



Dementia and Apraxia

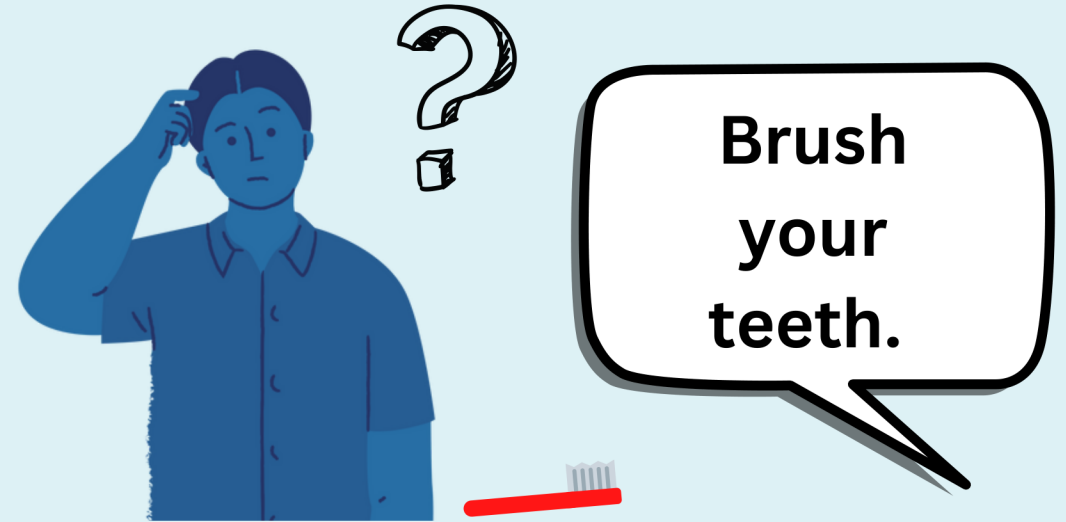
What is Apraxia?

- Difficulty carrying out skilled movements, even though strength may be intact
- A person with Apraxia wants to carry out a movement, but they can't.
- Apraxia results from damage to the part of the brain that controls motor planning.

Dementia and Apraxia

Those living with dementia may have difficulty carrying out skilled movements, even though their strength may be intact. *It isn't laziness or stubbornness— The motor programs in their brains are not functioning the way they used to.*

Ideational Apraxia



Difficulty performing an action because of trouble sequencing the steps to complete it.

Conceptual Apraxia

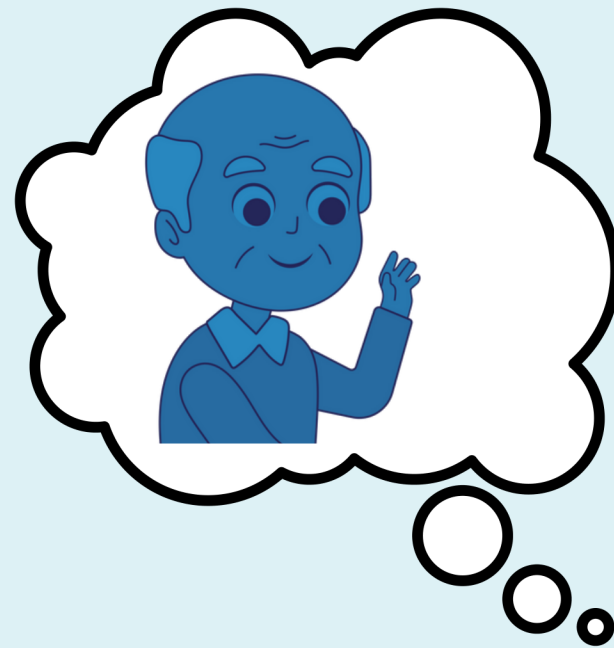


Difficulty understanding the concept or purpose of the object.

