

# Pocket Atlas of Sectional Anatomy

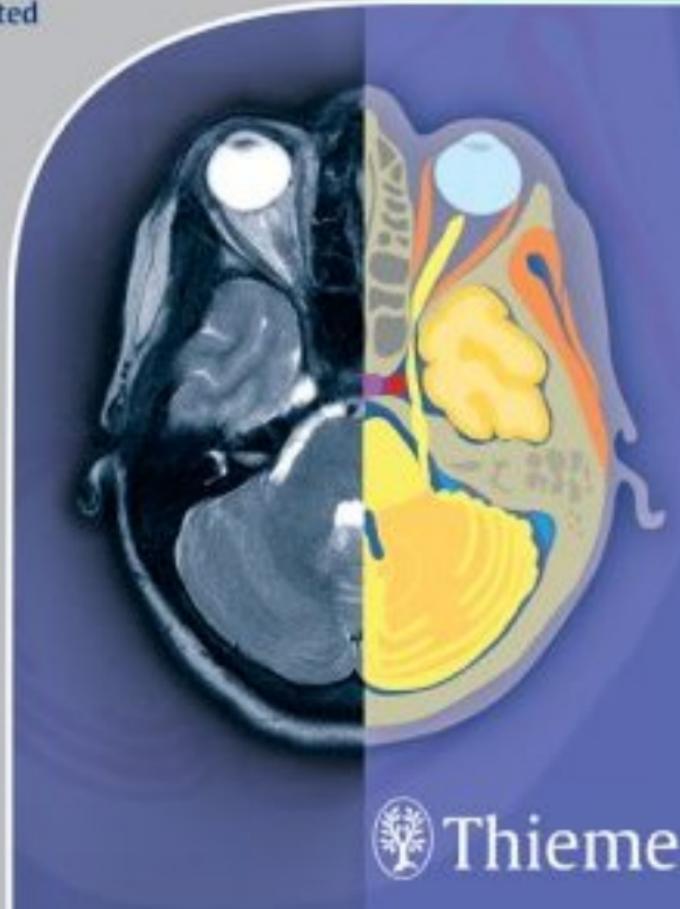
Computed Tomography and  
Magnetic Resonance Imaging

T. B. Moeller  
E. Reif

Volume I: Head and Neck

3rd edition,  
revised and updated

basic sciences



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# **Pocket Atlas of Sectional Anatomy**

**Computed Tomography  
and Magnetic Resonance Imaging**

**Volume I  
Head and Neck**

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Third edition, revised and updated

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**Dedicated in love and gratitude  
to our parents,  
Alfred and Friedel Moeller and  
Emil and Edith Reif.**

## Preface

This book presents the basic anatomy needed to interpret modern sectional images.

In making a diagnosis from sectional images, even experienced diagnosticians must adapt their thinking to the sectional portrayal of anatomic features. The *Pocket Atlas of Sectional Anatomy* aims to facilitate this process by presenting the two modalities that have the greatest practical importance in modern sectional imaging: computed tomography and magnetic resonance imaging.

The importance of these modalities rests partly on their high resolution. So many of the images were produced with 3-tesla instruments. We wish to express our gratitude to the manufacturers, Siemens and Philips.

We have attempted to provide vivid, comprehensive coverage of sectional anatomic details while still making the book compact and easy to use. The four-color illustrations were considered an essential part of this goal to maintain clarity despite the quantity of information.

The contents of the three volumes (I: Head and Neck, II: Chest and Abdomen, and III: Musculoskeletal System), which comprise a unit, follow a strict format in which each CT or MR image is accompanied by a correlative color diagram and a reduced-scale schematic drawing indicating the level of the section. This format conveys maximum information in a minimum of space.

All the images were obtained in patients or volunteers. We wish to express our special gratitude for the production of the images to our radiologic technologists, Monika Baumann, Silke Koehl, Sabine Mattil, Stefanie Mueller, Heike Philippi, Brigitte Schild, and Petra Weber, as well as to Birgit Reuter and Marion Hellinger from the Siemens manufacturing center. We sincerely thank our fellow physicians, Nadine Dillinger, Heike Ringling, Sigrid Roth, and especially Simone Zenner, for their helpful discussions and suggestions.

Torsten B. Moeller  
Emil Reif

## Contents

### Cranial CT

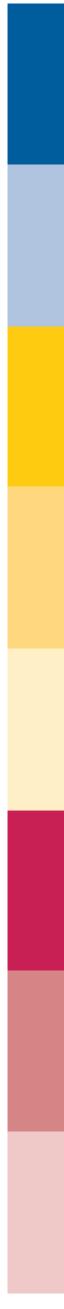
Cranial CT—Axial (Canthomeatal) .....	2
Cranial CT—Vascular Territories (Axial) .....	26
Cranial CT—Neurofunctional Systems (Axial) .....	28
CT of the Petrous Part of Temporal Bone—Axial.....	30
Cranial CT—Coronal .....	36
Spaces in the Facial Skeleton—Coronal.....	42

### Cranial MRI

Cranial MRI—Axial (Horizontal Plane).....	44
Cranial MRI—Vascular Territories (Axial) .....	78
Cranial MRI—Sagittal .....	84
Cranial MRI—Vascular Territories (Sagittal) .....	110
Cranial MRI—Coronal .....	112
Cranial MRI—Vascular Territories (Coronal).....	148
Cranial MRI—Neurofunctional Systems (Coronal).....	150
Cranial MR Angiography—Arterial.....	152
Cranial MR Angiography—Venous.....	158

### Neck

Neck—Axial.....	162
Cervical Lymph Nodes—Axial .....	198
Cervical Spaces—Axial .....	200
Larynx—Axial .....	202
Neck—Sagittal .....	210
Cervical Spaces—Sagittal .....	222
Neck—Coronal.....	224
 Bibliography.....	248
Index.....	249



**Cranial CT—Axial**

**Cranial CT—Coronal**

**Cranial MRI—Axial**

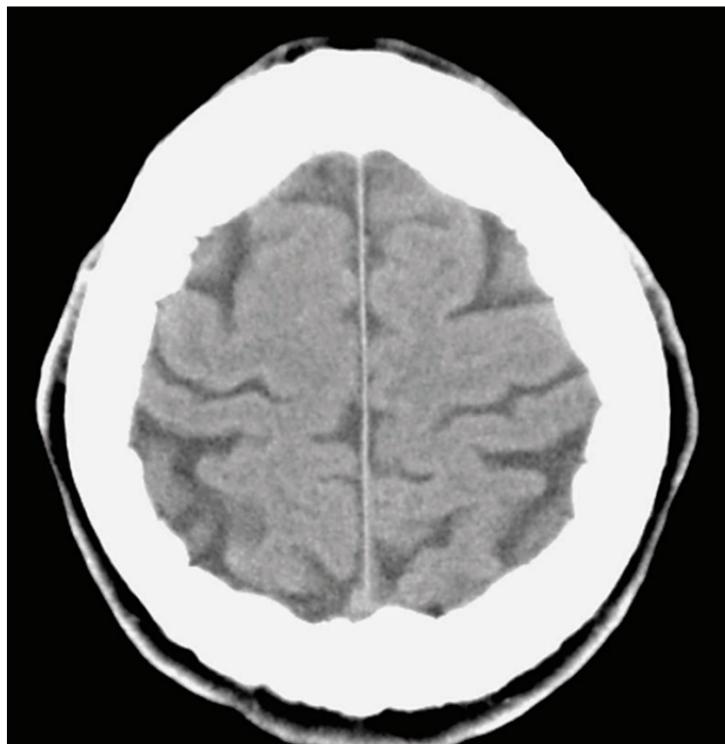
**Cranial MRI—Sagittal**

**Cranial MRI—Coronal**

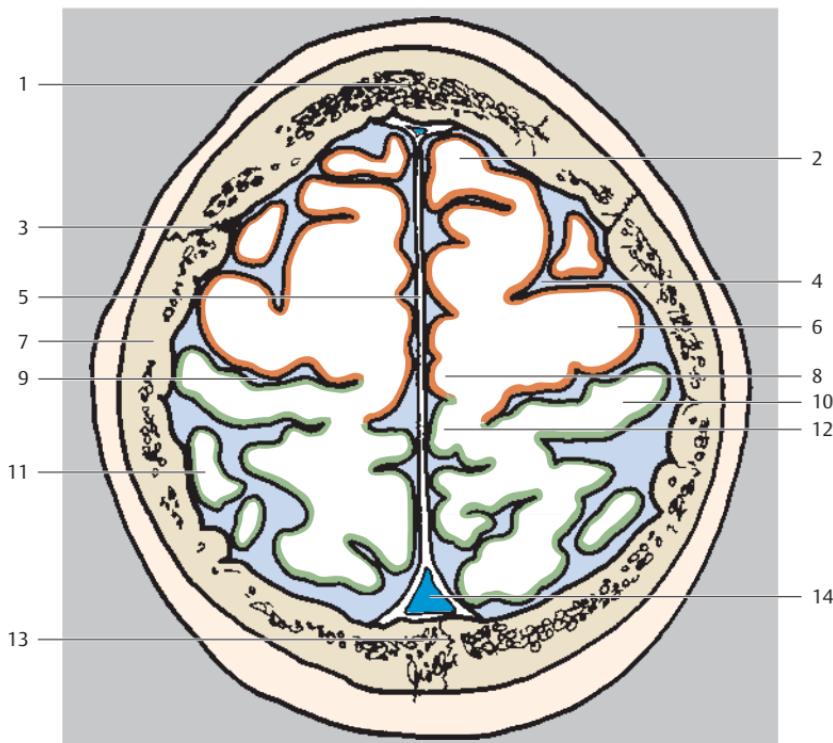
**Neck—Axial**

**Neck—Sagittal**

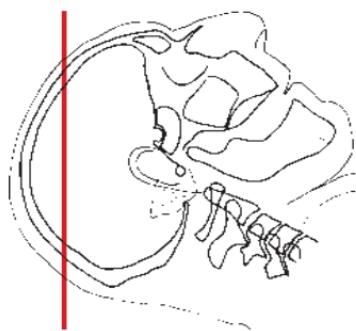
**Neck—Coronal**



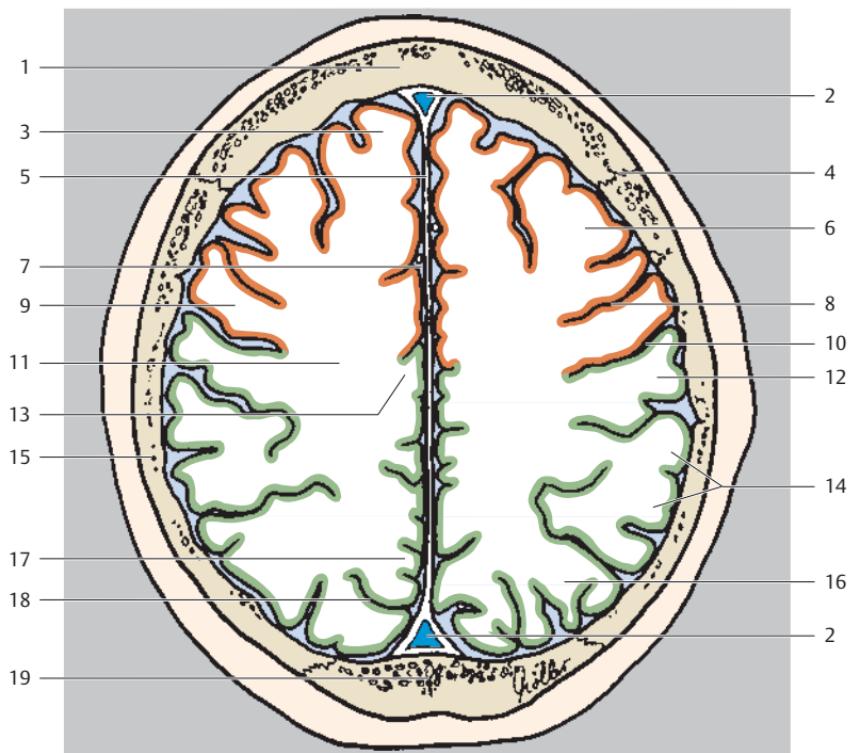
Frontal lobe  
Parietal lobe



- |                          |                             |
|--------------------------|-----------------------------|
| 1 Frontal bone           | 8 Paracentral lobule        |
| 2 Superior frontal gyrus | 9 Central sulcus            |
| 3 Coronal suture         | 10 Postcentral gyrus        |
| 4 Precentral sulcus      | 11 Superior parietal lobule |
| 5 Falx cerebri           | 12 Precuneus                |
| 6 Precentral gyrus       | 13 Sagittal suture          |
| 7 Parietal bone          | 14 Superior sagittal sinus  |

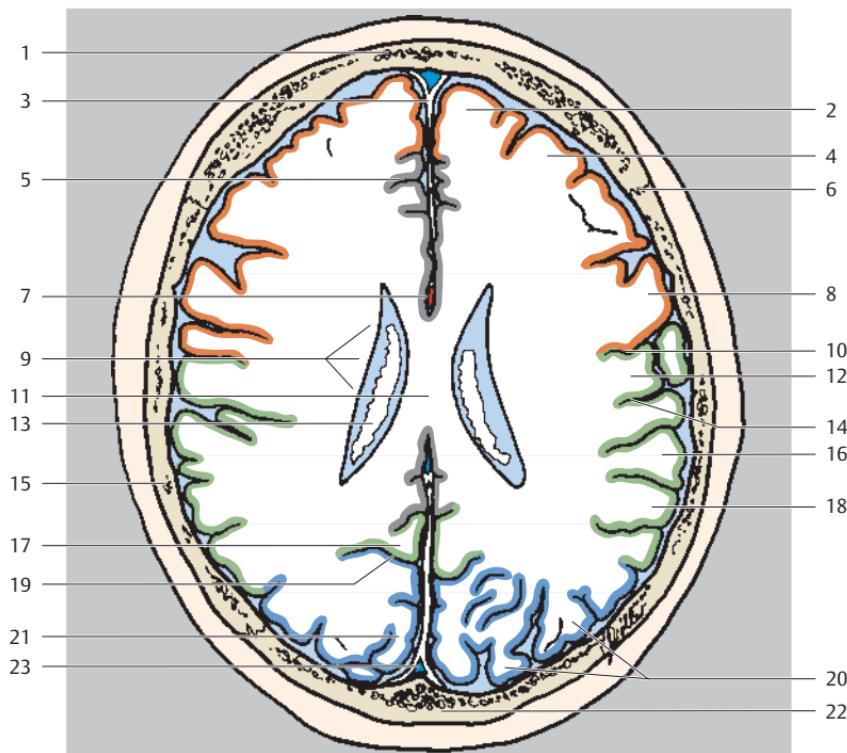


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Parietal lobe

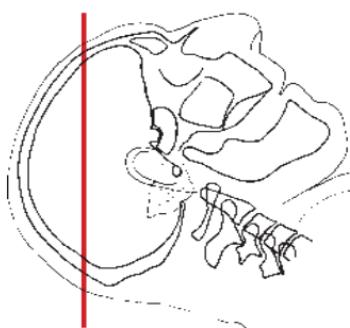
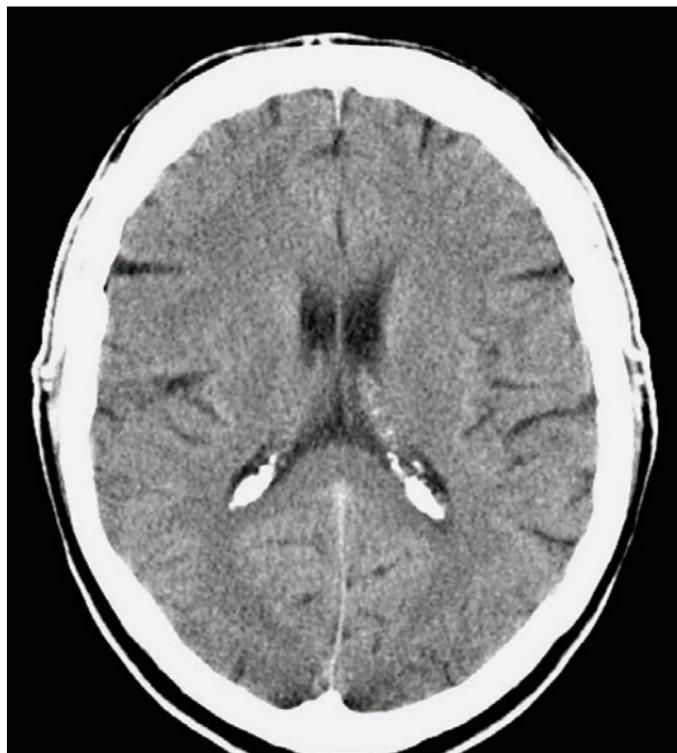


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|---------------------------------|--|
| 1 Frontal bone                  | 11 Cerebral white matter<br>(semitoval center) |
| 2 Superior sagittal sinus       | 12 Postcentral gyrus                           |
| 3 Superior frontal gyrus        | 13 Paracentral lobule                          |
| 4 Coronal suture                | 14 Supramarginal gyrus                         |
| 5 Falx cerebri                  | 15 Parietal bone                               |
| 6 Middle frontal gyrus          | 16 Inferior parietal lobule                    |
| 7 Longitudinal cerebral fissure | 17 Precuneus                                   |
| 8 Precentral sulcus             | 18 Parieto-occipital sulcus                    |
| 9 Precentral gyrus              | 19 Occipital bone                              |
| 10 Central sulcus               |  |

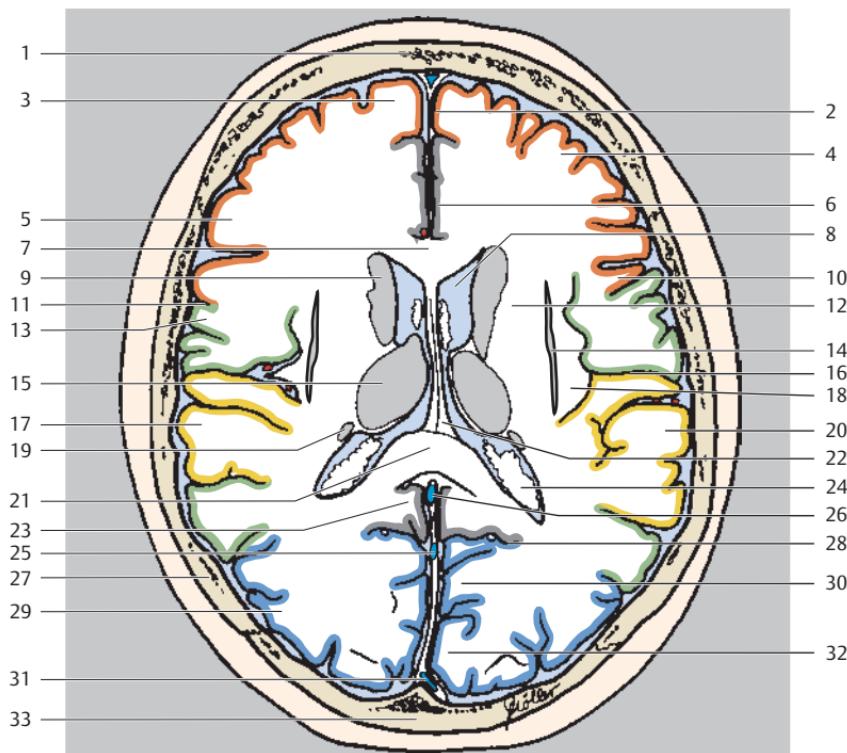




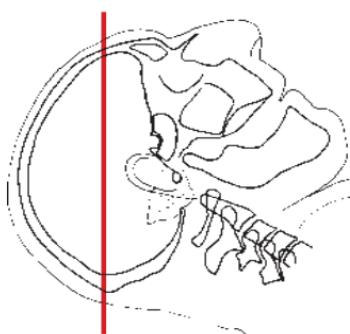
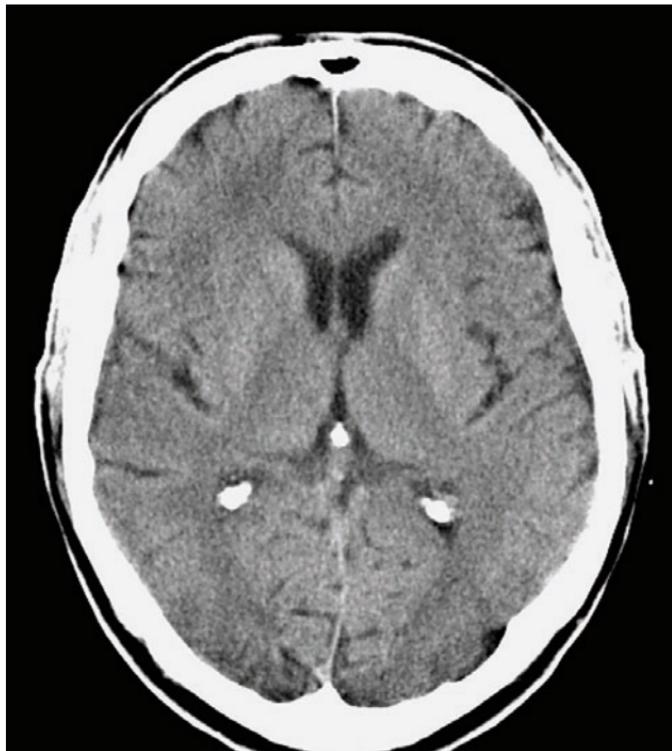
- |                          |                                       |
|--------------------------|---------------------------------------|
| 1 Frontal bone           | 12 Postcentral gyrus                  |
| 2 Superior frontal gyrus | 13 Lateral ventricle (choroid plexus) |
| 3 Falx cerebri           | 14 Postcentral sulcus                 |
| 4 Middle frontal gyrus   | 15 Parietal bone                      |
| 5 Cingulate sulcus       | 16 Supramarginal gyrus                |
| 6 Coronal suture         | 17 Precuneus                          |
| 7 Pericallosal artery    | 18 Angular gyrus                      |
| 8 Precentral gyrus       | 19 Parieto-occipital sulcus           |
| 9 Corona radiata         | 20 Occipital gyri                     |
| 10 Central sulcus        | 21 Cuneus                             |
| 11 Corpus callosum       | 22 Occipital bone                     |
|                          | 23 Superior sagittal sinus            |



