

## What is progressive nonfluent aphasia?

**Frontotemporal dementia or FTD is a progressive disorder of the brain. It can affect behaviour, language skills and movement.**

The main subtypes of FTD are called behavioural variant FTD and primary progressive aphasia or PPA.

PPA can be further split into two main subtypes, one of which is called progressive nonfluent aphasia or PNFA.

The first symptoms of PNFA are usually a subtle change in the ability to produce speech. At first this might be only in certain circumstances such as when speaking on the telephone or when speaking in public.

Symptoms can include:

### **Slow, hesitant speech**

Speech may seem effortful to produce and people may seem to stutter before they can get the right word out. This is known as apraxia of speech.

### **Difficulty finding the right word to say**

### **Pronouncing words incorrectly**

People may say the wrong word, often similar in sound to the one they meant to say, for example 'aminal' instead of 'animal'.

### **'Telegraphic' speech**

People may miss out the small words in sentences such as 'the' or 'and'.

### **Producing the wrong grammar**

People may use the wrong tense such as saying 'happened' when they mean 'happen' – this is known as agrammatism.

### **Saying the opposite word to the one they mean to say**

For example saying 'yes' when they mean 'no'.

### **Problems with reading**

### **Problems with spelling**

Understanding of speech is usually not affected in the early stages.

Non-language functions such as memory also tend not to be affected early on. However, as the disease progresses other thinking problems may occur such as:

- Difficulty understanding speech
- Problems with planning and problem solving

Behavioural problems similar to those seen in behavioural variant FTD may also occur although these often do not occur until the later stages of the disease.

Physical problems occur in some people similar to the symptoms of Parkinson's disease.

## What is progressive nonfluent aphasia?

Very rarely people with PPA may develop motor neurone disease.

It can be a frustrating condition and people may become depressed because of their inability to speak.

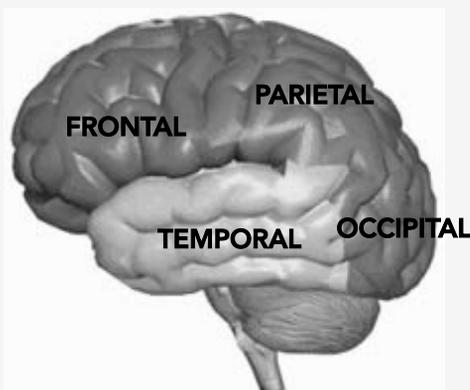
### Does PNFA run in families?

In some cases PNFA can be a genetic disorder and run in families. Mutations in either the progranulin or C9ORF72 gene can cause PNFA.

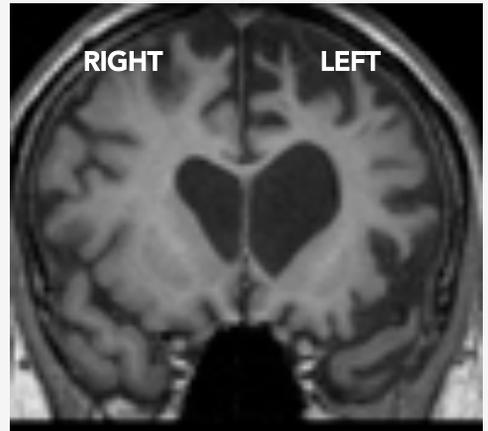
See FACTSHEET 2 for more details about familial FTD.

### How is PNFA diagnosed?

Usually a diagnosis is made by a specialist rather than a GP. There is no single test that will make a diagnosis. A series of tests are usually performed including a scan of the brain. In PNFA the scan may show loss of cells in the front of the brain in an area called the frontal lobe.



*The different lobes of the brain.*



*An MRI scan of the brain of somebody with PNFA showing loss of cells in the left frontal lobe.*

See FACTSHEET 11 for more details.

### Is there a treatment for PNFA?

There is currently no cure for PNFA but there are some important things which can help when caring for someone – see FACTSHEET 12 for more details.



The PPA Support Group has been set up to help people with PPA and their carers. It meets a number of times a year.

More information can be found at [www.ucl.ac.uk/drc/support-groups](http://www.ucl.ac.uk/drc/support-groups).