



HOBS BY DAILY INFORMATION BULLETIN SERVICE







THALAMUS

The thalamus serves as the main relay station for the brain.

Motor pathways, limbic pathways, and sensory pathways besides olfaction all pass through this central structureThe thalamus can divide into approximately 60 regions called nuclei. The thalamus (from the Greek thalamos or inner chamber) transmits 98 percent of sensory information to the cortex, including vision, taste, touch and balance; the only sense that doesn't pass through this brain region is smell.



STRUCTURE

- The thalamus is a paired gray matter structure of the diencephalon located near the center of the brain.
- The thalamus forms the upper and lateral walls of the third ventricle while the dorsal surface is part of the floor of the body of the lateral ventricle.
- While the thalamus is mostly gray matter (cell bodies of neurons), there are some areas of white matter (axons).
- The external and internal medullary laminae are white matter structures of the thalamus.



FUNCTIONS

- Functionally, the thalamus divides into five major functional components as:
- Reticular and intralaminar nuclei dealing with arousal and pain regulation
- Sensory nuclei regulating all sensory domains except olfaction
- Effector nuclei governing motor language function
- Associative nuclei connoting cognitive functions
- Limbic nuclei encompassing mood and motivation



PATHOLOGIES

- Thalamic aphasia can present as lexical-semantic deficits with verbal paraphasia.
- Alcoholic Korsakoff syndrome have damage to their mamillary bodies, which can extend into the thalamus.
- The "pulvinar sign" is an MRI identification technique originally developed as a non-invasive method to identify patients with Creutzfeldt-Jakob disease.



MCQ

QUESTION

Which of the following pathology of the larynx is associated with Arnold Chiari Malformation?

- A. Laryngeal Web
- B. Laryngomalacia
- C. Congenital Vocal Cord Palsy
- D. Congenital Subglottic Stenosis
- Ans-C

