

Mini-mental State Exam

Also known as the Folstein Test, this offers a quick (30 questions) and simple way to quantify cognitive function and screen for cognitive loss. It tests the individual's orientation, attention, calculation, recall, language and motor skills.



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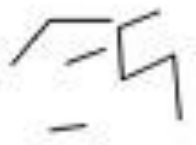
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1

Mini-mental State Exams

The Folstein Test:

- 30 questions.
- Takes about 5-20 minutes to administer.
- Generally, 25 points out of 30 points indicates some impairment.
- Done consecutively over a period of time can identify decline in cognitive functioning.
- Find it at:
<http://www.fammed.usouthal.edu/Guides&JobAids/Geriatic/MMSE.pdf>

Mini-mental State Exams

The Folstein Test:

Orientation:

What is the year, season, date and month? = 5 points

Where are we: state, country, town or city, hospital, floor? = 5 points

Registration:

Repeat the following: apple, table, penny. = 3 points

Attention and Calculation:

Serial 7s: 93, 86, 79, 72, 65 or spell *world* backwards. = 5 points

Recall:

What were the three objects above? = 3 points

Mini-mental State Exams

The Folstein Test (cont'd):

Language:

Name a *pencil* and *watch*. = 2 points

Repeat the following: No ifs, ands or buts = 1 point

3-step command: take this piece of paper in your right hand, fold it in half and put it on the floor. = 3 points

Read and obey: close your eyes. = 1 point

Write a sentence. = 1 point

Copy the design: = 1 point

TOTAL = 30 POINTS

Mini- mental State Exams - Scoring

Interpretation of MMSE Scores:

Score	Degree of Impairment	Formal Psychometric Assessment	Day-to-Day Functioning
25-30	Questionably significant	If clinical signs of cognitive impairment are present, formal assessment of cognition may be valuable.	May have clinically significant but mild deficits. Likely to affect only most demanding activities of daily living.
20-25	Mild	Formal assessment may be helpful to better determine pattern and extent of deficits.	Significant effect. May require some supervision, support and assistance.
10-20	Moderate	Formal assessment may be helpful if there are specific clinical indications.	Clear impairment. May require 24-hour supervision.
0-10	Severe	Patient not likely to be testable.	Marked impairment. Likely to require 24-hour supervision and assistance with ADL.

REVERSIBLE DEMENTIAS

What is a “reversible dementia?”

Many factors can cause symptoms that mimic Alzheimer's disease. These symptoms are known as reversible dementias.

Unlike Alzheimer's disease, they can be cured with proper treatment.

Reversible Dementias*

- 1) Substance abuse
- 2) Medications
- 3) Infections
- 4) Metabolic disorders
- 5) Depression
- 6) Poor eating habits
- 7) Brain tumor or subdural hematoma
- 8) Normal pressure hydrocephalus

*Source:
<https://www.webmd.com/alzheimers/types-dementia>



Substance Abuse

112

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Consuming excessive amounts of alcohol for a decade or more can also cause a dementia that resembles Alzheimer's disease.

Memory, orientation, and attention are impaired, although verbal skills are not always severely affected.

In this type of dementia, abstinence may partly restore mental functioning.

Substance Abuse (cont'd)

11
3

Alcohol withdrawal syndrome presents the classic picture of delirium.

Similarly, delirium can occur from abrupt withdrawal from barbiturates or benzodiazepines, a group of anti-anxiety drugs that includes diazepam (Valium), chlordiazepoxide (Librium) and alprazolam (Xanax).



Medications

114

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Adverse drug reactions are one of the most common reasons older persons experience symptoms that mimic dementia.



Medications

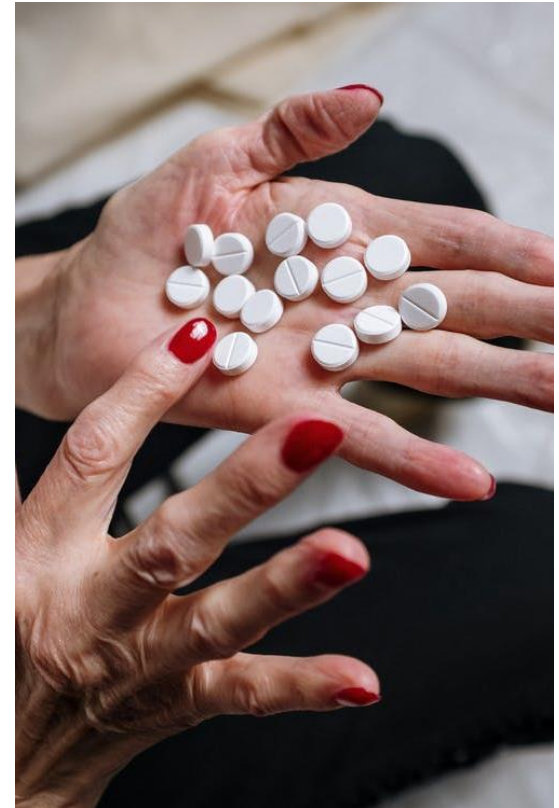
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All medications, prescriptions, over-the-counter pills and herbal remedies should be monitored by a physician to reduce the possibility of side effects.

Medications

- With aging, the liver becomes less efficient at metabolizing drugs, and the kidneys eliminate them from the body more slowly. As a result, drugs tend to accumulate in the body.
- Elderly people in poor health and those taking several different medications are especially vulnerable.





Medications

117

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The list of drugs that can cause delirium and dementia-like symptoms is long.

It includes*:

- ▶ Antidepressants
- ▶ antihistamines
- ▶ narcotics
- ▶ anti-Parkinson drugs
- ▶ anti-anxiety medications
- ▶ cardiovascular drugs
- ▶ anticonvulsants
- ▶ corticosteroids
- ▶ Sedatives

*Source:
<https://pmj.bmj.com/content/80/945/388>

Infection

118

Assisted Living Education

Confusion can be a symptom of an infection and needs to be brought to the attention of the physician.

Possible infections include:

- ▶ UTI's
- ▶ cold and flu
- ▶ staph, etc.

Also, dehydration can cause confusion.



Metabolic Disorder

Per MedlinePlus.gov*:

Confusion or appetite, sleep and emotional changes can be caused by medical conditions including renal and liver failure, electrolyte imbalances (blood chemistry levels), hypoglycemia (low blood sugar), hypercalcemia (high calcium) and diseases of the liver and pancreas.

*Source:

<https://medlineplus.gov/ency/article/000683.htm>





Depression

120

Assisted Living Education

Depression or major life changes such the loss of a spouse, moving from a long-time home or divorce can affect one's physical and mental health.

A physician should be informed about major stressful life events.

