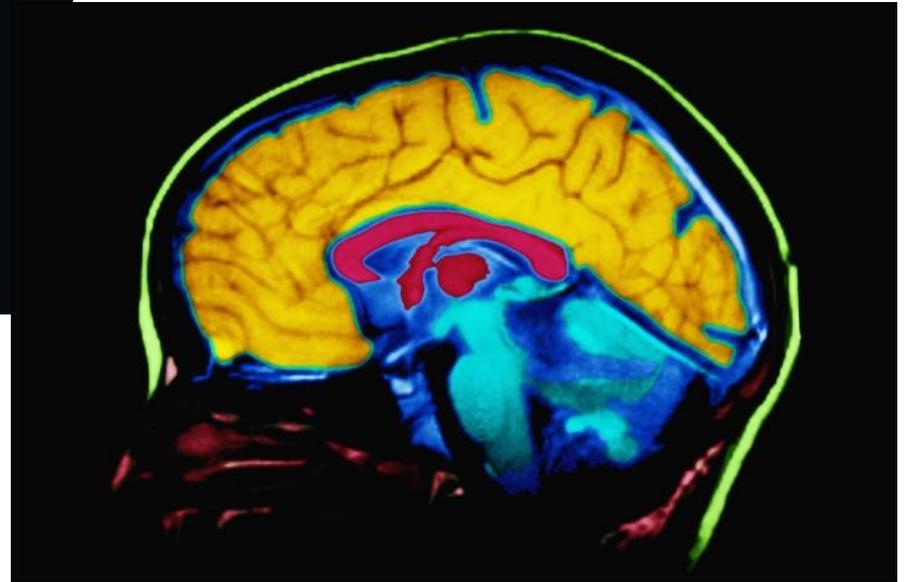
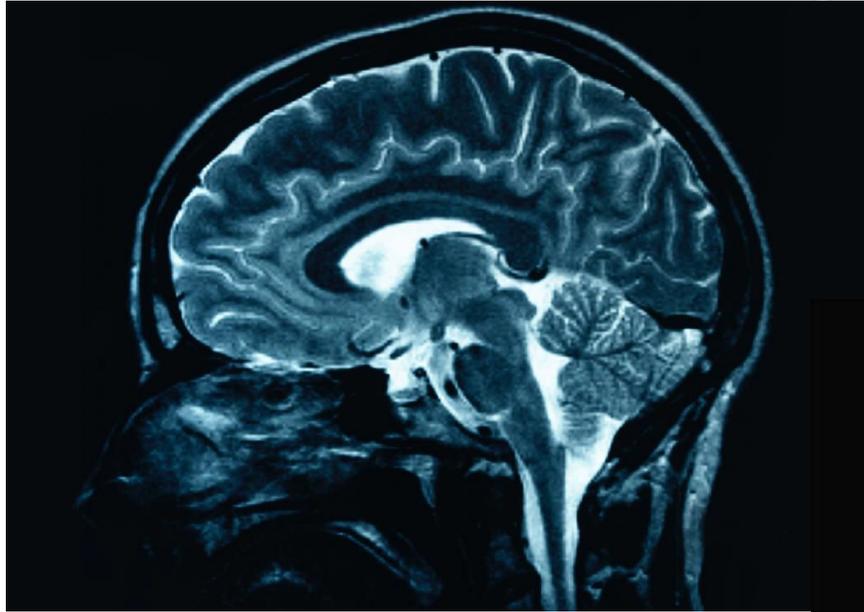


# Understanding Memory Loss



**Alzheimer's Association**

**Hudson Valley/Rockland/Westchester, NY Chapter**

# General Overview of Alzheimer's and Dementia

- Objectives
  - Gain an understanding of what is dementia and the different types of dementia that exist.
  - Learn what the ten warning signs are of Alzheimer's disease.
  - Gather information on the different tests that must be completed.
  - Gain an understanding of the stages of the disease.
  - Learn about the medications that are available.

