2º Curso de Verão para Internos de Medicina Física e de Reabilitação

Tema

**Acidente Vascular Cerebral**

**PROGRAMA**

Rovisco Pais
Centro de Medicina de Reabilitação da Região Centro

**CMRRC – Rovisco Pais**

**29, 30 e 31 de outubro de 2015**

**Tocha**

# AFASIA NO PÓS-AVC


Terapeutas da Fala

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# Incidência

- A afasia atinge cerca de 1/3 da população com AVC

(Darrigrand et al., 2011; Kelly, Brady & Enderby, 2010)

# Definição de Afasia

- “Perturbação seletiva adquirida das modalidades e funções da linguagem, causada por uma lesão cerebral focal no hemisfério dominante da linguagem, que afeta o funcionamento comunicativo e social do indivíduo, a sua qualidade de vida e a qualidade de vida dos seus familiares e cuidadores.”

(Papathanasiou, Coppens e Potagas, 2013)

# Afasia vs PMF (disartria e apraxia)

Afasia é uma perturbação adquirida da comunicação provocada por uma lesão cerebral, caracterizada por dificuldade nas modalidades da linguagem: falar, compreender, ler e escrever sem resultar de defeito sensorial, defeito intelectual ou doença psiquiátrica.

(Goodglass, 1993)

# Afasia vs PMF (disartria e apraxia)

Perturbação da fala, resultante de lesão neurológica, que afeta o controlo motor dos músculos da fala ou a programação motora dos movimentos da fala.

(Duffy, 2014)

**Disartria**

Alteração do controlo motor da fala, que provoca problemas na comunicação oral, devido a compromisso muscular (fraqueza, incoordenação ou paralisia da musculatura orofacial)

(Halpern & Goldfarb, 2013)

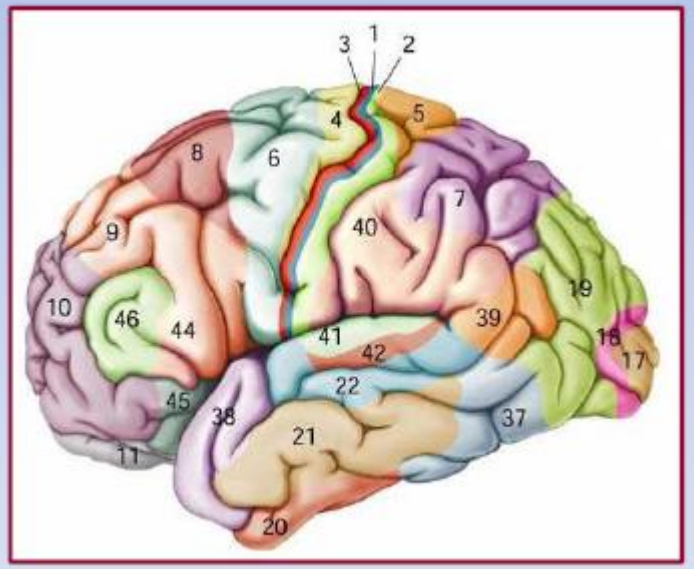
**Apraxia**

Alteração no planeamento, sequenciação e/ou coordenação dos músculos da fala, na ausência de paralisia, fraqueza ou incoordenação da musculatura

(Love e Webb, 2001)