Depression (cont'd)

121

Assisted Living Education

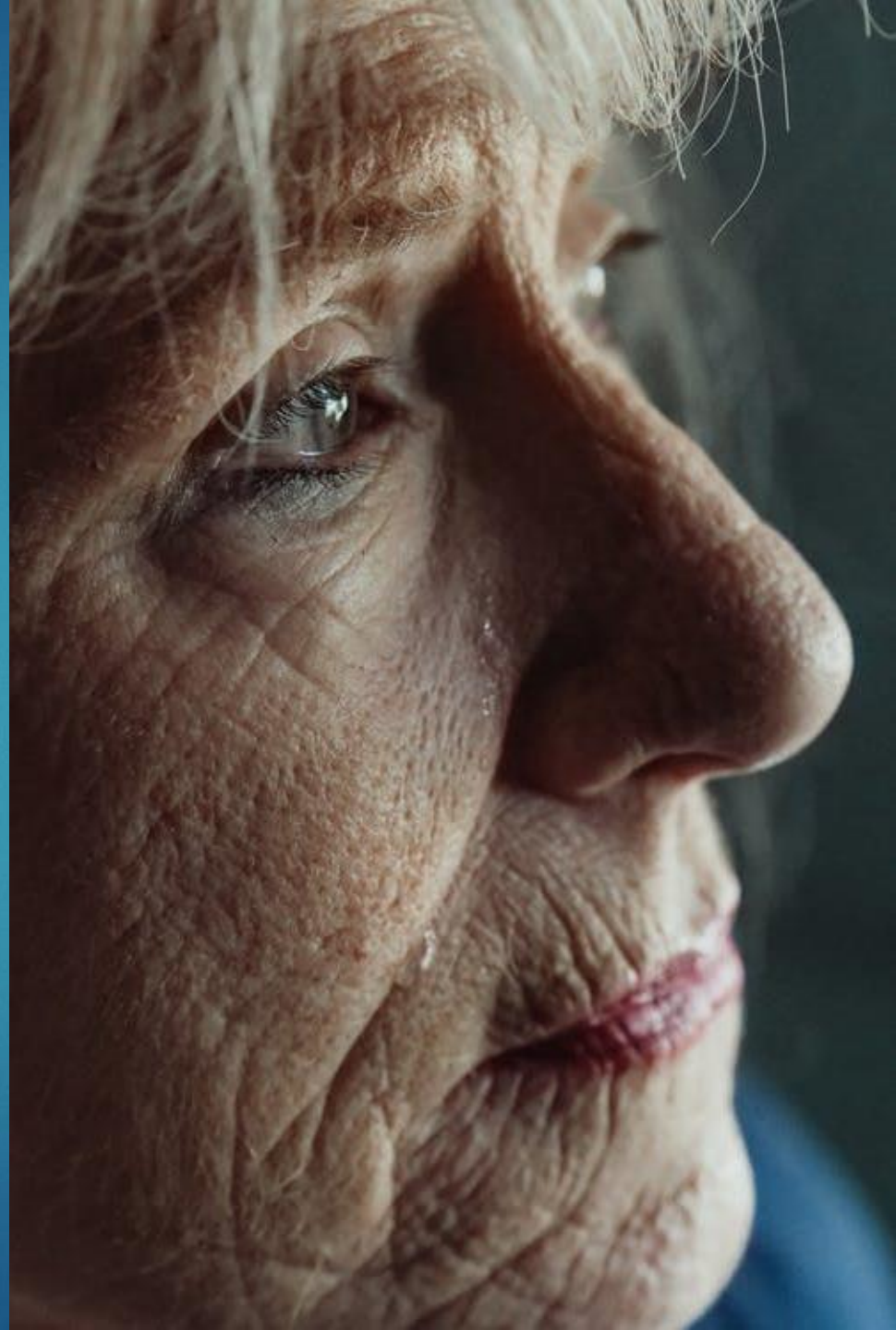
A memory problem may improve when the depression is treated, whether or not the depression is caused by the dementia.



Depression (cont'd)

Signs of depression:

- ▶ frequent crying
- ▶ weight loss
- ▶ complaints of fatigue
- ▶ change in sleep patterns
- ▶ feelings that one has done something bad and deserves to be punished
- ▶ preoccupation with health problems





Poor Eating Habits

123

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- ▶ Vitamin B deficiencies
- ▶ Anemia
- ▶ Anorexia
- ▶ Bulimia

Brain Tumor or Subdural Hematoma

Brain Tumors*

- Can interfere with cognitive functioning and cause personality changes.
- Depending on their location, they can trigger other symptoms, such as headaches, seizures, or vomiting.
- However, the first symptoms of slow-growing tumors frequently resemble dementia, especially in older people.

*Source:

<https://www.pennmedicine.org/updates/blogs/neuroscience-blog/2016/june/signs-of-a-brain-tumor>

Brain Tumor or Subdural Hematoma

Hematomas = blood clots caused by bruising.

When located in the subdural area, between the brain surface and the thin membrane that covers it (the dura), they can cause symptoms that mimic Alzheimer's disease.

Such subdural hematomas can also be life-threatening, causing coma and death.

Subdural Hematomas

- ▶ Most caused by severe head trauma sustained in automobile crashes.
- ▶ Elderly people sometimes develop subdural hematomas after a very minor (and, therefore, often forgotten) head injury.



Subdural Hematomas

- ▶ As blood oozes into a closed space, the hematoma enlarges and begins to interfere with brain function. Removing the clot within weeks of the injury may restore mental function.
- ▶ However, the symptoms often evolve so slowly that diagnosis is delayed for months.



Normal Pressure Hydrocephalus

Hydrocephalus = "water on the brain"*

An excess of cerebrospinal fluid around the brain; normal-pressure hydrocephalus occurs in a small number of elderly people.

Can result from head trauma, brain hemorrhage, or meningitis (inflammation of the membrane covering the brain), but most cases occur spontaneously without an obvious preceding illness.

*Source: <https://www.mayoclinic.org/diseases-conditions/hydrocephalus/symptoms-causes/syc-20373604>



Normal Pressure Hydrocephalus

129

In addition to developing dementia, people with this condition lose bladder control and walk in a slow, hesitant manner, as if their feet are stuck to the floor.

IRREVERSIBLE DEMENTIAS

IRREVERSIBLE DEMENTIA's

Multi-infarct
(vascular)
dementia

Parkinson's
disease

Stroke

Lewy body
dementia

Pick's
Disease

Huntington's
disease

Creutzfeldt-
Jakob
disease

AIDS

Progressive
aphasia

Vascular dementia*

- ▶ Widely considered the second most common type of dementia.
- ▶ Develops when impaired blood flow to parts of the brain deprives cells of food and oxygen (possibly due to a stroke). This situation is sometimes called “post-stroke dementia.”
- ▶ Some research suggests that the most common type of vascular dementia, multi-infarct dementia (MID) may actually cause or exacerbate Alzheimer's disease.

*Source: <https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/vascular-dementia>

Physical Signs and Symptoms of Vascular Dementia

Memory problems, forgetfulness

Dizziness

Leg or arm weakness

Lack of concentration

Moving with rapid, shuffling steps

Loss of bladder or bowel control



Behavioral signs and symptoms



Slurred speech



Language problems



Abnormal behavior



Wandering or
getting lost in
familiar surroundings



Laughing or crying
inappropriately



Difficulty following
instructions



Problem handling
money

Treatment of Vascular Dementia

Because vascular dementia is closely tied to diseases of the heart and blood vessels, many experts consider it the most potentially treatable form.



Treatment of Vascular Dementia

The risk factors associated with vascular dementia, therefore, are those associated with cardiovascular disease*:

- ♥ high blood pressure
- ♥ diabetes
- ♥ high cholesterol
- ♥ a family history of heart problems
- ♥ disease in arteries elsewhere in the body
- ♥ heart rhythm abnormalities.
- ♥ Lifestyle factors like being overweight or smoking can contribute to the risk, as well.

*Source: <https://www.alz.org/alzheimers-dementia/what-is-dementia/types-of-dementia/vascular-dementia>

Parkinson's disease

A movement disorder resulting from a deficiency of dopamine, a neurotransmitter involved in coordinating muscle activity as well as memory function.

