

#### Presenter

Susan Rothas, BSN, RN, CDP Dementia Educator / Consultant Powerful Tools for Caregiver, Facilitator

#### The Brain

" If the brain were so simple we could understand it, we would be so simple we couldn't"

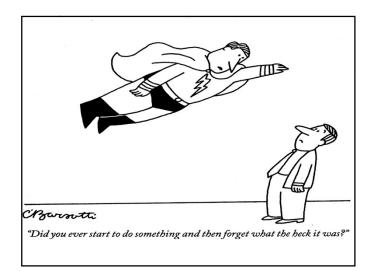


## The Aging Brain

- \* Minor memory loss occurs after the age of 40
- \* Normal Changes
  - \* Slower thinking
  - \* Difficulty paying attention
  - \* Memory cues required for recall
  - \*Takes more effort to learn new things

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## Normal Aging vs. Dementia

- \* Forget some part of an experience
- \* Often remember later
- \* Usually able to follow directions
- \* Able to use notes as reminders
- \* Able to care for self

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- \* Forget whole experience
- \* Rarely able to remember later
- \* Gradually unable to follow directions
- \* Gradually unable to use notes as reminders
- \* Gradually unable to care for self

#### **Forms of Dementia**

#### Reversible

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- \* Hypothyroid, anemia
- \* Vitamin deficiencies (B12)
- \* Tumor, infections
- \* Depression
- \* Low blood sugar

## Treatable condition can be reversed.

#### Irreversible

- \* Alzheimer's
- \* Vascular dementia
- \* Lewy Body
- \* Parkinson's
- \* Frontotemporal
- Chronic traumatic encephalopathy (CTE)

Caused by disease or injury and cannot be reversed.

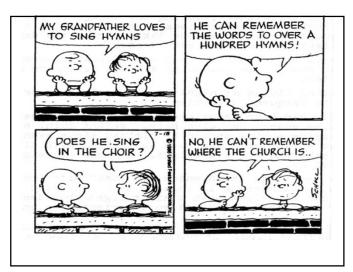
#### What is Dementia?



- \* Dementia is a word for a group of <u>symptoms</u> caused by <u>disorders</u> that affect the brain.
- \* <u>Symptoms</u> can include: confusion, poor judgment, memory loss, language problems, visual/spatial problems, and personality changes.
- Interferes with routine activities of daily living and or social relationships over time.
- \* Not a normal part of aging

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# Easily Distracted & Difficulty Organizing Thoughts

I was going to the store. No, I mean I was going to the post office... but why was I going there? Oh, I don't remember.

## Comprehension

What does that sign mean? Go – Stop? Is that for me?



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## Word Finding and Substitution

What is my doctor's name again? She stole my thingamajig!



## Repetition

I want to go home.

I want to go home.

I want to go home!...



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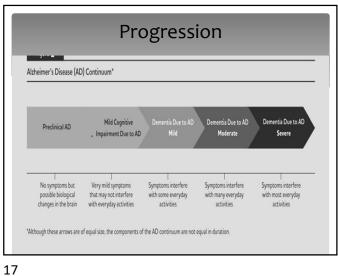
## Poor Judgment

- \* Goes outside in the winter without proper clothing.
- \* Purchases same item over and over again.
- \* Taken advantage of by phone solicitors.
- \* Gives money away.
- \* Say & do things that might be considered inappropriate.

## Mild Cognitive Impairment (MCI)

- \* Person has problems with memory, language or other mental functions.
- \* Person can report his or her own memory problems.
- \* Greater-than-normal memory impairment detected.
- \* Normal general thinking and reasoning skills.
- \* Ability to perform normal daily activities.

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## Alzheimer's (AD)

- \* Most common form of dementia
  - \* Age the biggest risk factor
  - \* Plaques and tangles form in brain
  - \* Usually starts in the hippocampus
    - \* Hallmark Short term memory loss plus on other symptom
  - \* Progressive and regressive \*

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- \* Brain is dying\* www.aboutalz.org
- \* An estimated 6.7 million people have Alzheimer's in the US today. (55 million worldwide)
- \* The number will continue to grow by 2050 the number is expected reach 13 million in the US.

#### Changes in the Brain \* Changes occur at the cellular level. \* Each type of dementia Parietal lobe attacks different parts of the brain at different times and varying rates, thus Occipital Temporal lobe accounting for the different symptoms a person can have. Cerebral cortex



My story: Alzheimer's from the Inside Out

I am Richard Taylor, Ph.D. and for nearly a decade I have lived with the diagnosis of dementia, probably of the Althémer's type. I have discovered that thinking, speaking, and writing about that it is like for me to live with this condition has become the new purpose of my life. with this constitute has been the new purpose of my life.