# Áreas da linguagem (historicamente)

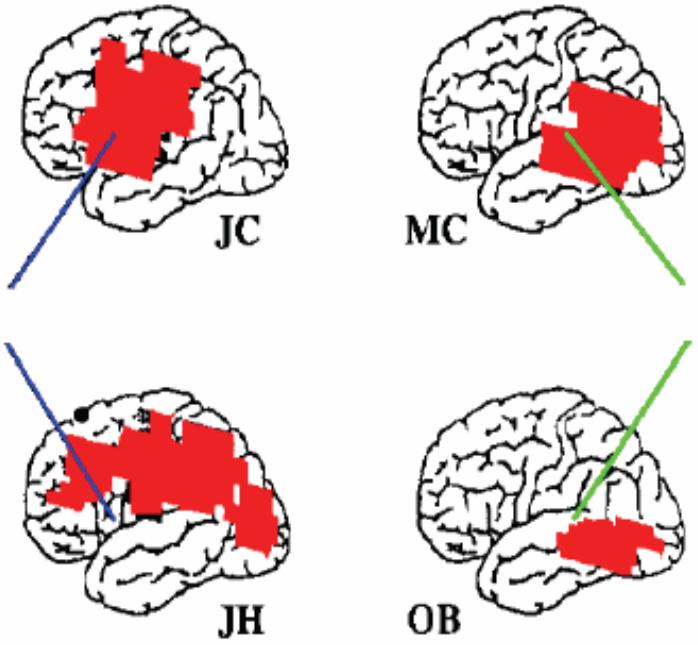
- Hemisfério esquerdo
  - Onde se encontra os centros da linguagem da maioria das pessoas




- Área Motora – **Áreas 4 e 6**
- Área de Broca – **Áreas 44 e 45**
- Área de Wernicke – **Área 22**
- Área Auditiva – **Áreas 41 e 42**
- Área Visual – **Área 17**

# Áreas da linguagem

- Teoria tradicional
  - JC terá Afasia de Broca
  - MC terá Afasia de Wernicke
  - JH e OB não têm afasia
- Realidade
  - JC e MC não têm afasia
  - JH tem Afasia de Broca
  - OB tem Afasia de Wernicke




(Dronkers *et al.*, 2000)

# Classificação taxonómica das afasias

| TIPO | NOMEAÇÃO | REPETIÇÃO | DISCURSO | COMPREENSÃO |
|---|---|---|---|---|
| ANÓMICA | × | | | |
| CONDUÇÃO | × | × | | |
| T. MOTORA | × | | × | |
| T. SENSORIAL | × | | | × |
| BROCA | × | × | × | |
| WERNICKE | × | × | | × |
| T. MISTA | × | | × | × |
| GLOBAL | × | × | × | × |

# Classificação taxonómica das afasias

- Afasias subcorticais
  - As afasias subcorticais têm sido descritas principalmente em adultos com lesões (oclusões vasculares e hemorragias) em estruturas subcorticais como cápsula interna, núcleo caudado, putamen e tálamo. Convém recordar que também ficam afectadas as vias cortico-subcorticais que participam do processamento da linguagem.

(MAC-KAY, 2003)

# Classificação taxonómica das afasias

- A categorização dos sub-tipos de afasia pode ser difícil.