# What is Dementia

- Is **NOT** a diagnosis
- Decline in mental functioning
- More severe than age-related mental difficulties
- Interferes with daily activities and social relationships

# Reversible Causes of Dementia

- D** drug reactions/interactions/poisoning from OD
- E** emotional disorders (depression & schizophrenia)
- M** metabolic and endocrine disorders (thyroid)
- E** eyes and ears (sensory loss causes confusion)
- N** nutritional loss (Vitamin B12 deficiency)
- T** tumors (may be operable)
- I** infection (pneumonia/kidney infection)
- A** arteriosclerotic (congestive heart failure)

Another reversible cause includes Normal Pressure Hydrocephalus (NPH) as well as Lyme disease

# Types of Irreversible Dementia

- **Alzheimer's Disease (AD)**
- **Vascular Dementia (Multi-Infract Dementia)**
- **Frontotemporal Dementia (FTD)** – [www.theaftd.org](http://www.theaftd.org)
- **Creutzfeldt-Jakob Disease (CJD)** – [www.cjdfoundation.org](http://www.cjdfoundation.org).
- **Lewy Body** – [www.lewybodydementia.org](http://www.lewybodydementia.org).
- **Parkinson's Disease**
- **Huntington's Disease**
- **Mixed Dementia**

# What is Alzheimer's Disease?

- Alzheimer's disease is an irreversible, progressive brain disorder that affects memory, behavior, personality and muscle control.
- Alzheimer's disease destroys brain cells and causes abnormal structural changes in the brain.
- Alzheimer's disease initially affects short-term memory; eventually the person with AD loses the capacity to function on their own and become completely dependent on other people for their everyday care.

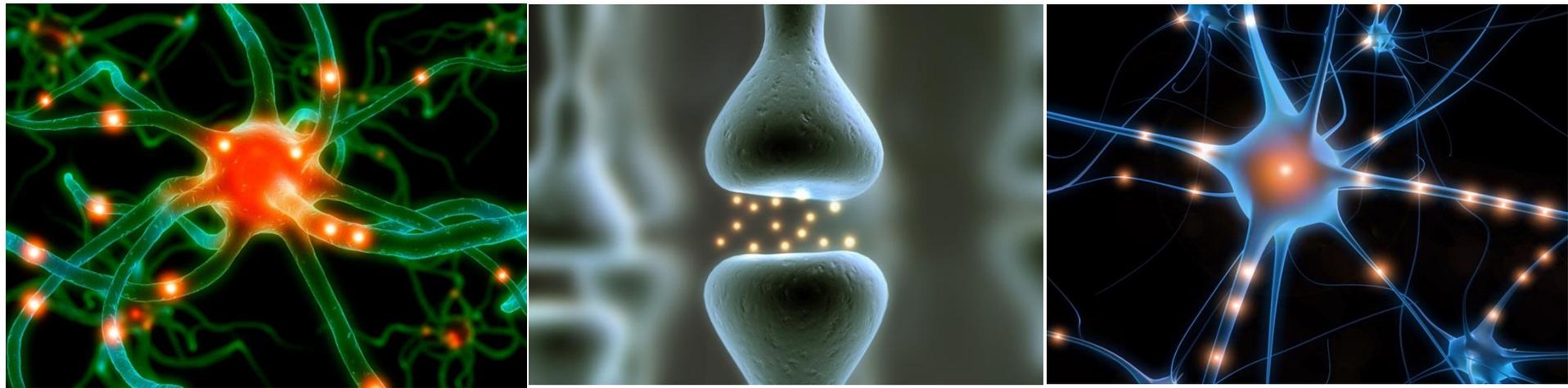
# Alzheimer's By The Numbers...

- There are currently more than 5 million Americans living with Alzheimer's – including as many as 500,000 people under the age of 65.
- Every 67 seconds someone develops Alzheimer's disease.
- By mid-century as many as 16 million will be living with the disease.

# Alzheimer's By The Numbers...

- Alzheimer's is the 6th leading cause of death in the U.S. and the 5<sup>th</sup> leading cause of death for those over 65.
- Two-thirds of Americans with Alzheimer's disease are women.
- One in three seniors dies with Alzheimer's or another dementia.