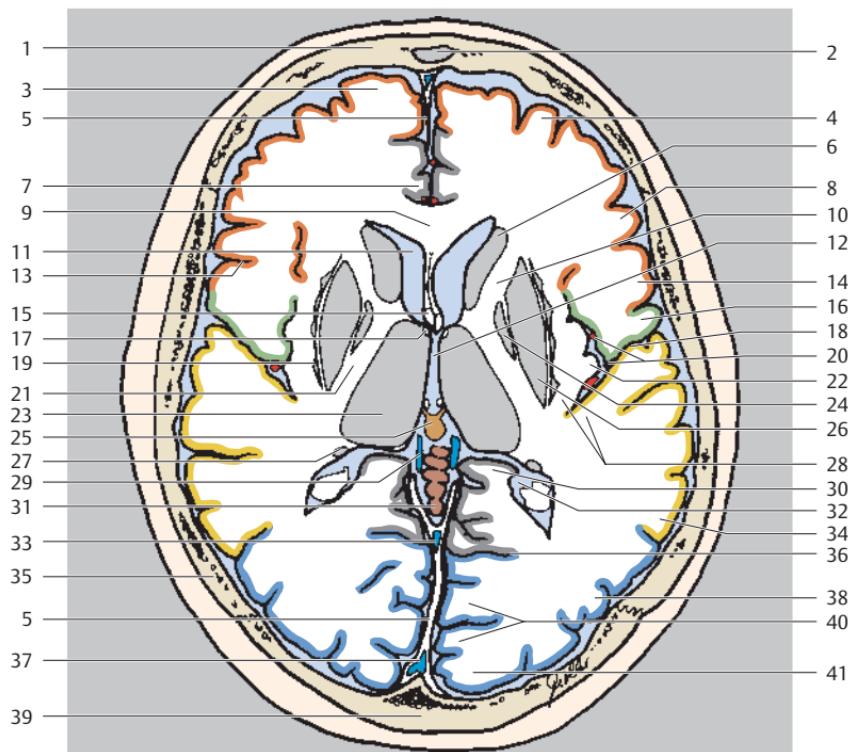
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- Parietal lobe
- Occipital lobe



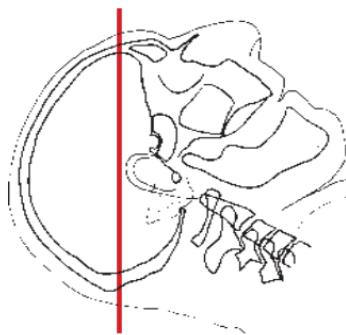
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|-------------------------------------|---|
| 1 Frontal bone                      | 18 Insula   |
| 2 Falx cerebri                      | 19 Caudate nucleus (tail)                                 |
| 3 Superior frontal gyrus            | 20 Superior temporal gyrus                                |
| 4 Middle frontal gyrus              | 21 Corpus callosum (splenium)                             |
| 5 Inferior frontal gyrus            | 22 Fornix   |
| 6 Cingulate gyrus                   | 23 Cingulum   |
| 7 Corpus callosum (trunk)           | 24 Lateral ventricle (collateral trigone, choroid plexus) |
| 8 Lateral ventricle (anterior horn) | 25 Straight sinus   |
| 9 Caudate nucleus (head)            | 26 Great cerebral vein (vein of Galen)                    |
| 10 Precentral gyrus                 | 27 Parietal bone  |
| 11 Central sulcus                   | 28 Parieto-occipital sulcus                               |
| 12 Corona radiata                   | 29 Occipital gyri   |
| 13 Postcentral gyrus                | 30 Cuneus   |
| 14 Claustrum                        | 31 Superior sagittal sinus                                |
| 15 Thalamus                         | 32 Striate cortex   |
| 16 Lateral sulcus                   | 33 Occipital bone   |
| 17 Temporal operculum               |   |



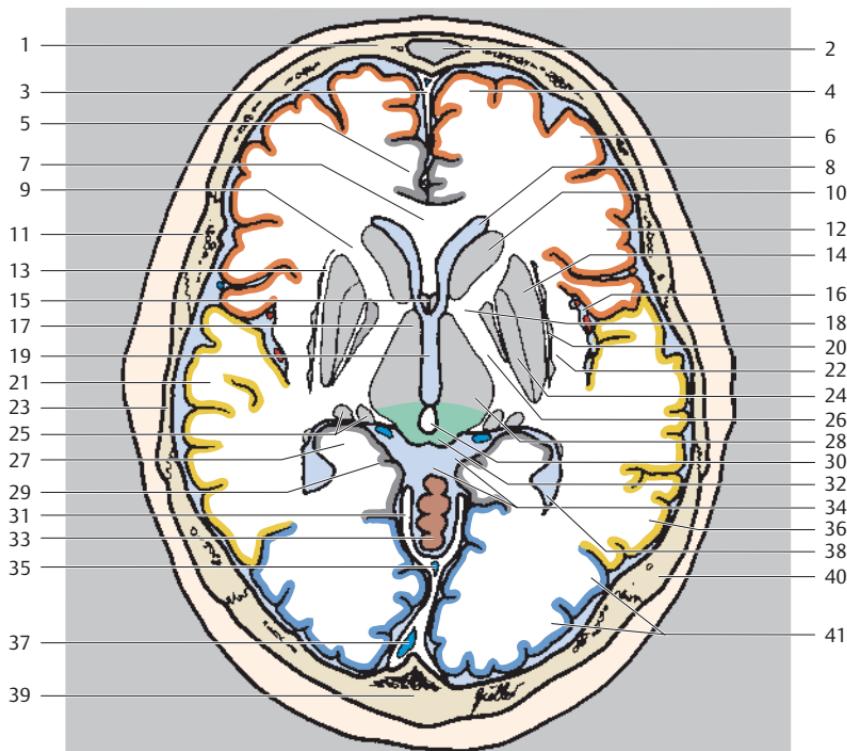
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- Parietal lobe
- Occipital lobe
- Cerebellum



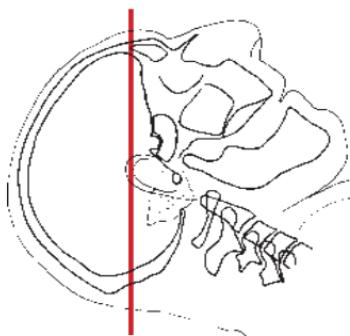
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|---|--|
| 1 Frontal bone  | 21 Internal capsule (posterior limb)               |
| 2 Frontal sinus   | 22 Insula  |
| 3 Superior frontal gyrus  | 23 Thalamus  |
| 4 Middle frontal gyrus  | 24 Globus pallidus (pallidum)                      |
| 5 Falx cerebri  | 25 Pineal gland                                    |
| 6 Caudate nucleus (head)  | 26 Putamen   |
| 7 Cingulate gyrus   | 27 Caudate nucleus (tail)                          |
| 8 Inferior frontal gyrus  | 28 Transverse temporal gyrus                       |
| 9 Corpus callosum (genu)  | 29 Internal cerebral vein                          |
| 10 Internal capsule (anterior limb)                                   | 30 Hippocampus                                     |
| 11 Lateral ventricle (anterior horn)                                  | 31 Vermis of cerebellum                            |
| 12 Third ventricle  | 32 Lateral ventricle (trigone with choroid plexus) |
| 13 Central sulcus   | 33 Straight sinus                                  |
| 14 Precentral gyrus   | 34 Middle temporal gyrus                           |
| 15 Fornix   | 35 Parietal bone                                   |
| 16 Postcentral gyrus  | 36 Parieto-occipital sulcus                        |
| 17 Interventricular foramen (foramen of Monro)                        | 37 Superior sagittal sinus                         |
| 18 Lateral sulcus   | 38 Occipital gyri                                  |
| 19 Claustrum  | 39 Occipital bone                                  |
| 20 Insular arteries in the cistern of lateral cerebral fossa (insular | 40 Striate cortex                                  |
|   | 41 Occipital pole                                  |
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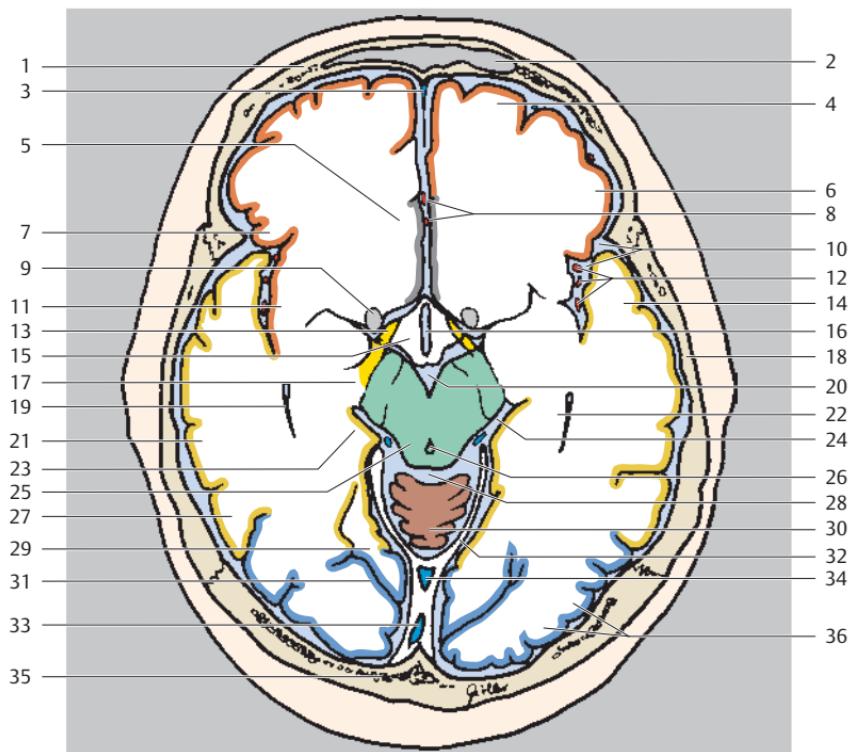
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- █ Cerebellum
- █ Mesencephalon



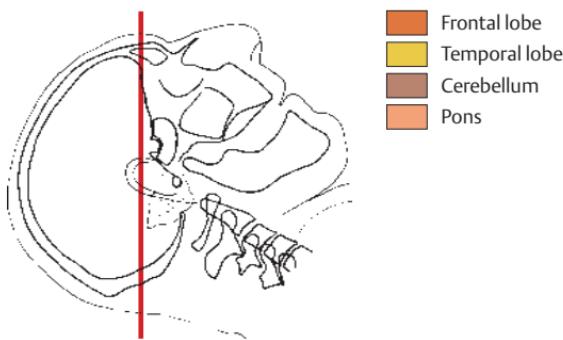
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| 1 Frontal bone  | 21 Superior temporal gyrus               |
| 2 Frontal sinus   | 22 Extreme capsule                       |
| 3 Falx cerebri  | 23 Temporal bone                         |
| 4 Superior frontal gyrus                                  | 24 Globus pallidus (pallidum)            |
| 5 Cingulate gyrus   | 25 Geniculate body                       |
| 6 Middle frontal gyrus                                    | 26 Internal capsule (posterior limb)     |
| 7 Corpus callosum (genu)                                  | 27 Hippocampus                           |
| 8 Lateral ventricle (anterior horn)                       | 28 Thalamus                              |
| 9 Internal capsule (anterior limb)                        | 29 Parahippocampal gyrus                 |
| 10 Caudate nucleus (head)                                 | 30 Pineal gland (calcified)              |
| 11 Parietal bone  | 31 Tentorium cerebelli                   |
| 12 Inferior frontal gyrus                                 | 32 Quadrigeminal plate (colliculus)      |
| 13 External capsule                                       | 33 Vermis of cerebellum                  |
| 14 Putamen  | 34 Quadrigeminal<br>and ambient cisterns |
| 15 Septum verum<br>(precommissural septum)                | 35 Straight sinus                        |
| 16 Cistern of lateral cerebral fossa<br>(insular cistern) | 36 Middle temporal gyrus                 |
| 17 Hypothalamus   | 37 Superior sagittal sinus               |
| 18 Internal capsule (genu)                                | 38 Lateral ventricle (trigone)           |
| 19 Third ventricle  | 39 Occipital bone                        |
| 20 Claustrum  | 40 Parietal bone                         |
|   | 41 Occipital gyri                        |

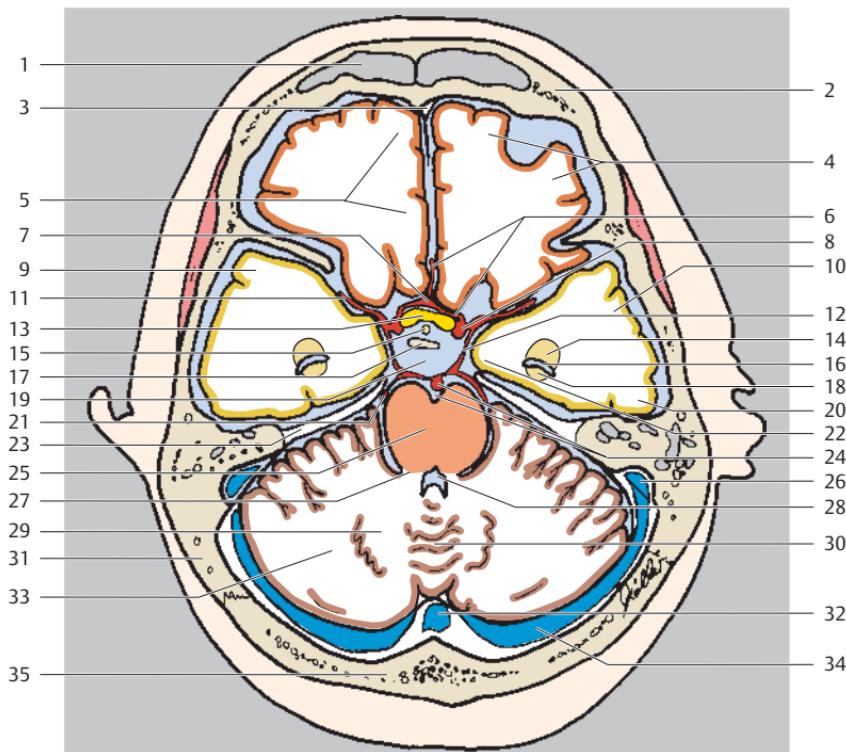


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- █ Occipital lobe
- █ Cerebellum
- █ Mesencephalon

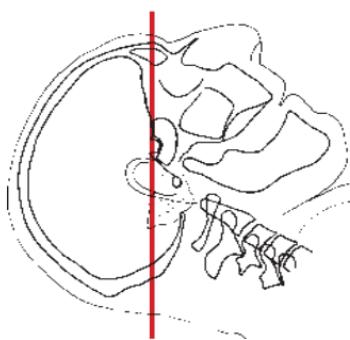


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|--------------------------------------|--|
| 1 Frontal bone                       | 20 Interpeduncular cistern                 |
| 2 Frontal sinus                      | 21 Middle temporal gyrus                   |
| 3 Falx cerebri                       | 22 Hippocampus                             |
| 4 Superior frontal gyrus             | 23 Parahippocampal gyrus                   |
| 5 Cingulate gyrus                    | 24 Ambient cistern                         |
| 6 Middle frontal gyrus               | 25 Mesencephalon (quadrigeminal plate)     |
| 7 Inferior frontal gyrus             | 26 Aqueduct                                |
| 8 Anterior cerebral artery           | 27 Inferior temporal gyrus                 |
| 9 Striatum (inferior portion)        | 28 Quadrigeminal cistern                   |
| 10 Lateral sulcus (insular cistern)  | 29 Lateral occipitotemporal gyrus          |
| 11 Insula                            | 30 Vermis of cerebellum (superior portion) |
| 12 Insular arteries                  | 31 Parieto-occipital sulcus                |
| 13 Optic tract                       | 32 Tentorium cerebelli                     |
| 14 Superior temporal gyrus           | 33 Superior sagittal sinus                 |
| 15 Hypothalamus                      | 34 Straight sinus                          |
| 16 Third ventricle                   | 35 Occipital bone                          |
| 17 Cerebral peduncle                 | 36 Occipital gyri                          |
| 18 Parietal bone                     |  |
| 19 Lateral ventricle (temporal horn) |  |

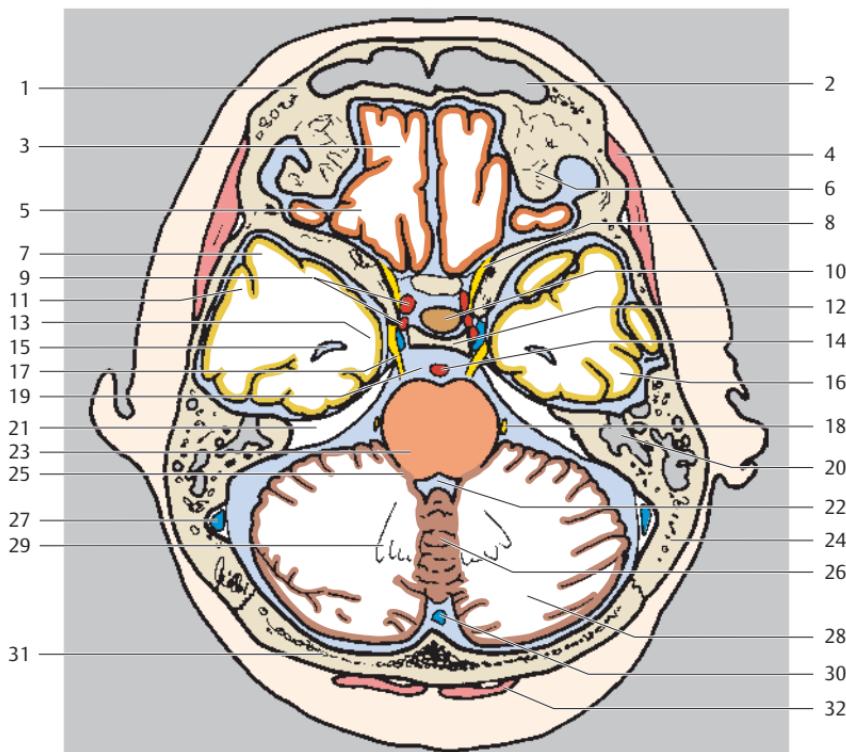




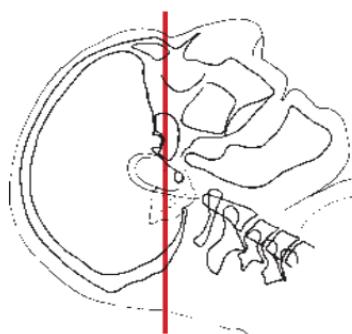
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|--------------------------------------|---|
| 1 Frontal sinus                      | 18 Hippocampus                          |
| 2 Frontal bone                       | 19 Pentagon of basal cisterns           |
| 3 Falx cerebri                       | 20 Inferior temporal gyrus              |
| 4 Orbital gyri                       | 21 Posterior cerebral artery            |
| 5 Straight gyrus                     | 22 Parahippocampal gyrus                |
| 6 Anterior cerebral artery           | 23 Tentorium cerebelli                  |
| 7 Anterior communicating artery      | 24 Basilar artery and basal sulcus      |
| 8 Internal carotid artery            | 25 Pons                                 |
| 9 Superior temporal gyrus            | 26 Sigmoid sinus                        |
| 10 Middle temporal gyrus             | 27 Cerebellar peduncle (middle)         |
| 11 Middle cerebral artery            | 28 Fourth ventricle                     |
| 12 Posterior communicating artery    | 29 Dentate nucleus                      |
| 13 Optic chiasm                      | 30 Vermis of cerebellum (superior part) |
| 14 Amygdaloid body                   | 31 Temporal bone                        |
| 15 Pituitary stalk                   | 32 Confluence of the sinuses            |
| 16 Lateral ventricle (temporal horn) | 33 Cerebellar hemisphere                |
| 17 Dorsum sellae                     | 34 Transverse sinus                     |
|                                      | 35 Occipital bone                       |



