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A GUIDE TO OTHER FORMS OF DEMENTIA AND THEIR EFFECT ON CAPACITY AND UNDUE INFLUENCE

#### CASCI Conference

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### WHAT IS DEMENTIA?

"Dementia is a progressive deterioration in intellectual function and cognitive skills, leading to a decline in the ability to perform the activities of daily living." From the Merck Manual of Geriatrics

Dementia is a loss of brain function that occurs with certain diseases. It affects memory, thinking, language, judgment, and behavior.

#### It's important to have some understanding of dementia

- · Elderly patients with first admission to a psychiatric hospital commonly suffered from undiagnosed dementia.
- · Often admitted for psychosis, depression, or behavioral disturbances.
- Older adults who live alone are less likely to be diagnosed with dementia by PCP
- Family members may be first
  to notice deficits

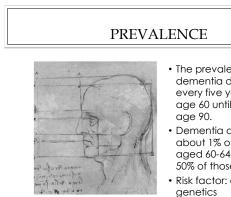


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# DEMENTIA

- Although dementia is more common in the geriatric population, it can occur in any stage of adulthood.
- Dementia is one of the most common causes of institutionalization, morbidity, and mortality among the elderly.
- Mildly slowing of cognitive processes is common with aging and, by itself, does not suggest dementia.
- Self reported memory loss in patients who function normally is often caused by aging or depression, but not dementia. Dementia patients are more likely to try to cover up their memory problems for as long as possible.
- Before a diagnosis of dementia can be made, all potentially reversible causes of cognitive impairment must be ruled out (I.e. drugs, delirium, depression, etc.)
- Dementia is typically preceded by a period of mild cognitive impairment which can last several years.

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- The prevalence of dementia doubles every five years after age 60 until about
- Dementia affects about 1% of people aged 60-64 but 30-50% of those over 85.
- Risk factor: age, genetics

# TYPES OF DEMENTIA

- Depends on first symptoms, part of the brain where damage begins
- Alzheimer's Dementia
- Mild Cognitive Impairment
- FrontoTemporal Dementia
- Dementia with Lewy Bodies
- Vascular Dementia
- Progressive Non-fluent Aphasia
- Wernicke-Korsakoff Syndrome
- PD, MS, HD

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# ETHNICITY & DEMENTIA

- Minority elderly have higher rates of dementia in the US
- dementia in the US
  AD is more prevalent among African Americans than among whites.
  African Americans with dementia are placed in nursing homes at significantly slower rates than whites



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### WHAT IS CAPACITY?

The ability to: •Take in information •Understand its meaning •Make an informed decision using the

information • Allows people to function independently



# CAPACITY

Not a unitary construct:

- Testamentary
- Medical decision making
- Driving
- Finances
- Marriage
- Live independently
- Contractual

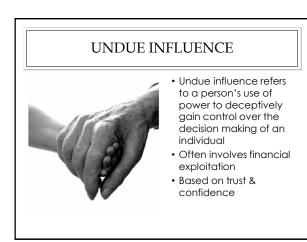
Often seen on a continuum

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# CAPACITY & COGNITION

- Testamentary : Memory, language, and sometimes higher order reasoning
- Driving: Sensory abilities (vision, basic motor coordination), attention, visuospatial processing, executive functions
- Financial: Mathematical skills, higher order thinking, prospective memory, performance skills (counting money, writing checks), judgment, values
- Medical: Comprehension, language, judgment, insight, reasoning

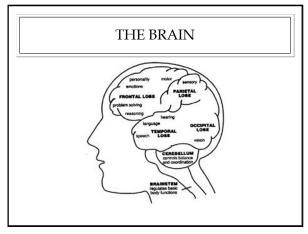
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#### VULNERABILITY TO UNDUE INFLUENCE

- Isolation from family and friends; geographical isolation
- Dependency on the perp (emotional, physical)
- Emotional manipulation of the victim (reciprocity)
- Acquiescence of the victim
- Financial loss; recently widowed
- Most likely victims: older Caucasian women who live alone
- Mental & physical illness increase susceptibility to undue influence

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# EXECUTIVE FUNCTION

EXECUTIVE FUNCTIONS: Executive functions refer to a broad array of high-order cognitive capacities needed for a person to interact independently and successfully in "real world" conditions. Examples include abilities that allow one to inhibit impulses, shift mental focus, organize one's thoughts and behaviors, plan, divide one's attention, or monitor one's own behavior. If there are deficits in executive functions, even individuals with strong cognitive abilities may be unable to behave in independent, productive, self-serving ways. In contrast, individuals with intact executive abilities but low overall cognitive ability may have few problems in behaving adaptively.

# ATTENTION

Different aspects of attention

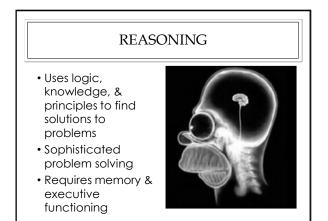
1.Brief auditory attention

2.Sustained attention

- 3.Divided attention
- 4.Selective attention
- 5.Complex attention

First step in memory: If you can't pay attention, you can't learn. If you can't learn, there's nothing to remember.

