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# Dementia, Delirium, Depression

## The 3 D's

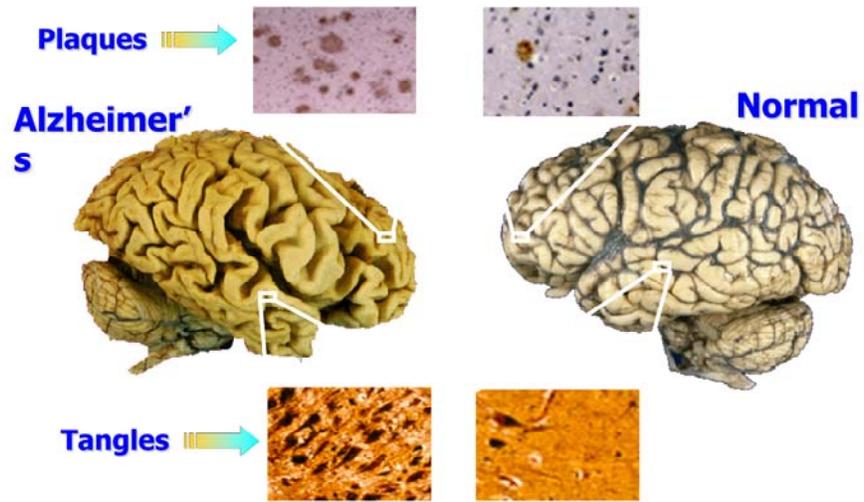
## Meaning of Dementia

- ↪ Impairment in short-term and long-term memory
- ↪ Impairment in abstract thinking or reasoning
- ↪ Impairment in Judgment
- ↪ Personality changes
- ↪ Apraxia (forgetting how to do things)
- ↪ Aphasia (difficulty with speech)

## Causes of Dementia

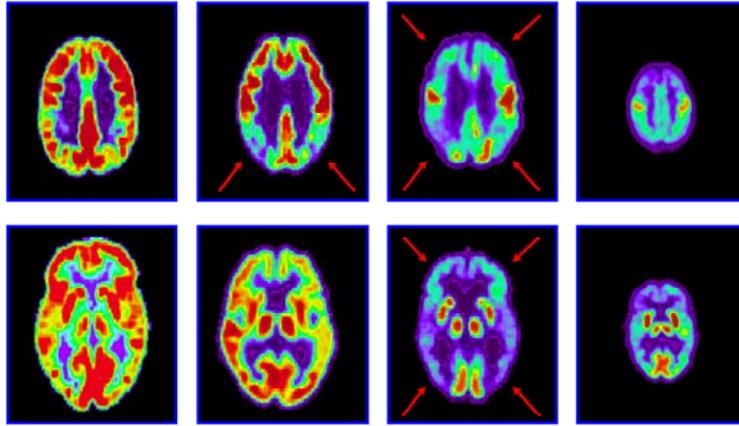
- ↪ Alzheimer's Disease : (50%-65%)
- ↪ Vascular Type : (10%-15%)
- ↪ Lewy Body Dementia : (10%-15%) this gets confused with Parkinson's dz.
- ↪ Frontotemporal Lobe Type : (5%-8%)
- ↪ Parkinson's Disease with Dementia: about 40% develop dementia

## Amyloid Plaques and Neurofibrillary Tangles in Alzheimer's Disease and Normal Aging

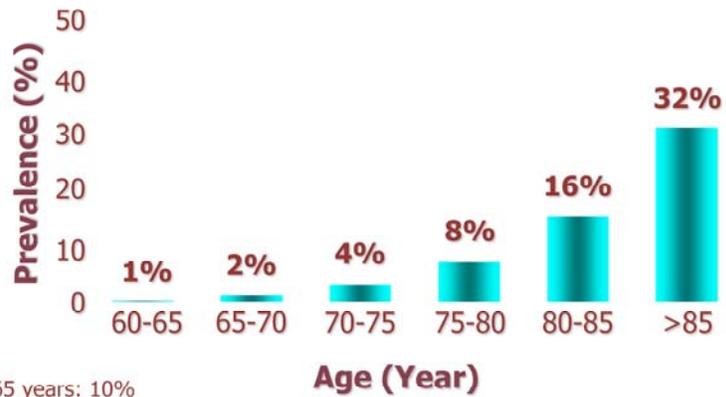


Courtesy of Harry Vinters, MD.