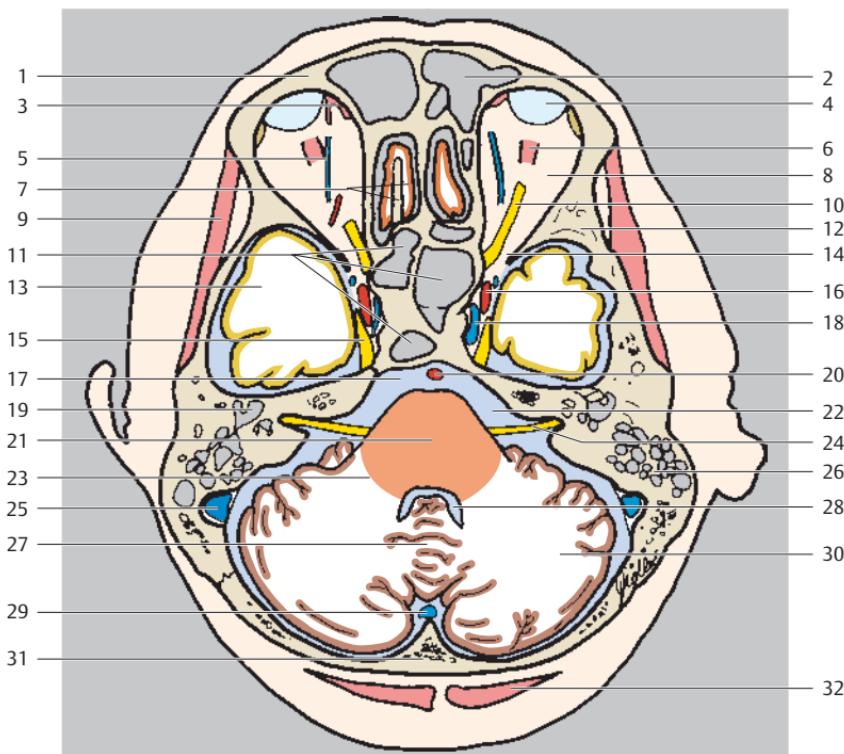
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- Cerebellum
- Pons



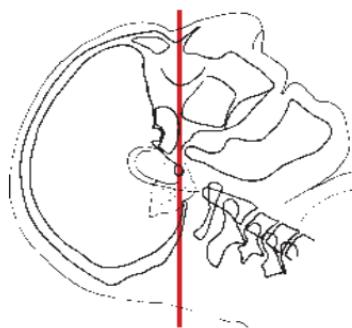
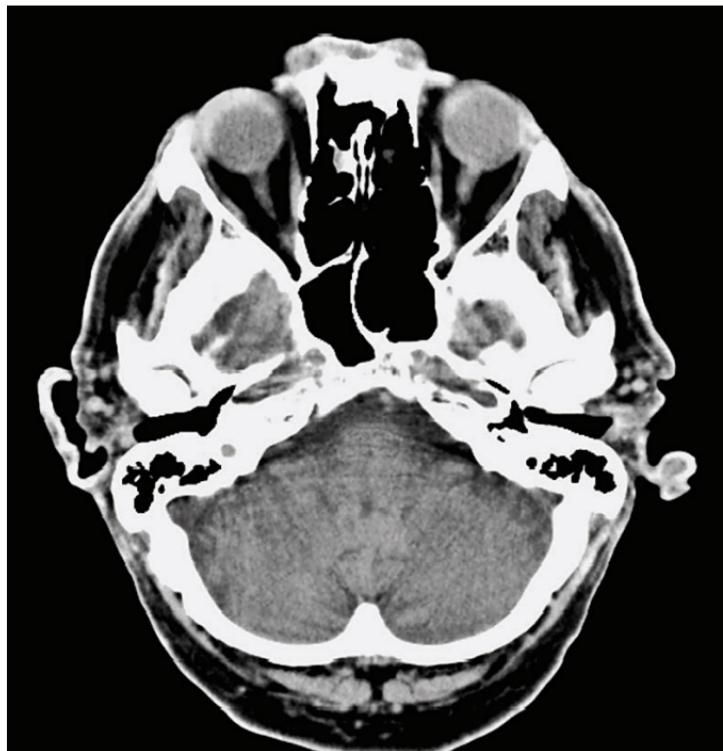
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|--------------------------------------|--------------------------------|
| 1 Frontal bone                       | 17 Trigeminal nerve (V)        |
| 2 Frontal sinus                      | 18 Trochlear nerve             |
| 3 Straight gyrus                     | 19 Pontine cistern             |
| 4 Temporal muscle                    | 20 Mastoid antrum              |
| 5 Orbital gyri                       | 21 Tentorium cerebelli         |
| 6 Roof of orbit                      | 22 Fourth ventricle            |
| 7 Superior temporal gyrus            | 23 Pons                        |
| 8 Optic nerve                        | 24 Temporal bone               |
| 9 Internal carotid artery            | 25 Cerebellar peduncle         |
| 10 Pituitary gland                   | 26 Vermis of cerebellum        |
| 11 Middle temporal gyrus             | 27 Sigmoid sinus               |
| 12 Dorsum sellae                     | 28 Cerebellar hemisphere       |
| 13 Parahippocampal gyrus             | 29 Dentate nucleus             |
| 14 Basilar artery                    | 30 Occipital sinus             |
| 15 Lateral ventricle (temporal horn) | 31 Occipital bone              |
| 16 Inferior temporal gyrus           | 32 Semispinalis capitis muscle |



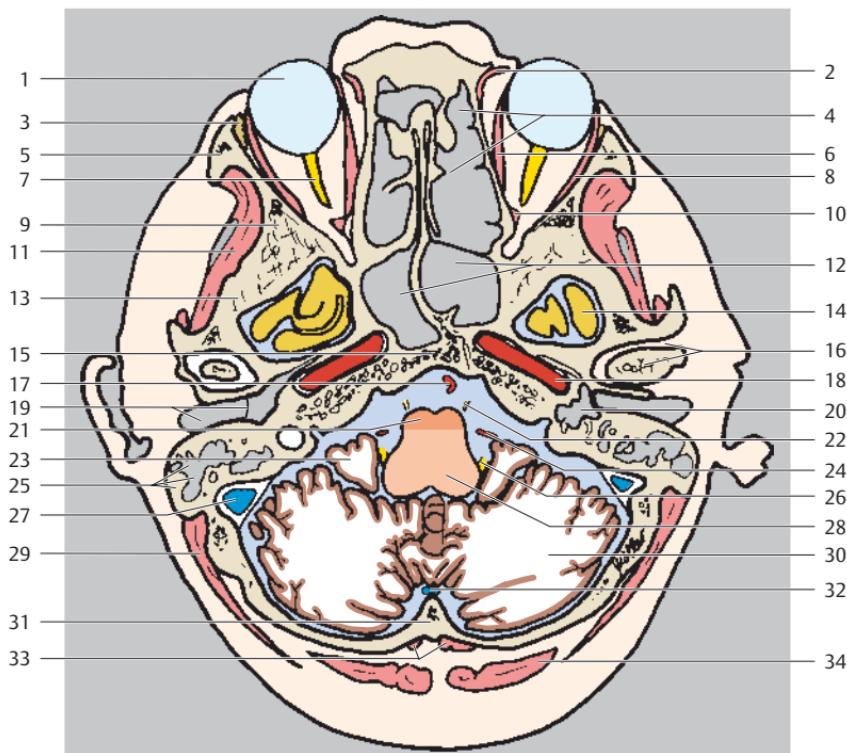
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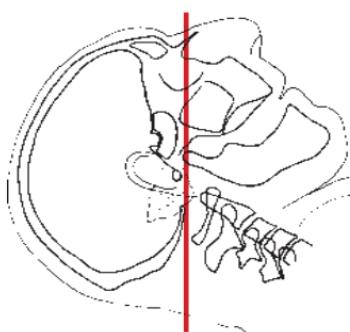
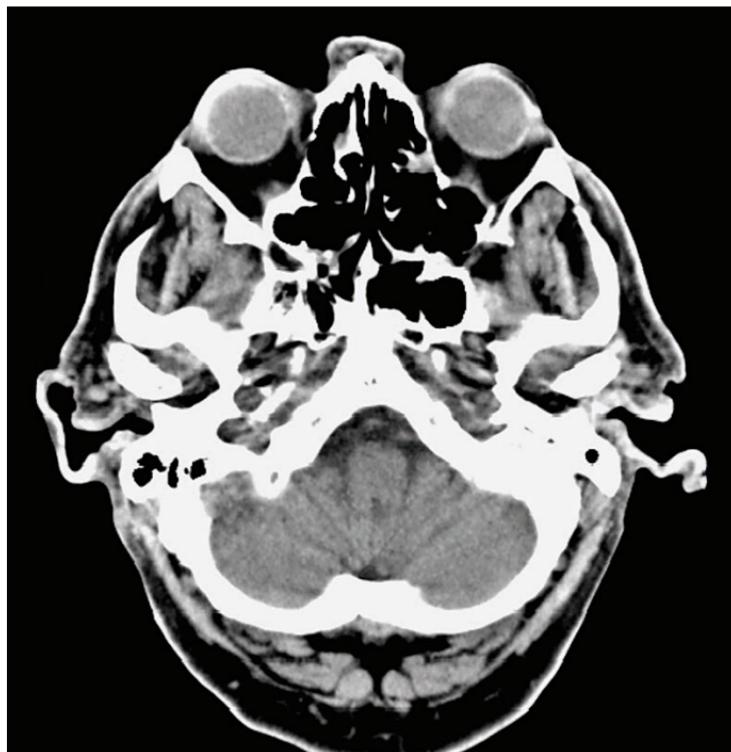
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|-------------------------------------|--|
| 1 Frontal bone                      | 18 Cavernous sinus   |
| 2 Frontal sinus                     | 19 Mastoid antrum  |
| 3 Superior oblique muscle           | 20 Basilar artery  |
| 4 Eyeball                           | 21 Pons  |
| 5 Ophthalmic vein                   | 22 Pontocerebellar cistern   |
| 6 Superior rectus muscle            | 23 Middle and inferior cerebellar peduncle   |
| 7 Straight gyrus and olfactory bulb | 24 Internal auditory meatus with facial (VII) and vestibulocochlear/acoustic (VIII) nerves |
| 8 Retro-orbital fatty tissue        | 25 Sigmoid sinus   |
| 9 Temporal muscle                   | 26 Mastoid process with mastoid cells  |
| 10 Optic nerve                      | 27 Vermis of cerebellum  |
| 11 Sphenoidal sinus                 | 28 Fourth ventricle  |
| 12 Sphenoidal bone                  | 29 Occipital sinus   |
| 13 Inferior temporal gyrus          | 30 Cerebellar hemisphere   |
| 14 Superior orbital fissure         | 31 Occipital bone  |
| 15 Trigeminal nerve (ganglion)      | 32 Semispinalis capitis muscle   |
| 16 Internal carotid artery          |  |
| 17 Pontine cistern                  |  |



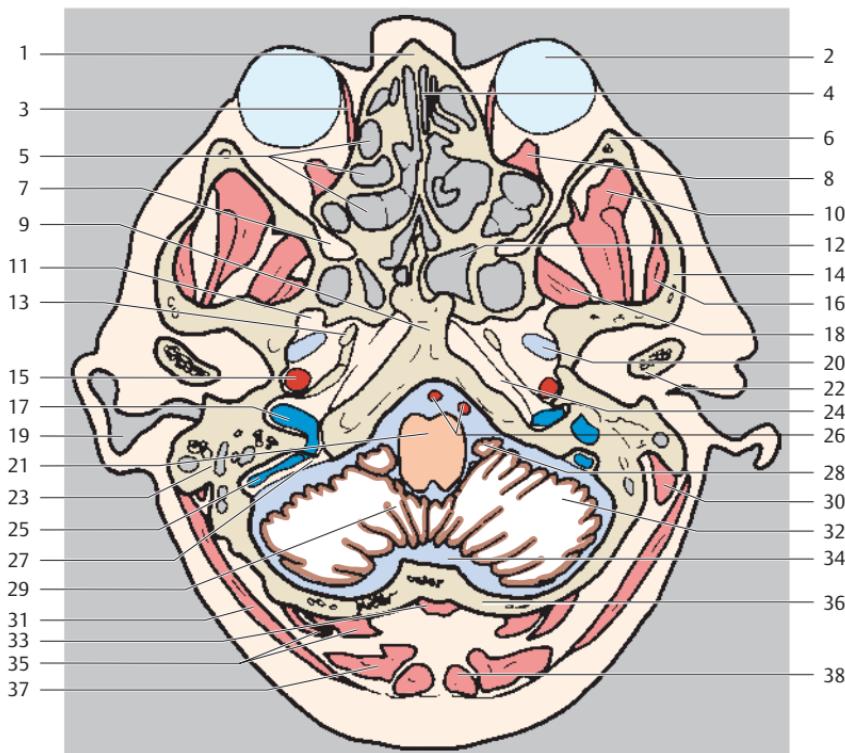
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- █ Pons



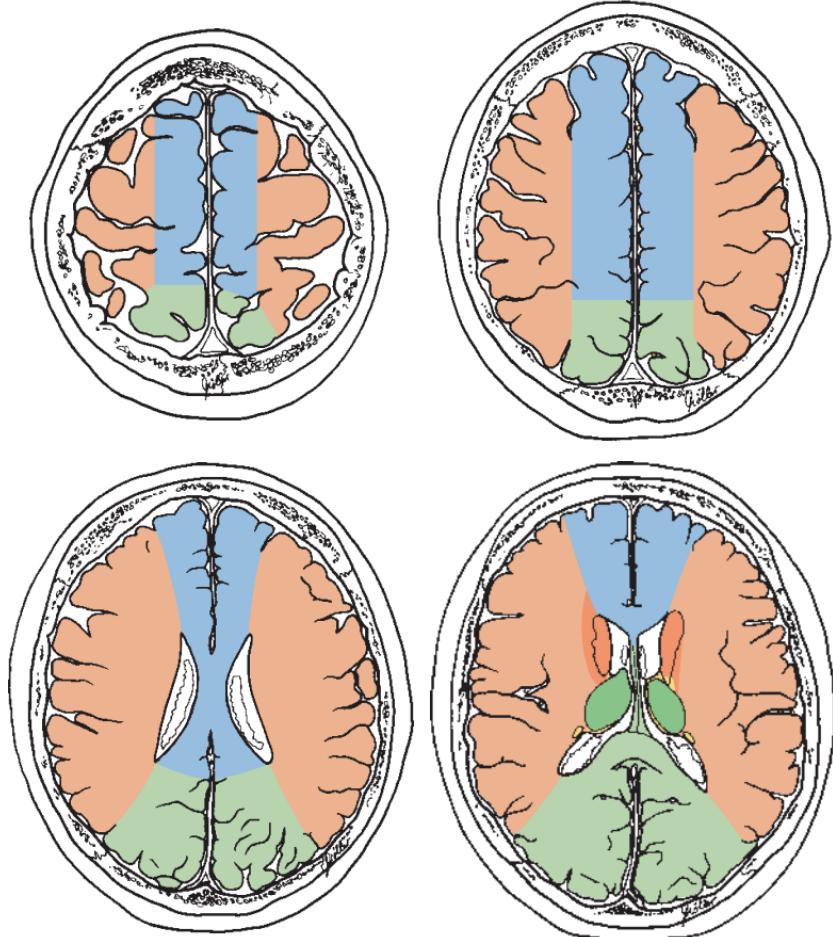
- |   |   |
|---|---|
| 1 Eyeball                                       | 19 External auditory meatus and eardrum (tympanic membrane) |
| 2 Superior oblique muscle                       | 20 Tympanic cavity  |
| 3 Lacrimal gland                                | 21 Pons   |
| 4 Ethmoidal cells                               | 22 Abducent nerve (VI)                                      |
| 5 Zygomatic bone                                | 23 Flocculus  |
| 6 Medial rectus muscle                          | 24 Anterior inferior cerebellar artery                      |
| 7 Optic nerve                                   | 25 Mastoid process and mastoid cells                        |
| 8 Lateral rectus muscle of eyeball              | 26 Glossopharyngeal (IX) and vagus (X) nerves               |
| 9 Sphenoidal bone                               | 27 Sigmoid sinus  |
| 10 Superior rectus muscle                       | 28 Medulla oblongata (myelencephalon)                       |
| 11 Temporal muscle                              | 29 Splenius capitis muscle                                  |
| 12 Sphenoidal sinus                             | 30 Cerebellar hemisphere                                    |
| 13 Temporal bone                                | 31 Occipital bone   |
| 14 Temporal lobe (base)                         | 32 Occipital sinus  |
| 15 Clivus                                       | 33 Rectus capitis posterior minor muscle                    |
| 16 Temporomandibular joint and head of mandible | 34 Semispinalis capitis muscle                              |
| 17 Basilar artery                               |   |
| 18 Internal carotid artery                      |   |



 Cerebellum  
 Medulla oblongata



- |   |   |
|---|---|
| 1 Nasal bone                                      | 19 External auditory meatus                                   |
| 2 Eyeball   | 20 Auditory tube  |
| 3 Medial rectus muscle                            | 21 Medulla oblongata  |
| 4 Nasal septum                                    | 22 Head of mandible   |
| 5 Ethmoidal cells                                 | 23 Mastoid process  |
| 6 Zygomatic bone                                  | 24 Foramen lacerum  |
| 7 Pterygopalatine fossa                           | 25 Sigmoid sinus  |
| 8 Inferior rectus muscle                          | 26 Vertebral arteries   |
| 9 Occipital bone (basilar part)                   | 27 Petro-occipital fissure                                    |
| 10 Temporal muscle                                | 28 Flocculus  |
| 11 Foramen ovale with<br>mandibular nerve         | 29 Cerebellar tonsil  |
| 12 Sphenoidal sinus                               | 30 Digastric muscle   |
| 13 Temporal bone (apex of the<br>petrous pyramid) | 31 Splenius capitis muscle                                    |
| 14 Zygomatic arch                                 | 32 Cerebellar hemisphere (caudal lobe)                        |
| 15 Internal carotid artery                        | 33 Rectus capitis posterior minor muscle                      |
| 16 Masseter muscle                                | 34 Cisterna magna (posterior cerebello-<br>medullary cistern) |
| 17 Jugular vein (bulb)                            | 35 Rectus capitis posterior major muscle                      |
| 18 Lateral pterygoid muscle<br>(superior head)    | 36 Occipital bone   |
|   | 37 Semispinalis capitis muscle                                |
|   | 38 Trapezius muscle   |