Mild cognitive problems are common early in the disease, and dementia occurs in 30%–80% of Parkinson's patients in the late stages. *

*Source: <https://www.helpguide.org/harvard/whats-causing-your-memory-loss.htm>

Parkinson's disease

Signs and symptoms:

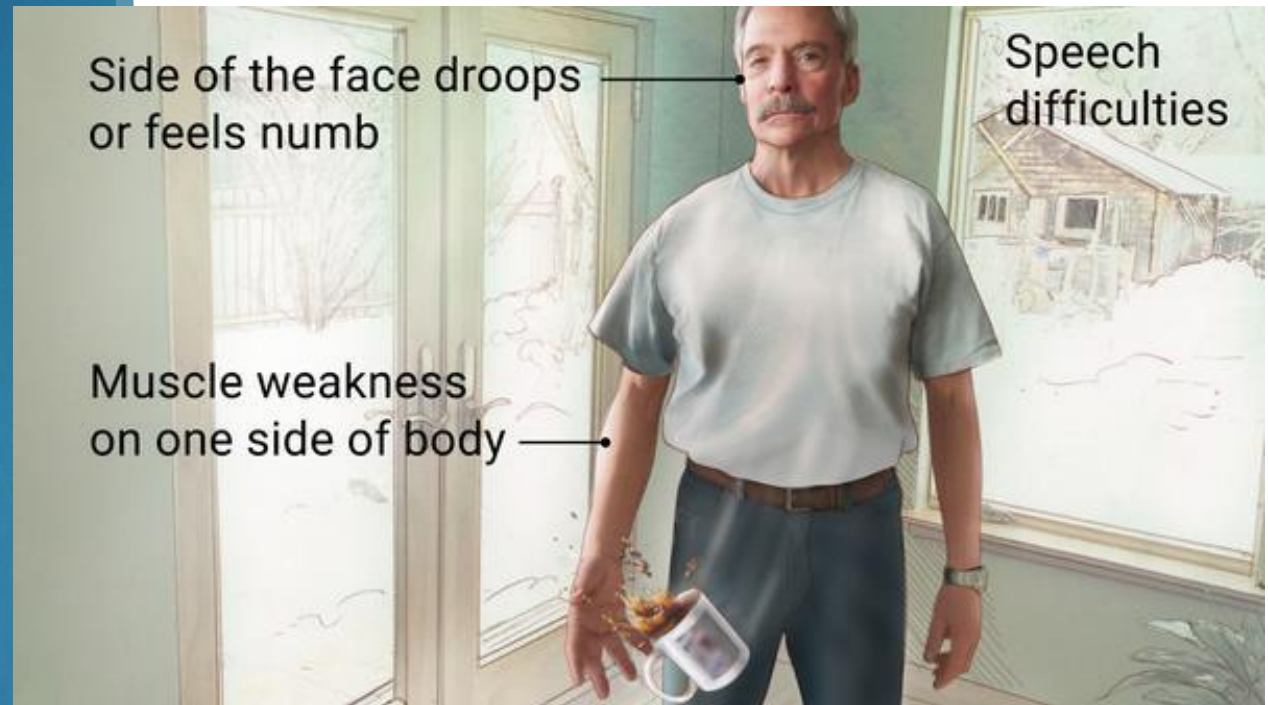
- ❑ Tremors (shaking or trembling). Tremors can affect the arms, hands, legs or head.
- ❑ Slow movement.
- ❑ Stiff muscles.
- ❑ Problems with balance or walking.

Parkinson's disease

- At first, a resident may notice a tremor, but not all Parkinson's patients have tremors.
- In time, Parkinson's affects all the muscles of the body, which can lead to swallowing issues.
- At this time, there is no cure for Parkinson's.

Stroke

A stroke occurs when a blood vessel in the brain is blocked or bursts. Without blood and the oxygen it carries, part of the brain starts to die. The part of the body controlled by the damaged area of the brain cannot work properly.*



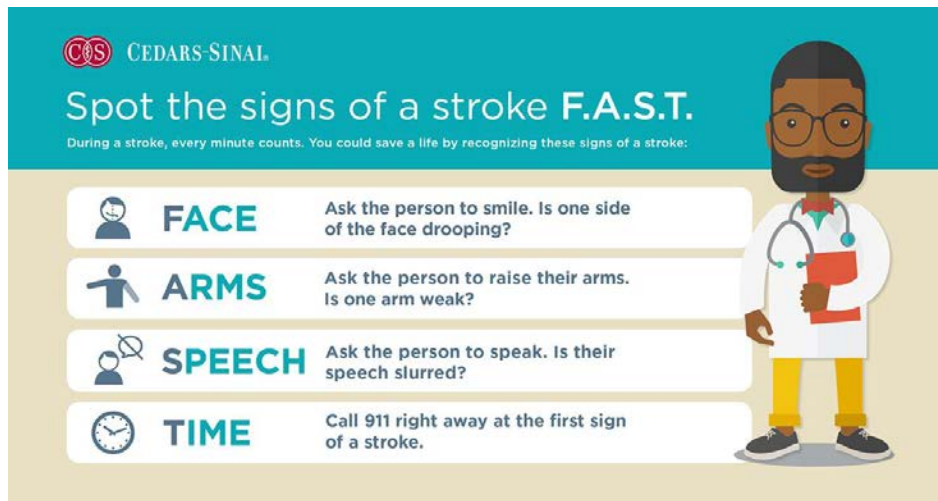
*Source: <https://www.mayoclinic.org/diseases-conditions/stroke/symptoms-causes/syc-20350113>

Signs of a Stroke

Brain damage from a stroke can begin within minutes, so it is important to know the symptoms and act fast; quick treatment can help limit damage to the brain and increase the chance of a full recovery.

- ▶ Sudden numbness, paralysis, or weakness in the face, arm, or leg, especially on only one side of the body.
- ▶ Sudden vision changes.
- ▶ Drooling or slurred speech.
- ▶ Sudden, severe headache.
- ▶ New problems with walking or balance.
- ▶ Feeling of confusion

Stroke – the FAST Method



Use the F.A.S.T. method for recognizing and responding to stroke symptoms:

F = FACE Ask the person to smile.
Does one side of the face droop?

A = ARMS Ask the person to raise both arms. Does one arm drift downward?

S = SPEECH Ask the person to repeat a simple sentence. Does the speech sound slurred or strange?

T = TIME If you observe any of these signs, call 911 immediately!

Source ://www.cedars-sinai.org/blog/stroke-strikes-act-fast.html

The 2 Types of Stroke

An ischemic stroke develops when a blood clot blocks a blood vessel in the brain. The clot may form in the blood vessel or travel from somewhere else in the blood system.

About 8 out of 10 strokes are ischemic strokes*; they are the most common type of stroke in older adults.

*Source:

<https://www.muhealth.org/conditions-treatments/neurosciences/missouri-stroke-center/diagnosis-treatment>



The 2 Types of Stroke

A **hemorrhagic** stroke develops when an artery in the brain leaks or bursts. This causes bleeding inside the brain or near the surface of the brain.

Hemorrhagic strokes are less common but more deadly than ischemic strokes*.

*Source:
<https://www.muhealth.org/condition-stroke-treatments/neurosciences/missouri-stroke-center/diagnosis-treatment>



Stroke (cont'd)

Residents who have had a stroke may have:

- ▶ Paralysis on the left or right side of the body
- ▶ Vision problems
- ▶ Quick, inquisitive behavioral style or slow, cautious behavioral style
- ▶ Memory loss
- ▶ Speech/language problems



TIA's

TIA = transient ischemic attack*

- Signs and symptoms are similar to a stroke.
- Symptoms may only last a few minutes or hours, then the person recovers.
- Very small deficits may not be noticeable.
- Must be reported to the physician immediately as it could be a warning of a stroke.