Localização das lesões cerebrais

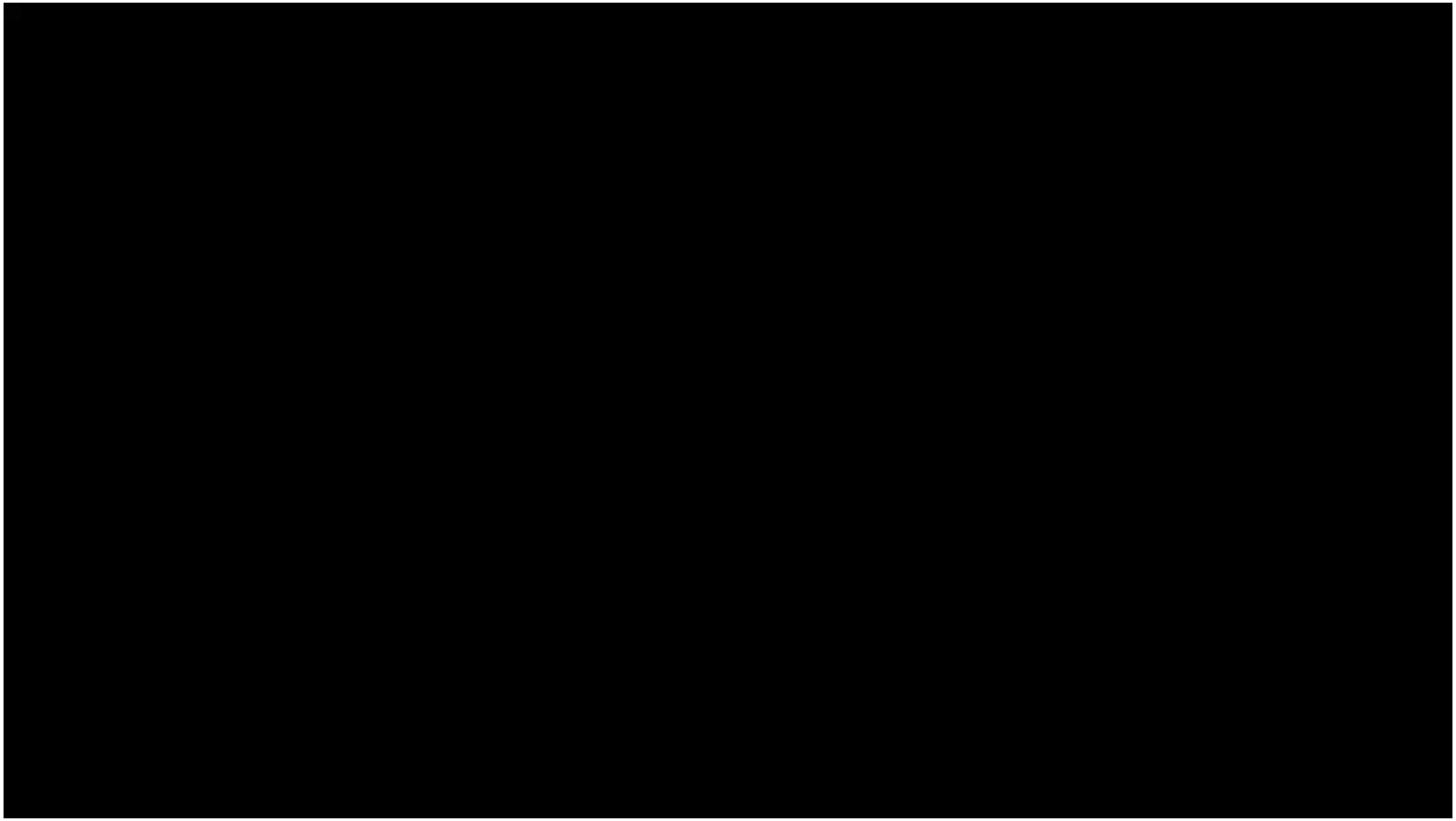
Nas habilidades de linguagem prejudicada em: fluência, compreensão auditiva, repetição e nomeação

(ASHA, 2015)

# Fluência de discurso

- Débito
- Esforço produtivo
- Articulação
- Comprimento das frases
- Prosódia
- Características do Léxico
- Estrutura gramatical
- Parafasias

# Fluência de discurso



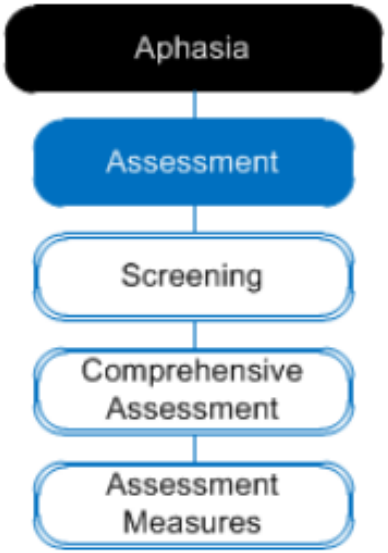
Não- fluente

# Fluência de discurso

Fluente

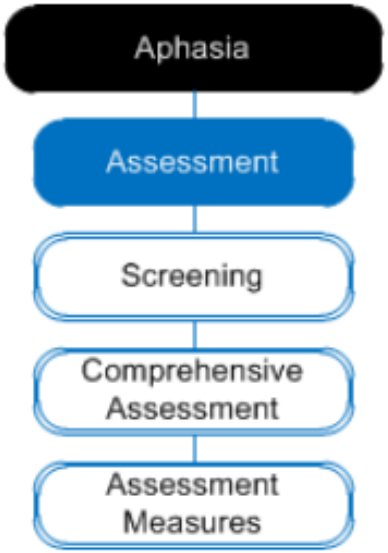
# Fluência de discurso

# Avaliação nas afasias




- Examining for Aphasia – Eisenson (1954);
- LMTA – The Language Modalities Test for Aphasia – Wepman (1961);
- MTTDA – Minnesota Teste for Differential Diagnosis of Aphasia – Schuell (1965,1973);
- PICA – Porch Index of Communicative Ability – Porch (1967, 1981);
- MAE – Multilingual Aphasia Examination – Benton & Hamsher – (1976, 1978);

