



Frontotemporal Dementia

Frontotemporal dementia

The word 'frontotemporal' refers to the two sets of lobes (frontal and temporal) in the brain that are damaged in this type of dementia. Frontotemporal Dementia (FTD) occurs when disease damages nerve cells in these lobes. This causes the connections between them and other parts of the brain to break down. The levels of chemical messengers in the brain also get lower over time. These messengers allow nerve cells to send signals to each other and the rest of the body. As more and more nerve cells are damaged and die, the brain tissue in the frontal and temporal lobes starts to get smaller. There are two broad types of FTD:

Behavioural variant FTD – where damage to the frontal lobes of the brain mainly causes problems with behaviour and personality. These lobes are found behind the forehead and process information that affects how we behave and the control of our emotions. They also help us to plan, solve problems and focus for long enough to finish a task. This is the most common type of FTD. In the early stages it mainly causes changes in someone's personality and behaviour.

A person with behavioural variant FTD may:

- lose motivation to do things that they used to enjoy
- struggle to focus on tasks and become distracted easily
- find it difficult to plan, organise and make decisions these problems may
 first appear at work or with managing money







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- lose their inhibitions behaving in socially inappropriate ways and acting
 impulsively or without thinking. For example, making insensitive or rude
 comments about someone's appearance, making sexual gestures in public,
 staring at strangers, or being verbally or physically aggressive
- lose the ability to understand what others might be thinking or feeling they
 may be less considerate of the needs of others, lose interest in social activities
 or be less friendly. They may also have less of a sense of humour or laugh at
 other people's problems. This can make the person appear cold and selfish
- show repetitive or obsessive behaviours for example, repeating phrases or gestures, hoarding or being obsessed with timekeeping. They may also take
 up new interests – for example, music or spirituality. These might give the
 person a positive focus but can become obsessive in nature
- crave sweet, fatty foods or carbohydrates and forget their table manners.
 They may also no longer know when to stop eating, drinking alcohol or smoking.

FTD can also affect how sensitive a person is to physical or environmental stimulation such as temperature, sounds and even pain. Most people with behavioural variant FTD are not fully aware of their symptoms. Instead, these changes are often first noticed by the people who are close to them. As a result, people with this type of FTD rarely think they need to seek medical help for their condition. They may also refuse to do so if others suggest it.





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Primary progressive aphasia (PPA) occurs when damage to the temporal lobes – on either side of the head nearest the ears – causes language problems. This part of the brain has many roles. A key function of the left temporal lobe is to store the meanings of words and the names of objects. The right temporal lobe helps most people recognise familiar faces and objects. Other aspects of thinking, perception and behaviour are not affected as much during the early stages, however, as the disease progresses, there may start to be changes in these areas. There are two sub types of PPA, Semantic Variant PPA and Non-fluent Variant PPA. A person with Semantic Variant PPA is likely to:

- lose their vocabulary over time at first mostly words they are less familiar with, such as technical words (for example 'accelerator') or less common words (for example 'crinoline'). They may try to use more general words instead for example, calling a 'spanner' a 'tool' or a 'thingy'. As the condition develops, they will start to forget even basic words, such as 'wet' or 'sugar'.
- forget what familiar objects are used for for example, a person may forget
 what a toaster does and why it's in the kitchen. This could cause them to
 eventually lose skills such as using cutlery or toothbrushes

Getting obsessed about daily routines or having eating problems are common also, as in behavioural variant FTD.

Over time, a person with Non-fluent Variant PPA will find it more and more difficult to get their words out. They may also:







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- start to speak differently this includes speaking more slowly, using the wrong grammar and putting words in the wrong order. For example, 'I gone to the shop.'
- use shorter, simpler sentences that miss out shorter words (known as telegraphic speech) – for example, 'Tired. Going bed now.'
- say the opposite of what they mean for example, saying 'yes' when they mean 'no'.

Unlike those with semantic variant PPA, many people with non-fluent variant PPA still understand individual words. However, over time they will struggle to understand full sentences that use these words. For example, a person with this condition may know what a 'spoon' is, but they may not know the meaning of 'Can you pass me the spoon, please?' At some point the person may stop speaking completely.

The first noticeable symptoms for a person with FTD will be changes to their personality and behaviour and/or difficulties with language. These are very different from the early symptoms of more common types of dementia. For example, in Alzheimer's disease, early changes are often problems with day-to-day memory. In the early stages of FTD, many people can still remember recent events.