*Source: <https://www.mayoclinic.org/diseases-conditions/stroke/symptoms-causes/syc-20350113>

Dementia with Lewy bodies

- ▶ A brain disease that causes progressive loss of memory and the ability to think and plan.
- ▶ Associated with protein deposits called Lewy bodies in brain cells.

*Source:

<https://www.mayoclinic.org/diseases-conditions/lewy-body-dementia/symptoms-causes/syc-20352025>



Dementia with Lewy bodies

Up to 80% of patients suffer
vivid hallucinations.*

Average age onset: 60-85;
death occurs about 5-7
years from onset*.

Once thought to be rare, it
is estimated that it accounts
for 15-25% of dementia in
the elderly*.

*Source: <https://www.nia.nih.gov/health/what-lewy-body-dementia-causes-symptoms-and-treatments>



Dementia with Lewy bodies

Symptoms:

- ▶ Visual hallucinations that are vivid and detailed.
- ▶ Repeated falls.
- ▶ Can't recall long-term memories.
- ▶ Fluctuating attention and alertness (the person may be alert and then suddenly confused).
- ▶ Visual-spatial problems (can't find his or her way around usually familiar places).



Pick's Disease

A very rare, progressive disease that affects certain areas of the brain (i.e., temporal and frontal lobes).

Affects 1 in 100,000 people; average age onset is 40-60; death occurs 2-12 years from onset.

In the majority of cases, the exact cause of Pick's Disease is not known.

Pick's Disease*

- Different from AD because it initially only affects the *frontal lobe* of the brain.
- This causes a loss of inhibition, impulse control and language skills – overeating, overdrinking, grabbing food off plates, etc.
- Memory loss does not occur until the disease reaches the *temporal lobe*.

*Source: <https://www.pennmedicine.org/for-patients-and-visitors/patient-information/conditions-treated-a-to-z/picks-disease>

Pick's Disease

- ▶ Affected individuals may exhibit confusion and a general lack of concern about their surroundings.
- ▶ Other symptoms may include unusual speech patterns and the repetition of another's words (echolalia).
- ▶ There is currently no drug therapy available for Pick's Disease.



Huntington Disease*

- ▶ Genetic, progressive, neurodegenerative disorder – it is incurable.
- ▶ Causes the gradual development of involuntary muscle movements affecting the hands, feet, face, and trunk and dementia.
- ▶ Strikes 1 in 10,000 people; average age onset is 30-45. Death occurs 10-20 years from onset.

*Source:
<https://medlineplus.gov/genetics/condition/huntington-disease/>

Huntington Disease

- ▶ **Everyone** who carries the gene will develop the disease.
- ▶ There is a test to identify who has the gene, but it cannot predict when symptoms will begin.
- ▶ Signs may include uncontrolled, irregular, rapid, jerky movements (chorea) and slow, writhing involuntary movements.

Huntington Disease

Dementia is typically associated with progressive disorientation and confusion, personality disintegration, impairment of memory control, restlessness and agitation.

The disease duration may range from approximately 10 years up to 25 years or more. Life-threatening complications may result from pneumonia or other infections, injuries related to falls, or other associated developments.



Creutzfeldt-Jakob disease*

Otherwise known as a human form of “mad cow disease”, this is a rare, rapidly progressive dementia caused by a type of infectious agent called a prion.

Initial symptoms: fatigue and subtle changes in behavior.

Typically, the disease progresses to movement problems, seizures, coma, and — within a year — death.

*Source: <https://www.cdc.gov/prions/cjd/index.html>

AIDS Dementia

This form of dementia occurs in people with AIDS, caused by infection with the human immunodeficiency virus (HIV).

This dementia can develop rapidly, sometimes in a matter of weeks, and consists of forgetfulness, inattentiveness and thinking difficulties.

Progressive Aphasia

According to the Mayo Clinic*, aphasia is a disorder that results from damage to portions of the brain that are responsible for language. For most people, these are areas on the left side (hemisphere) of the brain.



*Source: <https://www.mayoclinic.org/diseases-conditions/primary-progressive-aphasia/symptoms-causes/syc-20350499>

Progressive Aphasia

Aphasia usually occurs suddenly, often as the result of a stroke or head injury, but it may also develop slowly, as in the case of a brain tumor, an infection, or dementia.



Caring for Down syndrome Residents with AD

Down syndrome

According to the CDC*:

- Down syndrome is a condition in which a person has an extra chromosome.
- Typically, a baby is born with 46 chromosomes. Babies with Down syndrome have an extra copy of one of these chromosomes, chromosome 21.
- This extra copy changes how the baby's body and brain develop, which can cause both mental and physical challenges for the baby.

*Source: <https://www.cdc.gov/ncbddd/birthdefects/downsyndrome.html>

Down syndrome

Some of the more common health problems among children with Down syndrome are listed below:

- ▶ Hearing loss
- ▶ Obstructive sleep apnea, which is a condition where the person's breathing temporarily stops while asleep
- ▶ Ear infections
- ▶ Eye diseases
- ▶ Heart defects present at birth

*Source:
<https://www.cdc.gov/ncbddd/birthdefects/dwnsyndrome.html>

The Connection between Down syndrome and **Alzheimer's** disease

16
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The life expectancy has continued to increase for people with Down syndrome.

Aging increases the risk for physical and cognitive changes for people with Down syndrome. Many individuals with Down syndrome age prematurely, sometimes 20 years earlier than the general population.

Down syndrome and **Alzheimer's** disease (cont'd)

16
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The Amyloid Precursor Protein (APP) gene on chromosome 21 is related to pathology and risk of Alzheimer's disease.

All Down syndrome individuals have the neuropathological hallmarks by age 40 years of amyloid plaques and tau tangles.

However, Alzheimer's does not occur in 100% of cases.

Down syndrome and **Alzheimer's** disease (cont'd)

- As in the general population, the incidence is age related.
- The age of onset is much earlier*:
 - 20% of individuals over age 40
 - 50% of individuals over age 55
 - 75% of individuals over age 60; nearly 6 times the percentage of people in this age group who do not have Down Syndrome

*Source: www.alz.org/dementia/down-syndrome-alzheimers-symptoms.asp

Caring for these Residents

Most adults with Down syndrome will not self-report concerns about memory.

As the disease progresses, it is expected that abilities and skills decrease and the need for support and supervision increases, so prepare proactively for each step.