Positron Emission Tomography (PET)  
Studies of Glucose Metabolism (FDG)



## Prevalence of Alzheimer Disease (AD) in the US



- ✦ >65 years: 10%
- ✦ >85 years: 32%-47%
- ✦ 68% are women
- ✦ Today: ~4 million have AD
- ✦ 2050: >14 million will have AD

(Clinical Neuroscience Research Associates (CNRA, 2003). Available at: [www.the-rubins.com](http://www.the-rubins.com).)

## Facts & figures from [www.alz.org](http://www.alz.org)

- ✎ 1 in 8 older Americans have Alzheimer's disease.
- ✎ Alzheimer's is the 6<sup>th</sup> leading cause of death in the United States.
- ✎ Over 15 million Americans provide unpaid care for someone with Alzheimer's.
- ✎ Payments for care is estimated to be \$200 billion in 2012.

## Rule out any reversible or medical causes of dementia

- ↪ B12 or Folic acid deficiency
- ↪ Thyroid disease
- ↪ CNS Infections: Syphilis, HIV
- ↪ Normal-pressure Hydrocephalus
- ↪ Brain tumor, Subdural Hematoma
- ↪ Stroke
- ↪ Parkinson's or Huntington's disease
- ↪ Substance-induced
- ↪ Depression (pseudodementia)

## Dementia Work Up

- ↙ Physical and Neurological Exam
- ↙ Labs including: B12, Folate, TSH, UA, CBC, CP-comp, syphilis, HIV (if indicated)
- ↙ Brain Imaging: PET, MRI, CT
- ↙ Neuropsychiatric Testing
- ↙ Question Alcohol or Pain Med Use
- ↙ Depression and Anxiety Screen
- ↙ Insomnia/Apnea work up (if indicated)
- ↙ **Rule Out Delirium**

## Definition of Delirium

- ↪ 30-50% of Ill Geriatric patients become delirious at some point during their hospital stay
- ↪ Rapid Onset (hours to days)
- ↪ Brief Duration (days to weeks), Transient
- ↪ Alternating level of consciousness, altered attention (sundowning)
- ↪ Disorientation, Disorganization, Memory Impairment
- ↪ Psychosis, Irritability
- ↪ Disruption of the sleep-wake cycle

## Delirium Suspects

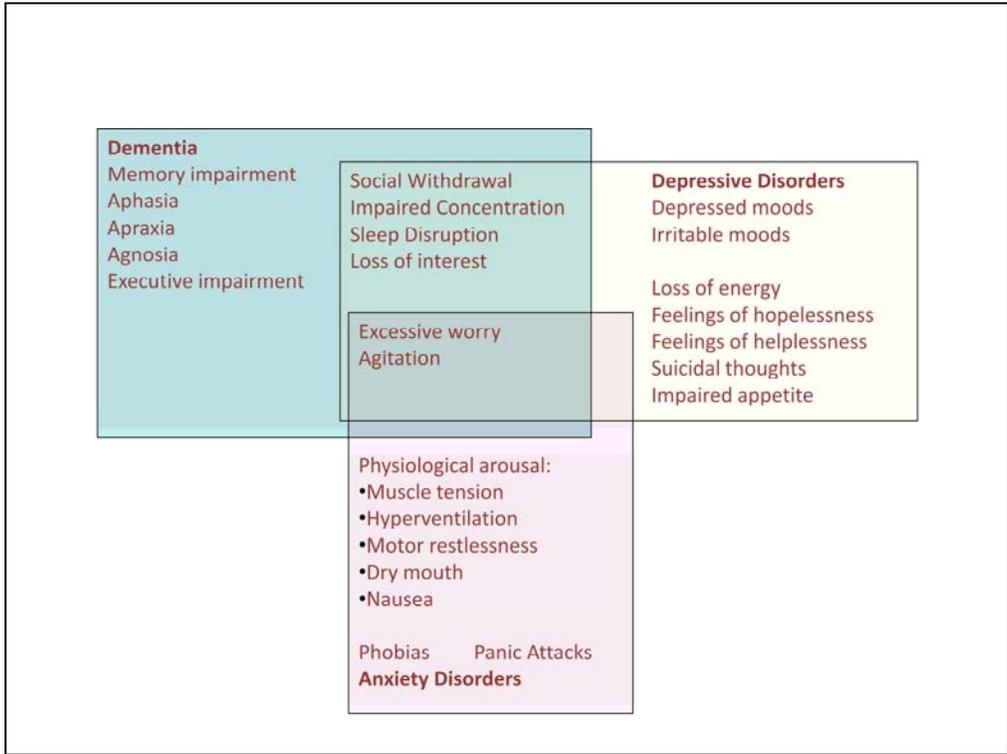
- ↪ In Demented Patients #1 cause is UTI
- ↪ Many other medical problems can cause it
- ↪ Dehydration, Pneumonia, Flu, Constipation, CNS infections, Post-Stroke, Hypoxemia, Hypo-or Hyperglycemia, Thyroid disease
- ↪ Drugs: Benadryl, Pain Meds, Lithium, Sinemet, Anesthesia (Post-Surgery), Alcohol, Benzos
- ↪ Drug withdrawal: Alcohol, Benzos, Opioids

