

측두엽의 수술적 해부학

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장 종 희 · 장 진 우

Surgical Anatomy of the Temporal Lobe

Jong Hee Chang, MD, PhD, Jin Woo Chang, MD, PhD

Department of Neurosurgery, Brain Korea 21 Project for Medical Science & Brain Research Institute, Yonsei University College of Medicine, Seoul, Korea

The temporal lobe is a unique structure in the human brain and one of the most important structures involved in the surgical treatment of intractable epilepsy. Knowledge of the temporal lobe's structures and function allow us to better understand the complex phenomenology of temporal lobe seizures and the positive and negative effects of surgical resections in the area. We reviewed the parenchymal and vascular anatomy and the white matter tracts of temporal lobe, and the relationships to surrounding structures such as dural structures and cistern.

KEY WORDS: Amygdala · Anatomy · Epilepsy · Hippocampus · Temporal lobe.

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ieto - temporal line) .¹⁾⁹⁾¹⁵⁾¹⁸⁾¹⁹⁾

(lingual gyrus)

2/3 ,

가 (cingulate gyrus)

가 (isthmus)

(amygdala) (globus pallidus) ,

(temporal stem) (insula), (limen insulae)

가 (ambient cistern) (basal frontal lobe) .

(choroidal fissure) (thalamus)

⁹⁾¹⁸⁾¹⁹⁾

(parieto - occipital sulcus)

(preoccipital notch) (parieto - temporal line) ,

(hippocampus) (sclerosis)가

(temporo - occipital line)

가 가 ,

(parieto - occipital fissure) 3 (allocortex)

(prepiriform area), (uncus) (semilunar gyrus), , 6 (mesocortex)

(parahippocampal gyrus), 6 (isocortex) (superior temporal gyrus), , (transverse temporal

Address for correspondence: Jong Hee Chang, MD, PhD, Department of Neurosurgery, Yonsei University College of Medicine, 134 Sinchon - dong, Seodaemun - gu, Seoul 120 - 752, Korea
Tel: +82 - 2 - 2228 - 2162, Fax: +82 - 2 - 393 - 9979
E - mail: changjh@yumc.yonsei.ac.kr

organization) 가 (synaptic re-organization) 가 (hippocampal sulcus)가 (head), (body), (tail) 가 (fimbria), (atrium) (calcar avis) (splenium) (subsplenial gyrus) CA1 (alveus) (septal

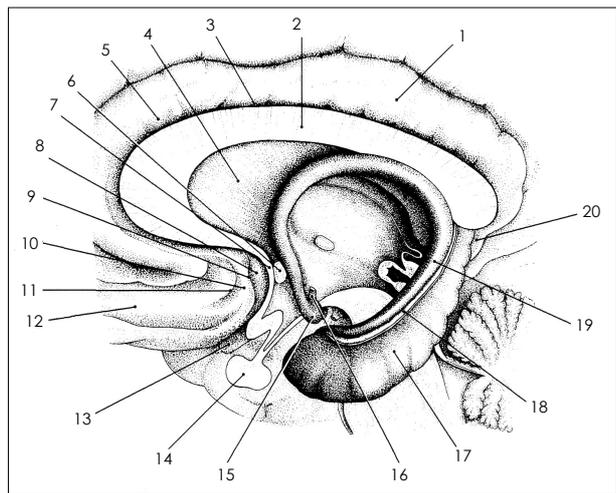


Fig. 4. Medial aspect of hippocampal formation and surrounding structures. 1 : cingulate gyrus, 2 : corpus callosum, 3 : sulcus of corpus callosum, 4 : septum pellucidum, 5 : indusium griseum, 6 : supracallosal gyrus, 7 : anterior commissure, 8 : lamina terminalis, 9 : paraterminal gyrus, 10 : subcallosal area, 11 : anterior parolfactory sulcus, 12 : medial frontal gyrus, 13 : optic nerve, 14 : pituitary gland, 15 : mammillary body, 16 : mammillothalamic tract, 17 : pes hippocampi, 18 : alveus hippocampi, 19 : fornix, 20 : fasciolar gyrus. From ref. 9 with permission.

nuclei) (fornix) (subcortical radiation) CA1 (Fig. 3).³⁾⁷⁻⁹⁾¹¹⁾¹²⁾¹⁸⁾ 가 (collateral eminence) 가 가 2/3 가 (3)8)11)12)19) 가 (optic radiation) (lateral geniculate body) (groove) (pes hippocampi) (basal ganglia) (principal amygdala) (basal forebrain) (extratemporal amygdala) (extended amygdala) 가 (oroalimentary automatism) ²⁰⁾ (caudate nucleus) (stria terminalis)

(deep middle cerebral vein)
 Rosenthal (basal
 vein of Rosenthal)
 (anterior hippo-
 campal artery), (uncal vein), (an-
 terior and posterior longitudinal hippocampal veins),
 (inferior ventricular vein), (in-
 ferior choroidal vein) Rosenthal
 Rosenthal (optic tract)
 (in-
 ternal cerebral vein)
 Galen (vein of Galen)
 (Fig. 5).³⁾⁸⁾¹¹⁾¹²⁾¹⁶⁾¹⁸⁾¹⁹⁾

측두엽의 백질로

교련로(commissural tracts)
 (corpus callosotomy)
 가 (anterior commissure)
 (hippocampal commissure)
 가 (Fig. 4).
 연합로(association tracts)
 (uncinate fas-
 ciculus) (infero - orbital frontal
 lobe) (arcuate fasciculus)
 (inferior longitud-
 inal fasciculus)
 (cingulum)
 (in-
 sula)
 가
 (primary visual cortex)

(geniculocalcarine tract)
 Meyer (Meyer's loop)
 가
 (contralateral upper homony-
 mous quadrantanopsia)
 가 가
 (hem-
 ianopsia)

주변 구조물과의 관계

경막 구조물(dural structures)
 (oculomotor nerve), (trochlear
 nerve), (ophthalmic nerve), (maxillary
 nerve)
 , Meckel (Meckel's
 cave), Gasser (gasserian ganglion),
 (maxillary nerve)
 (greater petrosal nerve)
 (awake cranio-
 tomy)
 수조(cistern)
 (crural cistern) (crus cerebri)
 (interpeduncular cistern)가
 Rosenthal (cis-
 ternal segment),
 4 (P1)

(posterior communicating artery) ,
 (P2) 가 가 가
 (P3) 가 가 가 가
 (calcarine fissure)
 (parieto - occipital artery)
 (calcarine artery)
 (quadrigeminal cistern) ,
 가 (P4) . 가
 (medial and lateral choroidal artery),
 (thalamogeniculate artery), (posterior
 thalamoperforating artery) 가
 , (pulvinar),
 , (lateral mesencephalon)
 (Fig. 5).⁵⁾¹¹⁾¹⁶⁾¹⁸⁾¹⁹⁾
 (perimesencephalic cistern)
 가 (plexal segment)
 , (posterior limb of internal capsule)
 2/3, , 1/3,
 (caudate nucleus) , (substantia nigra),
 (red nucleus), (corpus subthalamicus),
 가
 , (midbrain tegmentum)
 , Rosenthal
 5mm
 , (Fig. 5).
 T
 (sylvian cistern) (anterior sphenoidal compartment) (posterior operculoinsular compartment) . Reil
 (insula of Reil)
 , (circular sulcus)

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