Caring for these Residents

EARLY STAGE

- Short term memory loss (difficulty recalling recent events, learning and remembering names and keeping track of the day or date; asking repeated questions or telling the same story repeatedly)
- Difficulty learning and retrieving new information
- Expressive language changes (word finding difficulties, smaller vocabulary, shorter phrases, less spontaneous speech)
- Receptive language changes (difficulty understanding language and verbal instructions)
- Worsened ability to plan and sequence familiar tasks
- Behavior changes
- Personality changes
- Spatial disorientation (difficulty navigating familiar areas)
- Worsened fine motor control
- Decline in work productivity
- Difficulty doing complex tasks requiring multiple steps (including household chores and other daily activities)
- Depressed mood

Caring for these Residents

MIDDLE STAGE

- Decreased ability performing everyday tasks and self-care skills
- Worsened short-term memory with generally preserved long-term memory
- Increased disorientation to time and place
- Worsened ability to express and understand language (vocabulary shrinks even further, communicates in short phrases or single words)
- Difficulty recognizing familiar people and objects
- Poor judgment and worsened attention to personal safety
- Mood and behavior fluctuations (anxiety, paranoia, hallucinations, restlessness, agitation, wandering)
- Physical changes related to progression of the disease including: new onset seizures, urinary incontinence and possible fecal incontinence, swallowing dysfunction, mobility changes (difficulty with walking and poor depth perception)

Caring for these Residents

LATE STAGE

- Significant memory impairment (loss of short term and long term memory, loss of recognition of family members and familiar faces)
- Dependency on others for all personal care tasks (bathing, dressing, toileting, and eventually, eating)
- Increased immobility with eventual dependence on a wheelchair or bed
- Profound loss of speech (minimal words or sounds)
- Loss of mechanics of chewing and swallowing, leading to aspiration events and pneumonias
- Full incontinence (both urinary and fecal)

Further Reading

Down Syndrome and Alzheimer's Disease-An Introduction to Alzheimer's Disease

<https://www.ndss.org/resources/alzheimers/>

Alzheimer's Disease & Down Syndrome: A Practical Guidebook for Caregivers

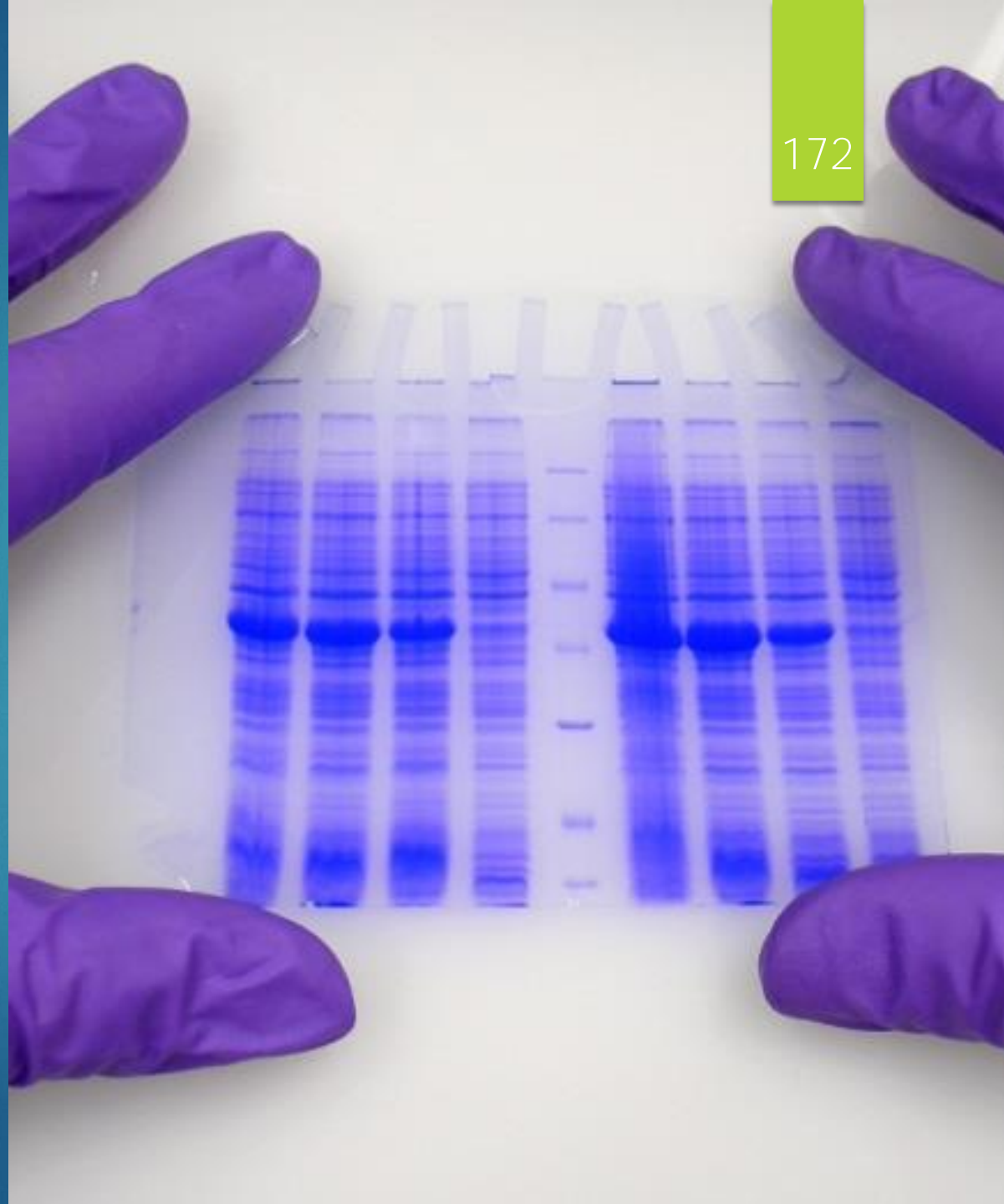
<https://www.ndss.org/about-down-syndrome/publications/caregiver-guide-order-form/>



TREATMENT

Treatments

Because there is no cure for Alzheimer's disease, managing the disease usually involves medications to control symptoms, in combination with various non-drug strategies designed to ease the suffering of the person afflicted as well as his or her family and caregiver.



Treatments

173

The focus of drug treatment for Alzheimer's disease is to improve cognitive abilities – such as memory or thinking – and slow the progression of these symptoms.



Treatments for Cognitive Symptoms*

2 types of 5 individual drugs have been approved by the FDA for treating cognitive symptoms:

1. Cholinesterases
2. Memantines

*Source:

<https://www.alz.org/alzheimers-dementia/treatments/medications-for-memory>

Cholinesterases

These prevent the breakdown of acetylcholine, a chemical messenger important for learning and memory.

On average, these drugs delay worsening of the symptoms for 6 – 12 months

Cholinesterases

- ▶ Donepezil (Aricept) – treats all stages
- ▶ Rivastigmine (Exelon) – treats mild-moderate
- ▶ Galantamine (Razadyne or Reminyl) – treats mild-moderate
- ▶ Tacrine (Cognex) – this is rarely prescribed due to serious side effects, including possible liver disease

Cholinesterases

Aricept*:

- Approved by the FDA in 1996 – 2nd AD drug
- #1 drug prescribed for AD
- It remains in the system longer than the other drugs
 - 5 mg = white pill
 - 10 mg = yellow pill

*Source:

<https://www.webmd.com/drugs/2/drug-14335/aricept-oral/details>



Cholinesterases

- ❑ Taken in the evening before bed
- ❑ Taken with or without food
- ❑ Doctors start off with 5 mg for 4-6 weeks and then increase it to 10 mg
- ❑ It takes 15 days for patients to achieve a steady therapeutic level in their bodies
- ❑ Must take the drug every day to continue benefits



Cholinesterases

Side effects:

increases the production of stomach acids, leading to:

- ▶ nausea
- ▶ vomiting
- ▶ loss of appetite
- ▶ increased frequency of bowel movements
- ▶ liver toxicity





Exelon*

- ✓ Approved by the FDA in 2000
- ✓ Not as popular because of the gastrointestinal side effects
- ✓ Requires 2 doses daily instead of 1
- ✓ They do have a liquid form for patients with difficulty swallowing pills
- ✓ Taken with food
- ✓ Starts with 1.5 mg twice a day – goal is 6-12 mgs
- ✓ 1.5 mg = yellow pill; 3 mg = orange pill; 4.5 mg = red pill; 6.0 mg = orange and red pill

*Source: <https://www.webmd.com/drugs/2/drug-18196-8218/exelon-oral/rivastigmine-oral/details>

Reminyl*

- ▶ Approved by the FDA in 2001
- ▶ Actually from a flower called a snowdrop – part of the daffodil family – relieved headaches
- ▶ This drug appears to hold AD patients at a higher level of cognitive functioning than the others – an average of 12 months compared to 6-9 for the other drugs.

