

Management of Wernicke's Aphasia: A Context-Based Approach

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Wernicke's Aphasia

- Wernicke's aphasia is associated with the German neurologist, Carl Wernicke.
- Pierre Marie, the French neurologist considered Wernicke's aphasia the only "true aphasia."
- Joseph Wepman, used the term "the talking aphasics" when referring to individuals with Wernicke's aphasia

Causative lesions in Wernicke's aphasia

- Blockages in smaller, posterior branches of LMCA (emboli)
- Damage to primary auditory cortex (41, 42), Wernicke's area (22), second temporal and angular gyri (39, 40), white matter extension.
- Damage of areas vital to language processing but not motor areas

Symptoms of Wernicke's Aphasia

Speech & Language

- Severe comprehension deficits
- Attention deficits
- Fluent, but severely disrupted speech
- Severe impairment of reading and writing
- Poor self monitoring

Physical

- None
- Individual is usually independent in self care shortly after their stroke
- Stroke often does not result in loss of consciousness for some individuals

Wernicke's Quiz

There are many treatment programs and available treatment outcome studies for Wernicke's aphasia. T/F

Wernicke's aphasia has a poorer prognosis for improvement. T/F

Wernicke's clients display less cognitive flexibility. T/F

Clinicians that like to control the treatment session enjoy working with the Wernicke's client. T/F

Advantages of a Context-Based Approach to Management

- “Fits” with the way this type of patient is treated in the managed care system (early discharge)
- “Helps” the patient cope with immediate demands to communicate in a real-life context (at home)
- “Capitalizes” on the patient’s strengths (speaking, preserved syntax, pragmatics, mobility, speed of responsiveness)
- “Promotes” compensation (using all modalities of communication) and provides a scaffold for caregiver education
- “Provides immediate success in communication and “sets the patient up” for later deficit-specific treatment

Vern

- Vern had a left hemisphere embolic stroke with resulting Wernicke's aphasia. He did not lose consciousness, but his speech was severely disrupted. In fact it was so disrupted, and Vern was so upset he was taken to the police station before he was taken to a hospital.

Vern's Hospital Course

- Once in the hospital, Vern was determined to have had a stroke. He was fine physically, but he was very frustrated he could not make his needs and wants known.
- He seemed to be trying to tell us something important. He become so upset with his failures he had to be placed in restraints.

Vern's Speech Evaluation

- Vern's speech and language evaluation went poorly. He gave few meaningful responses to test items, but he never relented in trying to get an important message across to me.
- Ultimately, I abandoned my attempts to test Vern, and concentrated on what he was trying to tell me.

The Birth of a Context-Based Approach

- When I stopped trying to get Vern to point to pictures and name things and just concentrated on interpreting what he was trying to tell me, I learned that the cause of his agitation was his wife's drinking problem and the fear that she would squander their small savings.
- Vern was soon discharged, but we had formed a bond that led to later treatment success.
- He taught me that contextual communication was the way to go in the early stages of management with clients with Wernicke's aphasia, and I've never strayed from that.

Context-Based Management

- The goal of the context-based approach is to improve listening comprehension and information exchange in authentic communicative contexts.

Authentic Communication Contexts ?

- Topics/issues the patient wants, needs, or can communicate about; problems the patient wants to solve
- Vern: Fears and concerns over \$
- Marie: Going home
- Pat: Child custody
- Celia: Tuning in to the right Bible passage

Creating Communicative Contexts

All patients are not like Vern. Sometimes the clinician has to create a context. She can do this by connecting to the patient's personal interests:

- Reviewing medical chart
- Observing
- Ask the family about the patient's pre-morbid interests
- Biographies

For Example

“Cub Fan”

- Humor/sarcasm: “They blew it again”
- Emotion: “Could this really be the year?”
- Shared knowledge: “I’m a big Cub fan too.”
- Available props: “What’s going on with the Cub’s today?”

Strengthening the Contextual Connection

- Written information detailing the topic, key words, or other information
- Facial expression, gesture, body position, tone of voice
- Relevant pictures
- Personal artifacts of the patient

Once Connected

Capitalize on:

- Ability to converse (fluency)
- Preserved syntax (ability to shift tenses)
- Preserved pragmatics (humor, nuance, sarcasm)
- Speed of responsiveness

Minimize need for:

- Bottom up and off line comprehension
- Retrieval of specific words
- Repetition or to respond to cues

Support for Context-Based Treatment

- Several clinical papers in your reference list provide therapeutic suggestions that are relevant to a context-based approach.
- From these come a number of suggestions for enhancing comprehension and improving information exchange for the patient with Wernicke's aphasia in the early post onset period.

