

# Early Identification of Alzheimer's Disease and Related Dementia's

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# Outline

- Dementia Defined
- Causes of Dementia
- Importance of Early Assessment
- Basic Dementia Assessment
- Assessment Instruments
- Treatment
- Patient Education/ Social Support
- Caregiver Stress
- Resources

All that is confusion is  
not dementia !

# Delirium

- ❖ Acute
- ❖ Generally reversible
- ❖ Altered sensorium and level of consciousness
- ❖ Multiple causes: the whole textbook of medicine

# Dementia

- ❖ Sub acute to chronic
- ❖ Rarely fully reversible
- ❖ Narrower range of causes
- ❖ Impaired sensorium, judgment, and function

# Define Dementia

- Is not a disease
- Term used to describe a group of symptoms that can accompany a disease
- Loss of memory, reason, judgment, and language
- It is not part of normal aging

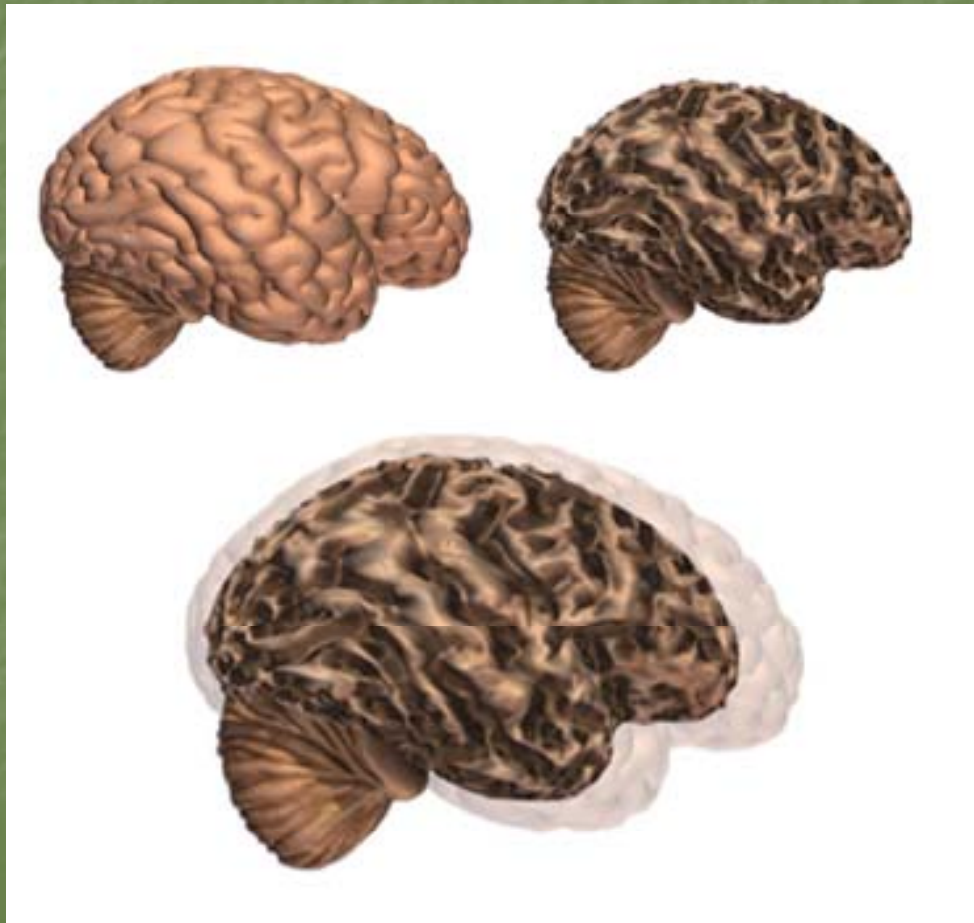
# Causes of Dementia

- ❖ Alzheimer's disease
- ❖ Vascular dementia

# Alzheimer's Disease

- ❖ Characteristic neurofibrillary tangles and senile plaques
- ❖ More frequent with advancing age
- ❖ Approx 65% dementia cases
- ❖ Gradual progression with short term memory loss as most common initial symptom

# Normal Brain vs. Brain w/ AD



# Non-diseased vs. Alzheimer's

Fig. 3. Normal brain section.

