

Brain stem, deep cerebral and diencephalic structures



Ref.no.: MP1100

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This 3D model preserves the several deep cerebral and diencephalic structures through to the proximal medulla oblongata and complement the other isolated brainstem (BRW10) in our series.

Superiorly, on the right side of the 3D model, the lentiform (lenticular) nucleus is in place and the corona radiata of the internal capsule is seen emerging around it. On the left, the lentiform nucleus is absent, but the caudate nucleus head and body are present medially on both sides, wrapping medial to the preserved internal capsule margins and leading to the amygdaloid bodies on each side. The thalami are present bilaterally, and the third ventricle is opened slightly in the midline inferior to the epithalamus (pineal gland).

Anteriorly, the cerebral peduncles are present, with the optic nerves extending from the preserved chiasm and tracts. The interpeduncular region is exposed with both the mammillary bodies and the sectioned infundibulum visible. Caudal to the interpeduncular region is the pons preserving the origins of the middle cerebellar peduncles as well as the origins of cranial nerves V, VII, and VIII. The portion of the medulla oblongata preserved possesses prominent pyramids and olives.

Posteriorly, the superior and inferior colliculi sit just superior to the sectioned superior cerebellar peduncles, and the fourth ventricle is opened to expose the rhomboid fossa and features of the floor: the medial eminence, facial colliculus, hypoglossal triangle, the vestibular triangle and the vagal triangle.



