

# Key Differences in Dementia Types



Dementia is an umbrella term for conditions that affect memory, thinking, and social abilities severely enough to interfere with daily life. While Alzheimer's disease is the most well-known form, several other types of dementia exist, each with distinct characteristics, causes, and progression patterns. Understanding these differences is crucial for accurate diagnosis, appropriate care planning, and setting realistic expectations.

#### Alzheimer's Disease

Alzheimer's disease accounts for 60-80% of dementia cases, making it the most common form. The disease is characterized by the buildup of two abnormal proteins in the brain: beta-amyloid plaques and tau tangles. These protein deposits interfere with communication between nerve cells and eventually lead to cell death.

Primary Symptoms: The hallmark early sign is difficulty remembering recent conversations, names, or events. As the disease progresses, individuals experience confusion, disorientation, problems with language, difficulty with spatial relationships, and eventually profound memory loss. Behavioral changes and difficulty with daily activities become more pronounced in later stages.

Typical Onset and Progression: Alzheimer's typically begins after age 65, though early-onset cases can occur in people in their 40s and 50s. The disease progresses gradually over several years, often 4-8 years on average, though some individuals may live with the condition for 20 years or more. The progression moves through mild, moderate, and severe stages, with symptoms worsening steadily over time.

Affected Brain Areas: The disease initially affects the hippocampus and entorhinal cortex, areas critical for memory formation. As it spreads, it impacts the cerebral cortex, particularly regions responsible for language, reasoning, and social behavior.

#### Vascular Dementia

Vascular dementia is the second most common type of dementia, resulting from reduced blood flow to the brain. This can occur after a major stroke, through multiple small strokes, or from chronic damage to small blood vessels in the brain.

Primary Symptoms: Unlike Alzheimer's, memory may not be the most prominent early symptom. Instead, individuals often experience difficulty with planning, organizing, problem-solving, and decision-making. Slowed thinking, trouble with concentration, and problems with analysis are

common. Physical symptoms may include weakness or paralysis on one side of the body, depending on the location of brain damage.

Typical Onset and Progression: The onset can be sudden, particularly when following a stroke, or gradual when related to small vessel disease. The progression pattern is often stepwise, meaning symptoms may remain stable for a period and then suddenly worsen after another stroke or vascular event. This contrasts with the steady decline seen in Alzheimer's disease.

Affected Brain Areas: Damage occurs in areas deprived of blood flow, which can vary widely. Common sites include white matter deep in the brain and areas affected by specific strokes. The pattern of symptoms depends heavily on which brain regions have been damaged.

# **Lewy Body Dementia**

Lewy body dementia involves abnormal deposits of a protein called alpha-synuclein, which form structures called Lewy bodies in the brain. This type shares features with both Alzheimer's disease and Parkinson's disease, creating a complex clinical picture.

Primary Symptoms: This form of dementia has several distinctive features. Visual hallucinations are common and often detailed, such as seeing people, animals, or objects that aren't there. Cognitive abilities can fluctuate dramatically, sometimes within the same day, with periods of alertness alternating with confusion or drowsiness. Movement problems similar to Parkinson's disease occur, including stiffness, tremors, and slow movement. Sleep disturbances are prevalent, particularly acting out dreams during REM sleep. Attention and executive function problems are often more prominent than memory issues in the early stages.

Typical Onset and Progression: Lewy body dementia typically begins after age 50, with most cases diagnosed in people over 60. The progression is generally faster than Alzheimer's but varies considerably between individuals. Average life expectancy after diagnosis is 5-8 years, though this can range widely.

Affected Brain Areas: Lewy bodies accumulate throughout the brain, particularly in the cerebral cortex and substantia nigra (the region affected in Parkinson's disease). The widespread distribution contributes to the diverse symptoms seen in this condition.

#### **Parkinson's Disease Dementia**

Parkinson's disease is primarily known as a movement disorder, but many people with Parkinson's eventually develop dementia, typically years after the motor symptoms begin. Parkinson's disease dementia and Lewy body dementia are closely related, both involving Lewy body proteins, but they're distinguished by the timing of cognitive versus movement symptoms.

Primary Symptoms: Movement symptoms of Parkinson's disease appear first and include tremors, rigidity, slow movement, and balance problems. When dementia develops, cognitive symptoms include slowed thinking, difficulty with memory retrieval (though memory storage may be intact), problems with planning and multitasking, and challenges with visual-spatial tasks. Depression,

anxiety, and apathy are common. Visual hallucinations and delusions may occur but are typically less prominent than in Lewy body dementia.

Typical Onset and Progression: Parkinson's disease typically begins between ages 50-60. Dementia usually develops at least one year after the motor symptoms appear, often many years later. About 50-80% of people with Parkinson's disease eventually develop some degree of dementia, particularly if they live with the condition for many years.

Affected Brain Areas: The substantia nigra is primarily affected initially, leading to the characteristic movement problems. As dementia develops, Lewy bodies spread to other brain regions including the cerebral cortex, similar to the pattern seen in Lewy body dementia.

## Frontotemporal Dementia (FTD)

Frontotemporal dementia is a group of disorders caused by progressive nerve cell loss in the frontal and temporal lobes of the brain. It's less common than Alzheimer's disease but is one of the most frequent causes of dementia in people under 60.

Primary Symptoms: FTD presents differently depending on which variant a person has. In behavioral variant FTD, the most common form, personality and behavior changes are prominent and often the first noticeable symptoms. These include socially inappropriate behavior, loss of empathy and social awareness, compulsive or repetitive behaviors, changes in eating preferences (often craving sweets or overeating), and apathy or loss of motivation. Memory is typically preserved in the early stages. Language variant FTD primarily affects speech and language, causing difficulty speaking, finding words, or understanding language. Some forms of FTD also involve movement problems similar to ALS or Parkinson's disease.

Typical Onset and Progression: FTD typically begins between ages 45-65, making it a leading cause of early-onset dementia. Progression is generally faster than Alzheimer's disease, with an average duration of 7-13 years from diagnosis, though this varies considerably. The disease progresses steadily, with symptoms becoming more severe over time.

Affected Brain Areas: As the name suggests, the frontal and temporal lobes bear the brunt of the damage. The frontal lobes control personality, behavior, judgment, and planning, while the temporal lobes are involved in language and emotional processing. The specific pattern of atrophy determines which symptoms predominate.

### Why Accurate Diagnosis Matters

Distinguishing between types of dementia is crucial because management strategies, medication responses, and prognoses differ significantly. For example, people with Lewy body dementia can have severe adverse reactions to certain antipsychotic medications commonly used for other types of dementia. Understanding the specific type helps families plan for the trajectory of the disease and access appropriate support services.

If you or a loved one is experiencing cognitive changes, memory problems, personality shifts, or other concerning symptoms, consulting a healthcare provider for a comprehensive evaluation is

essential. While there's no cure for most types of dementia, early diagnosis allows for better symptom management, care planning, and quality of life optimization.

# Contact Us

Phone: (903) 223-8021

Address: 100 Memory Ln Texarkana, TX 75503