UCSF Memory and Aging Center
Weill Institute for Neurosciences

Frontotemporal Dementia

Frontotemporal dementia (FTD) is a group of related conditions resulting from the progressive degeneration of the temporal and frontal lobes of the brain. These areas of the brain play a significant role in decision-making, behavioral control, emotion and language.

What Causes FTD?

The clinical symptoms of FTD are caused by degeneration in the parts of the brain that control decision-making, behavior, emotion and language (typically the frontal, temporal and insular regions).

How is Age Related to FTD?

In people under age 60, FTD is the most common cause of dementia and affects as many

people as Alzheimer's disease in the 45–64 age group.

What Happens in FTD?

There are several forms of FTD that lead to slightly different behavioral, language and/or motor symptoms. Due to the symptoms, people with FTD are often misdiagnosed with Alzheimer's disease, psychiatric problems (such as depression, manic-depression, obsessive-compulsive disease or schizophrenia), vascular dementia or Parkinson's disease.

Forms of Frontotemporal Dementia

Based on the distinct patterns of signs and symptoms, three different clinical syndromes have been grouped together under the category of "frontotemporal dementia" (FTD):

1. Behavioral variant frontotemporal dementia (bvFTD)
2. Semantic variant primary progressive aphasia (svPPA)
3. Non-fluent/agrammatic variant primary progressive aphasia (nfvPPA)

There is a third form of primary progressive aphasia (PPA) called *logopenic variant primary progressive aphasia* (lvPPA). At autopsy, patients with lvPPA are often found to have Alzheimer's disease, not frontotemporal lobar degeneration (FTLD), the pathological description of FTD.

A small number of people affected by FTD also develop motor neuron disease (FTD/MND), (sometimes called *FTD with amyotrophic lateral sclerosis* or FTD/ALS).

Corticobasal syndrome (CBS), also called *corticobasal degeneration* (CBD), and progressive supranuclear palsy (PSP) are two related diseases that are not classified as FTD but often share symptoms with FTD.

People with FTD typically first come to the doctor's office because of:

1. **Gradual and steady changes in behavior**
   The earliest changes typically include a disregard for social conventions, impulsivity, apathy, loss of sympathy or empathy, repetitive or compulsive movements, dietary changes and poor insight, planning and assessment.
2. **Gradual and steady language dysfunction**
   The majority of people with one of the language variants have problems expressing themselves, while their memory stays relatively intact. Difficulties reading and writing develop.
3. **Gradual and steady weakness or slowing of movement**

People with FTD often describe a general weakening of their muscles or slowing of their movements. They might feel uncoordinated or like they are walking through water – harder to move and slower going. They may also experience muscle spasms. In a neurological exam, the doctor may also find some slowing of particular eye movements, changes in the typical reflexes and muscle stiffness or slowness.

At the UCSF Memory and Aging Center, we have found a small group of FTD patients who develop new creative skills in music and art as their language skills decline.

While each type of FTD produces different symptoms, all forms cause a steady decline in the ability to think and function, eventually leaving the person dependent on caregivers to get through the day. The pace of the symptoms and length of the disease can vary dramatically from person to person.

Are There Medicines to Treat FTD?

Unfortunately, there is no way to prevent or reverse the damage caused by FTD yet, but medications and lifestyle changes can help relieve the symptoms. Furthermore, researchers are actively searching for new treatments and running clinical trials to test promising new medications.

Resources

- Familial FTD
- The Association for Frontotemporal Degeneration
- The Frontotemporal Dementia Support Group
- Frontotemporal Dementia Caregiver Support Center
- The Bluefield Project/Consortium for Frontotemporal Research (CFR)
- Alzheimer's Association
- Family Caregiver Alliance
- National Institutes of Health

Participate in Research

- Progressive Supranuclear Palsy Trial of ABBV-8E12
- Progressive Supranuclear Palsy Trial of Oral Salsalate