# Avaliação nas afasias



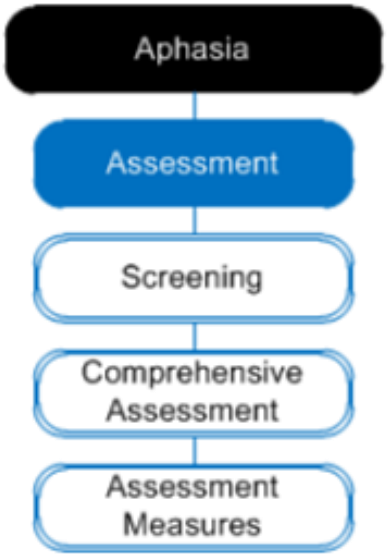

- NCCEA – Neurosensory Center Comprehensive Examination for Aphasia – Spreen & Benton (1977);
- AAT – The Aachen Aphasia Test – Willmes et al. (1980), Huber et al. (1983);
- BDAE – Boston Diagnostic Aphasia Examination – Goodglass & Kaplan (1972, 1983)
- WAB – Western Aphasia Battery – Kertesz (1982);
- ADP – Aphasia Diagnostic Profiles – Helm-Estabrooks (1992).

# Avaliação nas afasias

| Ferramentas de avaliação | Autores Portugueses | Autores Originais |
|---|---|---|
| Bateria de Avaliação de Afasias de Lisboa (BAAL) | (Castro Caldas,1979; Damásio,1973; Ferro, 1986) | Multilingual Aphasia Examination (MAE) (Benton, 1969) |
| Fine – Grained Psycholinguistic Assessment of Aphasia and other Language Impairments (PAL – PORT) | (Festas, et al. 2006) | Psycholinguistic Assessments of Language (PAL) (Caplan, 1992; Caplan & Bub, 1990) |
| Portuguese Aachen Aphasie Test (PAAT) | (Lauterbach, Martins & Ferreira, 2004) | Aachen Aphasie Test (AAT) |
| Escala de Funcionalidade para Afásicos (EFA) | (Leal et al. 2006) | (Niemi et al, 1988) |

(Matos, Jesus, Cruice, 2014)

# Screening




- O Screening é uma ferramenta importante na identificação e encaminhamento adequado de pacientes com possíveis problemas de comunicação.

Não fornece descrição detalhada dos défices linguísticos apresentados ou um diagnóstico diferencial → Representa um meio rápido e eficiente para determinar a presença ou ausência dos mesmos.

# Screening

*Brain Injury*, June 2006, 20(6): 559–568

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**REVIEW**

## Identification of aphasia post stroke: A review of screening assessment tools

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*(Received 13 October 2005; accepted 8 April 2006)*

Table II. Description of screening tools for aphasia.

