A review of aphasia

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07.10.14
Defining Aphasia

- Loss or impairment of language function caused by brain damage
- Aphasia is a multimodal disorder:
  - Difficulties in speaking, understanding, reading, writing
  - Reduction in capacity to interpret and formulate linguistic elements (e.g. sentences, words, morphemes – the smallest grammatical unit in a language)
- Amount of loss across each area varies

Murdoch (2010)
What aphasia is NOT

* Aphasia is NOT the result of:
  * A sensory deficit
  * A general intellectual deficit
  * An impairment of cognition e.g. memory
  * A psychiatric disorder
  * A developmental disorder

Brookshire (1992)
Goodglass (1993)
Dysarthria: An impairment in the motor functions of respiration, phonation, resonance, articulation and prosody affecting production of speech

Apraxia of Speech (AOS): An impairment in the motor-programming of actions involved in speech production and in the absence of any muscle paralysis or weakness

Dysphagia: A swallowing disorder

Murdoch (2010)
Co-occurring factors

* Aphasia rarely occurs in isolation.
* Be aware of other factors post-stroke which may co-occur:
  * Visual impairments
  * Cognitive impairments
  * Physical impairments
  * Emotional impairments
What causes aphasia?

* ALWAYS a result of damage to the brain, i.e. neurological

* Most common: **Cerebrovascular disorders** particularly left MCA lesions affecting frontal temporal and parietal lobes

* May also arise from:
  * Neoplasms (tumours)
  * Head trauma
  * Degenerative disorders e.g. dementia, PD
  * Infections (meningitis, encephalitis)

Chapey and Hallowell (2001)
Murdoch (2010)
Marquardsen (1969): One third of patients 7 days post stroke
Scarpa et al (1987): 55% of patients with Left CVA evaluated 15-30 days post stroke
Pedersen et al (1995): 40% of patients evaluated in the first three days
Engelter et al (2006): 30% of first ever ischaemic strokes

More that 250,000 people are living with aphasia in the UK (Speakability, 2014)
In the USA: >1,000,000 with aphasia, and 80,000 new cases every year (National Institute for Deafness and Communication disorders, 1999; American Academy of Neurology)
Aphasia or Dysphasia

* **Aphasia:** Total loss of language

* **Dysphasia:** Partial loss of language

* Terms are used inter-changeably
* Recent literature and **RCSLT:** advocates the use of **Aphasia.**
Expressive Symptoms of Aphasia

- **Word finding difficulties**

- **Paraphasias:**
  - Semantic paraphasia: word related in meaning e.g. table/chair
  - Phonological paraphasia: sound substitutions e.g. table/fable
  - Unrelated paraphasia: random word substitution e.g. table/wind
  - Neologism: non-word substitution e.g. table/shig

- Significant use of neologisms: **JARGON aphasia**

- Failure to **repeat** words

- **Grammatical errors** – omission of connective words or morphemes, incorrect word order

- **Dysgraphia**

  Damasio (1981)
Receptive Symptoms of Aphasia

* Impaired to varying degrees:
  * Difficulty following conversation
  * Difficulty following instructions
  * Inconsistent comprehension of single words
  * Inconsistent yes/no responses
  * Non-verbal semantic impairment
  * Impaired reading comprehension

  Damasio (1981)

* Beware the patient who nods and smiles and *appears* to understand
Aphasia is a term that is used to describe a core impairment but for which there is a broad spectrum of symptoms of differing severity.

Be aware: what works for one patient, may not work for another.

If in doubt, speak to your friendly SLT team.
Average pattern of recovery after stroke.
Prognosis for recovery in Aphasia

- Dependent on:
  - **Biographical variables** – age, gender and premorbid education
  - **Medical variables** – type of stroke, time since onset, site and extent of lesion
  - **Language variables** – aphasia severity, particularly receptive abilities

Barriers for the person with aphasia

- **In a hospital setting:**
  - Difficulty comprehending consent forms, prescriptions, health information
  - Inability to read hospital signage and directions
  - Exclusion from case conferences and care planning

- People with physical impairments: physical access via wheelchairs, ramps, automatic doors etc.
- Communicative access via “communication ramps” Kagan and Gailey (1993)
What is a communication ramp?

A way to communicate with aphasic individuals by modifying typical (your own) communication via the use of communication strategies and support materials.
Communication Ramps

Total Communication

* Modifications to our communication:
  * Verbal language
  * Gesture
  * Drawing
  * Writing
  * Use of pictures and photos

Aphasia Friendly Materials

* Modifications to patient information:
  * Short message
  * Clear sentences
  * Easy words
  * Good layout
  * Diagrams and pictures

Helpful guidance from the Stroke Association:
National Guidance to Support Practice

* National Stroke Strategy (2007)
  • Provision of communication support to enable PWA to participate in managing their own care

* Cochrane Review (2014)
  • “Decision aids to help people who are facing health treatment or screening decisions” (Stacey et al)

  • “Making Health and Social Care Information Accessible”

* Stroke Association:
  • “Accessible Information Guidelines”
How to help get the message IN

- Listen and watch
- Take your time
- Present one idea at a time. Don’t bombard with questions.
- Use plain, clear English
- Check and double check before moving on

Illustrate the idea by using:
- Drawing
- Writing
- Gesture
- Pictures/diagrams in leaflets

Think about your environment – quiet, distraction free, paper and pen

Be prepared to do repeated visits to ensure information has been understood.
How to help get the message OUT

- Encourage the person to use:
  - Writing
  - Drawing
  - Gesture
  - Facial Expression

- Summarise and check you have understood. Don’t pretend to understand

- Try asking questions in a different way

- Think about conversation props:
  - Paper and pen
  - Pictures/photographs
  - Alphabet charts
  - Communication books

- Allow plenty of TIME

UK Connect
Aphasia: An acquired language disorder of neurological origin
- Affecting all modalities of language
- May co-occur with other communication impairments
- For many will be a lifelong condition
- Remember to modify YOUR communication using “communication ramps” to reveal their competence
Questions?

Thank you for listening


* American Speech Hearing Association (ASHA) [http://www.asha.org/research/reports/stroke/](http://www.asha.org/research/reports/stroke/)


* UK Connect: [www.ukconnect.org](http://www.ukconnect.org)

