

# The Difference between Dementia and Alzheimer's

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It is common to hear the terms dementia and Alzheimer's used interchangeably, but there is a difference.

Dementia is not a disease itself, but a syndrome, or group of symptoms. It is helpful to think of dementia as an 'umbrella term'. It describes a group of symptoms characterized by gradual cognitive decline **severe enough to interfere with normal activities of daily living**. These symptoms include impairment in memory, judgment, language, insight, and deterioration in social skills.

Alzheimer's disease is one type of dementia. While Alzheimer's disease accounts for 50 to 80% of dementia cases, other types of dementia include:

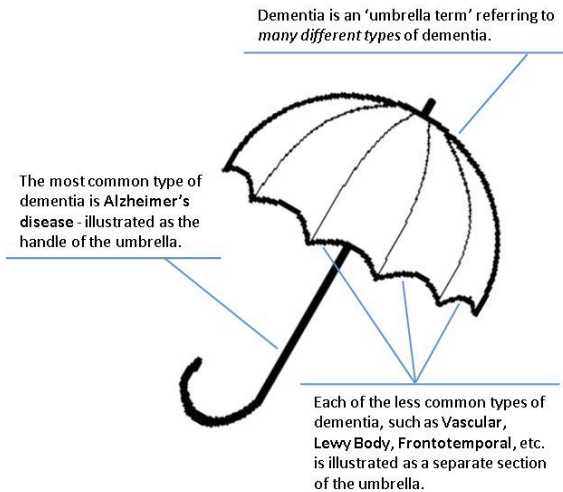
- Mild Cognitive Impairment (MCI)
- Vascular Dementia
- Mixed Dementia
- Dementia with Lewy Bodies
- Parkinson's Disease
- Frontotemporal Dementia
- Creutzfeldt-Jakob Disease (CJD)
- Normal Pressure Hydrocephalus (NPH)
- Huntington's Disease
- Wernicke-Korsakoff Syndrome

## Mild Cognitive Impairment (MCI)

Sometimes a person may have problems with memory or another thinking skill that is serious enough to show up on tests, but not severe enough to interfere with daily life. Because the problems do not interfere with daily activities, the person doesn't meet the criteria for being diagnosed with dementia. Some doctors use the term mild cognitive impairment (MCI) to describe this situation. Research shows that individuals with MCI have an increased risk of progressing to Alzheimer's disease, especially when memory loss is the predominant symptom.

## Vascular Dementia

Vascular dementia is the second most common form of dementia after Alzheimer's disease. It refers to cognitive impairment caused by reduced blood flow to parts of the brain. This can occur either by narrowing or complete blockage of blood vessels in the brain, which deprives brain cells from the nutrients and oxygen they need to function.



Vascular dementia can result from several small strokes that occur over time (multi-infarct dementia), after a single major stroke, or from conditions that don't block blood vessels, but simply narrow them, such as diabetes or hypertension.

Vascular dementia often progresses in a step-wise fashion. For example, the person might stabilize for a period of time, then suddenly get much worse, then continue to alternate between stable periods and sudden drops in functioning. One type may develop after a single major stroke blocks blood flow to a large area of brain tissue.

### Mixed Dementia

Mixed dementia is a condition in which Alzheimer's disease and vascular dementia occur together. Some experts believe that this combination is also very common. There is some evidence to show that this type of dementia is much more common than once believed.

### Dementia with Lewy Bodies

Dementia with Lewy Bodies is closely related to Alzheimer's disease. It is characterized by the presence of specific protein clumps (Lewy bodies – named after the scientist who first described them) in the brain's nerve cells, detectable on post-mortem brain biopsies. These deposits cause impairment in perception, thinking and behavior.

Symptoms like visual hallucinations, fluctuating alertness, and severe sleep problems set Lewy Body disease apart from other types of dementia.

### Parkinson's Disease

Parkinson's disease is a degenerative neurological disorder that affects control of movement, resulting in tremors, stiffness and impaired speech. Many individuals with Parkinson's also develop dementia in the later stages of the disease.

### Frontotemporal Dementia

Frontotemporal dementia, also known as Pick's disease, is a rare disorder caused by degeneration of the frontal lobe of the brain which sometimes extends back to the temporal lobe. It most commonly occurs between 50 and 60 years of age and is the second most common early-onset dementia after Alzheimer's disease. Pick's disease involves drastic personality changes, deterioration of social skills, and a lack of empathy and emotion. These signs usually occur before problems with memory and other typical signs of dementia.

### Creutzfeldt-Jakob Disease (CJD)

(*CROYZ-felt Yah-kob*) is a rare, rapidly fatal disorder that impairs memory and coordination and causes behavior changes. The disease occurs when prion protein, which is present throughout the brain, begins to assume an abnormal three-dimensional shape. This shape gradually triggers the protein throughout the brain to fold into the same abnormal shape, leading to increasing damage and destruction of brain cells.

Recently, "variant Creutzfeldt-Jakob disease (vCJD)" was identified as the human disorder believed to be caused by eating meat from cattle with "mad cow disease." It tends to occur in much younger individuals, in some cases as early as their teens.

### Normal Pressure Hydrocephalus (NPH)

Normal Pressure Hydrocephalus (NPH) is caused by a build-up of fluid in the brain. The cause of most cases is unknown. Symptoms include difficulty walking, memory loss and inability to control urine. NPH can sometimes be corrected with surgery to drain the excess brain fluid.

#### Huntington's Disease

Huntington's disease is an inherited, progressive disorder that causes irregular movements of the arms, legs and facial muscles, personality changes and a decline in the ability to think clearly.

#### Wernicke-Korsakoff Syndrome

Wernicke-Korsakoff syndrome is a manifestation of thiamine (Vitamin B<sub>1</sub>) deficiency. Thiamine helps the brain cells produce energy from sugar. When levels of the vitamin are too low, cells are unable to generate enough energy to function properly.

Wernicke-Korsakoff syndrome is often secondary to chronic alcohol abuse. It can also result from general malnutrition, eating disorders, or the effects of chemotherapy. Dementia due to Wernicke-Korsakoff syndrome involves confusing, apathy, hallucinations, communication problems, and severe memory impairment.