

ALZHEIMER'S DISEASE

South Cook County EMS

2019

OBJECTIVES

- Define dementia and Alzheimer's Disease (AD)
- Review causes and signs/symptoms of AD
- Discuss the stages of AD
- Discuss the approach and communication skills for dealing with a patient with AD

DEMENTIA

- IMPAIRMENT OF BRAIN FUNCTION (DECLINE IN INTELLECTUAL FUNCTIONING) THAT INTERFERES WITH ROUTINE DAILY ACTIVITIES.
- MENTAL DISORDERS CAUSED BY CHANGES IN THE BRAIN.
- PATIENTS WITH DEMENTIA ARE CONFUSED AND DISORIENTED (CONFUSED TO PERSON, PLACE OR TIME).
- DEMENTIA IS NOT A NORMAL CHANGE OF AGING.
- DEMENTIA IS A SYMPTOM, NOT A DISEASE

THERE ARE MANY CAUSES AND TYPES OF DEMENTIA

- ***REVERSIBLE***: MAY BE CAUSED BY VITAMIN DEFICIENCY, METAL POISONING, OR DEPRESSION.
- ***IRREVERSIBLE***: MAY SOMETIMES BE CONTROLLED BY TREATMENTS OR MEDICATION BUT NOT CURED. MULTI-INFARCT DEMENTIA, ALZHEIMER'S DISEASE.
- OTHER ILLNESS OR DISEASES THAT CAN CAUSE DEMENTIA: AIDS, BRAIN INJURIES, TUMORS, INFECTIONS.

MULTI-INFARCT DEMENTIA

IMPAIRMENT OF MENTAL FUNCTION THAT RESULTS FROM MANY SMALL STROKES THAT EACH DESTROY SMALL AREAS OF THE BRAIN.

APPROXIMATELY 20 PERCENT OF ALL DEMENTIAS ARE THIS TYPE

ALZHEIMER'S DISEASE

ALZHEIMER'S DISEASE IS A PROGRESSIVE NERVOUS DISORDER THAT EVENTUALLY DESTROYS ALL MENTAL AND PHYSICAL FUNCTION.

IT IS THE MOST COMMON CAUSE OF DEMENTIA, AFFECTING OVER 4 MILLION AMERICANS.

(10% OF THE POPULATION)

IT AFFECTS BOTH MEN AND WOMEN OF ALL RACIAL, ECONOMIC, AND SOCIAL GROUPS. It was first recognized as the most common form of dementia in 1976.

MOST PEOPLE WITH ALZHEIMER'S DISEASE ARE OVER AGE 65, ALTHOUGH IT CAN AFFECT PEOPLE AS YOUNG AS 40.

THE YOUNGEST CASE RECORDED - 28 YEARS OLD

STATISTICS:

- 65 – 74 YEAR OLDS – 3 % OF POPULATION HAS AD
- 75 – 85 YEAR OLDS – 19 % OF POPULATION HAS AD
- ABOVE AGE 85 – 47 % OF POPULATION HAS AD

FROM ONSET OF SYMPTOMS THE DISEASE CAN LAST ANYWHERE FROM 3 YEARS TO 20+ YEARS.

THE AVERAGE LIFE SPAN OF A PERSON WITH AD IS 11 YEARS.

ALZHEIMER'S DISEASE IS A TERMINAL DISEASE

The most common cause of death in the patient with AD is pneumonia from aspiration

IT IS THE FOURTH LEADING CAUSE OF DEATH IN AMERICAN ADULTS.

