MG32216 | HUMAN BRAIN VENTRICLE AND BASAL NUCLEUS

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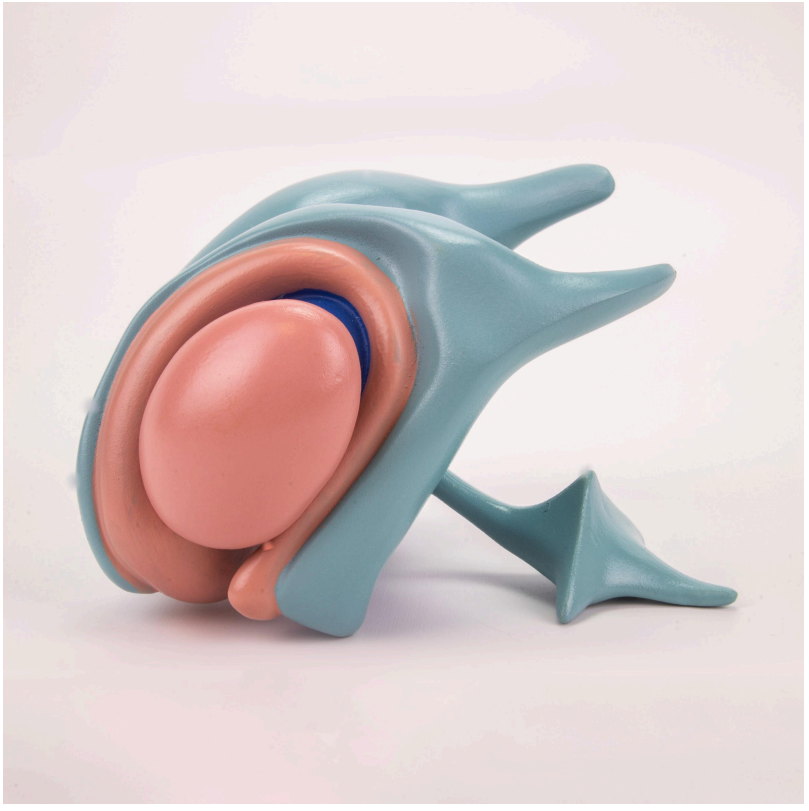

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This anatomical model represents the brain ventricles and basal nuclei at life size, offering a valuable tool for the study of neuroanatomy and understanding the topography of these structures. Important anatomical structures are represented in different colors and hand-numbered, facilitating identification and learning. The model is ideal for healthcare professionals and students.

Applications:

* Anatomy study in schools and universities.
* Surgical dissection training.
* Patient education and procedure demonstration.
* Patient explanations.
* Medical and scientific information.
* Neuroanatomy studies.

Technical Features:

* High didactic level.
* Created from precise anatomical knowledge.
* Detailed and hand-numbered representation.
* High-quality natural molding.
* Manufactured from stable and resistant synthetic material.
* Original replicas.
* Plastic with toxicological test approval.

3D Technology and Augmented Reality:

Our anatomical models offer an innovative visual complement through information cards that activate 3D models viewable in augmented reality (AR). This exclusive interactive platform aids learning, allowing comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

* Scale: Life size.
* Material: Plastic.

Main Structures:

Lentiform nucleus: Subcortical structure located deep within the brain, composed of the globus pallidus (medial) and the putamen (lateral). Together, they play a crucial role in motor control, learning, and cognition.

Head of the caudate nucleus: Anterior and expanded portion of the caudate nucleus, located in the frontal lobe, near the lateral ventricle. It is part of the basal ganglia system, involved in the planning and execution of movements.

Body of the caudate nucleus: Central and elongated portion of the caudate nucleus, extending posteriorly towards the tail. It continues to participate in motor, cognitive, and emotional functions.

Posterior horn of the lateral ventricle: Posterior extension of the lateral ventricle, extending into the occipital lobe. Contains cerebrospinal fluid (CSF) and is part of the ventricular system.

Tail of the caudate nucleus: Posterior and tapered portion of the caudate nucleus, curving towards the amygdala. It contributes to the function of the basal ganglia system, mainly in emotional and memory processes.

Amygdaloid body: Almond-shaped structure located at the anterior end of the inferior horn of the lateral ventricle. Involved in emotional processes, particularly fear and anxiety.

Inferior horn of the lateral ventricle: Inferior extension of the lateral ventricle, extending into the temporal lobe. Contains CSF and is an integral part of the ventricular system.

Third ventricle: Median ventricle, located between the thalami. Connected to the lateral ventricles by the interventricular foramina. Contains CSF.

Thalamus: Large ovoid mass of gray matter located in each cerebral hemisphere. Functions as a relay center for most sensory information arriving at the cerebral cortex.

Fourth ventricle: Ventricle located posteriorly to the brainstem, between the cerebellum and the pons. Contains CSF and is continuous with the mesencephalic aqueduct and the central canal of the spinal cord.

Mesencephalic aqueduct (Sylvius): Narrow canal connecting the third and fourth ventricles, allowing the passage of CSF.

Anterior horn of the lateral ventricle: Anterior extension of the lateral ventricle, extending into the frontal lobe. Contains CSF and is part of the ventricular system.

Central part of the lateral ventricle: Main portion of the lateral ventricle, located between the anterior and posterior horns. Contains CSF and connects with the third ventricle.

Other structures can be verified directly on the physical piece or the interactive 3D model.

About the Anatomical Models:

They are developed with resin replication technology, supplying the scarcity of natural anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, hand painting, and numbering for precise identification of structures.

List of all visible structures:

- Lenticular nucleus
- Head of the caudate nucleus
- Body of the caudate nucleus
- Posterior horn of the ventricle
- Tail of the caudate nucleus
- Amygdaloid body
- Inferior horn of the lateral ventricle
- Third ventricle
- Thalamus
- Fourth ventricle
- Mesencephalic aqueduct (Sylvius)
- Anterior horn of the lateral ventricle
- Central part of the lateral ventricle