**Anterior cerebral artery**

Terminal branches

**Middle cerebral artery**

Terminal branches

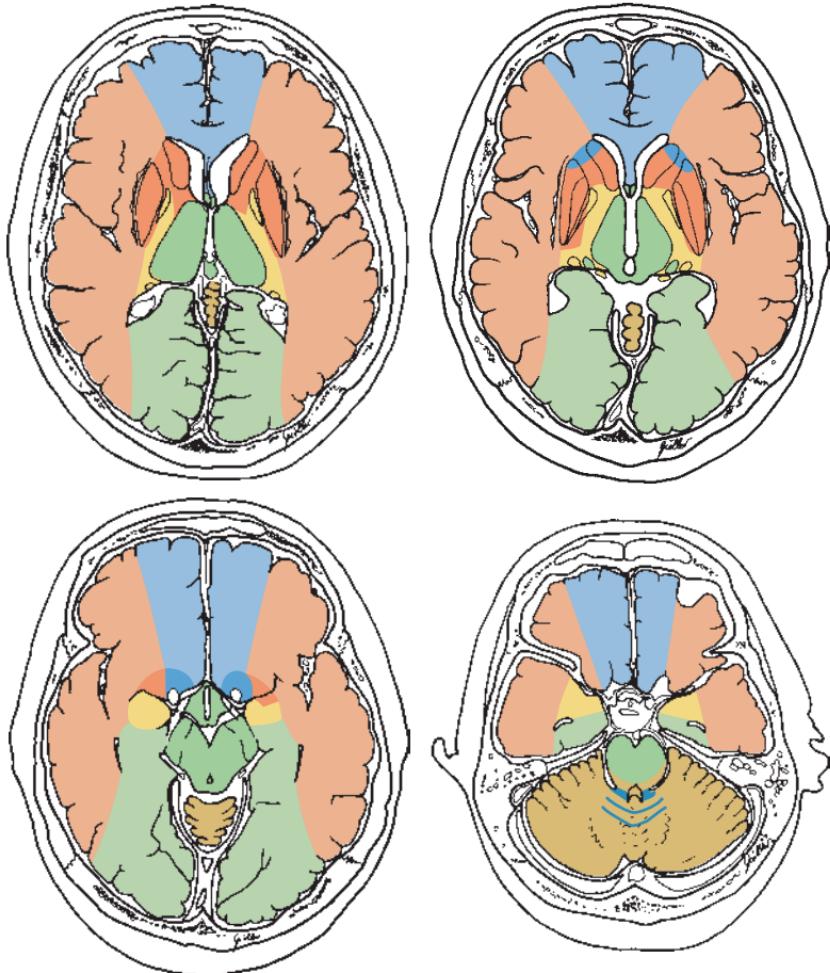
Central branches (striate branches)

**Posterior cerebral artery**

Terminal branches

Central branches (including the posterior communicating artery)

Anterior choroidal artery

**Anterior cerebral artery**

- Terminal branches
- Central branches (striate branches)

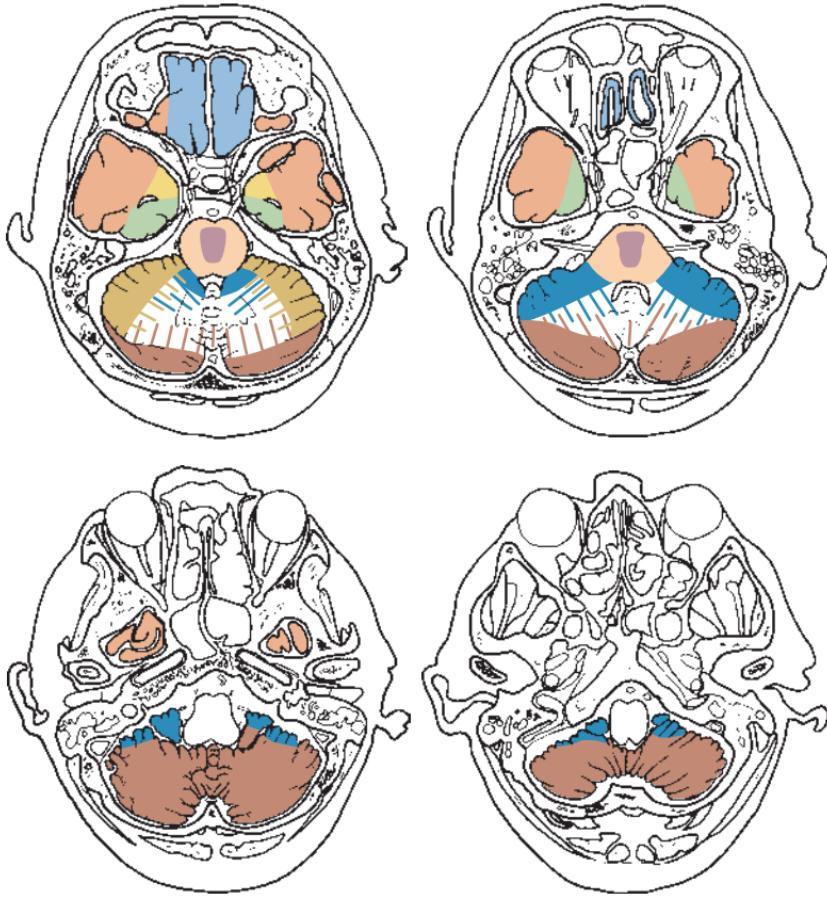
**Middle cerebral artery**

- Terminal branches
- Central branches (striate branches)

**Posterior cerebral artery**

- Terminal branches
- Central branches (including the posterior communicating artery)

- Anterior choroidal artery
- Superior cerebellar artery
- Anterior inferior cerebellar artery
- Border region

**Anterior cerebral artery**

Terminal branches

**Middle cerebral artery**

Terminal branches

**Posterior cerebral artery**

Terminal branches

Anterior choroidal artery

**Basilar artery**

Anteromedial and anterolateral paramedian branches

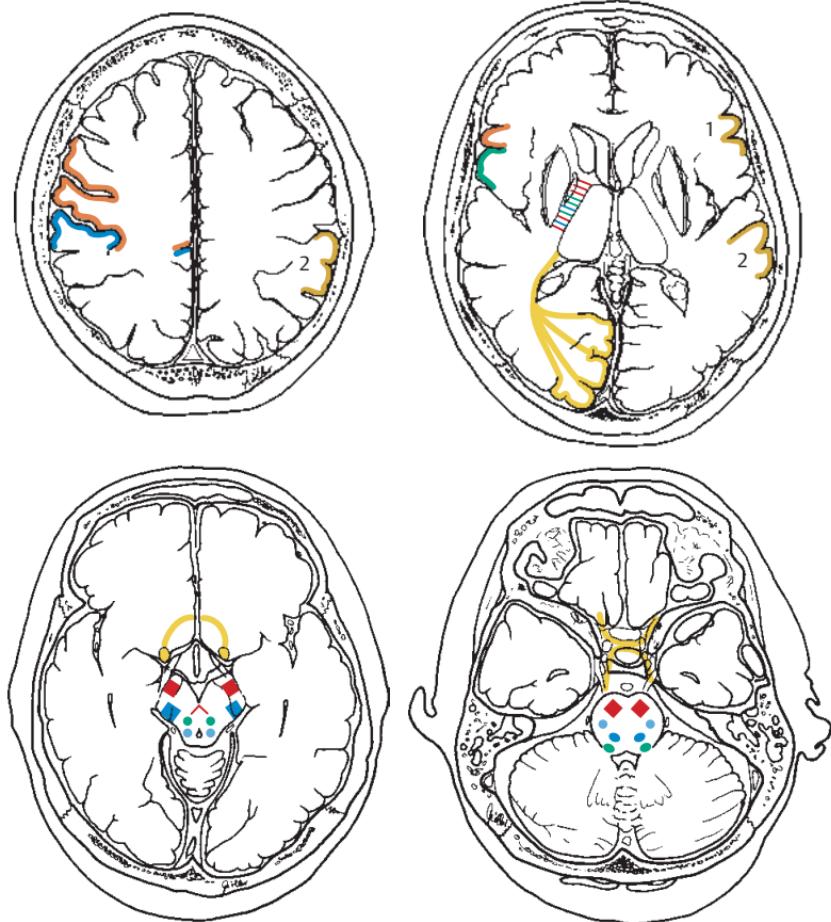
Circumferential arteries and Lateral and dorsal paramedian branches

Superior cerebellar artery

Anterior superior cerebellar artery

Border region

Posterior inferior cerebellar artery



Motor system

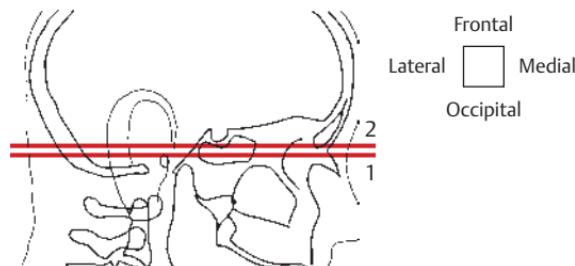
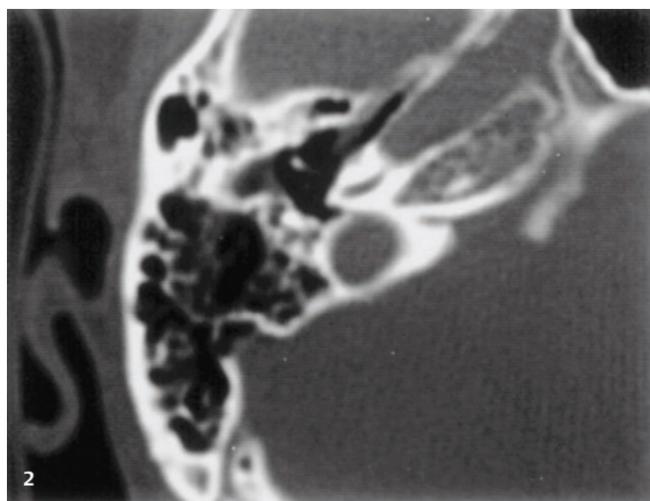
#### Sensory system

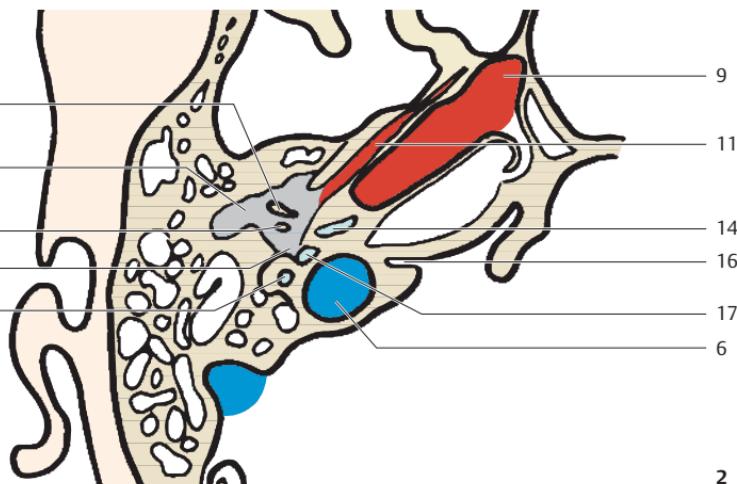
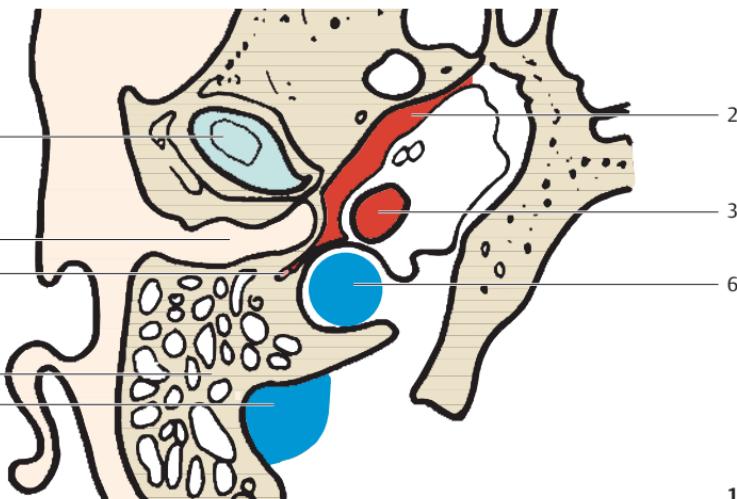
- Medial lemniscal tract
- Spinothalamic tract
- Mesencephalic nucleus of trigeminal nerve

- Oculomotor nucleus and pathways
- Optic tract
- Speech center  
(1 = motor, 2 = sensory)

**30 CT of the Petrous Part of Temporal Bone**

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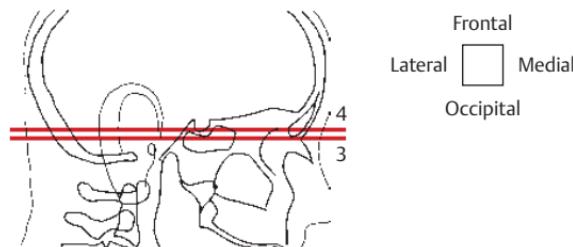
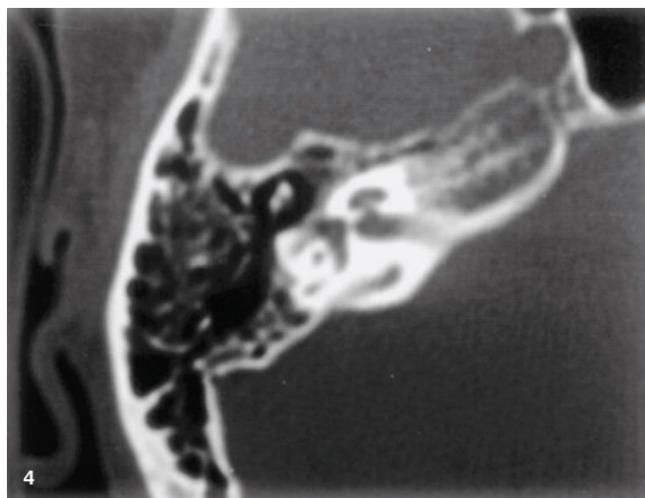
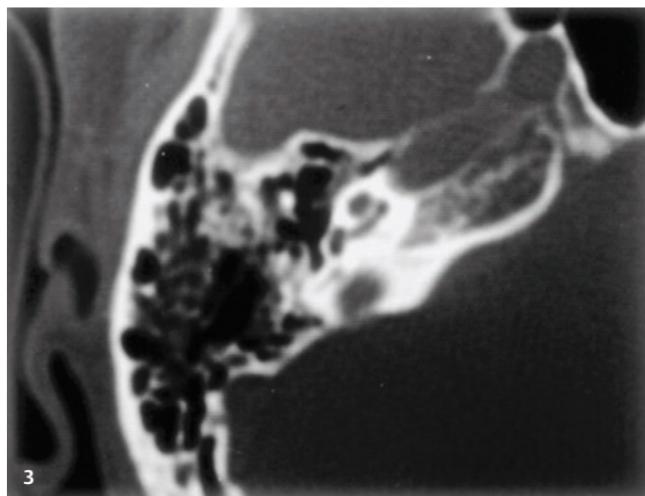


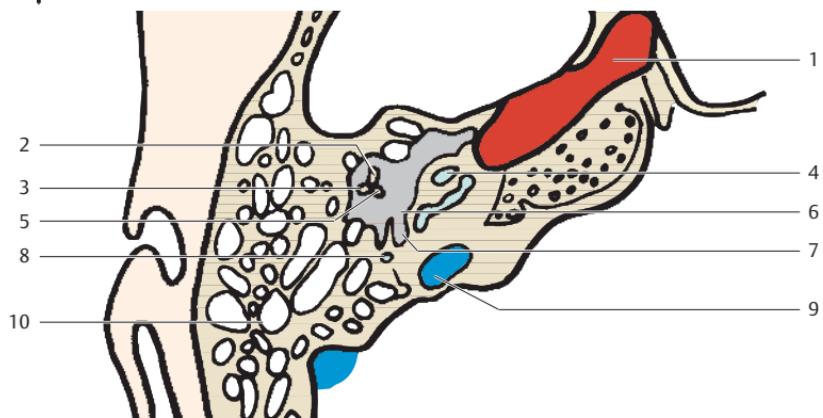


- |   |                                  |
|---|----------------------------------|
| 1 Temporomandibular joint (glenoid roof and articular disc) | 9 Carotid canal                  |
| 2 Pharyngotympanic tube (auditory tube)                     | 10 Malleus (handle)              |
| 3 Internal carotid artery                                   | 11 Tensor tympani muscle (canal) |
| 4 External acoustic meatus                                  | 12 Middle ear                    |
| 5 Facial canal  | 13 Incus (long limb)             |
| 6 Internal jugular vein                                     | 14 Cochlea (basal turn)          |
| 7 Mastoid process   | 15 Sinus tympani                 |
| 8 Sigmoid sinus   | 16 Vestibular aqueduct           |
|   | 17 Round window                  |

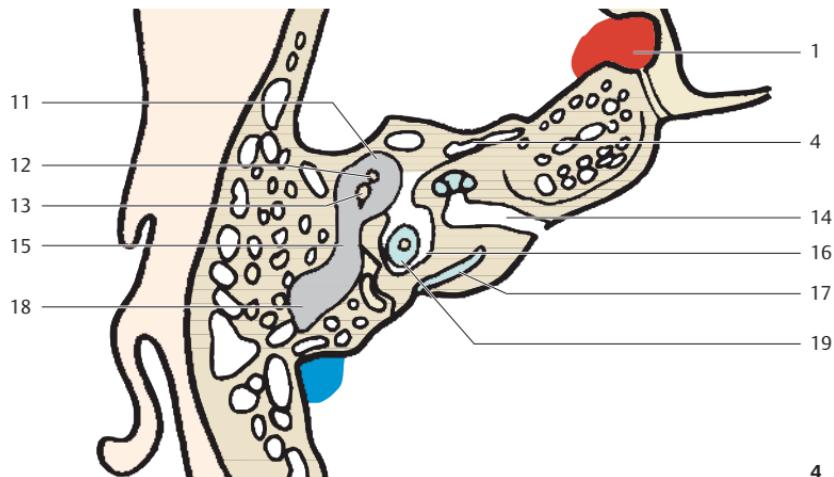
**32 CT of the Petrous Part of Temporal Bone**

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3



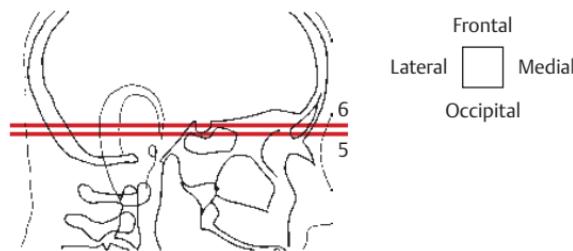
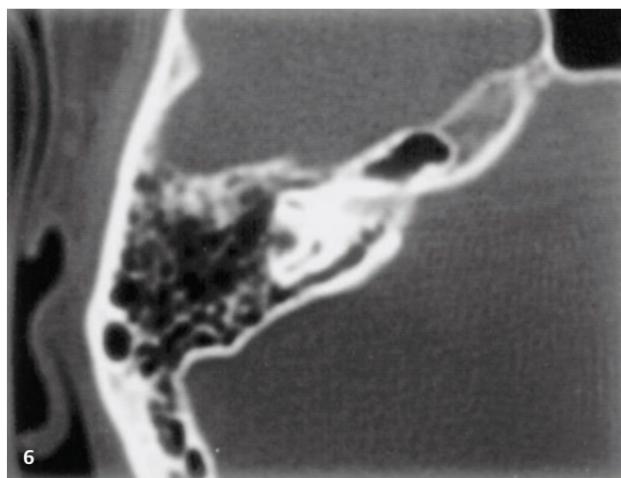
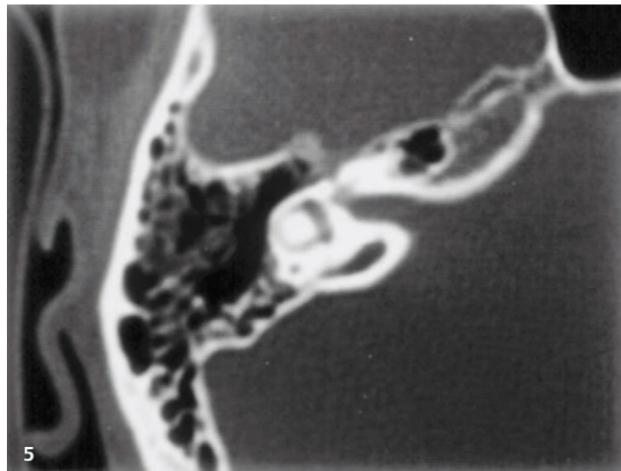
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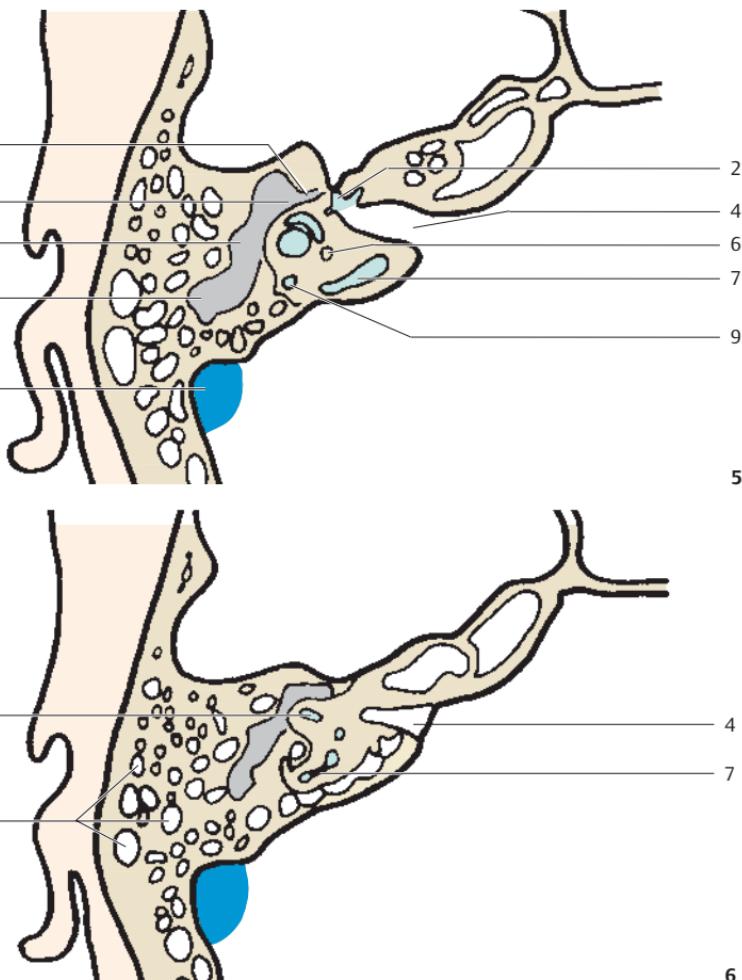
- 1 Internal carotid artery (canal)
- 2 Malleus (handle)
- 3 Incus (long limb)
- 4 Cochlea
- 5 Stapes
- 6 Oval window
- 7 Sinus tympani
- 8 Facial canal
- 9 Internal jugular vein (bulb)
- 10 Mastoid