MORE THAN 50 % OF ALL NURSING HOME RESIDENTS HAVE ALZHEIMER'S DISEASE

THE CAUSE OF ALZHEIMER'S DISEASE IS NOT KNOWN

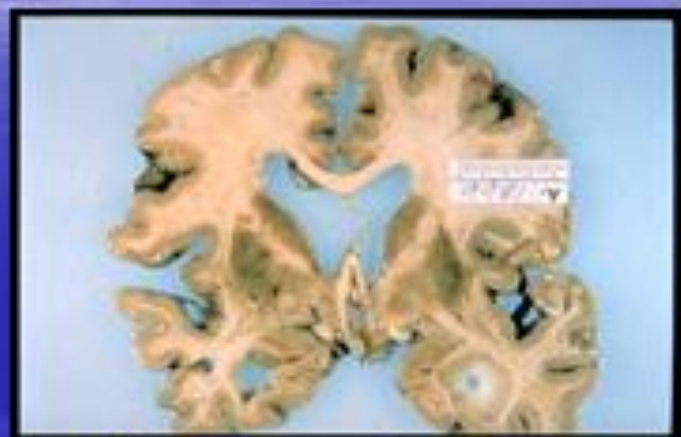
Normal Elderly Brain vs. Brain of AD Patient



Large Brain Size

Cell Functioning

Normal Brain activity



Brain Shrinkage

Cell Death

Plaque Build Up

Abnormal Brain activity

SIGNS AND SYMPTOMS

ALZHEIMER'S DISEASE HAS A GRADUAL ONSET

THE FIRST CLUE IS A CHANGE IN THE PERSON'S BEHAVIOR

MILD FORGETFULNESS

LEADS TO

PROBLEMS FINDING THE RIGHT WORD

LEADS TO

INABILITY TO RECOGNIZE OBJECTS

LEADS TO

INABILITY TO USE SIMPLE OBJECTS

AT FIRST, THE ONLY SYMPTOM MAY BE MILD
FORGETFULNESS

PEOPLE WITH AD MAY HAVE TROUBLE REMEMBERING:

- RECENT EVENTS
- NAMES OF FAMILIAR PEOPLE
- MATH PROBLEMS

THE PERSON MAY BE ABLE TO HIDE THE PROBLEM FROM
FAMILY AT THIS POINT

IT MAY TAKE MONTHS FOR THE FAMILY TO NOTICE
SOMETHING IS WRONG

EVENTUALLY FRIENDS, FAMILY, OR CO-WORKERS
START TO NOTICE THINGS LIKE:

- INCREASING AND PERSISTENT FORGETFULNESS
- MILD PERSONALITY CHANGES
- MINOR DISORIENTATION
- FREQUENTLY LOSES OR MISPLACES FAMILIAR ITEMS
- HAS MILD DIFFICULTIES FINDING THE RIGHT WORD
- HAS MILD DIFFICULTY PERFORMING FAMILIAR TASKS
- DISORIENTATION OF TIME AND PLACE
- POOR OR DECREASED JUDGEMENT
- LOSS OF INITIATIVE
- DIFFICULTIES PERFORMING MATH CALCULATIONS

DIAGNOSIS OF ALZHEIMER'S

ALZHEIMER'S DISEASE IS DIAGNOSED BY EXCLUSION

STEPS IN THE DIAGNOSTIC PROCESS

- MEDICAL HISTORY – THE DOCTOR GATHERS PERTINENT MEDICAL INFORMATION (ILLNESS, OPERATIONS, FAMILY HISTORY, NUTRITIONAL AND LIFESTYLE INFORMATION)
- PHYSICAL EXAM – THE DOCTOR PERFORMS A COMPLETE PHYSICAL EXAM
- NEUROLOGICAL EXAMINATION – THE DOCTOR WILL ORDER SPECIAL TESTS SUCH AS A BRAIN SCAN, EEG, OR AN MRI
- PSYCHOLOGICAL EXAMINATION – THE DOCTOR WILL REFER THE PERSON TO A PSYCHIATRIST

- LABORATORY TESTS – THE DOCTOR WILL HAVE LAB WORK DONE TO ELIMINATE OTHER POSSIBLE DISEASES
- EVIDENCE OF CHARACTERISTICS OF ALZHEIMER’S DISEASE – THE DOCTOR WILL LOOK AT THE TIME FRAME FOR THE CONFUSION AND BEHAVIORS OF THE PERSON

IF EVERYTHING ELSE IS RULED OUT THEN THE DOCTOR WILL MAKE THE DIAGNOSIS OF ALZHEIMER’S DISEASE

THE ONLY POSITIVE DIAGNOSIS IS MADE WITH MICROSCOPIC EXAMINATION OF THE BRAIN TISSUE

THIS CAN ONLY BE DONE ON AUTOPSY

Prevention?

