

## What is frontotemporal dementia?

Frontotemporal dementia (FTD) refers to a group of diseases that damage the frontal and temporal lobes of the brain. This results in significant changes in behavior, language, and motor function (muscle movement).

Examples of FTD include:

- Behavioral variant frontotemporal dementia
- Primary progressive aphasia
- Frontotemporal dementia with motor neuron disease
- Progressive supranuclear palsy
- Corticobasal degeneration

FTD is found in about 5 out of 100 (5%) of all dementia cases in the United States, but it is one of the most common types of dementia in younger individuals. Most people diagnosed with FTD are between the ages of 40 and 65.

## What is the cause of frontotemporal dementia?

The cause of FTD is not known, and it is not the same in everyone with FTD. In many people with FTD, a brain protein called tau accumulates abnormally and forms deposits. In many others, the brain develops deposits of a protein known as TDP43.

Unlike other common dementias, FTD is often inherited. Approximately 40 out of 100 (40%) of individuals with FTD have an affected family member. In these individuals, FTD is usually caused by a genetic change that (directly or indirectly) affects one of the proteins in the previous paragraph. Genetic testing

can reveal an underlying mutation responsible for FTD in about 40 out of 100 (40%) of patients. The diagnosis may be confirmed after death with a brain autopsy.

### **What are the symptoms of frontotemporal dementia?**

FTD usually begins with gradual changes in personality, behavior, or speech. People with FTD may also have motor difficulties similar to those with Parkinson's disease (rigidity and slow movement), or amyotrophic lateral sclerosis (weakness). Memory loss can occur with FTD, but is less obvious than in other types of dementia. Other symptoms can include:

- Decreased speech
- Inability to name common objects
- Loss of motivation
- Lack of concern or sympathy for others
- Inappropriate social or sexual behavior
- Rigid, inflexible thinking
- Compulsive, repetitive behaviors

### **How is frontotemporal dementia diagnosed?**

Because FTD can cause changes in personality and behavior, it may be misdiagnosed as a psychiatric disorder. An accurate diagnosis is important and should be made after a thorough evaluation that includes:

- A discussion of symptoms
- Information about similar symptoms in other family members
- Tests of thinking, speaking, and behavior
- A physical exam

Blood tests, brain scans, genetic tests and sometimes spinal fluid testing are often performed. Magnetic resonance imaging (MRI) or computerized tomography (CT) scans may show abnormalities in the frontal or temporal

lobes of the brain. Positron emission tomography (PET) or single photon emission computed tomography (SPECT) scans may be helpful in distinguishing FTD from other causes of dementia.

### **What are the prognosis and options for treatment?**

FTD worsens over time and impairs the individual's ability to live and function independently. Although there is no cure for FTD, there are medications that can help with some of the behavioral symptoms. With an accurate diagnosis, unnecessary medications can be removed that might otherwise worsen the disease symptoms.

### **Where can I learn more?**

More information about frontotemporal dementia can be found at:

- The Alzheimer's Association  
[www.alz.org](http://www.alz.org) or by calling (800) 272-3900
- The National Institute on Aging  
[www.nia.nih.gov](http://www.nia.nih.gov) or by calling (800) 438-4380

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