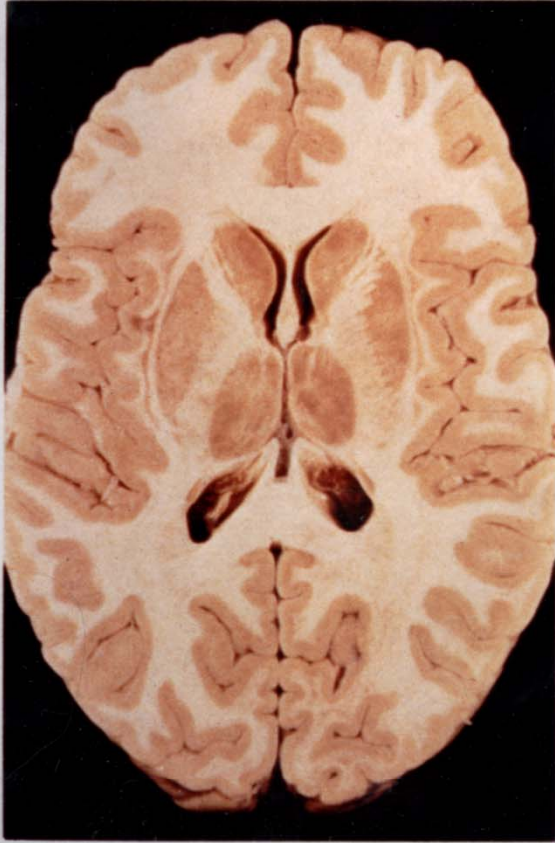
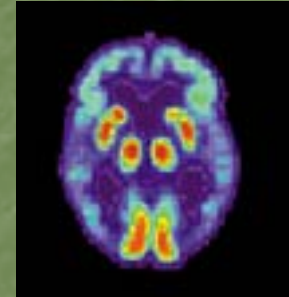
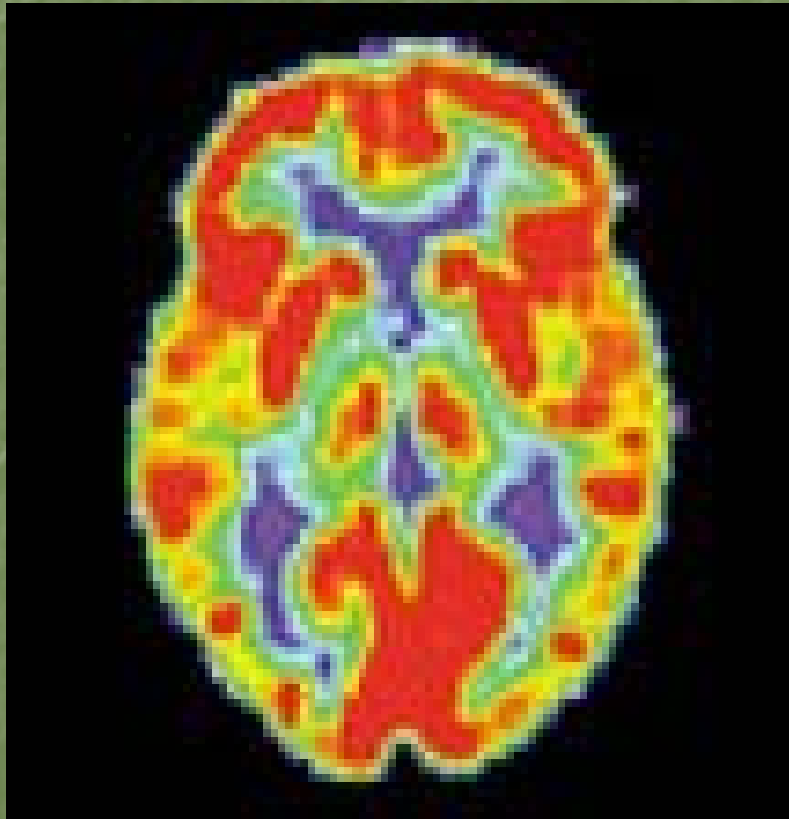