- NO way to prevent AD
- NO Vaccine available
- There may be ways to reduce risk factors.

Reducing Risk Factors

- Adopt a Brain and Heart Healthy Diet
- Regular exercise
- Blood pressure control
- Remain Socially Active
- Remain Mentally Active

What's the bottom line?

Alzheimer's is a complex disease, and the best strategy to prevent or delay it may turn out to be a combination of measures. There has not been any scientific proven developments, just promising strategies.

STAGES OF ALZHEIMER'S DISEASE

EARLY STAGE

THIS STAGE CAN LAST FOR TWO TO FOUR YEARS

MAY BE AWARE OF THE DIAGNOSIS OR KNOW THAT
SOMETHING IS WRONG

MAY STILL BE ABLE TO PARTICIPATE IN DECISIONS
AFFECTING THEIR FUTURE

MEDICATIONS GIVEN FOR AD TRY TO PROLONG THE
EARLY STAGE OF THE DISEASE RATHER THAN CURE IT

BEHAVIOR ASSOCIATED WITH THE EARLY STAGE

- MILD FORGETFULNESS

NAMES

WHAT HAS BEEN SAID

RECENT EVENTS

- DIFFICULTY PROCESSING NEW INFORMATION

LEARNING NEW THINGS

FOLLOWING CONVERSATIONS

- PROBLEMS WITH ORIENTATION

BECOMES EASILY LOST

TROUBLE FOLLOWING DIRECTIONS

DATE AND TIME



EARLY STAGE

- COMMUNICATION DIFFICULTIES
 - FINDING THE RIGHT WORDS
 - USING PROPER GRAMMER
 - PRONOUNCING WORDS
- DISINTEREST IN GROOMING
- OVERREACTION TO STRESS



MIDDLE STAGE

THIS STAGE MAY LAST FROM TWO TO TEN YEARS

THIS IS THE STAGE WHERE SOME PEOPLE WITH AD
BECOME RESTLESS AND PACE OR WANDER

PEOPLE IN THIS STAGE MAY NEED HELP WITH MANY
DAILY TASKS – DRESSING, BATHING, USING THE TOILET
CAREGIVER MAY HAVE DIFFICULTY AS CARE BECOMES
MORE DIFFICULT

BEHAVIOR ASSOCIATED WITH THE MIDDLE STAGE



- CONTINUED MEMORY LAPSES
- FORGETFULNESS ABOUT PERSONAL HISTORY
- INABILITY TO RECOGNIZE FRIENDS AND FAMILY
- PERSONALITY CHANGES

CONFUSION

ANXIETY

SUSPICIONS

SADNESS/DEPRESSION

HOSTILITY

MIDDLE STAGE



- DECLINING CONCENTRATION ABILITIES
- RESTLESSNESS
 - PACING
 - WANDERING
- REPETITION
- DELUSIONS
- AGGRESSION
- ASSISTANCE REQUIRED FOR DAILY TASKS
- APPETITE FLUCTUATIONS

LATE STAGE

THIS STAGE USUALLY LASTS FROM ONE TO THREE YEARS

THE PERSON WILL NEED 24-HOUR A DAY CARE

THE PERSON WILL EVENTUALLY BECOME BEDRIDDEN AND
BECOME INCONTINENT

BEHAVIOR ASSOCIATED WITH THE LATE STAGE



- LOSS OF ABILITY TO REMEMBER, COMMUNICATE OR FUNCTION
- INABILITY TO PROCESS INFORMATION
- SEVERE DISORIENTATION ABOUT TIME, PLACE AND PEOPLE
- WITHDRAWAL
- MUST USE NON-VERBAL METHODS TO COMMUNICATE
- MAY RESPOND TO MUSIC OR TOUCH
- BECOMES BED-RIDDEN
- IMPAIRED SWALLOWING

LATE STAGE



- LOSES ABILITY TO SPEAK
- BECOMES INCONTINENT
- INABILITY TO SWALLOW
- MAY BECOME UNRESPONSIVE (COMA)
- ENDS IN DEATH



SAFETY

- A safe home environment should include:
 - removing loose rugs
 - turning water heater to a safer, lower, temperature
 - removing locks on bathroom doors
 - consider hand rails and grab bars in the bathroom
 - consider auto shut off features on appliances.

