

WERNICKE'S APHASIA

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FOR... MEDICAL & NEUROLOGICAL RESIDENTS

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OUTLINE

- Usually misdiagnoses
- What is the difference between 'aphasia' or dysphasia and 'dysarthria'
- Anatomical connection of language brain areas
- How to evaluate and differentiation
- Wernicke's aphasia
- Examples of Wernicke's and motor or Broca's aphasias

USUALLY MISDIAGNOSES

A. acute confusional state

B. amnesia

C. dementia

D. conversion disorder

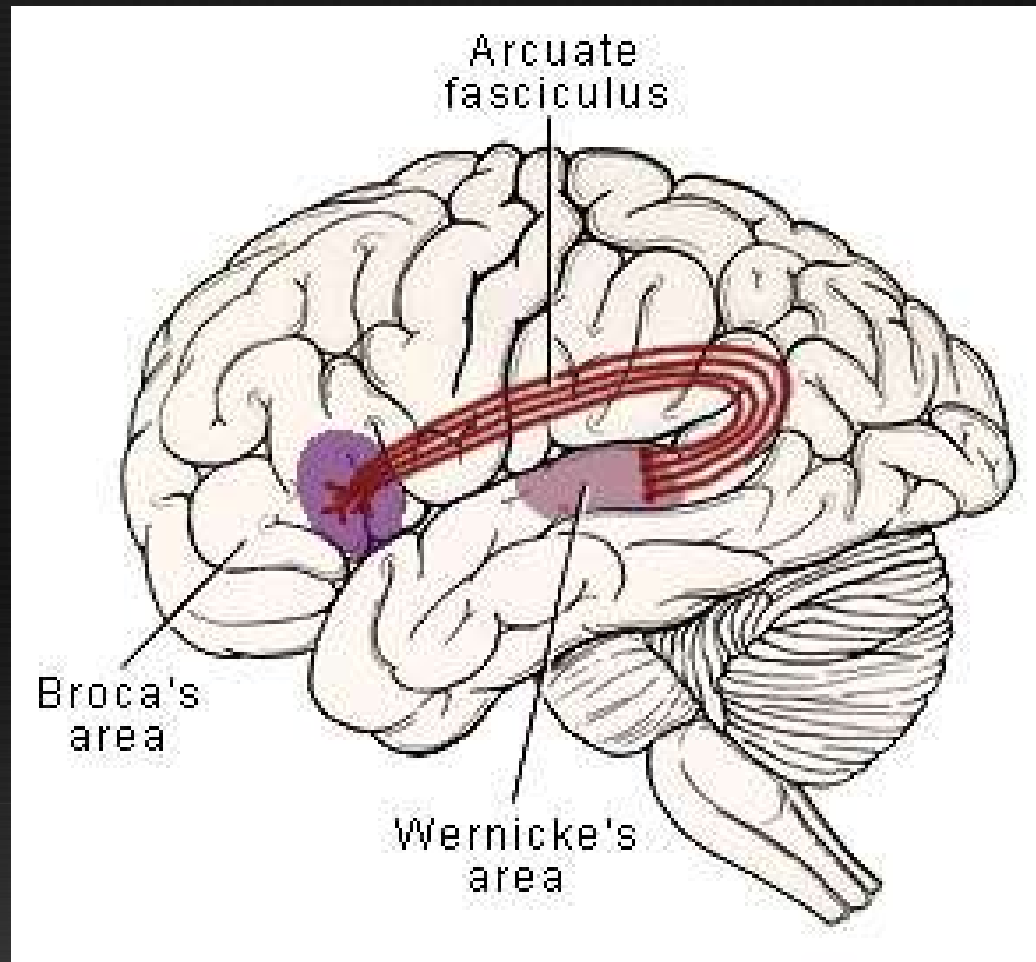
E. delirium

APHASIA

- **An impairment of linguistic (language) communication caused by cerebral dysfunction (Lt. hemisphere)**

Dysarthria คือ การที่กล้ามเนื้อที่ใช้ในการพูดผิดปกติ เกิดจากผู้ป่วยไม่สามารถควบคุมกล้ามเนื้อที่เกี่ยวข้องกับการพูดหรือเปล่งเสียงได้ตามปกติ ไม่สามารถควบคุมระดับเสียงและจังหวะในการพูดของตนเองได้

(dys-articulation 'articulate': express in words)]*



ASSESSMENT OF APHASIA

- spontaneous speech (fluent or non-fluent?)
- comprehension (1-2-3 steps commands)
- repetition
- naming
- reading
- writing
(spontaneous, follow command, copying)

CHARACTERISTIC OF APHASIA SYNDROMES

Syndrome	fluency	comprehension	repetition	localization (Lt. hemisphere)
Wernicke's	fluent	impaired	impaired	<i>Post. Superior temporal gyrus</i>
Transcortical sensory	fluent	impaired	intact	<i>Angular gyrus</i>
Conduction	fluent	intact	impaired	<i>Arcuate fasciculus</i>
Anomic	fluent	intact	intact	<i>Ant. Temporal gyrus Angular gyrus</i>
Broca's	non	intact	impaired	<i>Inf. frontal</i>
Transcortical motor	non	intact	intact	<i>Medial frontal</i>
Global	non	impaired	impaired	<i>Wernicke's and Broca's areas</i>
Mixed transcortical	non	impaired	intact	<i>Lesions of TCS+TCM</i>

What type of aphasia should this patient acquire?



WERNICKE'S APHASIA

- Although patients are unable to understand written and/or spoken words, their speech remains “fluent”.
- At the same time, however, their speech is meaningless and can include
 - paraphasia (phonemic and semantics),
 - neologism (made-up words), or
 - jargon (string of made-up words in combination with real words that do not make sense together)

EXAMPLE OF SENSORY APHASIA

- Examiner: Hi, how are you doing today?
- Patient: I'm happy, are you pretty.
- Examiner: What are you doing today?
- Patient: We stayed with the water today.

(Phonemic paraphasia)

EXAMPLE OF MOTOR APHASIA

- Examiner: Hi, Mr. Smith, when did you graduate college?

Patient: I was umm... 7 years... ago

- Examiner: What did you use to do?

Patient: well... work... um... work... on
desk... uh... marketing... very good...



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