| Tool | Sub-scales | Total score | Time required | Equipment required | Norms available |
|---|---|---|---|---|---|
| Acute Aphasia Screening Protocol [11] | Attention/orientation to communication (5 items), Auditory comprehension (15 items), Expressive abilities (20 items), Conversational style (4 items; 3 are rated using a 3-point scale) | 50 | 10 min | 5 items readily available in the test environment | No |
| Frenchay Aphasia Screening Test [15] | Comprehension (out of 10), Verbal expression (out of 10), Reading (out of 5), Writing (out of 5) | 30 | 3–10 min | One double-sided stimulus card and 5 written instructions | Yes |
| Mississippi Aphasia Screening Test [19] | Naming (5 items), Automatic speech (5 items), Repetition (5 items), Yes/no accuracy (10 items), Object recognition (5 items), Following verbal instructions (5 items), Reading instructions (5 items), Verbal fluency (1 item), Writing/spelling to dictation (5 items) | 100 | 5–10 min | One photograph, five written instructions, five common objects | No |
| Reitan-Indiana Aphasia Screening Examination [24] | 32 items, no sub-scales | 77 [25] | n/a | Written sentences/commands, common object (key) [25] | Yes |
| ScreeLing [7] | Semantics (24 items), Phonology (24 items), syntax (24 items) | 72 | 15 min | n/a | No |
| Ullevaal Aphasia Screening Test [31] | Expression, Comprehension, Repetition, Reading, Reproduction of a string of words, Writing, Free Communication | None | 5–15 min | A copy of the painting 'self-portrait' by Theodor Kittelsen, reading cards, six objects (cup, comb, pen, spoon, coin toothbrush) | No |

Australian Aphasia Rehabilitation Pathway

Home | The Pathway | Best practice statements | About | Contact

## The Pathway

# Screening tools

### The Aphasia Rapid Test

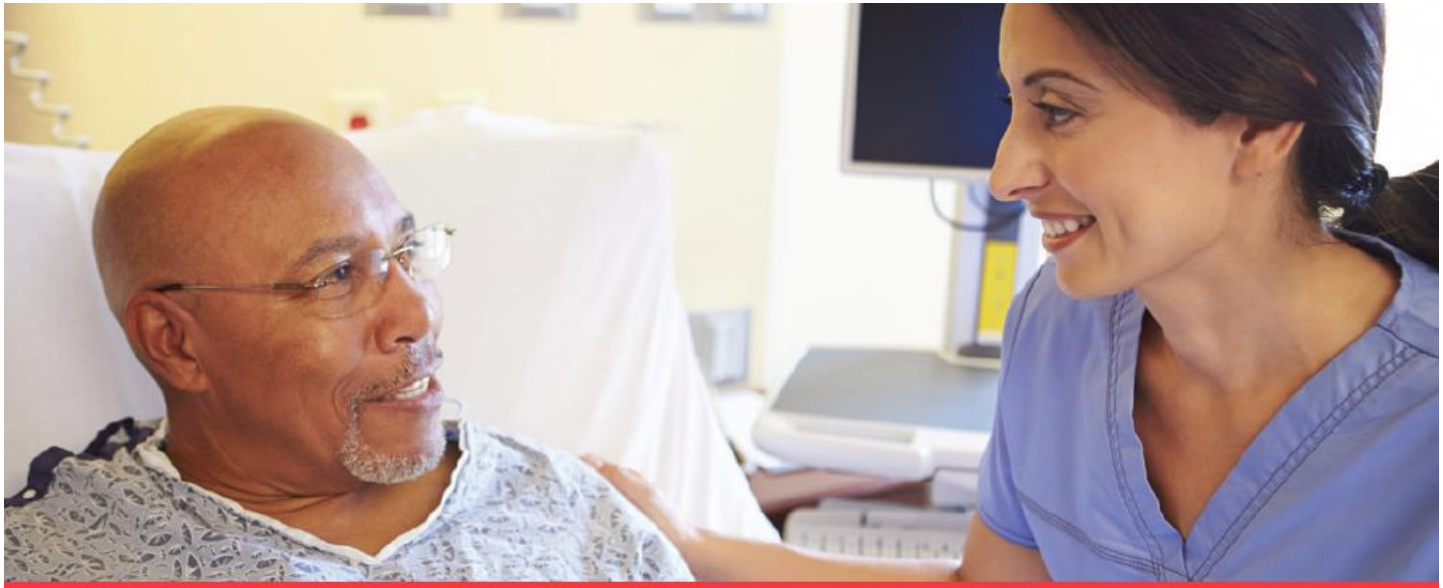
| Test overview | Administered by | Admin time | Psychometric data | |
|---|---|---|---|---|
| | | | Validity | Reliability |
| Brief test developed as a bedside assessment to rate aphasia severity in acute stroke patients.<br><br>Useful in monitoring early aphasic changes in acute stroke patients. Highly predictive of 3 month verbal outcome.<br><br>**Test examines:** Execution of simple and complex orders, repetition, object naming, scoring of dysarthria, verbal semantic fluency task. | Any healthcare professional | 3 mins | **Sensitivity 90% (high)**<br><br>**Specificity 80% (moderate)**<br>NB: Should not be used as a diagnostic tool since it does not discriminate between aphasia, apraxia of speech and dysarthria. | **Inter-rater = 0.99 (high)**<br><br>(concordance coefficient)<br><br>**Weighted Kappa = 0.93 (high)** |

