

Abnormalities

Lec 2:

- Somatosensory association area: If damaged → Amorphosynthesis
 - Visual association area: If damaged → word blindness.
 - Auditory association area: If damaged → word deafness.
 - Prefrontal association area: If damaged → became distracted, socially disinhibited, lost the ability to prognosticate, lost the ability to do mathematical equations and make complex movements, acquired bizarre behavior.
 - Area for recognition of faces and naming of objects: If damaged → Prosopagnosia (inability to recognize faces).
 - Wernicke's area: If damaged → dementia because it's also related to memory + sensory aphasia (receptive aphasia).
 - Broca's area: If damaged → motor aphasia (expressive aphasia)
 - If both Wernicke's and Broca's areas are damaged → global aphasia
-

Lec 3:

- secondary somatosensory association: If damaged → amorphosynthesis
- secondary visual: If damaged → word blindness.
- Corpus Callosum: interruption of these fibers can lead to bizarre types of anomalies.
- Prefrontal Association Area: If damaged → causes an inability to keep track of simultaneous bits of information, easily distracted.
- Wernicke's area: Destruction of the visual and auditory association areas results in an inability to understand the written or spoken word

● cerebral cortex: If damaged → the consciousness and awareness is DECREASED (you can still think); you lose the function of knowing the deep meaning behind words

● thalamus : If damaged → retrograde amnesia or the inability to recall stored experiences.

Lec 5+6+7:

● Cerebellum: If damaged →

1) Ataxia and intention trem: failure to predict motor movement, patients will overshoot

intended target, past pointing

2) Dysequilibrium- ataxic (staggering) gait (drunken gait)

3) Dysdiadochokinesia (Adiadochokinesia): failure of orderly progression of movement.

4) Dysarthria: failure of orderly progression in vocalization.

5) Cerebellar nystagmus: intention tremor of the eyes when trying to fix on object.

● basal ganglia: If damaged → initiation is damaged, movement will be slowed

● Globus pallidus: If damaged → athetosis - spontaneous writhing (snake-like) movements of the hand, arm, neck, and face

● Putamen: If damaged → chorea - involuntary flicking movements of the hands, face, and shoulders.

● Substantia nigra: If damaged → Parkinson's disease (rigidity, resting tremor, dyskinesia or akinesia).

● Subthalamus: hemiballismus - sudden flailing movements of the entire limb

● Caudate nucleus and Putamen : huntington's chorea - loss of GABA containing neurons to globus pallidus and substantia nigra

Lec 8:

● Reticular Activation System: If destroyed → Coma (unresponsive to stimuli)

● Decerebrate rigidity- removal of the cortical control over the medullary reticulospinal keeps pontine reticulospinal unchecked leads to hyperactivity of anti-gravity muscles

● damage in the vestibular nuclei or utricle or saccule : → will lead to vestibular Nystagmus which is inability to fix your eyes

Aya Aljbour