# What is Happening in the Brain

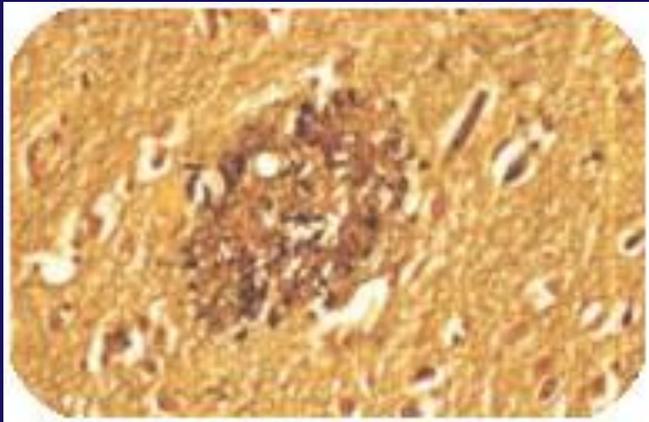


# AD and the Brain

## Plaques and Tangles: The Hallmarks of AD

The brains of people with AD have an abundance of two abnormal structures:

- beta-amyloid plaques, which are dense deposits of protein and cellular material that accumulate outside and around nerve cells
- neurofibrillary tangles, which are twisted fibers that build up inside the nerve cell