**Reference:** Azuar, C., Leger, A., Arbizu, C., Henry-Amar, F., Chomel-Guillaume, S., Samson, Y. (2013). The Aphasia Rapid Test: an NIHSS-like aphasia test, *J Neurol, 260,* 2110-2117.

http://www.aphasiapathway.com.au/?name=aphasia-screening-tools

**Table 1** Instructions and scoring system for the Aphasia Rapid Test

| Instructions | Score |
|---|---|
| 1a. Execution of simple orders: | 0 = performs both tasks correctly. |
| *«Open and close your eyes»* | 1 = performs one task correctly. |
| *«Give me your left hand»* | 2 = performs neither task correctly. |
| 1b. Execution of a complex order: | 0 = performs the task in less than 10 s. |
| *«Put your left hand on your right ear»* | 1 = performs the task in more than 10 s or requires the order to be repeated. |
| | 2 = performs the task partially: moves the hand across the median line or performs the task on the wrong side. |
| | 3 = does not perform the task: does not move the hand across the median line or does not move at all. |
| 2. Repetition of words: | Each word scores from 0 to 2 (total 0-6), as follows: |
| 2a. *« button»* | 0 = normal repetition. |
| 2b. *« macaroon»* | 1 = abnormal repetition but the word is correct and recognizable by the examiner *. |
| 2c. *« luggage»* | 2 = non-repetition or unrecognizable word *. |
| | **Note: Phonemic, apraxic or pronunciation errors can be scored 1 if the word is recognizable by the examiner, or 2 if the word is unrecognizable.* |
| 3. Repetition of a sentence: | 0 = normal repetition. |
| *«The boy is singing in the woods.»* | 1 = abnormal repetition but the sentence is recognizable by the examiner *. |
| | 2 = non-repetition or unrecognizable sentence*. |
| | **Note: Phonemic, apraxic or pronunciation errors can be scored 1 if the sentence is recognizable by the examiner, or 2 if the sentence is unrecognizable.* |
| 4. Object naming: | 0 = normal naming. |
| 4a. *« watch»* | 1 = abnormal naming but the word is correct and recognizable by the examiner.* |
| 4b. *« pen»* | 2 = wrong naming or unrecognizable word. * |
| 4c. *« coat »* | **Note: Phonemic, apraxic or pronunciation errors can be scored 1 if the word is recognizable by the examiner. An unrecognizable word or lexical error must be scored 2.* |
| 5. Scoring of dysarthria : | 0 = normal. |
| | 1 = minor dysarthria. |
| | 2 = moderate dysarthria: patient can be understood. |
| | 3 = severe dysarthria: unintelligible speech. |
| 6. Verbal semantic fluency task: | 0 = more than fifteen words. |
| *«Name as many animals as you can in one minute. »* | 1 = between eleven and fifteen words. |
| | 2 = between six and ten words. |
| | 3 = between three and five words. |
| | 4 = between zero and two words. |
| Total Score | /26 |



# STROKE ASSESSMENT POCKET GUIDE

HEART & STROKE™ FOUNDATION

CANADIAN Stroke BEST PRACTICE RECOMMENDATIONS

# CANADIAN NEUROLOGICAL SCALE

SPEECH:

RECEPTIVE: Ask patient the following separately (do not prompt by gesturing):

1. Close your eyes
2. "Does a stone sink in water?"
3. Point to the ceiling

SCORE: If patient is unable to do all three, Receptive Deficit, score 0.0, go to A2.