Fig. 4. Brain section of patient with Alzheimer's Disease—enlarged ventricles.

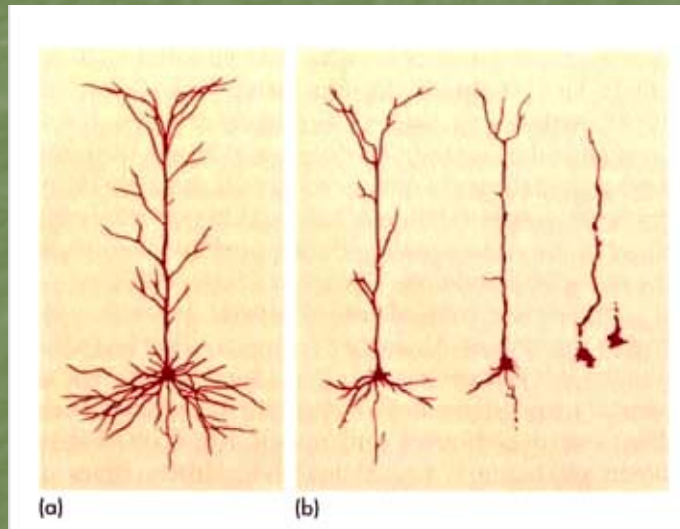


Slides courtesy of Duke University Medical Center, Durham, North Carolina.

# PET Scans: Non-diseased vs. AD



# Non-diseased Nerve vs. AD Nerve

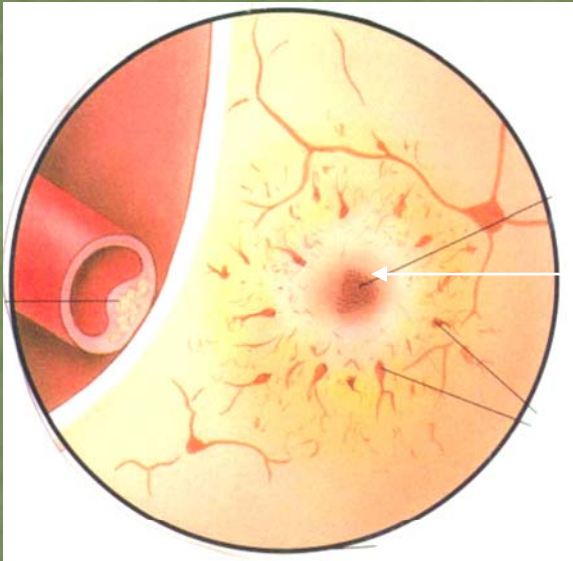


Non-diseased

Alzheimer's diseased nerve

12

# Plaques and Tangles



**Amyloid plaques** (center arrow) are found outside of nerve cells in the cerebral cortex and hippocampus. These plaques contain a core of beta amyloid protein that is surrounded by abnormal brain nerve cell endings (two arrows, bottom right).



**Neurofibrillary tangles** are bundles of filament inside nerve cells that abnormally twist around one another. Scientists believe the tangles play a role in the memory loss and personality changes that AD patients suffer.