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### MEMORY

- Fundamental to most everyday activities
- Memory decline leads to impairments in IADLs including shopping, meal prep, managing finances, managing medications, living alone, driving
- Most problems associated with short term memory
- Long term memory: Includes procedural (how to do things), episodic (what happened), semantic (what I know)
- Prospective memory
- Working memory

# Alzheimer's: A quick overview



- Affects men & women equally

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#### NEUROPATHOLOGY OF AD

- Begins in the entorhinal cortex and hippocampus (medial temporal lobes)
- Prominent early feature is (recent) memory loss
- Long term memory relatively spared early
- Next develop problems with language
- Moves forward: Problems with behavior, wandering, paranoia, aggressiveness, failure to recognize family members
- · Gait impairment, abulia (inability to make decisions), incontinence
- Late stages: akinetic, mute, bedridden

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### 10 EARLY WARNING SIGNS OF AD

• Memory loss

- Difficulty performing familiar tasks
- Difficulty with language
- Disorientation to time and place
- Poor or decreased judgment
- Problems with abstract thinking
- Misplaces things
- Changes in mood or behavior
- Changes in personality (fear, confusion,
- dependency)
- Loss of initiative, increased passivity

# AGE-RELATED MEMORY LOSS VS AD

- Cognitive performance is generally not impaired.
- A person may require extra time or encouragement but is able to successfully complete a task.
- A person may be able to learn new information but have difficulty with efficient recall.
- Daily functioning remains unaffected.
- The patient is usually more concerned than family members.

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AD VS NORMAL AGING			
Alzheimer's	Normal Aging		
Forgets entire experience	Forgets part of an experience		
Rarely remembers later	Often remembers later		
Is gradually unable to follow written/spoken directions	Is usually able to follow written/spoken direction		
Is gradually unable to use notes as a reminder	Is usually able to use notes as a reminder		
Is gradually unable to care for self	Is usually able to care for self		

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# EARLY LOSS IN AD

Early stage symptoms of AD (From Marson: 2009)

- Short term memory loss (verbal and visual)
- Language problems and loss of knowledge
- Executive dysfunction (impairments in planning, organization, self-monitoring)
- Decision making impairment
- Anxiety and depression

### EFFECT OF AD ON CAPACITY

- Early diagnosis is important
- Probably has capacity in early stages of the disease, but may lose cognitive abilities as the disease progresses
- Financial capacity is already significantly impaired in mild AD (Marson, 2000)
- Voting: OK in mild-mod; lacks capacity in severe AD
- Work: Usually impaired early in the disease
- Testamentary capacity: depends on the complexity of the estate and family dynamics

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### DEMENTIA WITH LEWY BODIES

- 2nd most common type after AD in adults >75
  Characterized by progressive dementia, parkinsonism, and neuropsychiatric symptoms
- Parkinsonism, and neuropsychiatric symptoms
   Increased functional impairment due to motor deficits and potentially fatal response to medications
- Marked by visual hallucinations, fluctuations in attention (good days, bad days), fluctuations in alertness (drowsiness)
- REM sleep behavior disturbance ((act out dreams)
- Parkinsonism: rigidity, less freq. of resting tremor, gait instability
- Delusions: in up to 57% of patients

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### DEMENTIA WITH LEWY BODIES

- Starts in brainstem, spreads to temporal lobes and cortex
- Neuronal inclusions: abnormal protein structures called Lewy bodies develop in regions of the brain responsible for thinking and movement
- Can co-occur with AD



#### DEMENTIA WITH LEWY BODIES

- LBD is slightly more common in men than women. The average age of onset is 75 to 80 years of age.
- Like Alzheimer's disease, a diagnosis of LBD is considered 'possible' or 'probable' after other possible diagnoses are considered and eliminated.
- Lewy body Dementia usually has a rapid onset and rapid progression. The average span of time between diagnosis and death is about 5 to 7 years.
- There are no know therapies to slow the progression of LBD, nor is there a known cure. The goal of treatment: control the cognitive, psychiatric and motor symptoms

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#### NEUROPSYCHOLOGICAL FINDINGS

- Pure LBD: Deficits in visuospatial, attention and executive functioning
- Visuospatial: Poor object size discrimination, form discrimination, poor visual counting, tendency to misidentify objects
- Hallucinations: Daily; usually people or animals; not always disturbing
- Delusions (may be related to misidentification)
- Poor learning and delayed recall
- Profile changes if patient also has AD pathology

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# EFFECT OF LBD ON CAPACITY

- Driving (due to visuospatial deficits)
- Living independently
- Medical decision making: may depend on periods of alertness
- Testamentary capacity: Depends on severity, type of day (good vs bad), level of alertness
- Financial capacity: For simple financial transactions but unlikely for complex management

