

Sample Excerpt:

Test Questions: Fundamentals of Neuropsychology

1. A patient suffering from Wernicke's Aphasia would display which of the following symptoms?
 - a) Psychomotor retardation, tremor.
 - b) Visual impairment, slurred speech.
 - c) Soft speech and stuttering.
 - d) Difficulty in language expression and comprehension.

Answer:

- d) Difficulty in language expression and comprehension.

Aphasia is the partial or total loss of the ability to articulate ideas or comprehend spoken or written language. Wernicke identified an area of the temporal lobe near the auditory cortex and associated with verbal and written language comprehension.

2. The myelin sheath covering an axon serves what function?
 - a) Insulation. Myelin maintains an exact temperature needed for the health of the neuron.
 - b) Storage. The myelin stores bits of information which may be accessed quickly without interfering with the electric impulse through the axon.
 - c) Speed of transmission. The sheaths create "jump-off" points where the impulse may leap across the physical distance of each axon more quickly.
 - d) Nutrients. The myelin absorbs proteins through the bloodstream and nourishes the cell.

Answer:

- d) Speed of transmission. The sheaths create "jump-off" points where the impulse may leap across the physical distance of each axon more quickly.

A myelin sheath is a fatty membrane which greatly speeds the transmission of electric impulses from one neuron to another. A bare axon is a very poor conductor and the loss of myelin results in degenerative disorders such as Alzheimer's Disease. Myelin has nothing to do with nutrition, storage, or insulation of a nerve cell.