## Delirium Treatment

- ↙ Identify and treat the medical condition
- ↙ Keep environment quiet and stimulation to a minimal level (ICU)
- ↙ Familiar Face, Reassurance (Pt.& Family)
- ↙ Hydrate and monitor food intake
- ↙ If irritable and psychotic: Antipsychotic medications

# Dementia Treatment

- ↪ Early Diagnosis is Crucial
- ↪ Treat The Medical Problems
- ↪ Cholinesterase Theory: “ACHEI’s”
  - ↪ Aricept, Reminyl, Exelon
- ↪ Glutamate Theory: Namenda



## Reasons for Delayed Diagnosis

- ↪ Normal aging
- ↪ Insidious onset/course
- ↪ Other medical illness/depression
- ↪ Lack of routine screening
- ↪ Denial



## Treatment with Medications

- ✎ Improves quality of life, prolong self-sufficiency
- ✎ Improved cognition and functioning after one year compared to patients who were never on AChEIs
- ✎ Slowing in deterioration
- ✎ Benefit declines as more cholinergic neurons (brain cells) are lost
  - ✎ Diagnose and Start treatment early
- ✎ Decreased risk of NHP
- ✎ Delay in NHP (by almost 2 years)

# Nonpharmacological Management

## ↙ Safety:

- ↙ “Child Proofing” the home (OT Eval)
- ↙ Driving (Driving Test)
- ↙ Limit financial responsibilities

## ↙ Serenity:

- ↙ Maintain a calm and peaceful atmosphere
  - ↙ Dimmed lighting
  - ↙ Peaceful music

## Nonpharmacological Management (cont.)

- ↪ Structure:
  - ↪ Regular Routines
  - ↪ Keeping things familiar
  - ↪ Memory Book (OT Eval)
- ↪ Sanity of Caregivers
  - ↪ Day care centers
  - ↪ Respite Care to take a vacation(ALF)

## Signs of Stress in Caregivers

- ✧ Anger
- ✧ Anxiety
- ✧ Denial
- ✧ Depression
- ✧ Exhaustion
- ✧ Health problems
- ✧ Irritability
- ✧ Lack of concentration
- ✧ Sleeplessness
- ✧ Social withdrawal

Alzheimer's Association. Caregiver stress. Available at: <http://www.alz.org/hc/counseling/stress.htm>



“What you need, Mr. Terwilliger, is a bit of human caring; a gentle, reassuring touch; a warm smile that shows concern — all of which, I’m afraid, were not part of my medical training.”

## American Association of Geriatric Psychiatry

- ↪ [www.aagponline.org](http://www.aagponline.org)
- ↪ A great source of knowledge for patients and their caregivers

# Alzheimer's Association Resources

✦ Contact center

✦ *Safe Return Bracelets for the  
patient and the caregiver*

✦ Multicultural outreach

✦ 1-800-272-3900

✦ [www.alz.org](http://www.alz.org)

## Wandering Behavior

- ✎ 4%-26% of SNF patients wander
- ✎ Up to 59% of patients who reside in a community wander
- ✎ If not located within 24 hours, 46% will die of hypothermia or dehydration
- ✎ No one can predict when wandering will occur

## Safe Return

- ✦ Registrant and caregiver ID products
- ✦ National information and photo database
- ✦ 24-hour, toll-free crisis line
- ✦ Fax alert notification system
- ✦ Local chapter support
- ✦ Wandering behavior information and training

## AltaVita Assisted Living Community

- State of the art secured community in Boulder County
- Assisted Living starts at \$4100 per month
- Neighborhood concept
- Higher functioning neighborhood
- Daycare Program, Respite Program
- Individualized care plans with stimulating activities specific for memory impaired

## Educational series

We will be offering educational Series at  
AltaVita

Next offering is targeted toward nurses in the  
community on March 6<sup>th</sup>. An all day seminar.

If interested please check online at  
[www.AltaVitaLiving.com](http://www.AltaVitaLiving.com) and send us an email  
to get on our mailing list for future updates