#### FRONTOTEMPORAL DEMENTIA

- Signs and symptoms vary
- First sign is often behavioral changes or apathy (often mistaken for depression)
- Progressive shrinking of frontal and temporal lobes
- Considered a behavior and/or language disorder vs AD which is a memory disorder
- Age of onset: 40's-70's
- Often mistaken for a psychiatric disorder (often depression, bipolar disorder, psychosis, or OCD)

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# APATHY VS DEPRESSION

- Apathy presents as indifference and the patient does not seem to have emotions: "I don't know and I don't care."
- People with apathy lack motivation but are unconcerned about it.
- Common complaints: a reduced participation in household chores; loss of interest in socializing; less affectionate or emotionally expressive.

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### DEPRESSION

- Tearfulness and crying
- Consistently low mood
- Feelings of failure
- Despair about the future
- Suicidal thoughts and actions
- Seems "active" compared to apathy
- Usually responds to treatment
- Client may have a history of depression

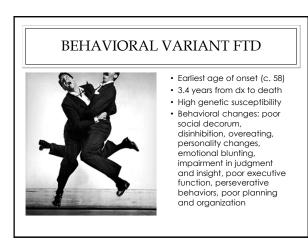
APATHY VS DEPRESSION				
Apathy Only	Common to Both	Depression Only		
Loss of motivation	Lack of interest in events and activities	Sad mood and pessimism		
Loss of initiation	Decreased energy	Hopelessness		
Emotional indifference	Psychomotor slowing	Suicidal ideation		
Decreased social engagement	Decreased insight	Vegetative symptoms (changes in sleep or appetite)		

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#### THREE SUBTYPES OF FTD

- Behavioral Variant: Frontal
- Semantic Dementia: Left temporal lobe vs right temporal lobe; deficits in emotion or speech (word meaning & conceptual knowledge)predominate
- Progressive non-fluent Aphasia: Difficulty with the production of speech

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#### BEHAVIORAL VARIANT FTD

- Frequently misdiagnosed as psychiatric
- Diagnosis often delayed
- Patient often very impaired by diagnosis
- Usually not correctly diagnosed until severe lapses of judgment in finances or behavior
- Patient may be resented by family or colleagues due to rudeness, coldness, deficits in social behavior
- Imaging shows greater atrophy on right vs left frontal lobe

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#### SEMANTIC DEMENTIA: LEFT SIDE

- Age of onset: c 59
- Slower rate of progression (5.2 years from dx to death)
- Less likely genetic
- Left more commonly recognized than right
- Begins with wording finding difficulty (nouns>verbs)
- Progresses to problems recognizing words
- Can develop compulsive interest in visually appealing objects; may steal or engage in compulsive card or video games or collections

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### SEMANTIC DEMENTIA: RIGHT SIDE

- Less frequent than left sided SD
- Spreads from one side to the other
- Psychiatric features predominate:
  - Loss of empathy,
  - Atypical depression,
- Inability to recognize emotion in faces
- Familiar face recognition can be lost as initial

symptom

# EARLY SYMPTOMS OF FTD

- Self centeredness
- Emotional distance
- Withdrawal
- Lack of empathy
- Lack of awareness of problematic behaviors
- Avoidance of social contact
- Neglecting hygiene
- Lack of inhibition

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# Early Sx of FTD con't

- Overeating
- Irritability, aggressiveness, violence
- Poor judgment
- Poor planning, cannot organize
- Repetitive or compulsive behaviors: OCD
- Euphoria

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#### PROGRESSIVE NON-FLUENT APHASIA

- About 25% of all FTD cases
- Intermediate rate of progression (4.3 years)
- Some genetic component
- Presents with deficits in language or speech
- Decreased output for words
- Shortened phrase length
- Deficits in articulation
- Patient often notices before others do
- Often maintain social decorum until later

### VASCULAR DEMENTIA

- A very common form of dementia
- Arteries that feed the brain narrowed or blocked
- Risk factors: High blood pressure, age, DM
- Can affect any part of the brain
- Early symptoms are variable
- Cognitive decline common
- Can have step-wise progression
- TIAs: prediction for future strokes
- Strokes doubles the risk of AD

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#### COMMON PSYCHIATRIC SX OF VD

- Blunted affect
- Depressed mood
- Emotional withdrawal
- Motor retardation
- Low motivation
- Anxiety
- Unusual thoughts
- Somatic concerns
- Step-wise progression

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#### IF YOU SUSPECT DEMENTIA

- Patient can be evaluated by a neurologist
- Memory and Aging Clinic at UCSF: (415) 476-6880
- Institute on Aging: (415) 750-4111
- Some PCPs are comfortable evaluating cognitive decline
- Can refer to a neuropsychologist for an in-depth evaluation
- Northern California Neuropsychology Forum has a directory: www.ncnf.org