- 11 Epitympanic recess
- 12 Malleus (head)
- 13 Incus (short limb)
- 14 Internal acoustic meatus
- 15 Aditus to mastoid antrum
- 16 Vestibule
- 17 Posterior semicircular canal
- 18 Mastoid antrum
- 19 Lateral semicircular canal

**34 CT of the Petrous Part of Temporal Bone**

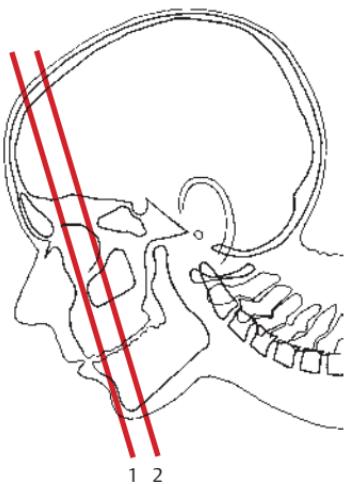
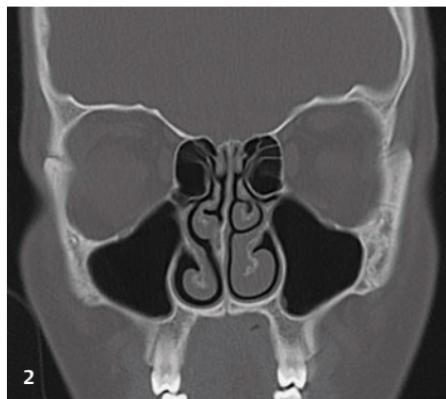
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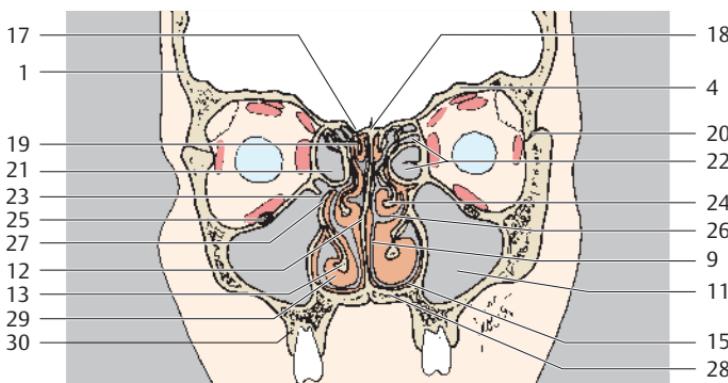
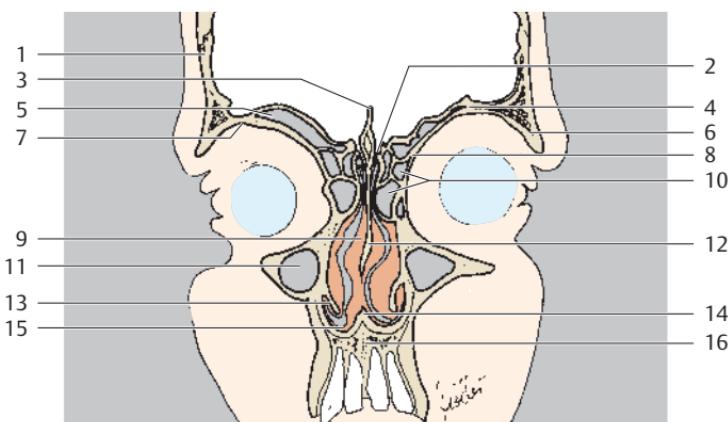




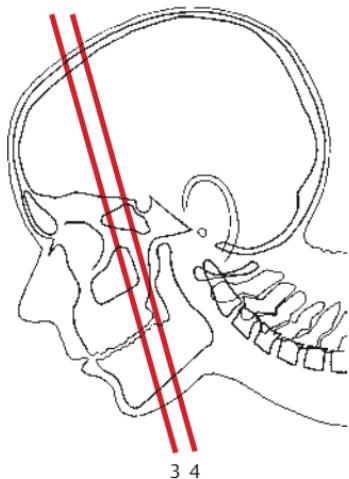
- 1 Geniculate ganglion
- 2 Facial nerve (first part)
- 3 Facial nerve (second part)
- 4 Internal acoustic meatus
- 5 Tympanic cavity
- 6 Vestibule

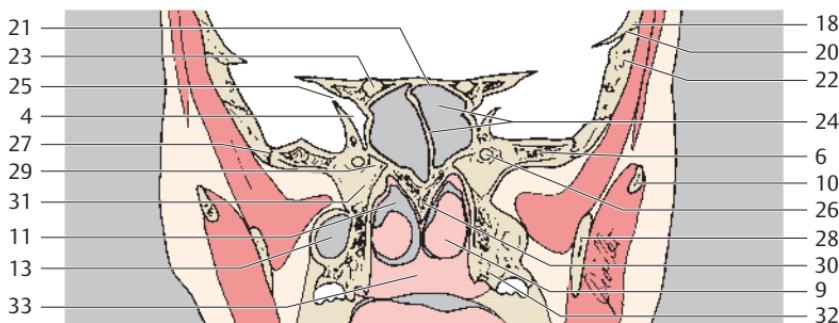
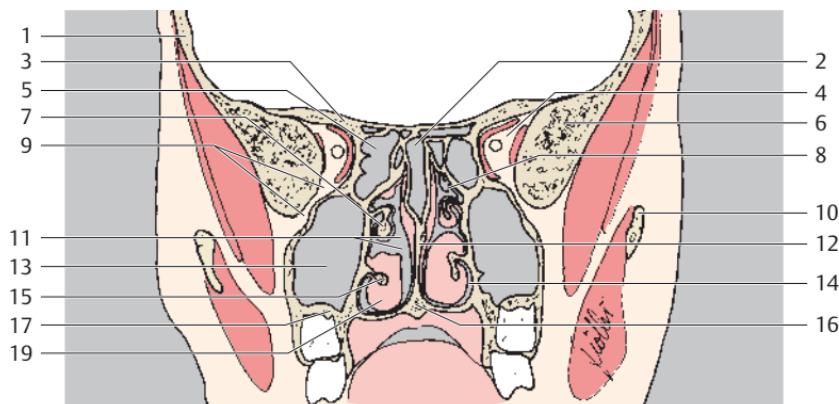
- 7 Posterior semicircular canal
- 8 Mastoid antrum
- 9 Lateral semicircular canal
- 10 Sigmoid sinus
- 11 Anterior (superior) semicircular canal
- 12 Mastoid cells



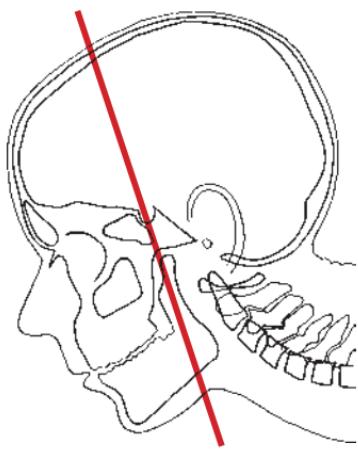


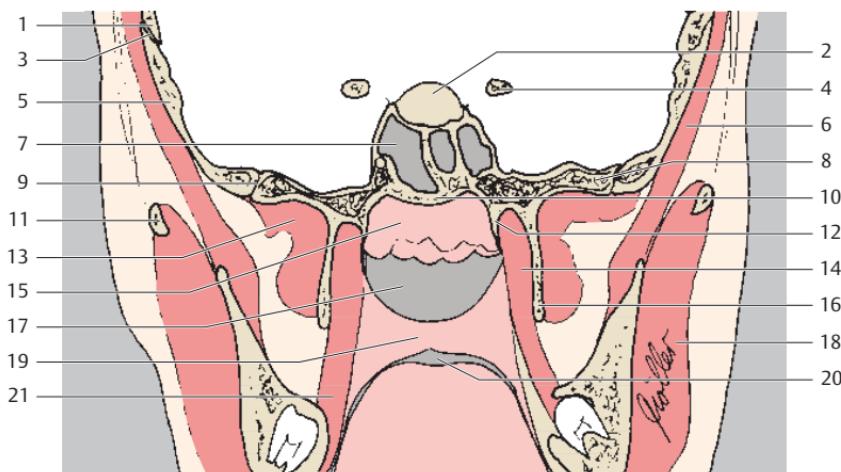
- |                             |   |
|-----------------------------|---|
| 1 Frontal bone              | 16 Alveolar process of maxilla          |
| 2 Cribriform plate          | 17 Ethmoidal notch                      |
| 3 Crista galli              | 18 Ethmoidal bone (cribriform plate)    |
| 4 Roof of orbit             | 19 Superior nasal concha                |
| 5 Frontal sinus             | 20 Frontozygomatic suture               |
| 6 Zygomatic process         | 21 Orbital plate of ethmoidal labyrinth |
| 7 Supraorbital notch        | 22 Ethmoidal cells (middle)             |
| 8 Orbital plate             | 23 Maxillary hiatus                     |
| 9 Nasal cavity              | 24 Middle nasal concha                  |
| 10 Anterior ethmoidal cells | 25 Infraorbital foramen                 |
| 11 Maxillary sinus          | 26 Middle nasal meatus                  |
| 12 Nasal septum             | 27 Uncinate process                     |
| 13 Inferior nasal concha    | 28 Hard palate                          |
| 14 Vomer                    | 29 Inferior nasal concha                |
| 15 Inferior nasal meatus    | 30 Maxilla (alveolar process)           |





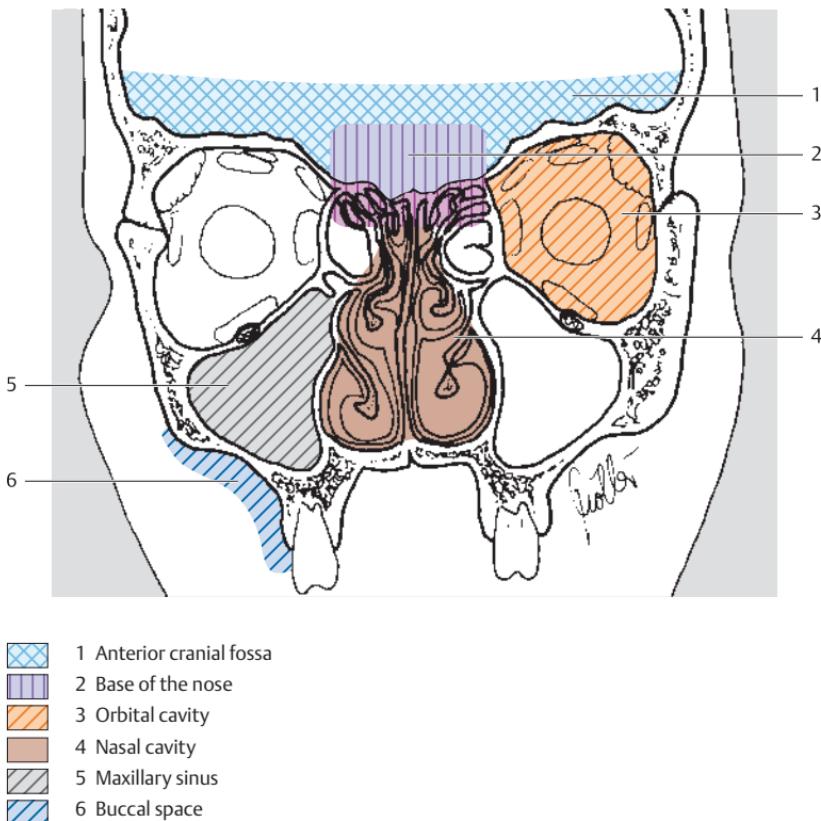
- |                                       |   |
|---------------------------------------|---|
| 1 Frontal bone                        | 18 Parietal bone                          |
| 2 Sphenoidal sinus (recess)           | 19 Inferior nasal concha (cavernous body) |
| 3 Sphenoidal bone (lesser wing)       | 20 Squamous suture                        |
| 4 Infundibulum of orbit               | 21 Sphenoid bone (roof of splenoid sinus) |
| 5 Ethmoidal cells (posterior)         | 22 Temporal bone (squamous part)          |
| 6 Sphenoidal bone (greater wing)      | 23 Optic canal                            |
| 7 Middle nasal concha                 | 24 Sphenoidal sinus with septum           |
| 8 Superior nasal concha               | 25 Superior orbital fissure               |
| 9 Inferior orbital fissure            | 26 Foramen rotundum of sphenoidal bone    |
| 10 Zygomatic bone                     | 27 Sphenosquamous suture                  |
| 11 Nasal cavity (common nasal meatus) | 28 Mandible (body and ramus)              |
| 12 Nasal septum (perpendicular plate) | 29 Pterygoid canal                        |
| 13 Maxillary sinus                    | 30 Ethmoidal bone (nasal septum)          |
| 14 Inferior nasal meatus              | 31 Pterygopalatine fossa                  |
| 15 Inferior nasal concha              | 32 Pterygoid process                      |
| 16 Palatine bone (horizontal plane)   | 33 Soft palate                            |
| 17 Maxilla (alveolar process)         |   |

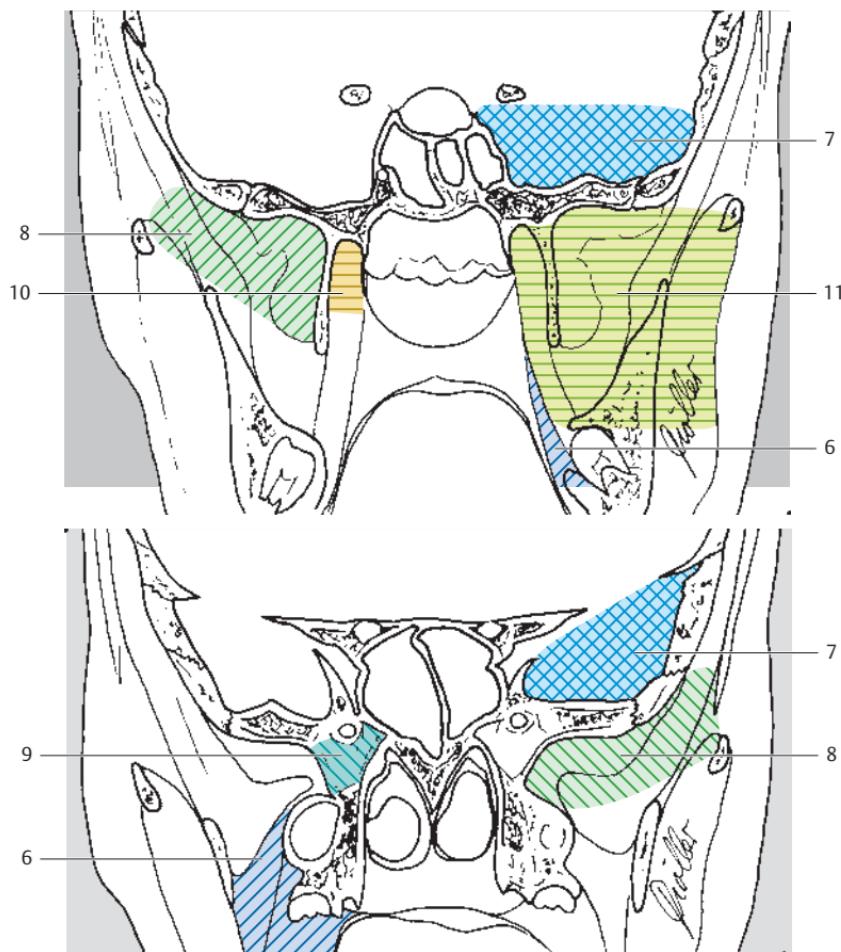




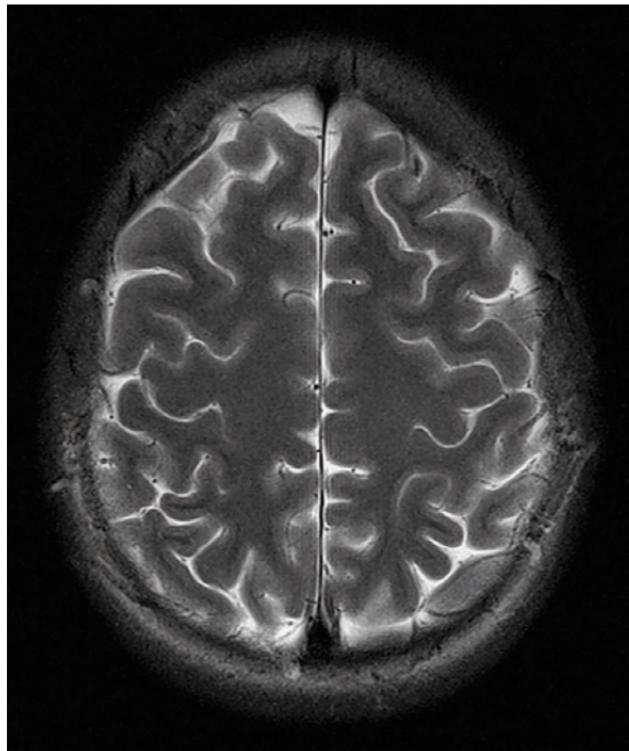
- |   |                                      |
|---|--------------------------------------|
| 1 Parietal bone                                 | 10 Sphenoidal bone                   |
| 2 Sella turcica                                 | 11 Zygomatic arch                    |
| 3 Squamous suture                               | 12 Pterygoid process (medial plate)  |
| 4 Anterior clinoid process<br>(sphenoidal bone) | 13 Lateral pterygoid muscle          |
| 5 Temporal bone (squamous<br>part)              | 14 Pterygoid fossa                   |
| 6 Temporal muscle                               | 15 Pharyngeal tonsil                 |
| 7 Sphenoidal sinus                              | 16 Pterygoid process (lateral plate) |
| 8 Temporal bone (with articular<br>tubercle)    | 17 Nasopharynx                       |
| 9 Sphenosquamous suture                         | 18 Masseter muscle                   |
|   | 19 Soft palate                       |
|   | 20 Oropharynx (isthmus of fauces)    |
|   | 21 Medial pterygoid muscle           |