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"I am a Verb - I be, I do. Exactly what I be and how I do depends on my disease.."

~ Richard Taylor

"Alzheimer's from the Inside Out"

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#### Other Types of Dementia

- \* Vascular dementia
  - \* Usually caused by "mini" strokes or TIAs
  - \* Vascular changes in the brain as we age or damage due to diseases such as hypertension, diabetes
- \* Lewy Body dementia (LBD)
  - \* Abnormal protein deposits in the brain stem / cortex
  - \* Accounts for up to 20% of all dementia cases
  - \* Often associated with Parkinson's Disease
- \* Frontotemporal dementia (FTD)
  - \* Associated with shrinkage of the frontal and temporal lobes of the brain
  - \* 60% with FTD are ages 45-60

#### Symptoms of Vascular Dementia

- Confusion
- Trouble paying attention and concentrating
- Reduced ability to organize thoughts or actions
- Decline in ability to analyze a situation, develop an effective plan and communicate that plan to others
- Slowed thinking

- · Difficulty with organization
- Difficulty deciding what to do next
- · Problems with memory
- · Restlessness and agitation
- Unsteady gait
- Sudden or frequent urge to urinate or inability to control passing urine
- · Depression or apathy

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#### Symptoms of Lewy Body Dementia

- \* Visual Hallucinations
- \* Unpredictable changes in concentration, attention, alterness and wakefulness
- Severe loss of thinking ability
- \* Loss of coordination
- \* Difficulty swallowing
- \* Stooped posture
- Frequent falls

- \* Sleep disorders
- \* Urinary Incontinence
- \* Problems with blood pressure
- \* Constipation
- \* Changes in mood
- \* Anxiety/restlessness

## Symptoms of Frontotemporal Dementia

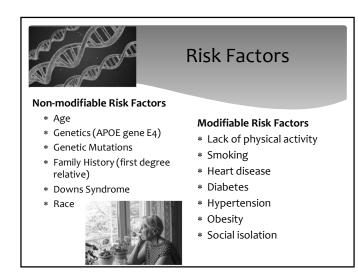
- Behavior and/or dramatic personality changes, such as swearing, stealing, increased interest in sex, or a deterioration in personal hygiene habits
- Socially inappropriate, impulsive, or repetitive behaviors
- Impaired judgment
- Apathy
- · Lack of empathy
- Decreased self awareness
- Loss of interest in normal daily activities
- Emotional withdrawal from others

- Loss of energy and motivation
- Inability to use or understand language; this may include difficulty naming objects, expressing words, or understanding the meanings of words
- Hesitation when speaking
- · Less frequent speech
- Distractibility
- Trouble planning and organizing
- Frequent mood changes
- Agitation
- Increasing dependence

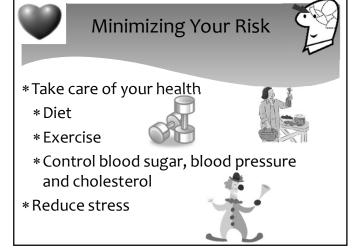
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## Diagnosis: A Process of Elimination

- \* Medical evaluation probable diagnosis
  - \* History and physical exam
  - \* Neurological exam
  - \* Cognitive tests
  - \* Blood tests
  - \* Brain scan
- \* Examination of brain tissue –definitive diagnosis



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#### **Current Treatments**

- \* Medications to slow progress of symptoms
  - ARICEPT (donepezil)
  - EXELON (rivastigmine)
  - RAZADYNE (galantamine)
  - NAMENDA (memantine)
- \* Psychotropic medications
  - Usually given to treat "behaviors"
  - Not approved by FDA / Black box warnings





## Recently FDA Approved Drugs



- \* Aducanumab (Aduhelm)
- \* Monoclonal antibody
- \* May prevent or remove beta-amyloid plaques that have formed
- \* IV infusion every 4 weeks.
- \* Side-effects: headaches, falls, brain swelling, brain bleeding.
- \* Cost: \$ 28,000/yr. Medicare covers only for those in clinical trials.
- \* Lecanemab (Leqembi)
- \* Monoclonal antibody
- \* Removes beta-amyloid plaques; Slows cognitive decline in people with early AD;
- \* IV infusion once every 2 weeks. MRI monitoring.
- \* Side-effects: Headache, changes in B/P, flu-like symptoms, brain swelling, brain bleeding
- Cost: \$26,500/yr. VA and Medicare cover for patients with confirmed amyloid plaques, MCI and mild dementia.
- \* Donanemab. The medicine has moved into a phase 3 study.

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