EXPRESSIVE:

1. Show patient 3 items separately (pencil, watch, key) and ask patient to name each object.
2. Ask patient what each object is used for while holding each up again, i.e. "What do you do with a pencil?"

SCORE: If patient is able to state the name and use of all 3 objects, Normal Speech, score 1.0.

If patient is unable to state the name and use of all 3 objects, Expressive Deficit, score 0.5.

*If patient answers all questions correctly but speech is slurred and intelligible, score Normal Speech and record "SL" along with the score.

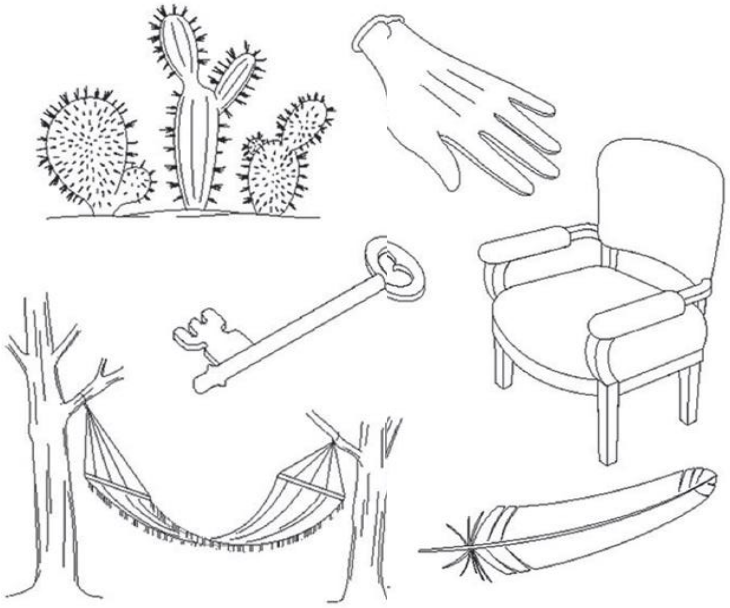
# NIH STROKE SCALE (NIHSS) CONT'D

## 9. Best Language*

Using pictures and a sentence list (see reverse), ask the patient to: "Describe what you see in this picture. Name the items in this picture. Read these sentences."

0 = No aphasia
1 = Mild-to-moderate aphasia
2 = Severe aphasia
3 = Mute, global aphasia

*Patients with visual loss can be asked to identify and describe objects placed in the hand. Intubated patients should be asked to write their answers. The examiner must choose a score for stuporous or uncooperative patients. Comatose patients (item 1a = 3) are scored 3. A score of 3 is only given if the patient is mute and unable to follow one-step commands.



You know how.

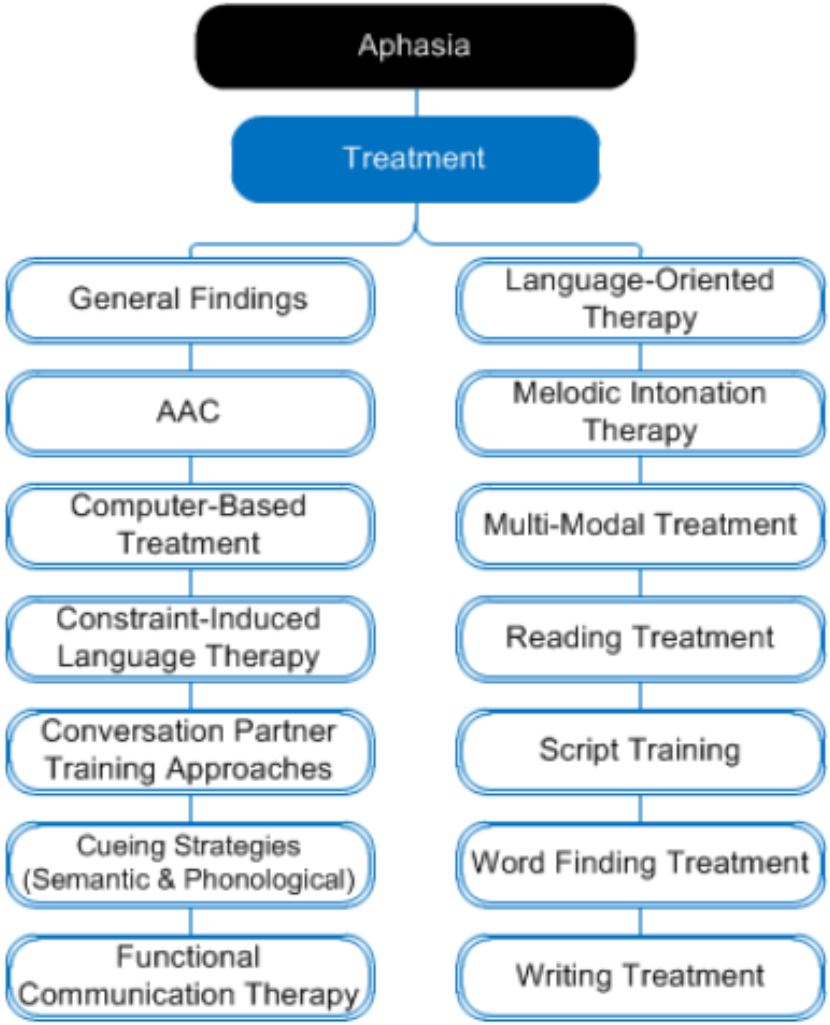
Down to earth.