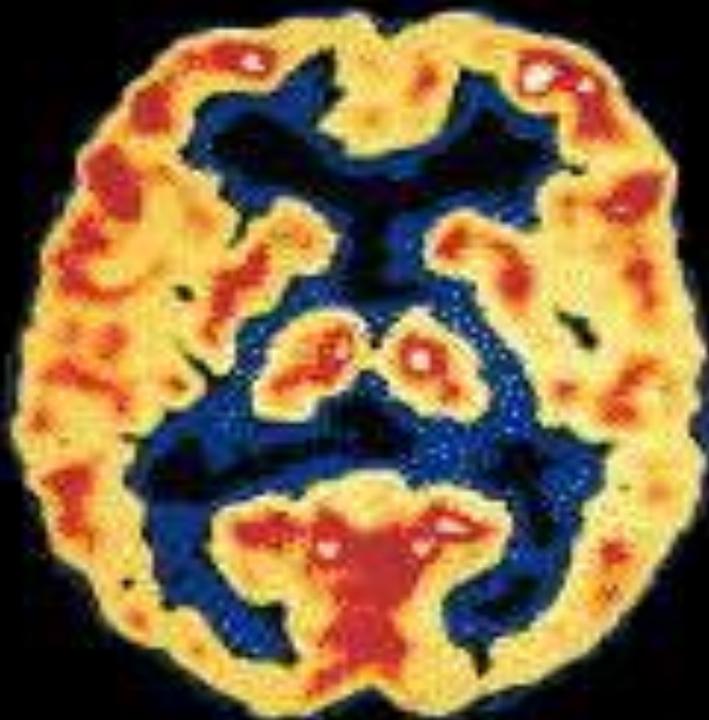


An actual AD plaque

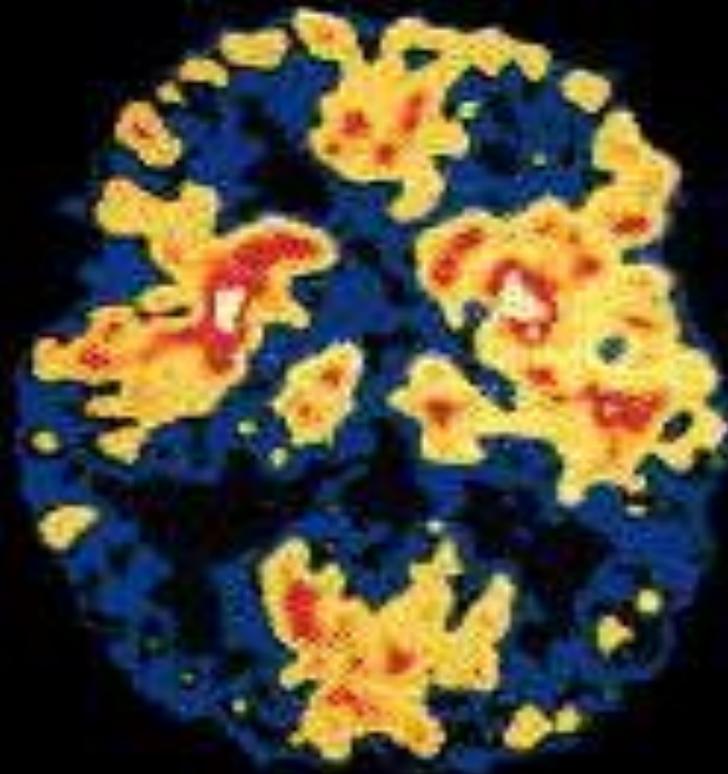


An actual AD tangle

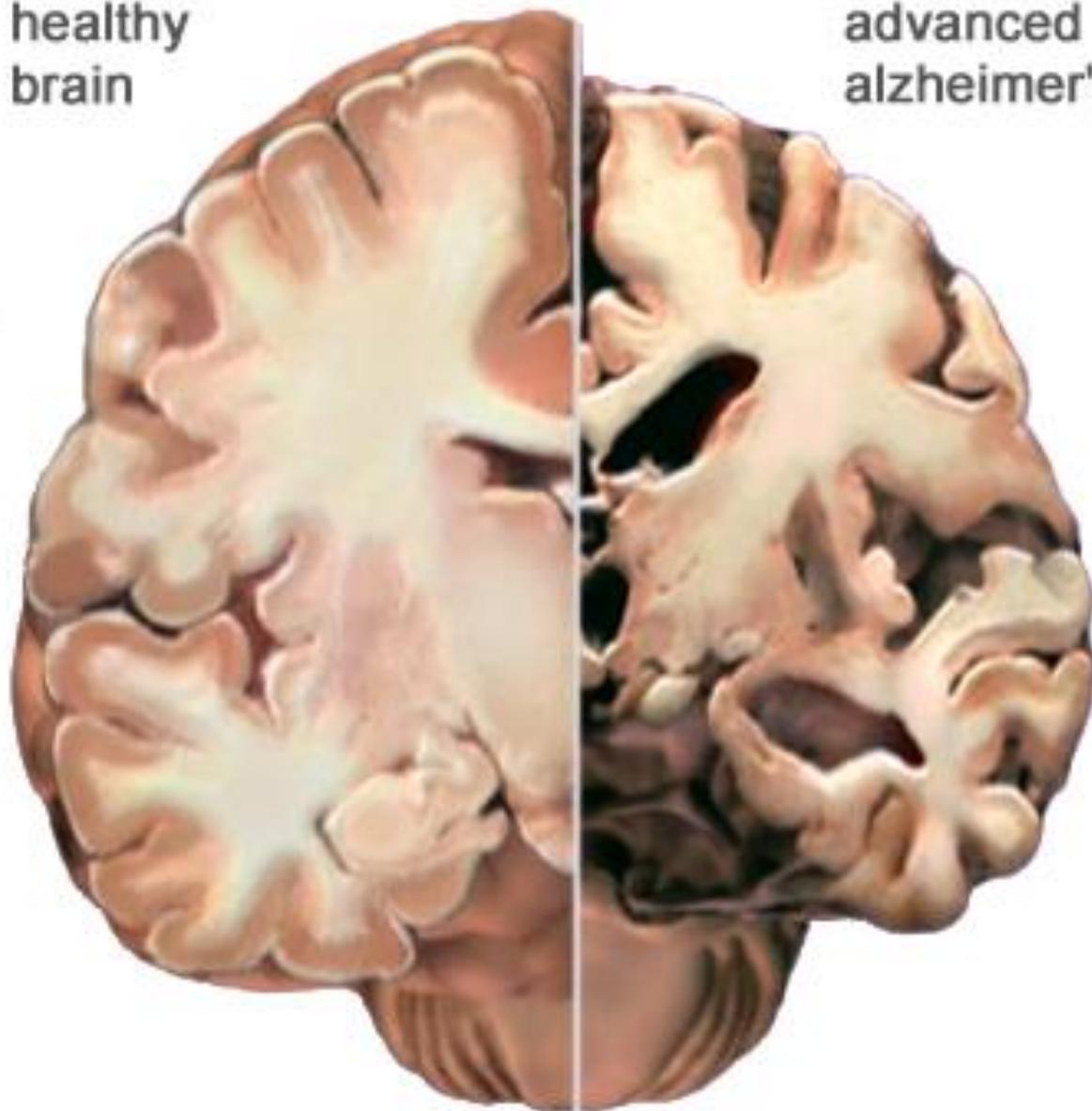
**Normal  
Brain**



**Alzheimer's  
Disease**



healthy  
brain



advanced  
alzheimer's

# Symptoms of Alzheimer's Disease

- Memory changes that disrupts daily life
- Challenges in planning or solving problems
- Difficulty completing familiar tasks
- Confusion with time or place
- Trouble understanding visual images and spatial relationships
- New problems with words in speaking or writing
- Misplacing things and losing the ability to retrace steps
- Decreased or poor judgment
- Withdrawal from work or social activities
- Changes in mood and personality

# Getting a Proper Diagnosis

- There is no single Diagnostic Test for Alzheimer's
- Diagnosed through a process of elimination
- The Process involves the following
  - Thorough Medical History
  - Thorough Physical Exam
  - Neurological Exam
  - Series of Lab Tests
  - Psychological and other Exams
  - Brain Scans (CT Scan, MRI, PET Scan)



A diagnosis obtained through this evaluation is considered more than 90% accurate. The only way to be 100% certain the person has Alzheimer's is through an autopsy.

# The Stages of Alzheimer's Disease

- **Stage 1** – No impairment
- **Stage 2** – Very mild cognitive decline. May be normal age-related changes or the very early signs of AD. Some difficulty in finding words, names or the location of an item, but not evident during testing.
- **Stage 3** – Mild cognitive decline. Friends, family and co-workers begin to notice changes. Can be seen in testing. Word-finding difficulty, difficulty in remembering names, losing or misplacing items.