*Source:

<https://www.webmd.com/drugs/2/drug-20740/reminyl-oral/details>



Reminyl



Delays troublesome behaviors such as agitation, aggression, apathy, hallucinations, delusions and a lack of inhibition.

4 mg = white tablet;

8 mg = pink tablet;

12 mg = orange-brown tablet

Reminyl



Also available in oral solution

Pills taken twice a day with meals and plenty of fluid

Start at 4 mg – increase to 12 mg

Reminyl



Side effects:

- ▶ gastrointestinal bleeding (liver disease patients cannot take this)
- ▶ nausea

Memantine (*Namenda*)*

This works by regulating the activity of glutamate, a messenger chemical involved in learning and memory.

Glutamate – excess levels of this neurotransmitter contributes to the death of brain cells in people with AD.

*Source:

<https://medlineplus.gov/druginfo/meds/a604006.html>





Memantine (*Namenda*)

- ▶ Approved in 2003 for treatment of moderate-severe AD.
- ▶ Currently the only drug of its type approved to treat AD.

Drug Options



In general, Reminyl, Exelon and Aricept are most effective when treatment is begun in the early stages.

Namenda is the only drug shown to be effective for the later stages of the disease.

Aricept is taken once a day, the others twice a day.

Drug Options

Both have been shown to moderately slow the progression of cognitive symptoms and reduce problematic behaviors in some people, but at least half of the people who take these drugs do not respond to them.





Other Medications

- ▶ Antidepressants
- ▶ Anti-anxieties
- ▶ Anti-psychotics
- ▶ Seizure medications/
mood stabilizers

Alternative Treatments*

There are claims being made on the effectiveness of herbal remedies, vitamins and other dietary supplements such ginkgo biloba or coenzyme Q10.

*Source: <https://www.alz.org/alzheimers-dementia/treatments/alternative-treatments>



Alternative Treatments (cont'd)

Ginkgo biloba: Subject of a number of ongoing studies regarding its potential to help people with AD retain memory.

Vitamin B: The theory is that certain B vitamins help lower the levels of the amino acid *homocysteine* in the body (high levels have been linked to an increase in AD).



Alternative Treatments (cont'd)

Vitamin E: Strong evidence that 1,000 I.U. of Vitamin E taken twice a day may slow the progression of AD in some people.

Estrogen: Studies show that estrogen may affect brain regions relevant to memory, but it's still being studied.



Alternative Treatments (cont'd)

19
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CAPRYLIC ACID AND COCONUT OIL:

Per the Alzheimer's Association*:

“Some people with Alzheimer's and their caregivers have turned to coconut oil as a less expensive, over-the-counter source of caprylic acid. A few people have reported that coconut oil helped the person with Alzheimer's, but there's never been any clinical testing of coconut oil for Alzheimer's, and there's no scientific evidence that it helps.”

*Source: <https://www.alz.org/alzheimers-dementia/treatments/alternative-treatments>

Alternative Treatments (cont'd)

Coral Calcium:

Per the Alzheimer's Association*, coral calcium is a form of calcium carbonate claimed to be derived from the shells of formerly living organisms that once made up coral reefs.

“The Federal Trade Commission (FTC) and the FDA have filed formal complaints against the promoters and distributors of coral calcium. The agencies state that they are aware of no competent and reliable scientific evidence supporting the exaggerated health claims and that such unsupported claims are unlawful.”*

*Source: <https://www.alz.org/alzheimers-dementia/treatments/alternative-treatments>



CAREGIVING*

*Source: <https://www.alz.org/help-support/caregiving>

Important Keys

- ▶ Keep a routine.
- ▶ Do not rush the resident.
- ▶ Encourage independence
- ▶ Maintain the resident's dignity.



Important Keys

- ▶ Be flexible.
- ▶ Be patient.
- ▶ Have a sense of humor.



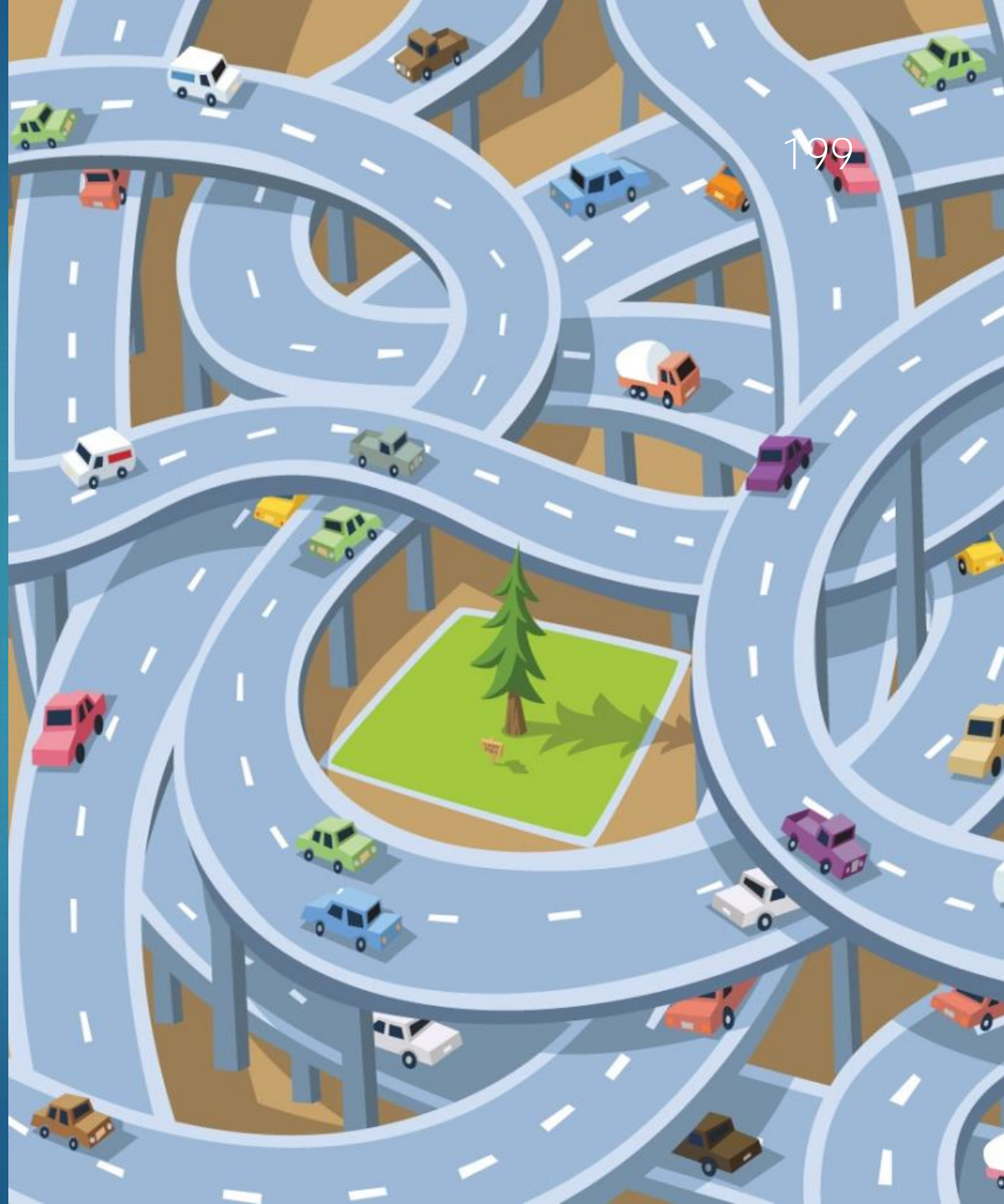
Assisting with ADL's



Caregiving

Imagine traveling to a foreign land where you:

- ▶ do not speak the language;
- ▶ other people do not understand what you are saying to them; and
- ▶ you do not understand what people are saying to you!



Caregiving (cont'd)

- ▶ How would you feel?
- ▶ This might be how a resident with Alzheimer's disease feels!



Caregiving (cont'd)

Communicating with the residents:

1. Yes and no questions.
2. Simple statements with short words and sentences.
3. Repeat commands, if necessary.



Caregiving (cont'd)

Communicating with the residents:

4. Speak slowly and in a low voice.
5. Avoid slang (“jump” into the bath)
6. Step by step directions.
7. Get rid of distracting background noises.



Caregiving (cont'd)

Encourage independence:

- ▶ Encourage the resident to button up their own shirt;
- ▶ Offer 2 choices when possible; and
- ▶ Ask for *their* assistance when providing care

Caregiving (cont'd)

Promote the individuality of each person:

- ▶ Offer them their favorite food or snack;
- ▶ Find out about their past likes and dislikes and incorporate them into their daily routine;
- ▶ Provide care for them when *they* like it rather when *you* like it; and
- ▶ Invite them to help you in a task they like to do, like setting the table or arranging flowers.

Caregiving (cont'd)

Maintaining the resident's dignity:

- ▶ Call them by the name they want, never sweetie, honey or dear;
- ▶ Never talk about the resident in third person or when the resident is near you; and
- ▶ Maintain their privacy when helping them with ADL's.

Caregiving (cont'd)

When you are caring for
AD residents...

- any small gesture on your part can really brighten a resident's day, such as a compliment or a hug!
- remember your non-verbal gestures.
- do things WITH the residents, not FOR.



Tasks

207

It is important to break tasks down into easier, smaller steps.

Assisted Living Education

Step	Description	Example
1	Present the step in a way that matches the resident's abilities.	Mrs. Smith can brush her teeth by herself once I get her started.
2	Demonstrate the step.	Use gestures to show her how to brush her teeth.
3	Help begin the step.	Put toothpaste on the toothbrush while she holds it, then bring toothbrush to her mouth.
4	Give the resident time to finish each step.	Give her time to finish.
5	Praise the resident for completing each step.	Tell her how great she's doing.
6	Repeat steps 1-5 if needed.	

Completing Tasks

Sometimes slower is better; when you rush the resident, they may get nervous and agitated. Residents need time to process your requests. Work at their pace.



208

Assisting with the Residents

Sometimes it is difficult to get the residents to cooperate with the task that needs to be accomplished.

Try “cueing!”

Cueing is a non-verbal method of communication where prompts are used to convey a message. Cueing utilizes a variety of senses.



Assisting with the Residents

In order to use cueing, you must know the resident and what they associate with each task.

For example, if you want the resident to start shaving and they use an electric razor, you wouldn't want to hold up a safety razor as they might not understand.

Cue	Desired Action
Towel and bar of soap	Bathing, hygiene care
Hat, coat, cane	Leave the facility
Smell of coffee, bacon	Come to the table
Singing, clapping	Time for an activity
Pajamas, lights off	Time for sleep

Cueing

Eating

- ▶ Good nutrition and hydration are extremely important for the resident with dementia.
- ▶ Poor nutrition can lead to health and dental problems, which can add to behavioral symptoms.

Source for this “Eating” section:
<https://www.alz.org/help-support/caregiving/daily-care/food-eating>



Helping the Resident Eat

Things that might cause problems with eating:

- ▶ Not enough light, or glare
- ▶ Noise and distractions
- ▶ Too many choices
- ▶ Unpleasant smells
- ▶ Unappetizing food
- ▶ Anxiety over being rushed



Helping the Resident Eat

Personal conditions that may disrupt eating:

- ▶ Mouth discomfort – teeth not fitting properly
- ▶ Side effects of medication
- ▶ Inability to recognize hunger
- ▶ Constipation
- ▶ Agitation
- ▶ Forgetting how to eat or use utensils

Eating Tips & Techniques

1. Eating with one or two other people in a quiet room.
2. Restless residents should be encouraged to eat with other residents and have frequent nutritious snacks.
3. Sleepy residents should also be encouraged to eat with other, interactive residents.
 1. Do not try to serve a resident that is too sleepy – they may choke.

Eating Tips & Techniques

4. Do not use plastic utensils but you can use a plastic tablecloth or placemats.
5. Use a placemat that is a different color than the plate.
6. Avoid glass if the resident has difficulty seeing it.
7. Make sure the resident's dentures are in in place.



Eating Tips & Techniques

8. Keep food simple!
9. Offer one choice at a time.
10. Soft, relaxing music at mealtime.
11. Encourage the serving of “finger foods.”
12. Pay attention to your residents; do not socialize with other staff during mealtimes.



Eating Tips & Techniques

- 13. Allow residents to feed themselves as much as they can.
- 14. Resident food likes/dislikes
- 15. Pay attention to food temperature.
- 16. NO alcohol!

Eating Tips & Techniques

17. Remove condiments (salt, pepper, etc.) from the table if the resident is confused by them.
18. If the resident is confused by too many silverware choices, only give them one.

Eating Tips & Techniques

Do not have on the table:

- ▶ items that look like food, but are not (i.e., fake fruit)
- ▶ salt, pepper, hot sauce, vinegar
- ▶ plants





Choking Risks

A resident might not be able to display that they are choking. Look for:

- ▶ Inability to talk
- ▶ Confusion and anxiety
- ▶ Difficulty breathing or noisy breathing
- ▶ Skin, lips and nails turning blue



Choking Risks

If a resident has trouble swallowing, make sure they are sitting up straight with their head slightly forward – never tilted back – when they eat.

Some liquids are much easier to swallow than others. If your resident is choking on fluids like water, try a thicker liquid, like apricot or tomato juice.