MANAGEMENT OF PROBLEM BEHAVIORS



TOUCH IS AN IMPORTANT METHOD OF COMMUNICATING WITH THE
ALZHEIMER PATIENT

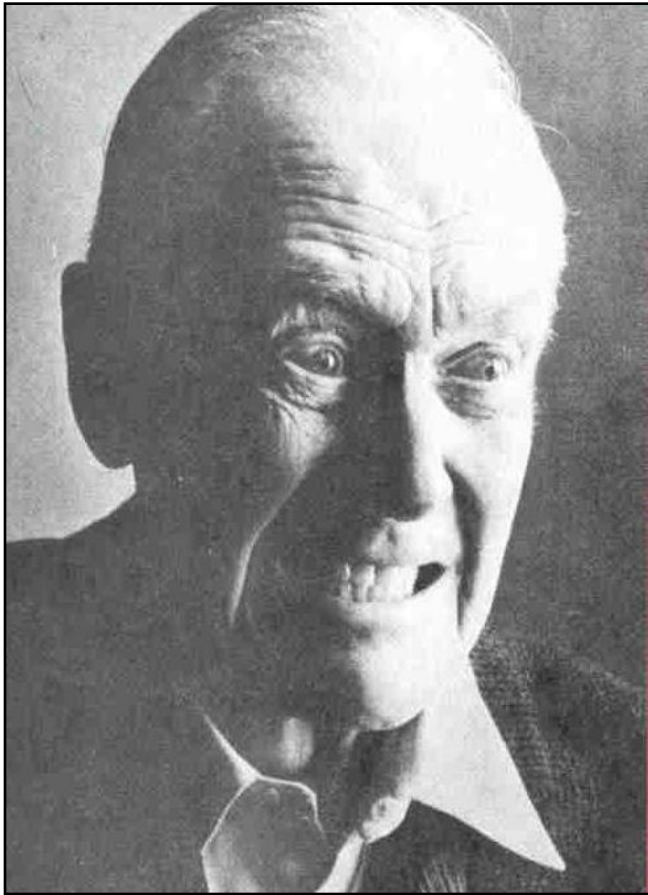
One of the goals of creating a supportive environment for a person with AD is to help
the person reach his or her full potential

WANDERING

- KEEP ENVIRONMENT SAFE
- MAKE SURE PATIENT GETS ENOUGH EXERCISE, wandering may be good exercise when it occurs in a safe area.
- DISTRACT THE PERSON TO ANOTHER ACTIVITY
- PATIENTS WHO WANDER SHOULD NOT BE ALLOWED OUTDOORS ALONE.



CASTROPHIC REACTION



- PERSON OVER-REACTS TO A SITUATION BY BECOMING VERY AGITATED, ANGRY, OR EMOTIONAL.
- HAPPENS BECAUSE THE PERSON HAS TOO MUCH STIMULI AT ONE TIME
- TRY TO PREVENT THE PERSON FROM HAVING A REACTION IF AT ALL POSSIBLE

KEEP ENVIRONMENT SIMPLE

DO TASKS IN SMALL STEPS

- STAY CALM YOURSELF
- TRY TO DISTRACT THE PERSON TO ANOTHER ACTIVITY-perhaps prompt them to reminisce.

