MG29521 | MICRO ANATOMY OF CRANIAL LAYERS



Enlarged anatomical model of the microanatomy of the cranial layers, exhibiting in detail the stratification of the human skull for the study of neuroanatomy. It presents several internal structures with manual numbering and painting, mounted on a polymer base for easy visualization and handling.

Applications:

* Study of the neurological system in schools and universities.
* Training for surgical dissection.
* Classroom aid.
* Patient education and procedure demonstration.
* Medical and scientific information.

Technical Advantages:

* Detailed representation of the internal structures of the skull.
* Manual numbering and painting for precise identification.
* High-precision molding.
* Manufactured from stable synthetic material and resin approved in toxicological tests.
* Includes an information card with the related structures.
* Original replicas enlarged in relation to natural size.

3D Technology and Augmented Reality:

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

Technical Specifications:

* Material: Synthetic resin.
* Scale: Enlarged in relation to natural size.
* Finish: Numbered and hand-painted.
* Support base: Polymer.

Main Structures:

Skin: Outer layer that protects the body from damage, infection, and water loss. It is composed of several layers, including the epidermis (superficial layer) and the dermis (deeper layer).

Subcutaneous tissue: Layer of loose connective tissue located below the skin, containing fat, blood vessels, and nerves. Helps insulate the body and acts as an energy reserve.

Epicranial aponeurosis: A strong, broad fibrous sheet that covers the scalp, connecting the muscles of the forehead and the back of the head.

Subaponeurotic space: Potential space between the epicranial aponeurosis and the periosteum of the skull.

Pericranium: Layer of connective tissue that externally covers the skull. Rich in blood vessels and nerves, it provides nourishment to the bone.

Skull: Bony structure that protects the brain. Formed by several interconnected bones, including the frontal, parietal, temporal, and occipital bones.

Diploic veins: Small veins located inside the cranial bone, which drain blood from the skull.

Emissary vein: Veins that connect the intracranial veins with the extracranial veins, allowing venous drainage of the skull.

Dura mater: Outermost meningeal membrane, thick and fibrous, intimately adhered to the skull. Formed by two layers, the meningeal and the periosteal.

Cranial arachnoid: Middle meningeal membrane, delicate and avascular, located between the dura mater and the pia mater. Characterized by arachnoid trabeculae that cross the subarachnoid space.

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

About the Anatomical Models:

They are developed with resin replication technology, supplying the need for anatomical parts for teaching and research. They present the main morphological characteristics with excellent cost-benefit, good resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Skin
- Subcutaneous tissue
- Epicranial aponeurosis
- Subaponeurotic space
- Pericranium
- Skull
- Diploic veins
- Emissary vein
- Dura mater
- Cranial arachnoid
- Cranial pia mater
- Subarachnoid space
- Superior cerebral vein
- Cerebral cortex
- White matter

- Cerebral sulcus
- Subdural space
- Arachnoid granulations
- Superior sagittal sinus