# The Stages of Alzheimer's Disease

- **Stage 4** – Moderate cognitive decline. Decreased knowledge of recent events. Difficulty in performing complex tasks, such as planning dinner for guests and paying bills. Withdrawn from social situations. Reduced memory of personal history.
- **Stage 5** – Moderately severe cognitive decline. Confused about day and time. Need help with choosing appropriate clothing for the season. Some assistance with day-to-day activities.

# The Stages of Alzheimer's Disease

- **Stage 6** – Severe cognitive decline. Memory difficulties continue to worsen, significant personality changes may emerge and the person with the disease will need extensive help with activities of daily living. Sleep cycle may become disrupted.
- **Stage 7** – Very severe cognitive decline. Final stage of the disease. Person loses ability to speak coherently. Dependent on others for their activities of daily living. Person becomes incontinent and has difficulty walking.

# Medications

- Cholinesterase inhibitors – increase levels of acetylcholine, a chemical messenger involved in memory. Acetylcholine is released by certain brain cells to carry messages to other cells. FDA approved for people in the early stages of the disease. Does not slow the progression of the disease but keeps the symptoms at bay.
  - Aricept
  - Exelon
  - Razadyne

# Medications

- Namenda – FDA approved for the moderate stages of the disease. It works by regulating the activity of glutamate, one of the brain's specialized messenger chemicals involved in information processing, storage & retrieval. Glutamate plays an important role in learning & memory by triggering one of the receptors to allow a controlled amount of calcium to flow into a nerve cell, creating the chemical environment needed for storing information.

# Mirror Exercise



**alzheimer's  association™**

**Thank you**

**[www.alz.org](http://www.alz.org)**

**1-800-272-3900**