Comprehension comes first: Find the hole in the screen

Imagine you have a wire mesh screen and you throw gooey, sticky mud at the screen.

Some holes in the mesh will be filled with mud; others will be open.

For the client to comprehend, you have to hit an open hole

- Context primes the client for listening
- Through trial and error, and by learning from past experience, the clinician finds a hole in the screen.
- Once the client comprehends a message, she moves on from there by continuing the conversation.

Suggestions from the Auditory Comprehension Literature on Improving Contextual Comprehension

- Highlight main ideas
- Emphatic stress to important words
- Use direct wording
- Use repetition and paraphrasing
- Speak a little slower and get the client's attention
- Cohesive ties

Maintaining the Context

- Reinforce and encourage the client to ask for repeats; ask for repeats yourself
- Verify and rephrase what the client has said; ask rhetorical questions
- Clearly alert the client to topic switches and re-orient to the topic
- Give the client a listening break

Demonstrate How to Maximize Comprehension

In a contextual situation where the topic is known to all the therapist can:

- Demonstrate how to talk to the client to maximize comprehension
- Reveal the client's competence
- Family members and staff tune in better to topics of mutual interest

Stop versus Go Strategies

- Originally, it was believed that the best way to work with the Wernicke's client was to “stop the patient from talking and have him/her listen and tune into their errors.
- Martin (1981 a, b) questioned stopping the best thing the patient did and offered an alternative “go” strategy

Implementing a “Go” Strategy

- Identify a topic of interest to the client that you know something about and let the patient teach you about it
- Because you have apriori knowledge of the topic, you can be a good interpreter of the client’s defective utterances

Breaking the Cycle

- Paraphrase and re-phrase the client's defective utterances so that they are “fed” back to the client as a good model
- This breaks a garbage out garbage in cycle and maintains communication and information exchange
- It provide the client with success

Taking Your Cue from the Client

- Filling in the blanks and providing the client with the missing word in a face-saving manner
- Encouraging the client to keep trying
- Forgetting about the word finding problem and moving on because the client has conveyed the meaning
- Admit if you don't get it – move on in a face-saving manner

Increase Degrees of Freedom

- Increase the number of options for conveying a specific thought (related words, descriptions, direct reference to items)
- Dramatically reduce the use of “Wh” questions
- Ask open ended questions – make open ended statements for the client to pick up on

Compensations

- Reinforcing the client for being cognitively flexible and successfully using drawing, writing, gesture, and pointing to convey information
- Discouraging the use of ineffective compensations, by filling in the missing word for the client and telling him/her when something does not help

Self-correction

- Reinforce error awareness and any effort to self correct whether successful or unsuccessful

Variability

- Wernicke's clients are unduly concerned that their ability to communicate specifics varies from day-to-day
- Sometimes counseling is needed

Successes

- Summarize things for the client when information has been successfully transmitted
- The immediate success in sending and understanding messages prepares the client for later deficit-specific work

Mary

- 65 year old woman had a left hemisphere ischemic stroke while at home.
- No LOC; no physical deficits; complete loss ability to communicate
- Mary realized she could not drive; she walked two miles to a brother's house for help

Mary's Story

- Wernicke's aphasia – severe
- Early rehabilitation unsuccessful
- Mary living at home alone, but successfully
- Mary enrolled in University clinic
- Unresponsive to deficit-specific treatment
- Responsive to context-based treatment

Functional Tests

Direct

- CADL-II
- Everyday language test
- Aphasia Functional Language Assessment
- Inpatient Functional Assessment Interview

Indirect

- ASHA FACS
- FAQ-A
- CETI
- Oxenham Questionnaire

Summary

No

Drill

Repetition

Tasks requiring bottom up
processing

Cues/prompts

Acontextual material

Yes

Personally relevant material

Giving the client options

Increasing degrees of freedom
for word choices

Taking responsibility for
comprehension and
correction

Atmosphere of Delight

- Aphasia represents a problem accessing a learned code.
- The person with aphasia is competent
- Language was learned in an “atmosphere of delight” which was always a context
- It makes sense to restore it in a similar venue

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