Ideomotor Apraxia

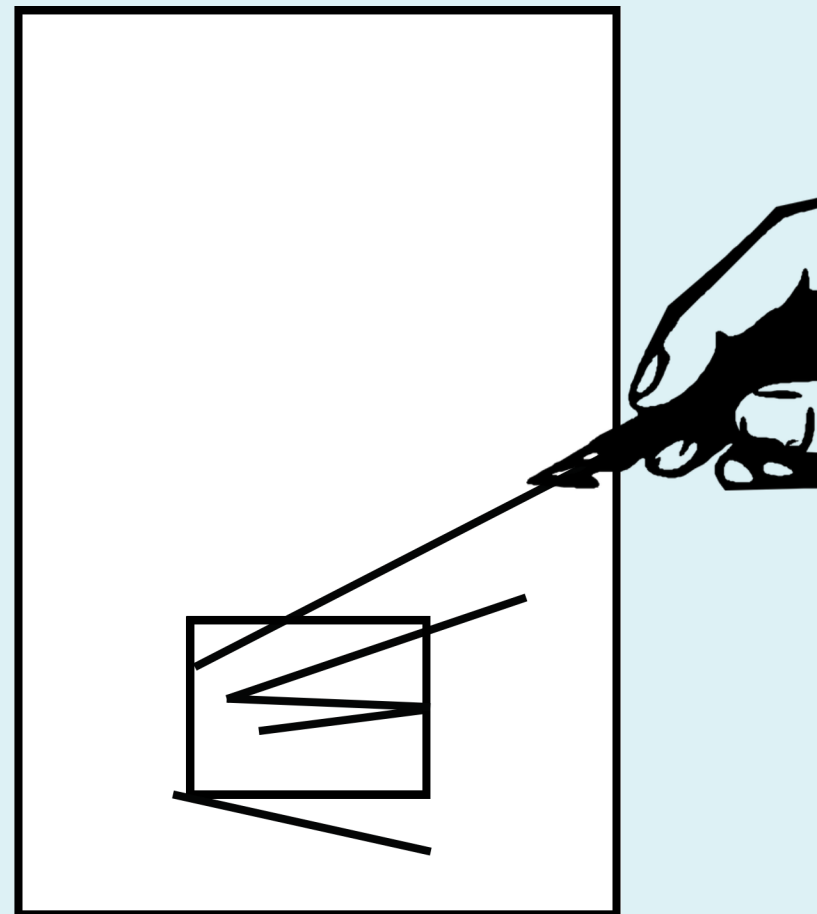
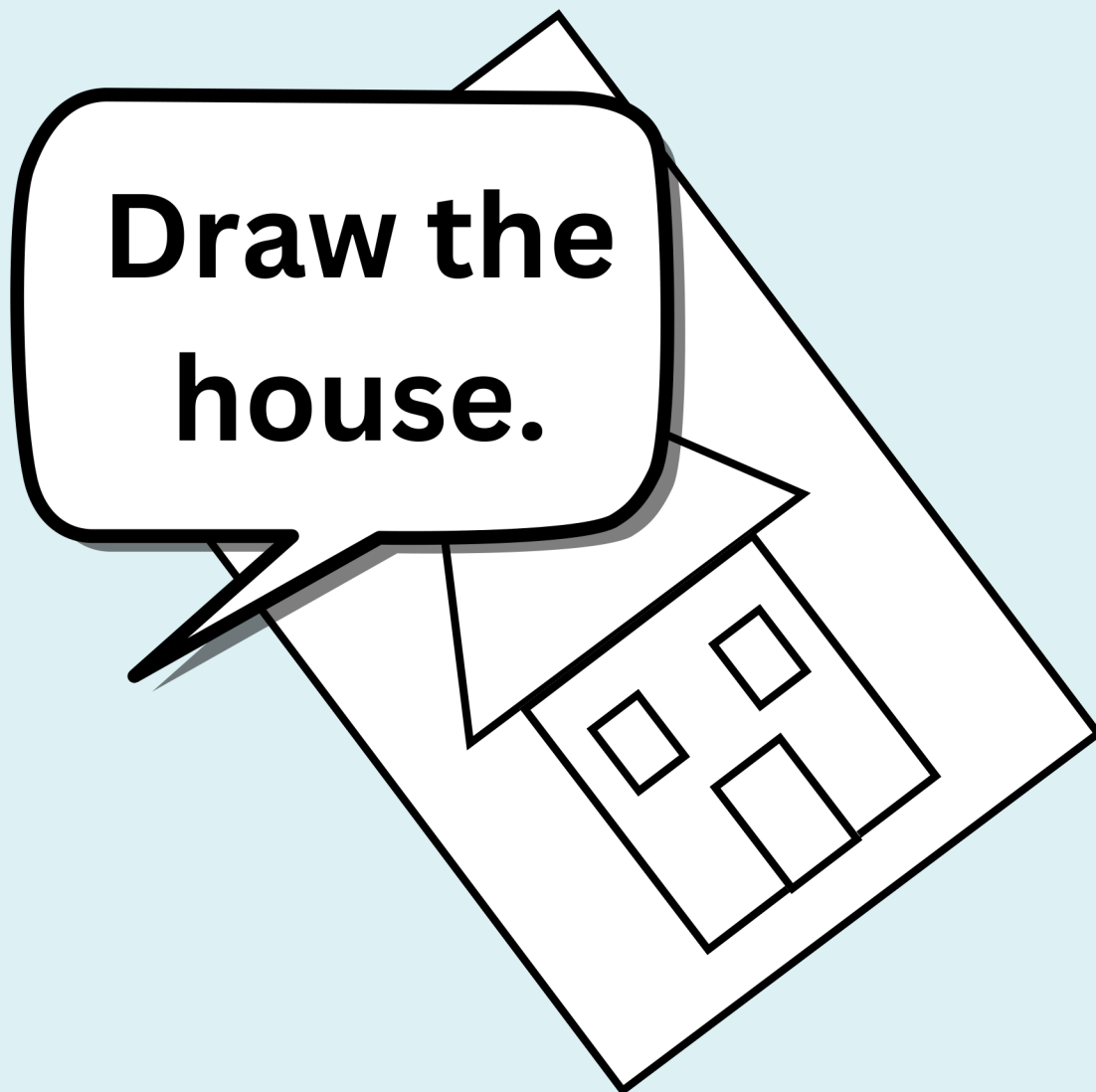
Difficulty performing an action on command, despite being able to understand it. The action can still be performed automatically.

