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Dementia



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Illustrations



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Alternative Names [Return to top](#)

Chronic brain syndrome; Lewy body dementia; DLB; Vascular dementia

Definition [Return to top](#)

Dementia is a loss of brain function. It is not a single disease. Instead, dementia refers to a group of illnesses that involve memory, behavior, learning, and communicating problems. The problems are progressive, which means they slowly get worse.

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The two major causes of degenerative (non-reversible) dementia are Alzheimer's disease and vascular dementia (loss of brain function due to a series of small strokes). The two conditions often occur together.

Dementia with Lewy bodies (DLB) is a leading cause of degenerative dementia in elderly adults. This condition is linked to abnormal protein structures in certain areas of the brain. The structures and symptoms of DLB are associated with Alzheimer's disease, but it is uncertain whether DLB is a sub-type of Alzheimer's or separate disease. There is no cure for DLB or Alzheimer's.

Conditions that damage blood vessels or nerve structures of the brain can also lead to dementia.

Treatable causes of dementia include [normal pressure hydrocephalus](#), brain tumors, and [dementia due to metabolic causes](#), thyroid conditions, low vitamin B12 levels, and infections.

Dementia may be diagnosed when a patient has two or more problems in brain function. Problems may involve language, memory, perception, emotional behavior or personality, and cognitive skills (such as calculation, abstract thinking, or judgment). Dementia usually first appears as forgetfulness. Other symptoms may only be seen during a medical exam or with cognitive tests.

Dementia usually occurs in older age. Dementia is rare in people under age 60. The risk for dementia increases as a person gets older.

Symptoms [Return to top](#)

- Progressive memory loss
- Inability to concentrate
- Decrease in problem-solving skills and judgment capability
- [Confusion](#), severe
- Hallucinations and delusions
- Altered sensation or perception
- Impaired recognition (agnosia)
 - Impaired recognition of familiar objects or persons
 - Impaired recognition through the senses
- Altered sleep patterns
 - [Insomnia](#)
 - Need for increased sleep
 - Disturbance or change in sleep-wake cycle
- Motor system impairment
 - Impaired skilled motor function ([apraxia](#))
 - Inability to reproduce geometric figures
 - Inability to mimic hand positions
 - Inability to dress self
 - [Gait changes](#)
 - Inappropriate movements
 - Other motor system impairment
- Disorientation
 - Person, place, time disorientation
 - Visual-spatial disorientation
 - Inability to interpret environmental cues
- Specific disorders of problem-solving or learning
 - Inability to generalize
 - Loss of abstract thinking
 - Impaired calculating ability
 - Inability to learn
- Memory deficit
 - Short-term memory problems (can't remember new things)
 - Long-term memory problems (can't remember past)
- Absent or impaired language ability ([aphasia](#))
 - Inability to comprehend speech
 - Inability to read
 - Inability to write
 - [Inability to speak](#), without muscle [paralysis](#)
 - Inability to form words
 - Inability to name objects
 - Poor enunciation
 - Inappropriate speech; use of jargon or wrong words
 - Inability to repeat a phrase
 - Persistent repetition of phrases
 - Other [language impairment](#)
- Personality changes
 - Irritability
 - Poor temper control
 - [Anxiety](#)

- [Depression](#)
- Indecisiveness
- Self-centeredness
- Inflexibility
- No observable mood (flat affect)
- Inappropriate mood or behavior
- Withdrawal from social interaction
- Inability to function or interact in social or personal situations
- Inability to maintain employment
- Decreased ability to care for oneself
- Decreased interest in daily living activities
- Lack of spontaneity

Additional symptoms that may be associated with this disease are as follows:

- Swallowing problems
- [Incontinence](#)

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The following tests and procedures may be done to determine the severity of dementia and its cause:

- [Serum electrolytes](#)
- Blood chemistry ([chem-20](#))
- [Serum calcium](#)
- [Glucose test](#)
- [Thyroid stimulating hormone](#) level
- [Thyroid function tests](#)
- [Liver function tests](#)
- Blood [ammonia](#) levels
- [B-12 level](#)
- Drug or alcohol levels ([toxicology screen](#))
- [Urinalysis](#)
- Blood gas analysis
- [EEG](#) (electroencephalograph)
- [Head CT](#)
- [MRI of head](#)
- [CSF \(cerebrospinal fluid\) analysis](#)

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The goal of treatment is to control the symptoms of dementia. Treatment depends on the specific condition causing the dementia. Some people may need to stay in the hospital for a short time.