SUNDOWNER'S SYNDROME

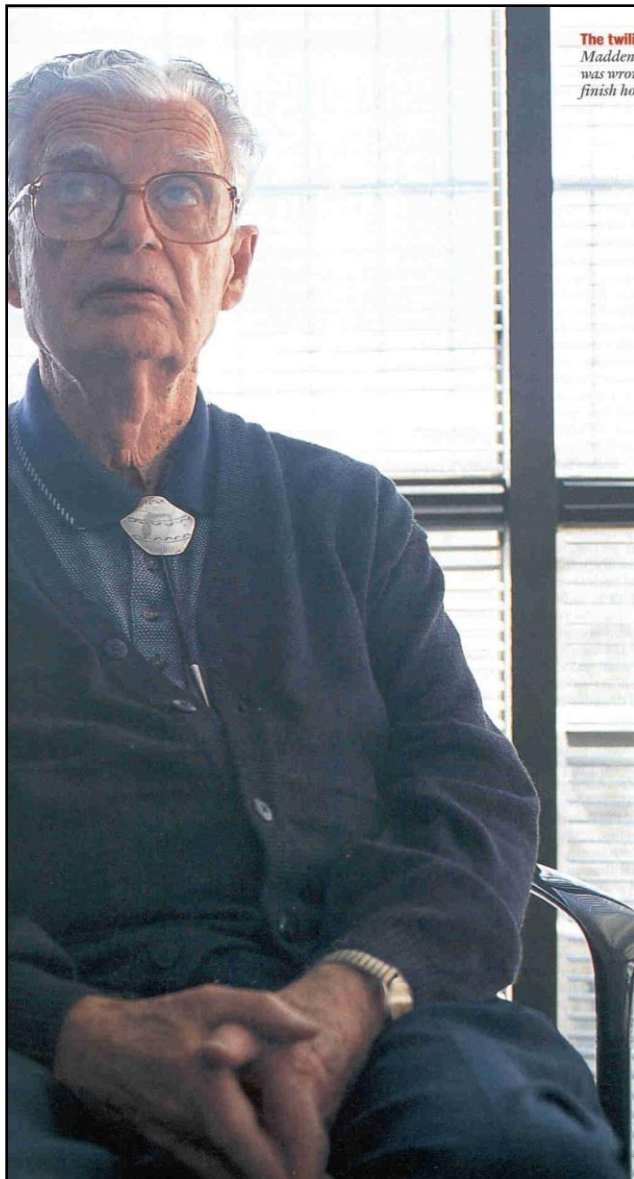
- INCREASE IN PROBLEM BEHAVIOR AS THE SUN SETS IN THE EVENING
- MAY OCCUR BECAUSE THE PATIENT IS TIRED AT THE END OF THE DAY OR THE PERSON MAY BE AFRAID OF THE DARK
- EMS CALLS MAY INCREASE DURING THIS TIME FRAME



HOARDING



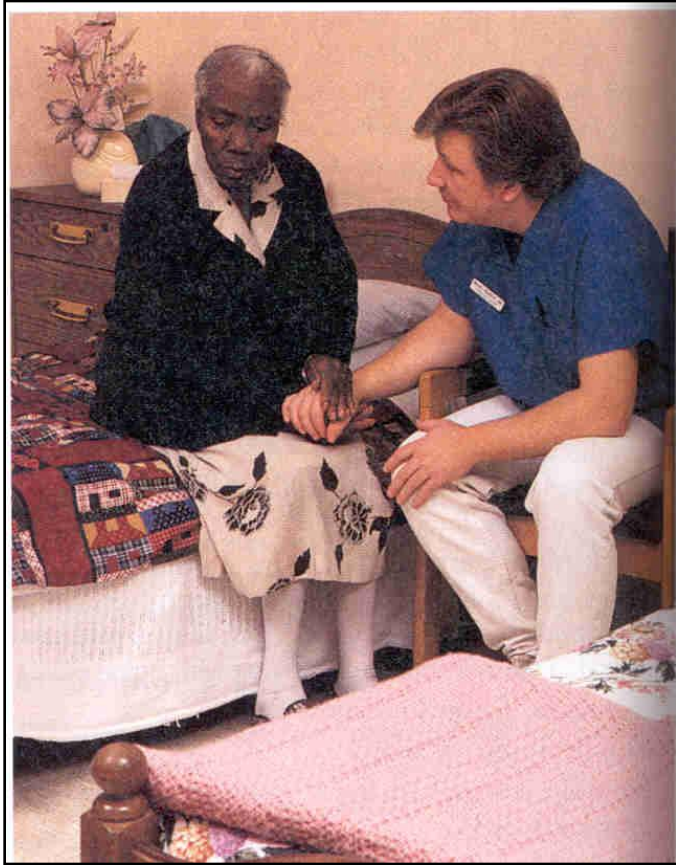
- PERSON GATHERS ITEMS AND HIDES THEM
- THEY MAY FORGET WHERE THEY PUT THINGS AND ACCUSE ANOTHER PERSON OF STEALING THEM
- DISTRACT THE PERSON FROM WORRYING ABOUT THE ITEM SO THEY WILL NOT HAVE A CATASTROPHIC REACTION



