



What is Aphasia?

The definition of aphasia (or dysphasia) is, as per Chapey (2008):

- Aphasia is an acquired LANGUAGE disorder due to damage to the brain, e.g stroke
- It is the reduced ability understand or express yourself
- Aphasia may affect the person's ability to read, write and use gestures.
- Aphasia is not an intellectual deficit

Aphasia can mask as person's ability to communicate feelings, thoughts and emotions.

The language system is broken into two parts: the receptive language system (ability to understand) and expressive language (ability to put words together to convey meaning). When diagnosing aphasia, speech pathologists will usually discuss the person/s ability in these two categories.

Characteristics of Aphasia

Expressive Language

Spoken output is often described as either fluent or non fluent (Chapey, 2008).

Non fluent output:

- non fluent speakers tend to have increased effort when speaking
- the words put together are shorter than a usual sentence
- often non fluent speakers are referred to as "telegrammatic" or sound as if their sentences don't follow the grammar rules

Fluent Output

- Fluent aphasia speakers often speak with no effort and often speak faster than normal speech.
- Fluent speech is often vague or meaningless as the content words within the sentence are often exchanged for "thing" or "this or that" or other non-descript words
- Paraphasia's are used often within fluent speech: these are word substitutions. For example: a semantic (word meaning) substitution –





“chair” instead of “table” or phonemic (sound) substitutions - /mouse/
instead of /house/

Receptive Language:

A person’s ability to understand is measured in a variety of ways

- Ability to understand instructions, ranging from basic 1 step commands to complex (before you touch your nose, nod twice)
- Reliable yes & no response to questions. For example: the person answers correctly to the question “Are you wearing a hat?” Or “Are you in a hospital?”

If a person has an expressive aphasia, it is most likely they will also have a receptive aphasia.

Naming

As a general rule, people with aphasia will have some form of word finding difficulty. This is commonly referred to as anomia.

In order to improve a person’s ability to retrieve the correct word, the Speech Pathologist will use cues. These are called either semantic (meaning) cues or phonemic (sound) cues. For example

- Semantic cues: In order to help a person with aphasia find the word “pen” in conversation, you might give them the cue “ you use it to write with”
- Phonemic Cues: you might give the person with aphasia the start sound of the word /p.../ to give them a chance to finish the word /pen/
- The speech pathologist will document which cues work best for the patient and you can use this information to help the person with aphasia express themselves in conversation.

Reading

Alexia (or Dyslexia) is the term that describes a person ability to no longer be able to comprehend (read) written language. Often patients may be able to read aloud sentences however they may not be able to interpret or understand what they are reading.





Writing

Agraphia (or Dysgraphia) is the term used to describe a person who has an acquired difficulty with writing letter and words. Often people with aphasia that have writing difficulties can still write their name as it is an over learned motor response.

Types of Aphasia

There are different types of aphasia that Speech Pathologists may refer to. They are:

- Wernicke's aphasia
- Broca's aphasia
- Conduction aphasia
- Transcortical sensory aphasia
- Transcortical motor aphasia
- Global aphasia

These types of aphasia provide information about the location of the stroke that is causing the aphasia, and also some of the features of the person's language.

References:

Chapey, R. 2008. *Language Intervention Strategies in Aphasia and related Neurogenic Communication Disorders (5th Ed.)*. Baltimore, Maryland: Lippincott Williams & Wilkins





What is Dysarthria?

Dysarthria is a motor speech disorder. Dysarthria results from reduced strength, speed, range, steadiness, tone and accuracy in movements required for speech production (Duffy 2005). Dysarthria can impair all processes involved in speech production including respiration (breathing), phonation (voicing), articulation, resonance and prosody (melody of speech) (Duffy, 2005).

Causes of Dysarthria

Causes can include stroke, or progressive neurological diseases such as Motor Neuron Disease, or Parkinson's Disease. These diseases result in damage to the central or peripheral nervous system that impairs the transmission of neural messages to the muscles involved in speech.

Types of Dysarthria

When diagnosing dysarthria, Speech Pathologists will comment on type of dysarthria. These types include:

- Spastic
- Hyperkinetic
- Hypokinetic
- Ataxic
- Flaccid
- Mixed





These types of dysarthria provide information on the features of the persons speech. It also tells us information about the possible location of the lesion which has contributed to the dysarthria.

Features of Dysarthria

When assessing dysarthria, a person's intelligibility (how easily they are understood when speaking) is rated. This is rated as mild, moderate or severe. For a person with dysarthria, intelligibility can change dependant on the situation; for example, when they are very fatigued, they may become harder to understand.

The following are parts of speech production that influences a person's intelligibility. Each factor can be affected differently across person to person, dependant on where the stroke occurred (Duffy, 2005).

- *Respiration*: Does the person sound like they are short of breath when speaking, or having to stop and breathe more frequently when talking?
- *Phonation*: Does their voice sound softer, strained or rough? Does their vocal quality impact on their intelligibility?
- *Articulation*: does the person's speech sound slurred or imprecise or weak? Are the sounds in their speech prolonged or irregular sounding?
- *Resonance*: do they sound like they are talking with a blocked nose, or sound nasal?
- *Prosody*: do they have the normal melody of speech, or does it sound flat or slow? Is it short and choppy?

DYSARTHRIA = ARTICULATION

References:

Duffy, J. R. 2005. *Motor Speech Disorders: Substrates, Differential Diagnosis, & Management* (2nd Ed).Missouri: Elsevier Mosby



Enhancing Communicative Success
A multimedia problem based learning package
A Victorian Stroke Clinical Network Project



Useful Websites

www.aphasia.org.au

www.strokefoundation.com.au

<http://www.asha.org/public/speech/disorders/dysarthria.htm>

Other:

