

# Example of term paper on wernickes aphasia

[Sociology](#), [Communication](#)



## **Introduction**

This is a form of aphasia which usually results from destruction of the anterior part of the brain. This area of the brain is the dominant part of the brain as regards to language development/activities. The condition was discovered by Carl Wernicke in 1974 and the condition usually occurs in an area tagged no 22 region/Wernicke's area. Wernicke's aphasia can be defined as a language disorder that impaired comprehension and meaningful language production. The affected individual usually has the problem with understanding spoken language. The related neuroanatomy is that of posterior and superior temporal gyrus, planum temporale and lower parietal cortex.

## **Etiology**

The most implicated etiological factors that have been found to be associated with this neurological disorder are basically as a result of damage to the Wernicke's area. The damage could result from the following: Area that are vital to language processing, cerebral infarction, intracerebral hemorrhage and Seizure and head trauma.

## **Applied Neuroanatomy and Neurophysiology**

The affected area termed Wernicke's area is a region of the cerebral cortex which is involve in written and spoken language. It is actually the posterior region of the superior temporal gyrus which has been found to be located in the dominant region of the cerebral hemisphere. Non-verbal sounds impairment has been found to be more or stronger when compared to verbal sounds impairment in Wernicke's aphasia.

## Signs and symptoms

The major signs and symptoms that are associated with the condition can be described as a speech language changes or physical changes: The sentences produced by the individual do not go along but are affected by irrelevant words that make the production similar to jargon. Word repetition is mild to moderate while naming is mild to severe. Patients tend to speak longer but with no meaning. In severe cases, the individual might find it difficult to comprehend simple verbal component. Multiple paraphasias is one of the main components of the aphasia. This is characterized as literal phonological paraphasias, verbal semantic, remote semantic and neologistic paraphasias. These are levels of affectation of spoken words of the individual. Articulation and melodic line are both unaffected. They tend to have disrupted speech which is usually fluent but can become gibberish sound later or totally incomprehensible (Altschuler et al., 2006).

The difference of Wernicke's aphasia to Broca's (another form of aphasia) is related to the quantity of output which ranges from low normal to supernormal. The output in affected individual ranges from 100-150 words per minute. There are also pauses to look for meaningful words and this is more frequent without language substitution (Adel & Bergman). Despite loss of comprehension, the individual is still able to choose words appropriately simply because the memory is still preserved, some patient has been said to be euphoric and or paranoid, although there are levels of fluency in Wernicke's aphasia, the affected individual is not able to communicate or convey information effectively.

## **Diagnosis tests**

There are important diagnostic test that are used in the diagnosis of aphasias. Some of those tests include: Minnesota test for differential diagnosis (MTDDA), Boston Diagnostic Aphasia Examination (BDAE), Porch index of communicative ability (PICA) and Western Aphasia Battery (WAB). The WAB represent an instrument that is used to evaluate the language function of the patient. This will show the severity of the language problem. Scoring criteria are used to assess the language function and some of those criterion scores are: cortical quotient, aphasia quotient, reading quotient and writing quotient. These can all be applied in case of assess the patient with Wernicke aphasia.

## **Treatment**

An important aspect of evaluating patients with Wernicke's is that the examiner must tell the person to communicate or respond to questions by using nonverbal responses. This is because of the speech deficit that characterized those people living with the condition. The examiner will try to assess the patient's ability to comprehend speeches. When the western aphasia battery is used to evaluate the patient with Wernicke's aphasia, the aphasia quotient range; is 20 less or equal to AQ or less than 68.

The patients can then be classified as based on the treatment need; basic choice communicators, controlled situation communicators, augmented input communicators and comprehensive communicators. Comprehensive can use different communication gestures; augmented input needs support of verbal input because of language processing difficulties. Controlled situation communicator required a skilled communication partner while the

basic choice group required the maximal assistance from partners (Aphasia.com). Treatment goals include: improvement of comprehension and self-monitoring, speech therapy and rehabilitation, and functional rehabilitation of non-language areas/domain of Wernicke's aphasia so as to achieve functional learning (Altschuler et al., 2006).

Managing such patients entails first stabilizing the cause of the aphasia. After that has been achieved, speech therapy will then be instituted to regain normal language function. The main focus of the therapy is teaching the patient to learn other means of communication. The therapy must begin immediately after diagnosis and must also involve speech pathologist. This also helps the patient compensate for language problems and make use of other best possible modes of communication. Specifically placing patients in a real or simulated environment for the patient to learn modes of communication has been proposed to be an important mode of managing Wernicke's patients. When those patients are placed in such environment, the patient will be able to train and learn to use their non-language communication means and skills so that he or she can have an improved practical functioning (Altschuler et al, 2005).

## **Conclusion**

This condition result in communication impairment and there is no treatment yet. However there are managing principles that help to stabilize the cause of the aphasia. Focus is then place on helping to achieve communication with other modes. Further research in this field will actually help design better management principles.

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