DELUSIONS AND HALLUCINATIONS

- DELUSIONS – A FALSE BELIEF
- HALLUCINATIONS – SENSING SOMETHING THAT IS NOT THERE
- AVOID DIRECT CONFRONTATION
- DO NOT AGREE THAT YOU SEE THE HALLUCINATION OR INSIST THAT IT WAS UNREAL
- REASSURE THE PERSON THAT YOU ARE THERE TO CARE FOR HIM/HER

COMMUNICATING



- APPROACH THE PERSON WITH AN OPEN, FRIENDLY, RELAXED MANNER.
- ALZHEIMER PATIENTS MAY MIRROR YOUR BEHAVIOR.
- DO NOT APPROACH FROM BEHIND. AD PATIENTS NEED TO SEE YOUR FACE BEFORE THEY RECOGNIZE THAT YOU ARE SPEAKING TO THEM.
- USE SHORT AND SIMPLE SENTENCES OR QUESTIONS. ASK ONE QUESTION AT A TIME.

- SPEAK IN A LOW PITCH VOICE
- USE NONVERBAL CLUES (GESTURES, FACIAL EXPRESSIONS, POINTING, DEMONSTRATIONS)
- When the patient asks the same question several times even after the question has been answered, the caregiver should respond (again) to the question and try to distract the patient



GUIDELINES FOR CARE OF THE CONFUSED PATIENT

- USE PATIENCE AND UNDERSTANDING
- MAINTAIN A CALM, QUIET ENVIRONMENT
- USE SIMPLE, CLEAR WORDS AND SENTENCES
- GIVE FREQUENT PRAISE AND REASSURANCE
- USE TOUCH AND OTHER FORMS OF NONVERBAL COMMUNICATION
- USE REALITY ORIENTATION

REALITY ORIENTATION

Today is
THURSDAY
AUGUST 20 1999

The Season is
 **SUMMER**

The Weather is
 **AND HOT**

The Next Holiday is
LABOR DAY 

HELPS THE CONFUSED PATIENT WITH REALITY BY FREQUENT REMINDERS OF :

WHO HE IS

WHERE HE IS

WHAT TIME IT IS

ALWAYS CALL THE PATIENT BY NAME AND IDENTIFY YOURSELF

REPEAT THE DATE, TIME, AND PLACE AS NEEDED

GUIDELINES FOR CARE OF THE AGGRESSIVE/COMBATIVE PATIENT

- DO NOT RESPOND IN ANGER
- BE AWARE OF WARNING SIGNS OF ANGER, SUCH AS MUSCLE TENSION, RESTLESSNESS, PACING, CRYING, AND LOUD SPEECH
- OFFER DISTRACTIONS
- COMMUNICATE AND REASSURE
- BE AWARE OF YOUR NONVERBAL COMMUNICATION
- SIT DOWN, YOU WILL APPEAR LESS THREATENING

The 3 R's approach to calming an agitated patient involves:

- **REPEATING, REASSURING, REDIRECTING**

Information

Illinois Chapter: www.alz.org/illinois

24/7 Helpline: 800-272-3900