## 42 Spaces in the Facial Skeleton

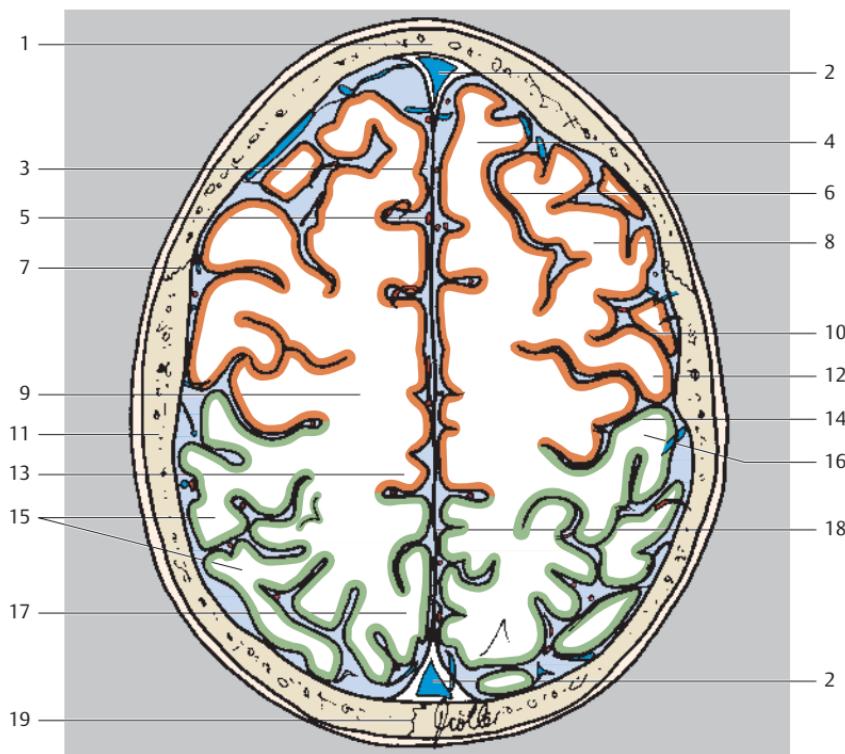




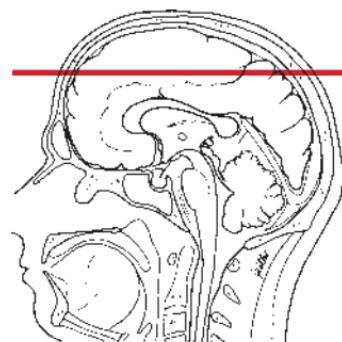
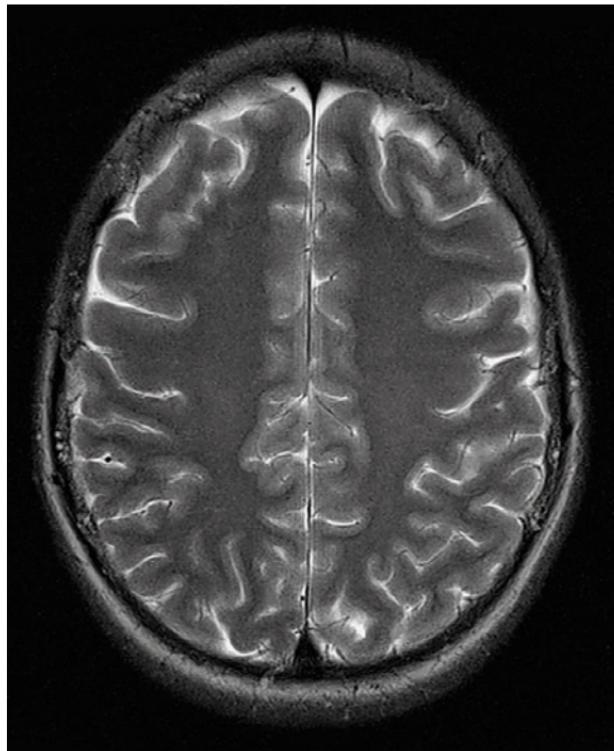
- |  |                         |
|--|-------------------------|
|  | 6 Buccal space          |
|  | 7 Middle cranial fossa  |
|  | 8 Infratemporal fossa   |
|  | 9 Pterygopalatine fossa |
|  | 10 Pterygoid fossa      |
|  | 11 Masticatory space    |



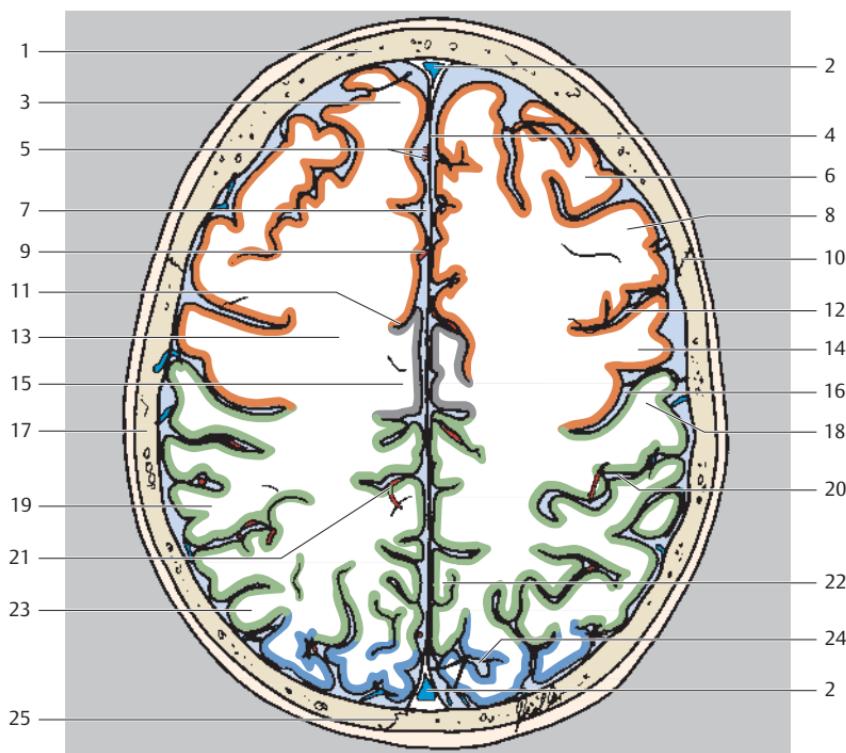
Frontal lobe  
Parietal lobe



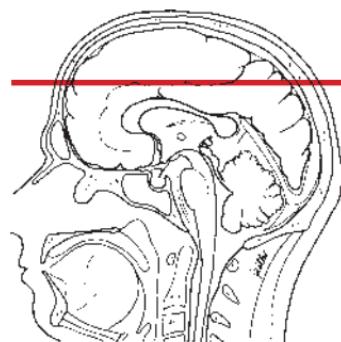
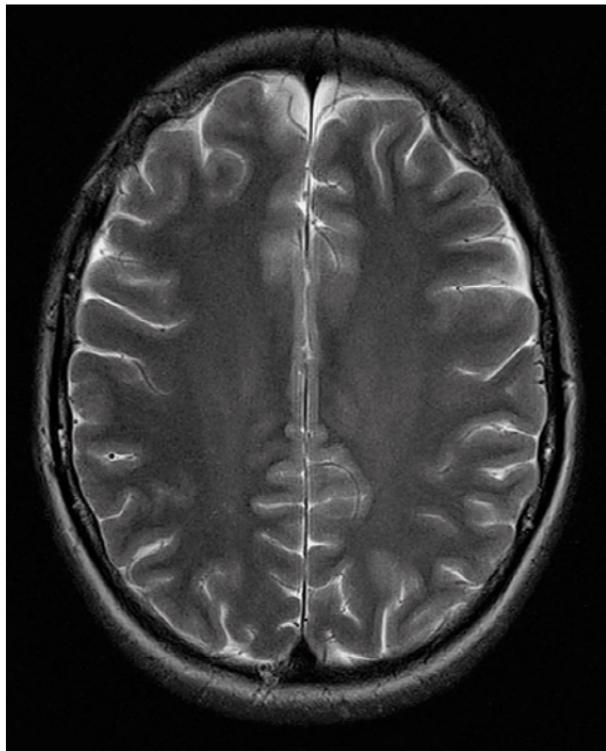
- |   |                             |
|---|-----------------------------|
| 1 Frontal bone                                | 10 Precentral sulcus        |
| 2 Superior sagittal sinus                     | 11 Parietal bone            |
| 3 Longitudinal cerebral fissure               | 12 Precentral gyrus         |
| 4 Superior frontal gyrus                      | 13 Paracentral lobule       |
| 5 Supratrochlear artery (postero-medial)      | 14 Central sulcus           |
| 6 Superior frontal sulcus                     | 15 Superior parietal lobule |
| 7 Coronal suture                              | 16 Postcentral gyrus        |
| 8 Middle frontal gyrus                        | 17 Precuneus                |
| 9 Cerebral white matter<br>(semitoval center) | 18 Falx cerebri             |
|   | 19 Sagittal suture          |



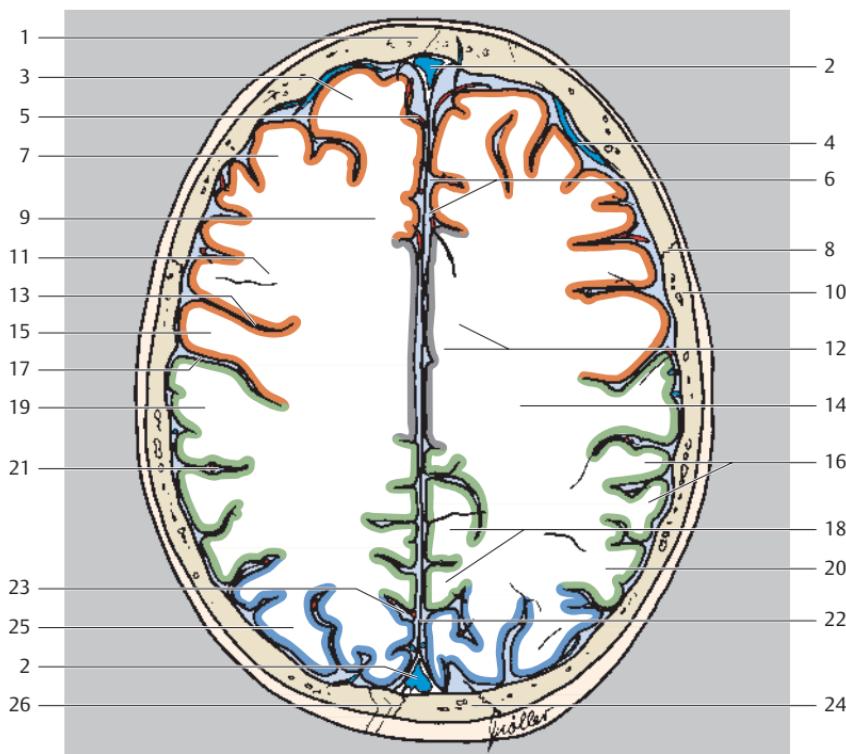
- Frontal lobe
- Parietal lobe
- Occipital lobe



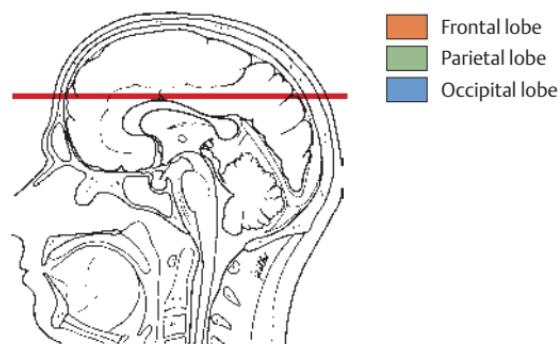
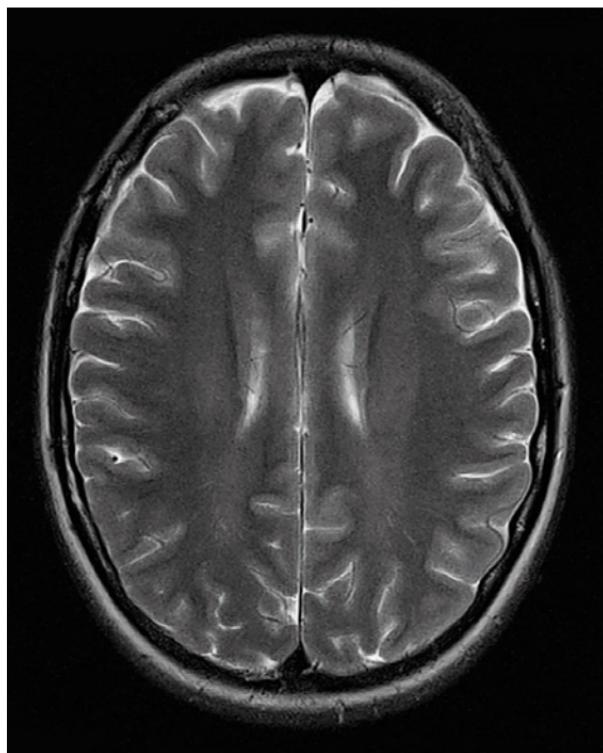
- |  |  |
|--|--|
| 1 Frontal bone                                 | 14 Precentral gyrus                                  |
| 2 Superior sagittal sinus                      | 15 Cingulate gyrus and cingulum                      |
| 3 Superior frontal gyrus                       | 16 Central sulcus (fissure of Rolando)               |
| 4 Falx cerebri                                 | 17 Parietal bone                                     |
| 5 Supratrochlear artery<br>(mediomedial)       | 18 Postcentral gyrus                                 |
| 6 Middle frontal gyrus                         | 19 Supramarginal gyrus                               |
| 7 Longitudinal cerebral fissure                | 20 Postcentral sulcus                                |
| 8 Inferior frontal gyrus                       | 21 Paracentral branches of<br>callosomarginal artery |
| 9 Callosomarginal artery                       | 22 Precuneus   |
| 10 Coronal suture                              | 23 Angular gyrus                                     |
| 11 Cingulate sulcus                            | 24 Parieto-occipital sulcus                          |
| 12 Precentral sulcus                           | 25 Sagittal suture                                   |
| 13 Cerebral white matter<br>(semitotal center) |  |

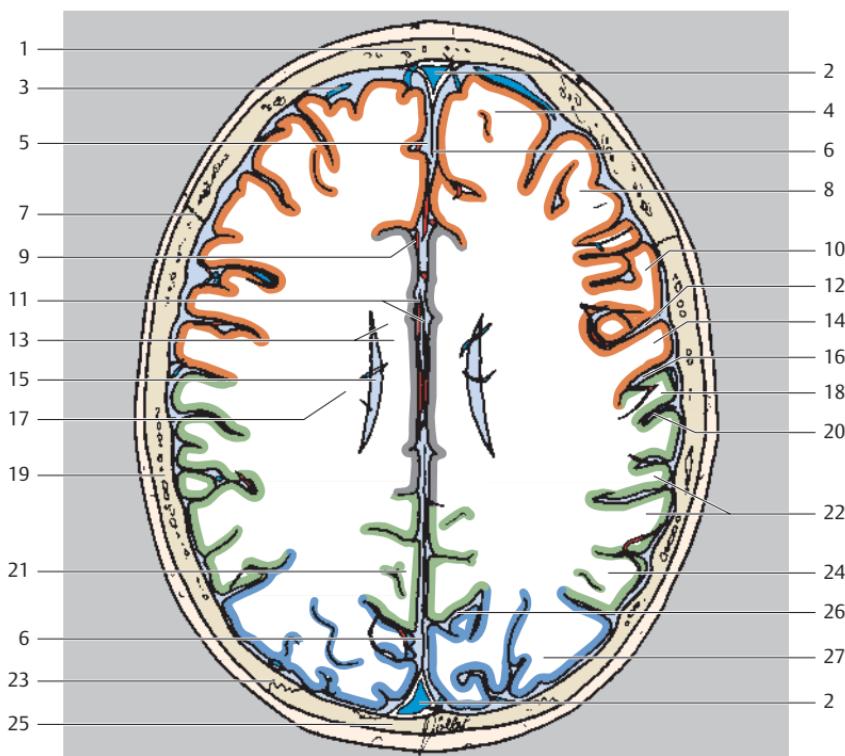


- █ Frontal lobe
- █ Parietal lobe
- █ Occipital lobe

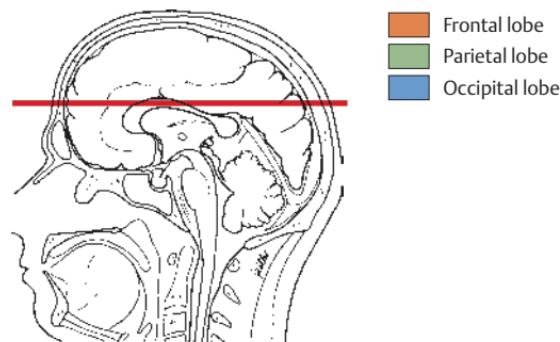
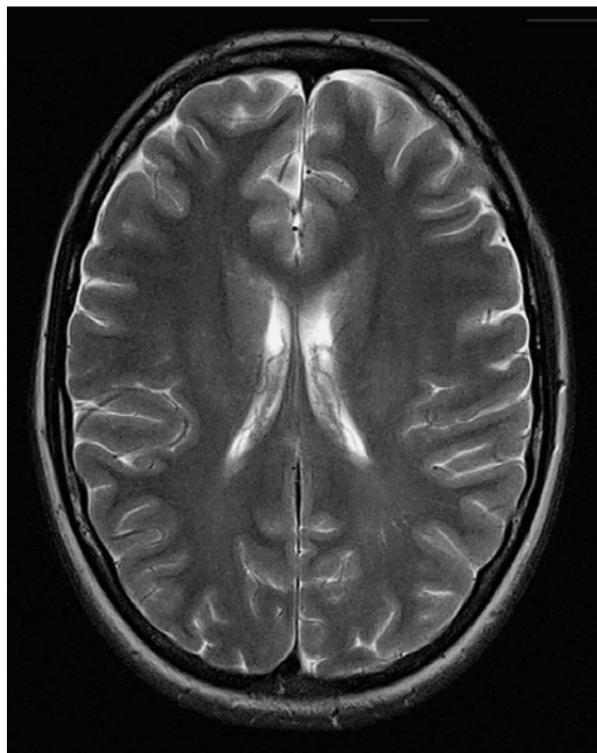


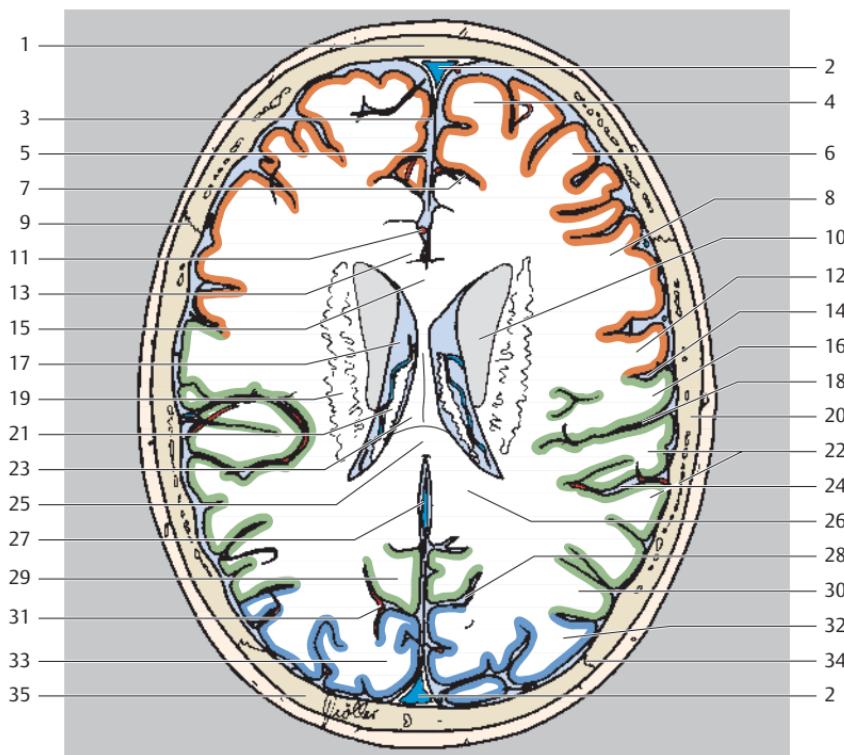
- 1 Frontal bone  
 2 Superior sagittal sinus  
 3 Superior frontal gyrus  
 4 Superior cerebral vein  
 5 Supratrochlear (mediomedial) artery  
 6 Longitudinal cerebral fissure  
 7 Middle frontal gyrus  
 8 Coronal suture  
 9 Callosomarginal artery  
 10 Parietal bone  
 11 Inferior frontal gyrus  
 12 Cingulate gyrus and cingulum  
 13 Precentral sulcus  
 14 Cerebral white matter (semioval center)  
 15 Precentral gyrus  
 16 Supramarginal gyrus  
 17 Central sulcus  
 18 Precuneus  
 19 Postcentral gyrus  
 20 Angular gyrus  
 21 Postcentral sulcus  
 22 Falx cerebri  
 23 Parieto-occipital sulcus  
 24 Occipital bone  
 25 Occipital gyri  
 26 Lambda suture