Wave hello!



Constructional Apraxia

Difficulty constructing/drawing/copying simple images.



Conduction Apraxia

Difficulty imitating movements, but able to gesture on command.

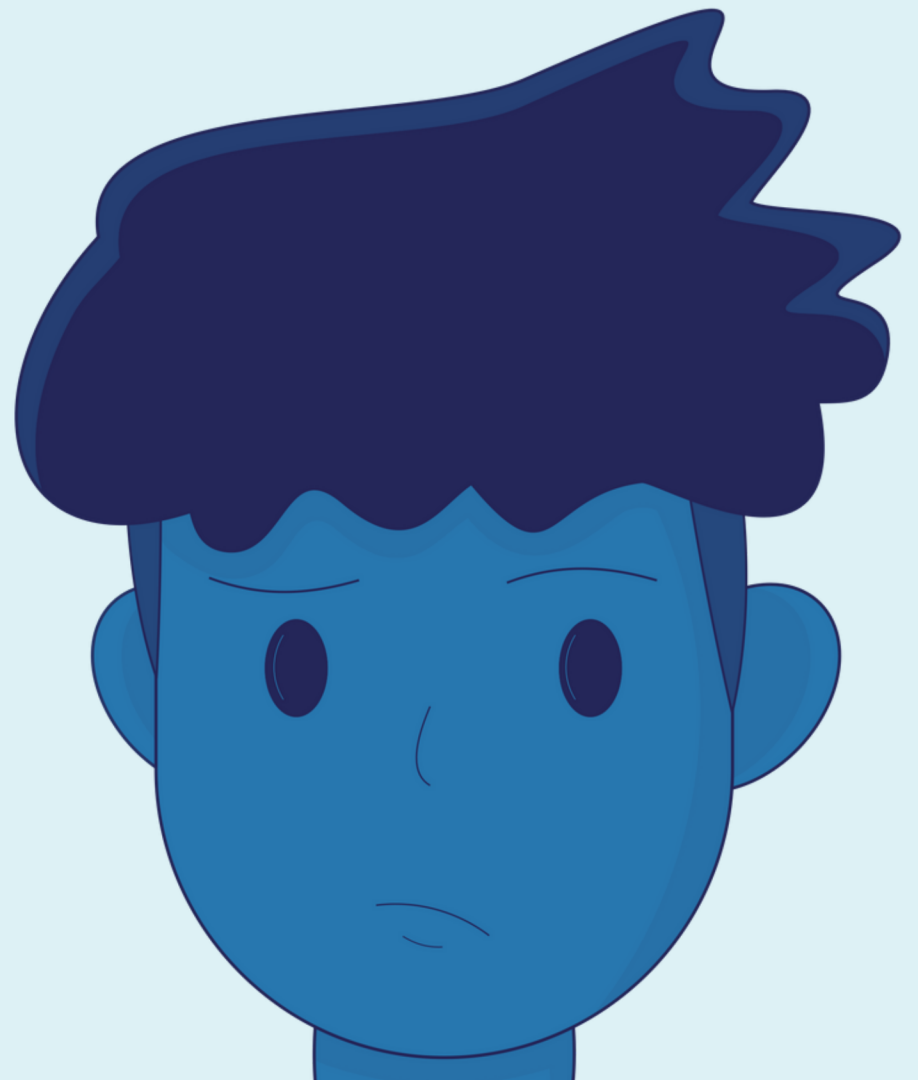
Disassociation Apraxia

Difficulty gesturing on command, but able to imitate.

Buccofacial or Orofacial Apraxia

Difficulty coordinating and executing facial movements.

**Stick out
your
tongue.**



Apraxia of Speech

Difficulty coordinating and executing movements for speech in someone who could previously perform these actions. In other words, it is acquired as a result of injury to the brain.

This can occur along with **Aphasia**, but while Aphasia refers to difficulty understanding and/or expressing *language*, Apraxia of Speech refers to difficulty planning movements to execute *speech* sounds. Aphasia and Apraxia of Speech can occur at the same time.

Note: Childhood Apraxia of Speech is not acquired. This refers to when child has difficulty executing motor plans for speech.

Sources

Ahmed, S., Baker, I., Thompson, S., Husain, M., & Butler, C. R. (2016). Utility of testing for apraxia and associated features in dementia. *Journal of Neurology, Neurosurgery & Psychiatry*, 87(11), 1158-1162.

Chandra, S. R., Issac, T. G., & Abbas, M. M. (2015). Apraxias in neurodegenerative dementias. *Indian journal of psychological medicine*, 37(1), 42-47.

Daroff, R. B., & Aminoff, M. J. (2014). *Encyclopedia of the neurological sciences*. Academic press.

Gross, R. G., & Grossman, M. (2008). Update on apraxia. *Current neurology and neuroscience reports*, 8(6), 490-496.

Johnen, A., Reul, S., Wiendl, H., Meuth, S. G., & Duning, T. (2018). Apraxia profiles—A single cognitive marker to discriminate all variants of frontotemporal lobar degeneration and Alzheimer's disease. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 10, 363-371.

Ogar, J., Slama, H., Dronkers, N., Amici, S., & Luisa Gorno-Tempini, M. (2005). Apraxia of speech: an overview. *Neurocase*, 11(6), 427-432.