Food Choices for AD Residents

- ▶ Small, “finger foods”
- ▶ Not too many items on the plate
- ▶ Peas, small bits of food are hard to scoop up
- ▶ Rough textured food, like toast, that stimulates the person's tongue and encourages chewing
- ▶ Mashed or pureed fruits or vegetables
- ▶ Scrambled eggs, puddings, chicken fingers
- ▶ Sandwiches into quarters
- ▶ Use bendable straws



Food Choices to Avoid

Hard candy

Taffy

Hot dogs

Nuts

Crunchy foods like chips or crackers

Peanut butter

Gum

Grapes or cherries

Thin liquids if given too rapidly

Resistance Issue

Refusing to eat

Possible causes:

- Unpleasant presentation of food
- Too many choices
- Noise and confusion in dining room, smells
- Approach of caregiver
- Dry mouth from medications
- Pain from dentures or teeth issues
- Inability to recognize sensation of hunger
- Fear of poisoning (distrust of caregiver)



Resistance Issue: Eating all the time

Possible causes:

- Short-term memory loss
- Lack of routine
- Burning calories from pacing, agitation
- Boredom
- Former smoker

Resistance Issue: Unable to sit still

Possible causes:

- Short attention span
- Foods presented in complicated way
- Agitation from confusing environment
- Inactivity during non-meal times



Resistance Issue: Difficulty eating and swallowing

Possible causes:

- Brain damage from the disease
- Need for cues or modeling
- Mouth discomfort
- Dry mouth from medications
- Throat infection
- Inappropriate sizes/texture/form of food



Resistance Issue: Unable to follow directions

Possible causes:

- Too many directions/too complicated
- Noisy/confusing environment
- Distractions
- Short-term memory loss
- Hearing loss
- Need for visual cues and/or modeling



Resistance Issue: Eating inappropriate things

Possible causes:

- Inappropriate things on dining table
- Things that look edible, like wax fruit
- Smells good
- Poor lighting
- Diminishing eyesight



Resistance Issue: Forgetting they just ate

Possible causes:

- Memory loss from brain damage
- Lack of routine
- Craving other foods/sweets
- An activity cues the person to eat
- Time change (daylight savings)
- Boredom
- Confusion other symptoms, like dehydration, with hunger

Resistance Issue: Forgetting that they have not eaten

Possible causes:

- Time change (if it is dark, they must have eaten)
- Change in routine
- Constipation
- Unable to recognize hunger
- Actually have been eating/snacking all day



Resistance Issue: Weight loss, even with eating

Possible causes:

- Pacing/agitation
- Inappropriate diet
- Physical problem
(unable to absorb
nutrients)
- Acute illness/disease
(cancer)





Helping the resident dress

- ▶ Lay out the resident's clothing.
- ▶ Do not rush them – try to let them do as much as they can.
- ▶ Ensure privacy.
- ▶ Let them choose the clothing, if appropriate.
- ▶ Choose items that fit well and that are not uncomfortable.
- ▶ Ensure that they are wearing proper footwear.
- ▶ Label drawers and closets with items enclosed.

*Source: “The 36-Hour Day” by Nancy Mace and Dr. Peter Rabins



Helping the resident with grooming

- ▶ Hair – keep hair in an easy-to-care for style.
- ▶ Washing hair in the sink may be easier than in the shower.
- ▶ Electric razors may be easier than razors.
- ▶ Teeth – encourage min. 2 x day tooth brushing. Try cueing.
- ▶ Women may still want to use lipstick or powder.
- ▶ Trim nails only if safe.



Medication Refusal

Why?

- ▶ Resident feels rushed
- ▶ Does not like caregiver
- ▶ Resident is overwhelmed

Medication Refusal

Try:

- ▶ Try again at another time
- ▶ Try another caregiver
- ▶ Give medications in a quiet, peaceful place


REMEMBER – ALWAYS DOCUMENT REFUSALS AND CALL THE PHYSICIAN!



Bathing the AD Resident


For some residents, this may be a frightening and confusing experience. There are ways to make this experience easier and more enjoyable for the resident.





General bathing suggestions

- ◆ Maintain a routine, same time and if possible, same caregiver.
- ◆ Find out what type of bath/shower routine the resident used to have:
 - ◆ In the morning or evening?
 - ◆ Bath or shower?
 - ◆ Warm vs. hot water?



General bathing suggestions

- ◆ Do not ask if the resident wants a bath.
- ◆ Try to use the resident's preferred shampoo/ soap.
- ◆ Maintain the resident's dignity and privacy at all times.
- ◆ Be sensitive to the fact that it is not normal to take a bath with another person.

General Bathing Tips



Group
exercise:



One person pretends they
are the resident who does
NOT want a shower.




One person pretends they
are the caregiver trying to
coax them into the shower.

Resistance Issue: Refusing to take a bath

Possible causes:

- Embarrassment
- Lack of privacy
- Inappropriate water and/or air temperature
- Lack of routine
- Mistrust of caregiver
- Caregiver approach (too aggressive)
- Fear of running water, depth of water
- Too much explanation/preparation
- Being rushed



Resistance Issue: Will not take off clothing

Possible causes:


- Room temperature too cold
- Privacy issues
- Being rushed
- Not liking the caregiver
- Forgot how to

Resistance Issue: Thinks already bathed

Possible causes:

- Lack of routine
- Time of day
- Different caregiver
- Unable to perceive the need for a bath (poor sense of smell, vision)



A close-up photograph of an elderly person's face, focusing on the eyes, nose, and mouth. The skin is wrinkled and shows signs of aging, including some redness and dryness around the eyes and mouth. The person has light-colored eyes and a mustache.

Resistance Issue: Unable to help with bath

Possible causes:

- Lack of routine
- Lack of cues
- Memory loss of how to perform task
- Poor lighting
- Poor vision
- Physical illness
- Poor motor skills
- Depression
- Cannot process caregiver instructions

Resistance Issue: Dressing

Issue/concern:

- Layering of clothing
- Disrobing
- Wrong seasonal clothing
- Refusing to remove clothes
- Mismatching
- Wearing clothing inside out or backwards
- Wearing the same clothes every day
- Unable to dress and undress self



Resistance Issue: Dressing

Possible causes:

- Room temperature too hot/cold
- Fear of losing clothes or having clothes stolen
- Lack of privacy
- Too many clothing choices available
- Inability to make decisions
- Clothes too tight, uncomfortable
- Needing to go to the bathroom
- Lack of routine
- Wet or soiled from incontinence



Resistance Issue: Dressing

Possible causes:

- Loss of judgment concerning season
- Fear of bathing
- Embarrassment
- Forgot how to dress
- Distracted by other people, activity or noises
- Does not recognize the clothing as their own
- Unable to follow directions

Resistance Issue: Dressing

Suggestions:

- Do not argue with the resident. Do not force them and do not rush them.
- If their choices are not hurting themselves or offending anyone else, do not worry about it.
- Look into the possibility of providing clothing that is easier to get in and out of independently.
- Allow the resident to be as independent as long as possible.
- Label drawers and closets with items enclosed.

Toileting the AD Resident

- ▶ Keep bathroom doors open when not in use to cue resident.
- ▶ Keep the resident on a schedule.
- ▶ Look for cues that the resident needs to go to the bathroom.
- ▶ Limit caffeine.
- ▶ Make sure the resident's clothing is comfortable and easy to manage.



Issue/concern: Having “accidents”

Possible causes:

- Unable to recognize sensation
- Cannot find the bathroom
- Clothes too difficult to remove
- Lack of routine
- Too much caffeine in diet
- Visual problems
- Chronic illness (prostate problems)
- Unfamiliar caregiver causing anxiety



Issue/concern: Going to the bathroom in inappropriate places

Possible causes:

- Cannot get to the bathroom in time
- Cannot find the bathroom
- Visual issues
- Poor lighting
- Shower chairs feel like a toilet
- Running water may trigger urination
- Not on a toileting routine



Maintaining the Resident's Dignity

- Close the door when the resident is bathing or toileting.
- Do not talk about the resident in front of other residents.
- Do not criticize the resident if they've had an accident.
- Let them do as much as possible for themselves.