# Vascular Dementia

- ❖ Approximately 25% of dementia cases
- ❖ Characteristically step-wise in progression
- ❖ Pattern of loss tends to be less predictable than in Alzheimer's Disease

# Less Common Causes

- ❖ Frontotemporal dementia(s)
  - More rapid onset
  - Personality changes more prominent
  - Hyperphagia
- ❖ Lewy body dementia
  - Parkinsonian features, drowsiness, Hallucinations
  - Very sensitive to behavior meds

# Less Common Causes (cont.)

- ❖ Infectious diseases:

  - HIV

  - Syphilis

  - Endemic illnesses: in US: Lyme disease

  - Creutzfeldt-Jacob

  - Encephalopathy

# Rule Outs

- ❖ Space occupying lesions
- ❖ Subdural hematoma
- ❖ Thyroid disease
- ❖ B12 deficiency, other B vitamins
- ❖ Heavy metals
- ❖ Liver failure
- ❖ Pulmonary failure
- ❖ Renal/metabolic disorders
- ❖ Depression

# DRUG TOXICITIES

- ❖ Broad array

# Important Distinctions

- ❖ All aging changes are not bad
- ❖ Some “aging” changes are preventable
  - ❖ Dementia is more frequent with age but is a group of age-associated diseases, not due to age alone

# Importance of Early Assessment

- Critical concern
- Ascertain early, while patient can be part of discussion
- Refer patients to services/supports

# Basic Dementia Assessment\*

- Monitor Changes in:
  - Daily Functioning
  - Cognitive status
  - Comorbid medical conditions
  - Behavioral symptoms, psychiatric, depression
  - Medications
  - Living Arrangements
  - Palliative or End of Life Care

\*Guidelines for Alzheimer's Disease Management 2008

# Basic Dementia Assessment (cont.)\*

- Re-assess at least every 6 months
- Identify supports
- Assess capacity
- Identify Culture and Values

\*Guidelines for Alzheimer's Disease Management 2008

# Assessment Instruments

- Mini Mental Status Exam (MMSE)
- Clock Drawing Test
- Caregiver Screening Tools

# Treatment

- Develop Treatment Plan
- Treat Behavioral Symptoms
- Non-Pharmacological Treatment First
- Treat Co-Morbid Conditions
- Provide End of Life Care

# Treatment

- Treat depression first
- Treat UTI first
- Consider social circumstances, care, isolation, sensory limitations, activities
- Then: consider available memory medications

# Memory Medications

- Acetylcholinesterase inhibitors
- Namenda
- Limited benefits; expense concerns

# Behavior Medications

- Hazards of anti-psychotic agents
- Potential benefits of antidepressants
- Other sedatives: benzodiazepines, antihistamines
- Anti-psychotic agents for narrow indications

# Caregiver Stress

- AD takes a huge physical, financial and emotional toll on caregivers.
- Caregivers may provide care for 5-8 years
- Caregivers are especially vulnerable to physical and emotional stress.

# Caregiver Education

- Studies show caregivers who receive education about AD and support services are able to provide care longer and report feeling less stress and burden.
- Attending to Caregiver needs results in positive outcomes for patients

# A.D.A.C model

- Three step process
- Home visit and assessment by ADAC social worker
- Clinical assessment by physician
- Family conference with ADAC social worker to create care plan for family and help connect with resources

# Resources

- Eddy Alzheimer's Services
  - ADAC (Alzheimer's Disease Assistance Center)
    - 518-238-4164
  - Savvy Caregiver Program
  - Care Teams
  - Support Groups
  - Various education/training programs

# Additional Resources

- Alzheimer's Association
  - 24-hour helpline: 1-800-272-3900
- Alzheimer's Disease Education and Referral (ADEAR) Center
  - 1-800-438-4380
- Anne B Goldberg Alzheimer's Resource Center
  - 518-262-0808
- Albany VA Medical Center
  - 518-626-5000
- NY Connects [www.nyconnects.org](http://www.nyconnects.org)

# Conclusion

- Diagnosing Dementia is a rule out process
- Current medications have limited benefit
- Social management is key
- Remember
  - All that is confusion is not Dementia!

Questions ?

Thank you !