a physiologist who specializes in understanding the relationship between the physical brain and behavior.

Neuropsychological Evaluation

- Used to quantitatively measure the cognitive and behavioral capabilities of a patient
- The data gathered can be compared to "normals"
- Data compared according to age, race, gender, education, and socioeconomic status
Neuropsychological Evaluation

- Can include testing of: intelligence, attention, memory, personality, problem solving, language, perception, motor, academic and learning abilities
- Interview can take 3–4 hours

WE SCREEN!

They can usually make a clinical diagnosis!
Main Focus Today

Alzheimer’s Dementia

Frontotemporal Dementia (Pick’s Disease)

Neurological Diseases Impairing Cognitive Ability

- Alzheimer’s disease
  - Slow decline in cognitive and behavioral ability, no focal deficits
Imaging

- CT and/or MRI commonly performed but do NOT have great sensitivity for diffuse metabolic changes associated with dementia in a patient who shows no gross neurologic deficits.
- May yield important information regarding certain reversible causes of dementia such as infarction or normal pressure hydrocephalus.
- SPECT and PET imaging may be superior to clinical exam in differentiating vascular dementia from Alzheimer’s dementia.

Alzheimer’s Disease

- Dr. Nilufer Taner gave an excellent lecture on the disease and I want to thank him for the great presentation.
- Great Information, he is on the front line.
Alzheimer’s Disease

- BUT, I will remind you of the following 10 Warning Signs of Alzheimer’s

10 Warning Signs of Alzheimer’s

1. Memory loss that disrupts daily life
2. Challenges in planning or solving problems
3. Difficulty completing familiar tasks at home, work or at leisure
4. Confusion with time or place
5. Trouble understanding visual images and spatial relationships
10 Warning Signs of Alzheimer’s

6. New problems with words in speaking or writing
7. Misplacing things and losing the ability to retrace steps
8. Decreased or poor judgment
9. Withdrawal from work or social activities
10. Changes in mood or personality

Changing Subject

- Frontotemporal Dementia
FRONTOTEMPORAL DEMENTIA
A neurological Disorder Impairing Cognitive Ability

- How many in audience have seen this dementia?

Frontotemporal Dementia (FTD)
Cortical Dementia

- Describes a clinical syndrome associated with shrinking of the frontal and temporal lobes. Originally known as Pick’s Disease, the name and classification of FTD has been a topic of discussion for over a century.

The current designation groups together Pick’s Disease, primary progressive aphasia, and semantic dementia as FTD. Occurs in 2%-3% of Dementias.
Frontotemporal Dementia

- FTD (Pick’s Disease)
  - Clinically resembles Alzheimer’s, more prevalent in women, onset in 50’s
  - Treatment: antidepressants, antipsychotics, sleep aids, no benzodiazepines

Frontotemporal Dementia (FTD)

- Affects frontal and anterior temporal lobes

Areas of control of “Executive Functions” reasoning, personality, social behavior movement, speech, language and certain aspect of memory
Frontotemporal Dementia

- Varying personality and behavior changes, from apathy to hyperactivity
- Loss of empathy toward others; lack of proper social conduct
- Memory is preserved early on
- Language difficulty
- Compulsive eating and oral fixations
- Repetitive actions

Case Presentation

57 y/o White Female, G1P1, daughter, 32 week gestation
Hypothyroid x 20 + years
BCP’s until menopause then Prempro
PSH – T & A, Appy, Tubal ligation,
Liver cyst destruction (10-07)
Occupation, office manager
Clinical Presentation

**SUBTLE**

- Forgetful
- Lost in thought
- Ritualistic (stroking hair when watching television)
- Avoids complex tasks
- Late in paying bills
- Not as friendly (noticed by friends for about 4–6 months)
- Very tired
- Quiet
- Loses temper easily (not to family or friends but to phone solicitors or smokers by public entrances)

Clinical Presentation

- Plays solitaire during every free moment in office, instead of doing office work, misses a lot of plays
- Charts filed in wrong order
- Letters misplaced on charts, ETS should have been EST
- Desk a mess, not organized, has trouble finding things
- Forgets a lot of things she did routinely in office
- Not taking messages properly or forgetting to give
- Put wrong dates and times on Appointment Cards
- Not sleeping well
Clinical Presentation

- She broke her arm changing a light bulb on the front of the garage, a light not needed, there is a flood light in the center of the garage. She was on step stool. She did it when husband was out of town. When I asked why she didn’t wait one day for husband to change the bulb? She stated “IT WAS BUGGING ME”. She has not changed a light bulb in 33 years of marriage.