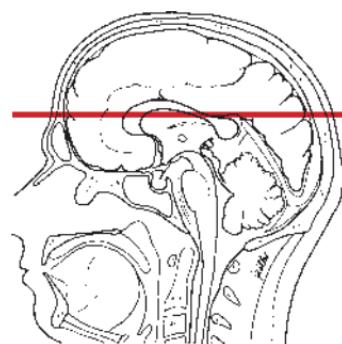
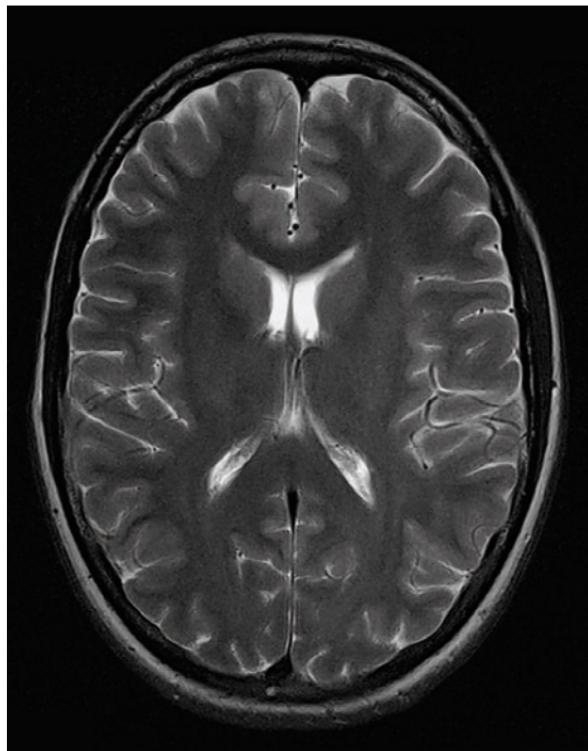


- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 1 Frontal bone                  | 15 Lateral ventricle (central part) |
| 2 Superior sagittal sinus       | 16 Central sulcus                   |
| 3 Superior cerebral vein        | 17 Corona radiata                   |
| 4 Superior frontal gyrus        | 18 Postcentral gyrus                |
| 5 Longitudinal cerebral fissure | 19 Parietal bone                    |
| 6 Falx cerebri                  | 20 Postcentral sulcus               |
| 7 Coronal suture                | 21 Precuneus                        |
| 8 Middle frontal gyrus          | 22 Supramarginal gyrus              |
| 9 Callosomarginal artery        | 23 Lambdoid suture                  |
| 10 Inferior frontal gyrus       | 24 Angular gyrus                    |
| 11 Pericallosal artery          | 25 Occipital bone                   |
| 12 Precentral sulcus            | 26 Parieto-occipital sulcus         |
| 13 Cingulate gyrus and cingulum | 27 Occipital gyri                   |
| 14 Precentral gyrus             |                                     |



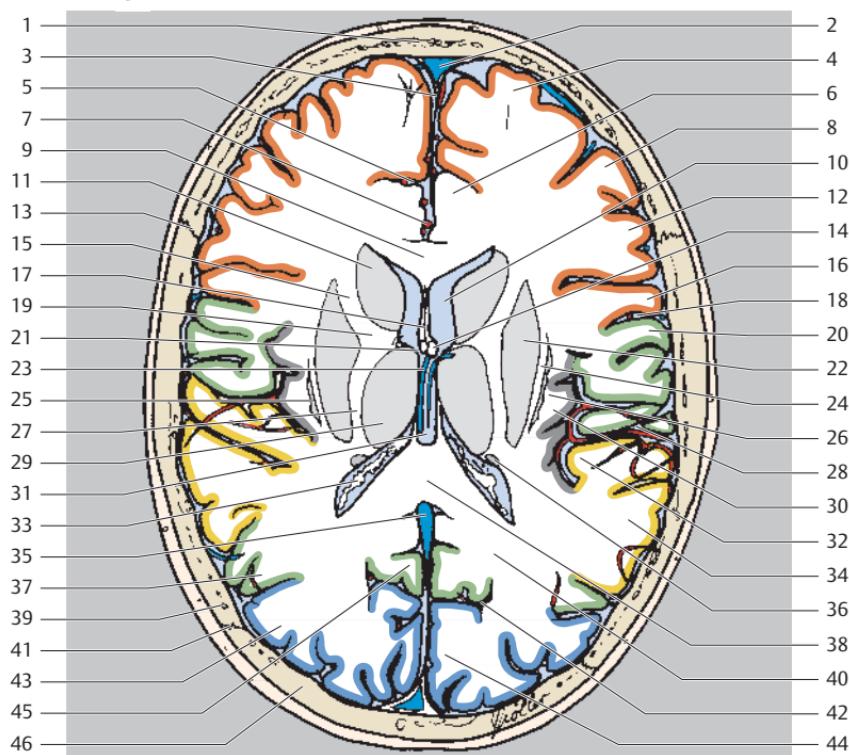


- |                            |                                      |
|----------------------------|--------------------------------------|
| 1 Frontal bone             | 19 Corona radiata                    |
| 2 Superior sagittal sinus  | 20 Parietal bone                     |
| 3 Falx cerebri             | 21 Choroid plexus                    |
| 4 Superior frontal gyrus   | 22 Supramarginal gyrus               |
| 5 Longitudinal cerebral    | 23 Fornix                            |
| 6 Middle frontal gyrus     | 24 Lateral sulcus (posterior ramus)  |
| 7 Cingulate sulcus         | 25 Corpus callosum, splenium         |
| 8 Inferior frontal gyrus   | 26 Major forceps (occipital forceps) |
| 9 Coronal suture           | 27 Inferior sagittal sinus           |
| 10 Head of caudate nucleus | 28 Parieto-occipital sulcus          |
| 11 Pericallosal artery     | 29 Precuneus                         |
| 12 Precentral gyrus        | 30 Angular gyrus                     |
| 13 Cingulate gyrus         | 31 Parieto-occipital artery          |
| 14 Central sulcus          | 32 Occipital gyri                    |
| 15 Corpus callosum (genu)  | 33 Cuneus                            |
| 16 Postcentral gyrus       | 34 Lambdoid suture                   |
| 17 Lateral ventricle       | 35 Occipital bone                    |
| 18 Lateral sulcus          |                                      |

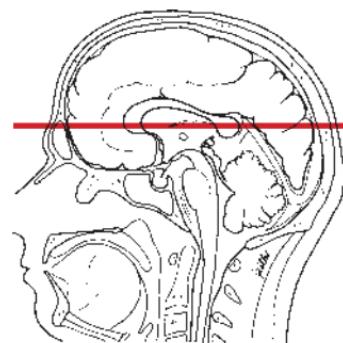
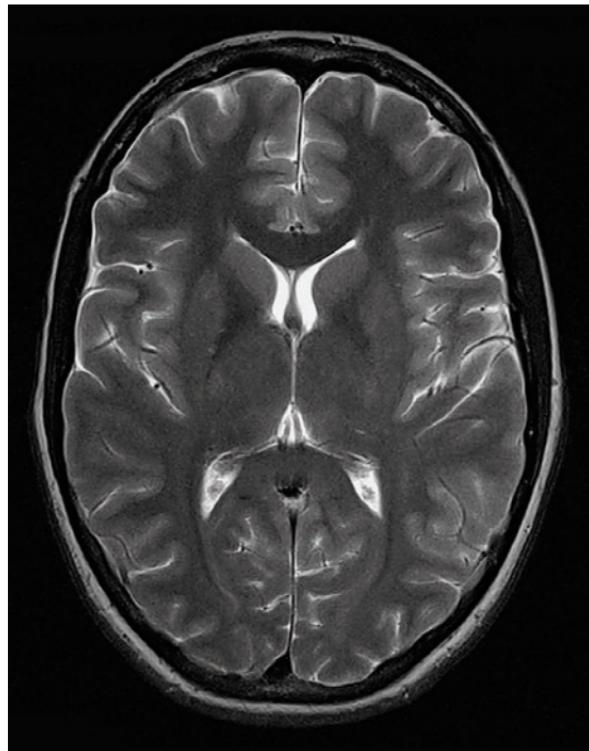


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe

- 1 Frontal bone
- 2 Superior sagittal sinus
- 3 Falx cerebri
- 4 Superior frontal gyrus
- 5 Cingulate sulcus
- 6 Cingulate gyrus
- 7 Pericallosal artery
- 8 Middle frontal gyrus
- 9 Corpus callosum (genu)
- 10 Lateral ventricle (frontal horn)
- 11 Head of caudate nucleus
- 12 Inferior frontal gyrus

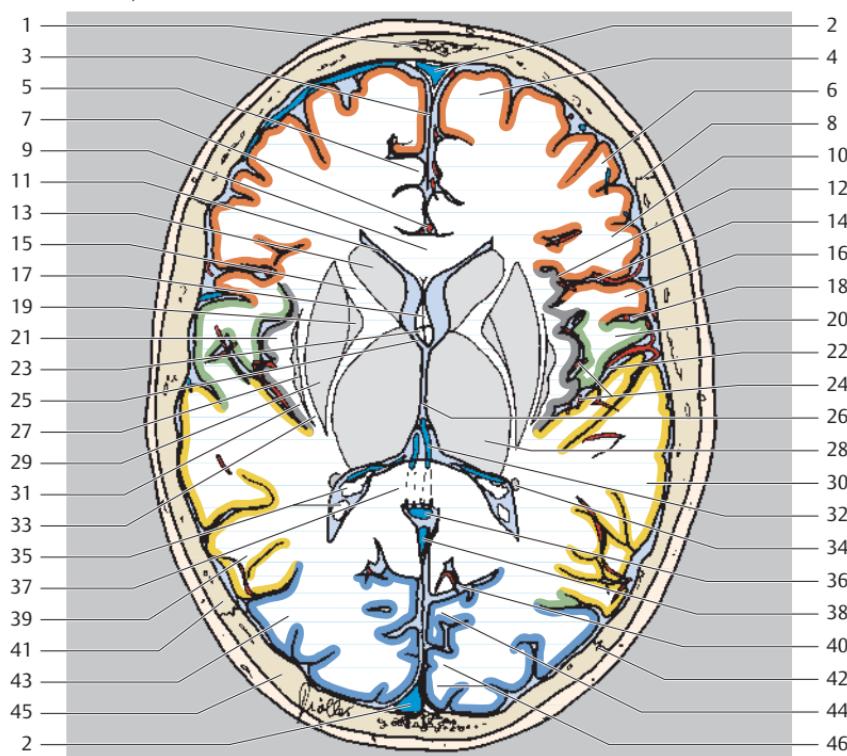


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|--|---|
| 13 Coronal suture                              | 30 Insula   |
| 14 Fornix (column)                             | 31 Third ventricle (suprapineal recess)                             |
| 15 Internal capsule (anterior limb)            | 32 Transverse temporal gyrus  |
| 16 Precentral gyrus                            | 33 Choroid plexus in trigone of posterior horn of lateral ventricle |
| 17 Cave of septum pellucidum                   | 34 Superior temporal gyrus  |
| 18 Central sulcus                              | 35 Great cerebral vein  |
| 19 Internal capsule (genu)                     | 36 Tail of caudate nucleus  |
| 20 Postcentral gyrus                           | 37 Angular gyrus  |
| 21 Interventricular foramen (foramen of Monro) | 38 Corpus callosum, splenium  |
| 22 Putamen                                     | 39 Parietal bone  |
| 23 Internal cerebral vein                      | 40 Major forceps (occipital forceps)                                |
| 24 External capsule                            | 41 Lambdoid suture  |
| 25 Claustrum                                   | 42 Parieto-occipital sulcus   |
| 26 Extreme capsule                             | 43 Occipital gyri   |
| 27 Internal capsule (posterior limb)           | 44 Cuneus   |
| 28 Lateral sulcus                              | 45 Precuneus  |
| 29 Thalamus                                    | 46 Occipital bone   |

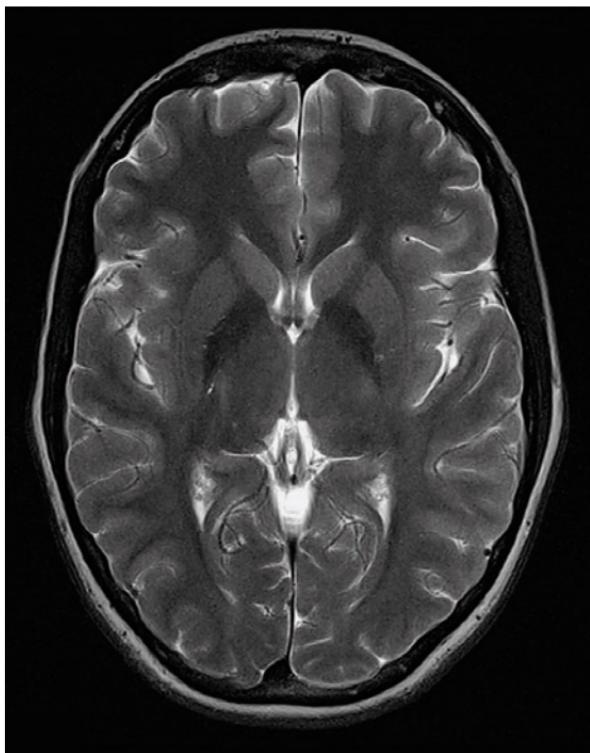


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe

- |                           |                           |
|---------------------------|---------------------------|
| 1 Frontal bone            | 6 Middle frontal gyrus    |
| 2 Superior sagittal sinus | 7 Pericallosal artery     |
| 3 Falk cerebri            | 8 Coronal suture          |
| 4 Superior frontal gyrus  | 9 Corpus callosum (genu)  |
| 5 Cingulate gyrus         | 10 Inferior frontal gyrus |

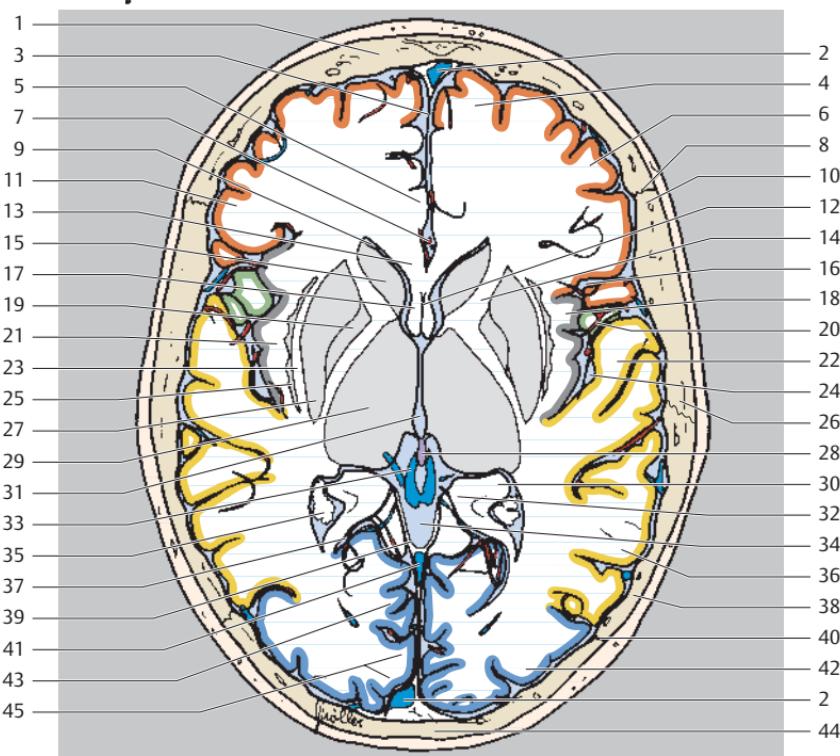


- |  |   |
|--|---|
| 1 Lateral ventricle (frontal horn)                     | 29 Putamen                                |
| 2 Circular sulcus of insula                            | 30 Superior temporal gyrus                |
| 3 Head of caudate nucleus                              | 31 Extreme capsule                        |
| 4 Lateral sulcus                                       | 32 Internal cerebral vein                 |
| 5 Internal capsule (anterior limb)                     | 33 External capsule                       |
| 6 Precentral gyrus                                     | 34 Tail of caudate nucleus                |
| 7 Cave of septum pellucidum                            | 35 Choroid plexus in trigone of posterior |
| 8 Central sulcus                                       | horn of lateral ventricle                 |
| 9 Globus pallidus                                      | 36 Great cerebral vein                    |
| 10 Postcentral gyrus                                   | 37 Corpus callosum, splenium              |
| 11 Insula  | 38 Straight sinus                         |
| 12 Cistern of lateral cerebral fossa (insular cistern) | 39 Middle temporal gyrus                  |
| 13 Fornix (column)                                     | 40 Parieto-occipital sulcus               |
| 14 Insular arteries                                    | 41 Parietal bone                          |
| 15 Interventricular foramen (foramen of Monro)         | 42 Lambdoid suture                        |
| 16 Third ventricle                                     | 43 Occipital gyri                         |
| 17 Claustrum   | 44 Cuneus                                 |
| 18 Thalamus  | 45 Occipital bone                         |
|  | 46 Striate cortex                         |

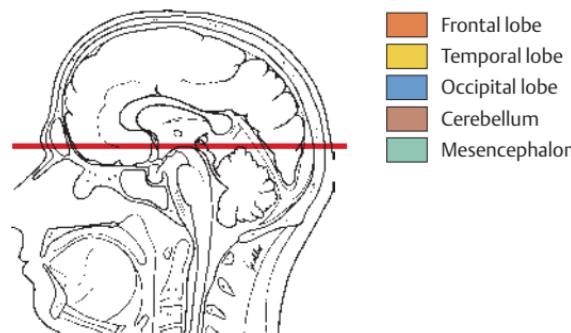
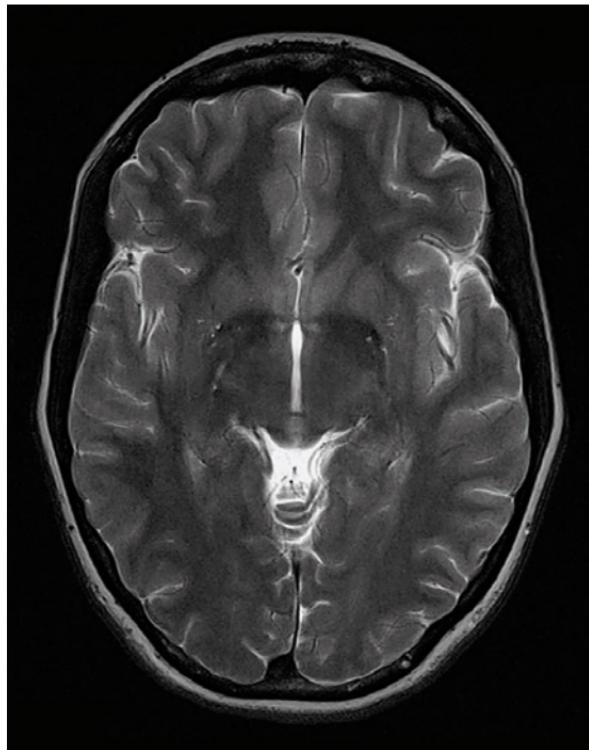


- █ Frontal lobe
- █ Temporal lobe
- █ Parietal lobe
- █ Occipital lobe

- |   |                         |   |                                     |
|---|-------------------------|---|-------------------------------------|
| 1 | Frontal bone            | 6 | Middle frontal gyrus                |
| 2 | Superior sagittal sinus | 7 | Anterior cerebral artery            |
| 3 | Falx cerebri            | 8 | Coronal suture                      |
| 4 | Superior frontal gyrus  | 9 | Lateral ventricle<br>(frontal horn) |
| 5 | Cingulate gyrus         |   |                                     |