I got home from work.

Near the table in the dining room.

They heard him speak on the radio last night.

# Intervenção nas afasias



# aphasia

COMMUNICATING THROUGH THE BARRIERS.

## What is Aphasia?

Aphasia is a language disorder that affects the ability to communicate. It's most often caused by injury to parts of the brain that control speech and language resulting from a stroke.

## I need to communicate with someone who has aphasia.

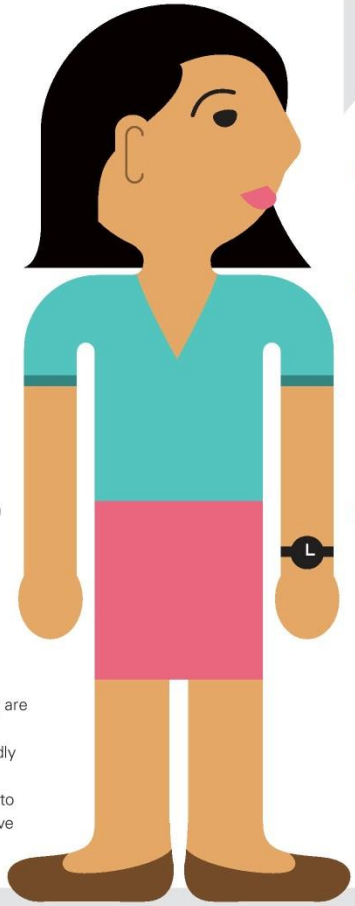
**Keep It Simple**
Speak in short, simple sentences.

**Be Patient**
Allow plenty of time for a response. Talk *with* him/her not *for* him/her.

**Remove Distractions**
Turn off radios and TVs.

**Be Creative**
Try writing, gesturing, pictures and communication tools like an iPad.

**Confirm**
Repeat back what you think he/she is saying.



## I have aphasia.

**Take Your Time**
Remember it may take a while to get the words out.

**Let People Know What Works Best For You**
Do you want a question asked in multiple ways? Let them know.

**Use Assistive Devices**
Bring photos, diagrams, pen and paper, etc.

**Getting Frustrated Is Okay**
Don't blame yourself if you get stuck or stumble on your words. Be patient with yourself as you find what works.

### People With Aphasia

1. Communicate differently, but they are as smart as they were before.
2. Their hearing is fine; speaking loudly does not help.
3. Aphasia is not contagious! To talk to people with aphasia, you'll just have to communicate differently.

### If You Get Stuck, You Can

1. Admit you're struggling.
2. Recap what you have discussed so far.
3. Decide whether to carry on or come back to it later.

American Heart Association | American Stroke Association.
*Together* to End Stroke™

National Aphasia Association

**Learn more at StrokeAssociation.org/aphasia and Aphasia.org**



# Obrigada!