A Patient’s Guide to Nonfluent Variant Primary Progressive Aphasia (nfvPPA)

This material is provided by UCSF Weill Institute for Neurosciences as an educational resource for patients.
What is nonfluent variant primary progressive aphasia?

Primary progressive aphasia (PPA) is a condition that slowly damages the parts of the brain that control speech and language. People with PPA usually have difficulty speaking, naming objects or understanding conversations.

One form of PPA is called the nonfluent variant (nfvPPA), and those with nfvPPA have increasing trouble getting words out. Their speech may sound slurred or their voice may change. As time goes on, people with nfvPPA have more trouble putting sentences together, and they eventually begin to speak slower and slower.

Because it primarily affects the front part of the brain, nfvPPA is considered a subtype of a large group of brain conditions called frontotemporal dementia (FTD).

What causes nfvPPA?

The cause of nfvPPA is unknown. Scientists know that in nfvPPA there is a build-up of one of two proteins, either tau or TDP-43, usually in the front left part of the brain, which controls speech and language. These proteins occur normally, but we do not yet understand why they build up in large amounts in this brain area. As more and more protein builds up in those brain cells, the cells lose their ability to function and eventually die. This causes the brain to shrink.

How is age related to nfvPPA?

Most people with nfvPPA start to have symptoms in their 60s, although some people have shown signs earlier or later.

What happens in nfvPPA?

People with nfvPPA gradually have more trouble expressing themselves. For example, they might begin speaking in shorter phrases or pausing mid-sentence or mid-word. They may have increasing difficulty with pronouncing or mixing up sounds in familiar words. People with nfvPPA may have trouble understanding sentences that are grammatically complex, and it may be hard for them to use correct grammar. Other people may have a hard time understanding what the person with nfvPPA is trying to say.

In advanced nfvPPA, people may have such difficulty saying words out loud that they might stop speaking completely, and they may become depressed, anxious, or apathetic. Difficulties with planning and judgment may also happen. People with nfvPPA may have trouble with movement, especially on the right side of the body, such as difficulty moving the right arm or leg. People with nfvPPA may also have difficulty swallowing, which could become serious enough to interfere with eating and puts them at risk for infections like pneumonia.

A person with nfvPPA can live many years with the disease. Research has shown that a person with nfvPPA may live an average of 8–10 years with the disease, although this can vary from person to person.

Are there medicines to treat nfvPPA?

Though there is no cure for nfvPPA yet, there are medications that may help manage the symptoms. These medications are called selective serotonin reuptake inhibitors (SSRIs), and these medicines can help if a person with nfvPPA is having changes in mood or behavior.

What other things help?

There are various ways to help a person with nfvPPA. Speech therapy may help improve communication between people with nfvPPA and others. Communication devices, like tablets and type-to-talk instruments, or picture books, can help the person with nfvPPA express what they want to say with less anxiety.

If symptoms of weakness or difficulty using the arm or leg develop, physical and occupational therapy may help manage them and provide coping skills and strategies. A swallowing evaluation and a modification of diet and consistency of liquids may be necessary for people with nfvPPA who develop swallowing difficulties.

Research has shown that physical exercise helps to enhance brain health and improves mood and general fitness. A balanced diet, enough sleep, and limited alcohol intake are other important ways to promote good brain health. Other illnesses that affect the brain, such as diabetes, high blood pressure, and high cholesterol, should also be treated if present.

Resources

National Aphasia Association: aphasia.org
Faces of Aphasia: facesofaphasia.com
Aphasia Hope Foundation: aphasiashope.org
American Stroke Association: strokeassociation.org
The Association for Frontotemporal Degeneration: theaftd.org
Family Caregiver Alliance: caregiver.org
National Institutes of Health: nih.gov
Research: clinicaltrials.gov

Models for illustrative purposes only.