The Patient

- My office manager of 35 years had developed dementia!
- But what kind??
Work–UP

- Standard Laboratory Tests–Negative
- MRI–atrophy frontal and temporal lobes
- PET Scan–poor perfusion frontal and temporal lobes
- Neuropsychological evaluation

Neuro–Psych Evaluation

Diagnosis: Frontotemporal Dementia

Confirmation: by Medical Director of Dementia at Duke University

Frontotemporal Dementia ? Never heard of it !
What happened next?

Prognosis—disintegration from a viable, energetic, personable, intelligent human being who could think, converse and act intelligently to an infant who could not care for herself. My wife was dying in front of my eyes.

“Terminal” Death of a Mind

With the diagnosis, of a TERMINAL ILLNESS

My wife and I reacted and went through

Elisabeth Kubler-Ross’ s 5 Stages of & LossGrief
Kubler-Ross 5 Stages of Loss & Grief

1.) Denial & Isolation
   – It can’t be happening!

2.) Anger
   – At inanimate objects, complete strangers, friends, family or God

3.) Bargaining
   – Could I have done something sooner?
   – Make deal with God

5 stages of Grief and Loss

4.) Depression
   Reaction to the practical applications relating to loss
   Concern about costs

5.) Acceptance
In today’s reality, the caregivers of patients with dementia are often the spouse or the adult children. They are stressed, depressed, confused, and forgotten. Until placement is an option, the physician must facilitate home health, respite care, home medical equipment, and bring organization and guidance to medications, medical maintenance, and specialists. They must also monitor for signs of neglect, abuse, and fatigue.

Provide Support to Caregivers

- Web Site with a Bonanza of Information and ADVICE
- alz.org
- Alzheimer’s Association
  Alzheimer’s & Dementia Caregiver Center
Caregiver Home

- Daily Care
  - Enhancing daily
    - Personal care
    - Medical care
- Stages of Behavior
  - Early
  - Middle
  - Late

Caregiver Home

- Behaviors
  - Aggression and Anger
  - Anxiety and Agitation
  - Depression
  - Hallucinations
  - Memory loss and Confusion
Caregiver Home

- Get support
- Support groups
- On Line Community
- Blog
- Training and Resources
  - Caregiver Notebook
  - Resolving Family Conflicts
  - Holidays
  - Ethical and Care Issues

Caregiver Home

- Wandering vs Nestor
- Home safety
- Dementia and Driving (Silver Alert)
- Medication Safety
- Comfort Zone (GPS)
- Medic Alert Bracelet
Caregiver Home

- Safety
  - Special Situations
  - First responders
  - Traveling
  - In a disaster
  - Abuse

Caregiver Home

- Coordinating Care
  - Working with care providers
  - Care team leader
  - Long distant care giving

- Financial matters
  - Planning for costs, paying for care,
  - insurance,  Medicare & Medicare Part D,
  - Medicaid, Tax  deductions and credits
Caregiver Home

- Legal matters
  - Planning ahead
  - Legal documents (where are they?)

Prevention of Dementia

- Lead and active life, both mentally and physically
- Regular moderate consumption of beer and wine may reduce risk
- Hypertension medications, NSAIDS, and certain anti-diabetic drugs may help in prevention
- Some studies suggest that Mediterranean diets such as those rich in beta-carotene may help prevent certain cortical dementias
Thank You!

- Any Questions?
- Thoughts about Long-Term Care?