Medial Orbit

Price inquiry: +48 605999769, kontakt@openmedis.pl

Product code: AM01246

This 3D print displays the orbital contents and its close relations as viewed from the medial perspective when the majority of the lateral wall of the nasal cavity and the intervening ethmoidal sinuses have been removed. The posterior ethmoidal nerve (PEN) (a branch of the nasociliary nerve, CN V1) can be seen passing between the medial rectus (MR) inferiorly and the superior oblique muscle superiorly. A small piece of the orbital plate of the ethmoid bone (EB) has been retained to illustrate its path as it enters the posterior ethmoidal foramen. Other structures visible include the frontal nerve (FN), the sphenoid sinus (SS), the pituitary gland (PG) and the frontal sinus mucosal lining exposed after removal of the orbital plate of the frontal bone on the anterior roof of the orbit. The internal carotid and optic nerve are also visible within the cranium.

Lateral Orbit

Price inquiry: +48 605999769, kontakt@openmedis.pl

Product code: AM01060

This 3D printed specimen shows the orbit from the lateral perspective when the bony lateral wall and part of the calvaria of the skull have been removed. The frontal and temporal lobes of the brain are exposed. In the orbit the lateral rectus (LR) has been divided to demonstrate the intraconal space. The muscle near its insertion has been reflected anteriorly to reveal the insertion of inferior oblique muscle (IO). The portion near its origin from the annulus is reflected to reveal the abducens nerve (VI Nv) entering the bulbar aspect of the muscle belly. Other features shown include the tarsal plate (TP), lacrimal gland (LG), the lacrimal artery (LA) and lacrimal nerve (LNv) and numerous other nerves and vessels around the optic nerve.

Superior Orbit

Price inquiry: +48 605999769, kontakt@openmedis.pl

Product code: AM01059

This 3D printed model captures a dissection in which the calvaria and cerebrum have been removed to expose the floors of the anterior and middle cranial fossae. The midbrain has been sectioned at the level of the tentorium cerebelli and on the cross sectional surface one can identify the superior colliculi, cerebral peduncles and the substantia nigra. Anterior to the mid-brain the vertebral artery can be clearly identified rising from the posterior cranial fossa and dividing into the posterior cerebral arteries. Anterior to this in the region of the sella turcica one can identify the internal carotid arteries emerging from the roof of the cavernous sinus medial to the anterior clinoid processes and beneath and lateral to the optic nerves and chiasm. The oculomotor nerves are visible penetrating the roof of the cavernous sinuses on the left and right posterior to the point where the internal carotid arteries emerge.

Anteriorly in the midline of the anterior cranial fossa lies the crista galli with the olfactory bulbs still present above the cribriform plates on either side. On the right the orbital plate of the frontal bone (the roof of the orbit) has been removed to expose the frontal nerve splitting into the supraorbital and supratrochlear nerves lying superior to the levator palpebrae superioris. The trochlear nerve is visible entering the superior aspect of the superior oblique muscle belly on the medial aspect of the orbit. Ethmoidal air cells have been exposed in the medial orbital wall by removal of the part of the lamina papyracea. On the left the levator palpebrae and superior rectus muscles have been divided along with the frontal nerve to expose the optic nerve, nasociliary nerve, ophthalmic artery and superior ophthalmic vein in the intraconal space.

The face has been dissected to show facial muscles around the orbit on the right and the infraorbital nerve on the left. The infratrochlear nerve is also shown on the right and facial veins and arteries are also visible.