Stopping or changing medications that make confusion worse may improve brain function. Medicines that contribute to confusion include anticholinergics, [analgesics](#) (painkillers), cimetidine, [central nervous system](#) depressants, and lidocaine.

Medical conditions that can lead to confusion should be treated. Such conditions include [heart failure](#), decreased oxygen ([hypoxia](#)), [thyroid disorders](#), [anemia](#), nutritional disorders, infections, and psychiatric conditions such as depression. Treatment of co-existing medical and psychiatric disorders often greatly improves a person's mental functioning.

Medications may be needed to control behavior problems. Possible medications include:

- Anti-psychotics, given at night
- Serotonin-affecting drugs (trazodone, buspirone)
- [Dopamine](#) blockers (haloperidol, risperdal, olanzapine, clozapine)
- Cholinesterase inhibitors such as donepezil (Aricept), rivastigmine (Exelon), or galantamine (Razadyne, formerly called Reminyl) for Alzheimer's-type dementia

- Mood stabilizers such as fluoxetine, imipramine, or Celexa
- Stimulants such as methylphenidate to increase activity and spontaneity

A person's eyes and ears should be checked regularly. Hearing aids, glasses, or [cataract surgery](#) may be needed.

Psychotherapy or group therapy usually does not help because it may further confuse a person with dementia.

LONG-TERM TREATMENT:

A person with dementia may need monitoring and assistance at home or in an institution. Possible options include in-home care, boarding homes, adult day care, and convalescent homes.

Visiting nurses or aides, volunteer services, homemakers, adult protective services, and other community resources may help a family care for a patient with dementia. In some communities, [support groups](#) may be available (see [elder care - support group](#)). Family counseling can help family members cope with home care.

In any care setting, there should be familiar objects and people. Lights can be left on at night to reduce disorientation. The activity schedule should be simple.

Behavior modification may help some people to control unacceptable or dangerous behavior. This consists of rewarding appropriate behaviors and ignoring inappropriate ones (within the bounds of safety). Reality [orientation](#), with repeated reinforcement of environmental and other cues, may also help reduce disorientation.

Advance directives, [power of attorney](#), and other legal actions may make it easier to decide about the care of the person with dementia. Legal advice should be sought early in the course of the disorder, before the person with dementia is unable to make such decisions.

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The outcome varies. Dementia usually gets worse and often results in a decreased quality of life and decreased life span.

Possible Complications [Return to top](#)

Complications depend on the cause of the dementia, but they may include the following:

- Loss of ability to function or care for self
- Loss of ability to interact
- Increased infections anywhere in the body
- Reduced life span
- Abuse by an overstressed caregiver
- Side effects of medications used to treat the disorder

When to Contact a Medical Professional [Return to top](#)

- Call your health care provider if dementia develops or a sudden [change in mental status](#) occurs.
- Call your health care provider if the condition of a person with dementia gets worse.
- Call your health care provider if you are unable to cope with caring for a person with dementia at home.

Prevention [Return to top](#)

Most causes of dementia are not preventable. The risk of vascular dementia, which is caused by a series of small strokes, can be reduced by quitting smoking and controlling high blood pressure and diabetes. Eating a low-fat diet and exercising regularly may also reduce the risk of vascular dementia. Vascular dementia may also play a role in the progression of Alzheimer's disease.

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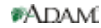
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Updated by: Daniel Kantor, M.D., Director of the Comprehensive MS Center, Neuroscience Institute, University of Florida Health Science Center, Jacksonville, FL.
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