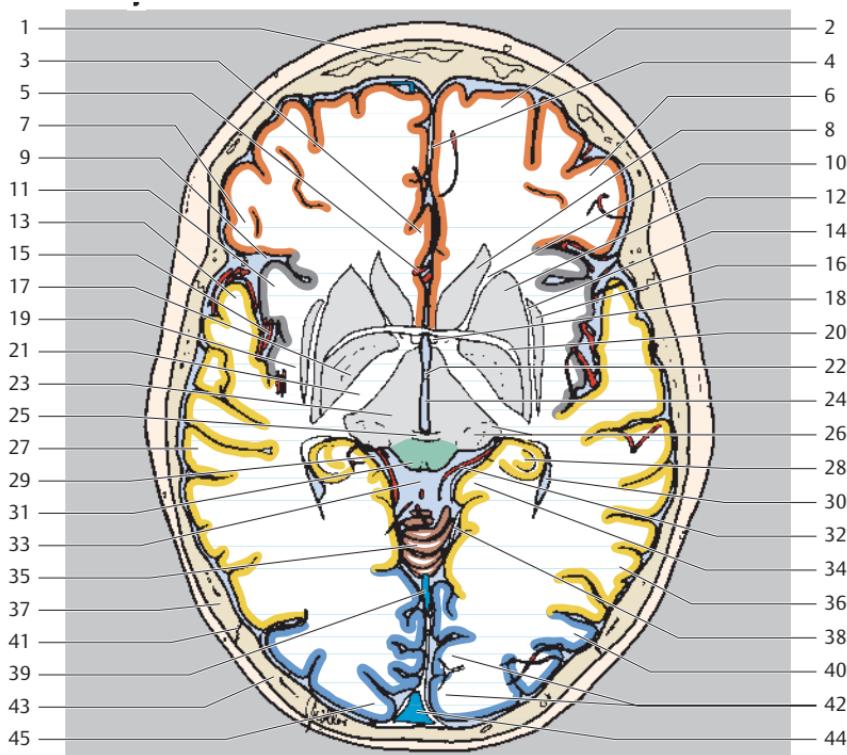


- |                                     |   |
|-------------------------------------|---|
| 10 Parietal bone                    | 29 Thalamus   |
| 11 Inferior frontal gyrus           | 30 Hippocampus  |
| 12 Cave of septum pellucidum        | 31 Third ventricle  |
| 13 Corpus callosum                  | 32 Uncus of parahippocampal gyrus                                   |
| 14 Internal capsule (anterior limb) | 33 Internal cerebral vein and great cerebral vein                   |
| 15 Head of caudate nucleus          | 34 Superior cerebellar cistern                                      |
| 16 Lateral sulcus                   | 35 Choroid plexus in trigone of posterior horn of lateral ventricle |
| 17 Fornix                           | 36 Middle temporal gyrus  |
| 18 Insula                           | 37 Parieto-occipital artery   |
| 19 Pallidum                         | 38 Parietal bone  |
| 20 Insular arteries                 | 39 Tentorium cerebelli  |
| 21 Extreme capsule                  | 40 Lambdoid suture  |
| 22 Superior temporal gyrus          | 41 Straight sinus   |
| 23 External capsule                 | 42 Occipital gyri   |
| 24 Insular cistern                  | 43 Cuneus   |
| 25 Claustrum                        | 44 Occipital bone   |
| 26 Temporal bone                    | 45 Striate cortex   |
| 27 Putamen                          |   |
| 28 Epiphysis of cerebrum            |   |

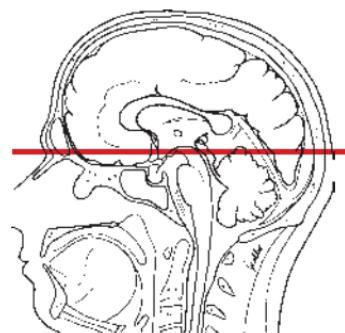
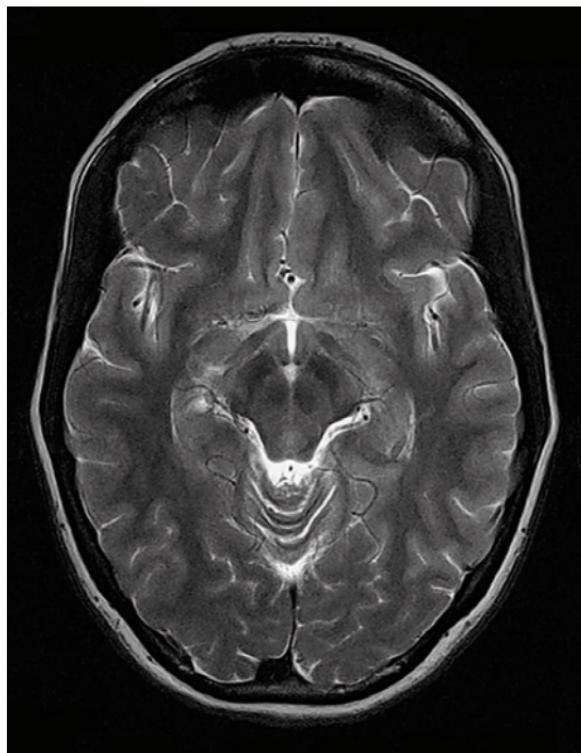


- Frontal lobe
- Temporal lobe
- Occipital lobe
- Cerebellum
- Mesencephalon

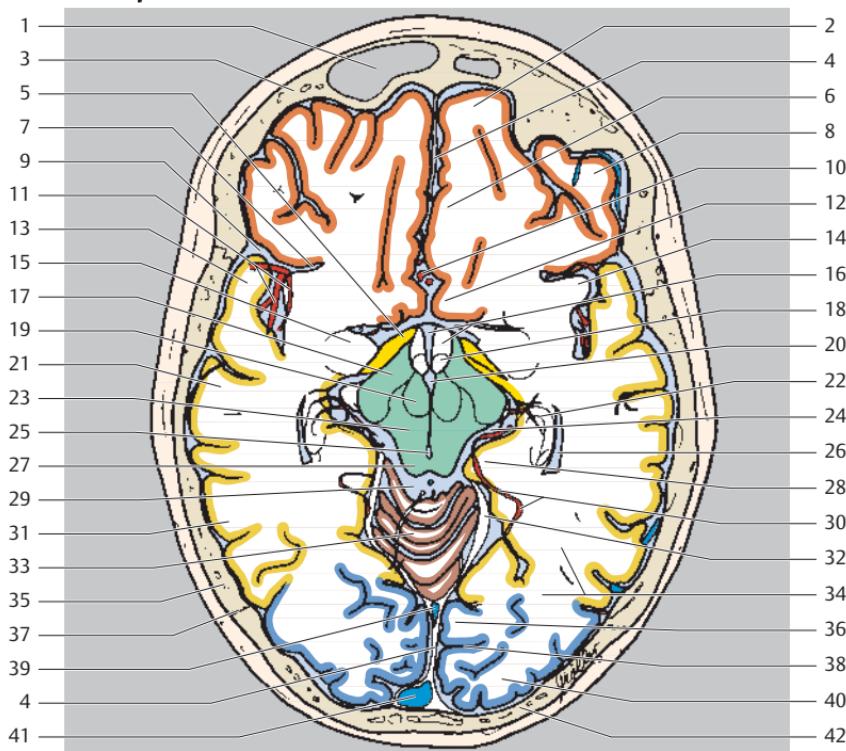
- |                            |                                     |
|----------------------------|-------------------------------------|
| 1 Frontal bone             | 6 Middle frontal gyrus              |
| 2 Superior frontal gyrus   | 7 Inferior frontal gyrus            |
| 3 Cingulate gyrus          | 8 Head of caudate nucleus           |
| 4 Falx cerebri             | 9 Lateral sulcus                    |
| 5 Anterior cerebral artery | 10 Internal capsule (anterior limb) |



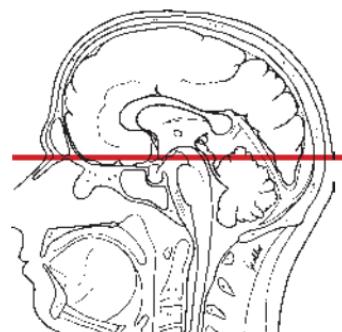
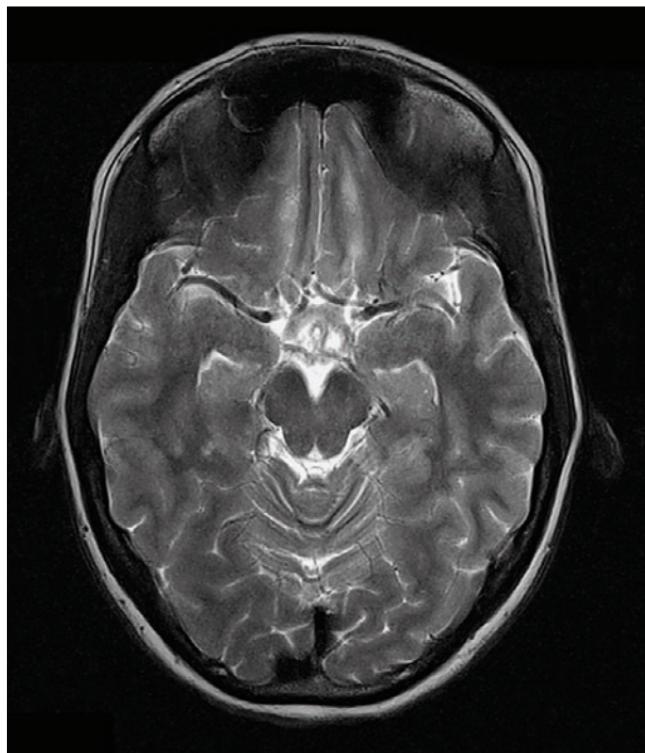
- |  |                                       |
|--|---------------------------------------|
| 11 Insula  | 27 Middle temporal gyrus              |
| 12 Putamen                                       | 28 Hippocampus                        |
| 13 Superior temporal gyrus                       | 29 Ambient cistern                    |
| 14 External capsule                              | 30 Lateral ventricle (temporal horn)  |
| 15 Insular arteries                              | 31 inferior colliculus                |
| 16 Claustrum                                     | 32 Basal vein                         |
| 17 Globus pallidus (lateral and medial segments) | 33 Quadrigeminal cistern              |
| 18 Fornix  | 34 Uncus of parahippocampal gyrus     |
| 19 Extreme capsule                               | 35 Vermis of superior cerebellar lobe |
| 20 Anterior commissure                           | 36 Inferior temporal gyrus            |
| 21 Internal capsule (posterior limb)             | 37 Temporal bone                      |
| 22 Interthalamic adhesion                        | 38 Tentorium cerebelli                |
| 23 Thalamus                                      | 39 Straight sinus                     |
| 24 Third ventricle                               | 40 Occipital gyri                     |
| 25 Posterior commissure                          | 41 Lambdoid suture                    |
| 26 Medial and lateral geniculate body            | 42 Striate cortex                     |
|  | 43 Occipital bone                     |
|  | 44 Superior sagittal sinus            |
|  | 45 Occipital pole                     |



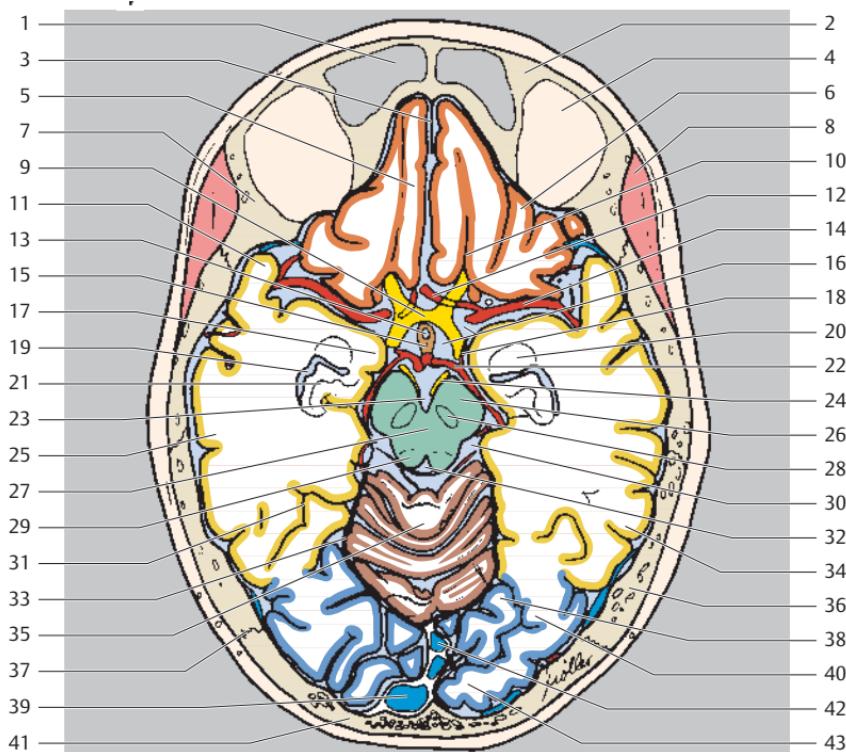
- █ Frontal lobe
- █ Temporal lobe
- █ Occipital lobe
- █ Cerebellum
- █ Mesencephalon



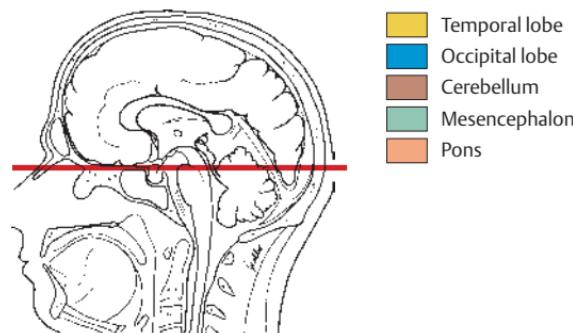
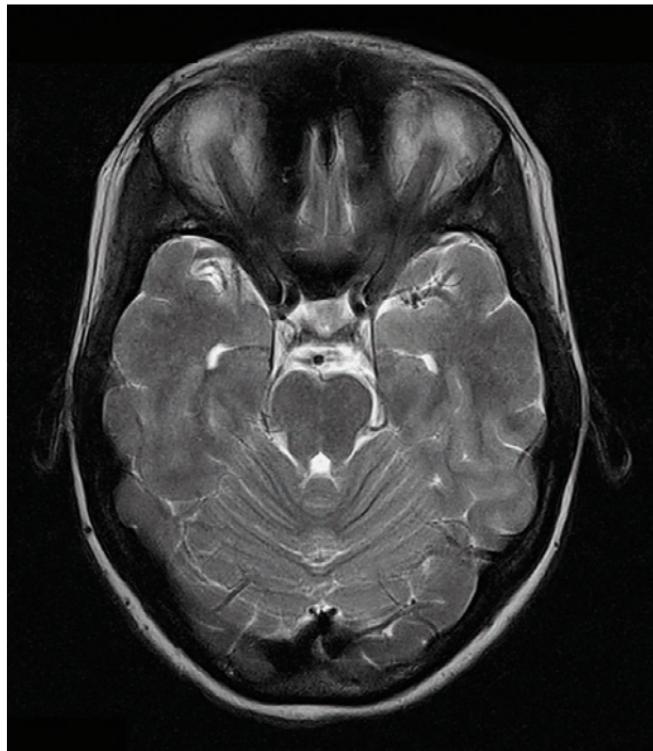
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|----|---|----|-------------------------------------|
| 1  | Frontal sinus   | 21 | Middle temporal gyrus               |
| 2  | Superior frontal gyrus                                | 22 | Hippocampus                         |
| 3  | Frontal bone  | 23 | Tegmentum of midbrain               |
| 4  | Falx cerebri  | 24 | Ambient cistern                     |
| 5  | Optic tract   | 25 | Aqueduct of mesencephalon           |
| 6  | Cingulate gyrus                                       | 26 | Lateral ventricle (temporal horn)   |
| 7  | Circular sulcus of insula                             | 27 | Inferior colliculus                 |
| 8  | Middle frontal gyrus                                  | 28 | Uncus of parahippocampal gyrus      |
| 9  | Lateral sulcus  | 29 | Quadrigejimal cistern               |
| 10 | Anterior cerebral artery                              | 30 | Posterior cerebral artery           |
| 11 | Insular arteries                                      | 31 | Inferior temporal gyrus             |
| 12 | Subcallosal cortex                                    | 32 | Tentorium cerebelli                 |
| 13 | Superior temporal gyrus                               | 33 | Anterior cerebellar lobule (Vermis) |
| 14 | Insula  | 34 | Optic radiation                     |
| 15 | Amygdaloid body                                       | 35 | Temporal bone                       |
| 16 | Third ventricle<br>(optic recess)<br>and hypothalamus | 36 | Striate cortex                      |
| 17 | Cerebral peduncle                                     | 37 | Lambdoid suture                     |
| 18 | Mammillary body                                       | 38 | Calcarine sulcus                    |
| 19 | Red nucleus   | 39 | Straight sinus                      |
| 20 | Interpeduncular fossa                                 | 40 | Occipital pole                      |
| 41 | Superior sagittal sinus                               | 42 | Occipital bone                      |

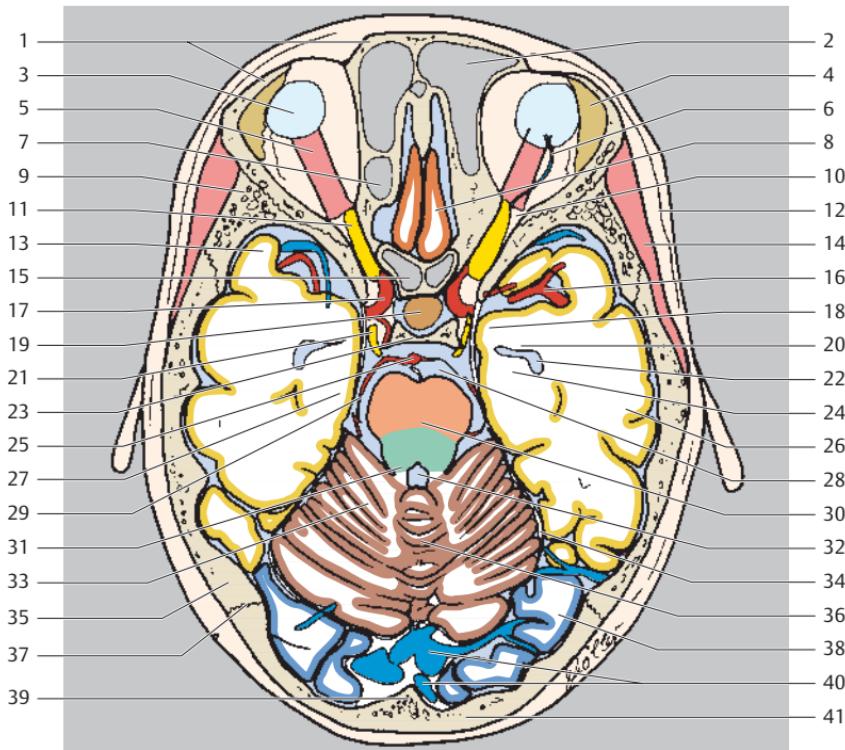


- Frontal lobe
- Temporal lobe
- Cerebellum
- Mesencephalon



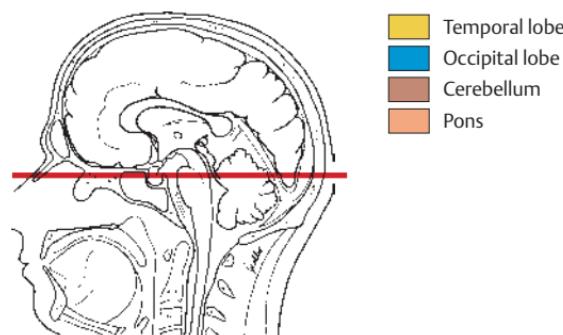
- |    |                                   |    |                                |
|----|-----------------------------------|----|--------------------------------|
| 1  | Frontal sinus                     | 21 | Hippocampus                    |
| 2  | Frontal bone                      | 22 | Posterior cerebral artery      |
| 3  | Falx cerebri                      | 23 | Interpeduncular cistern        |
| 4  | Orbital roof                      | 24 | Oculomotor nerve (III)         |
| 5  | Straight gyrus                    | 25 | Middle temporal gyrus          |
| 6  | Orbital gyrus                     | 26 | Cerebral peduncle              |
| 7  | Sphenoidal bone                   | 27 | Tegmentum of midbrain          |
| 8  | Temporal muscle                   | 28 | Substantia nigra               |
| 9  | Optic chiasm                      | 29 | Inferior colliculus            |
| 10 | Olfactory sulcus                  | 30 | Ambient cistern                |
| 11 | Superior temporal gyrus           | 31 | Collateral sulcus              |
| 12 | Anterior cerebral artery          | 32 | Aqueduct of midbrain           |
| 13 | Infundibular recess               | 33 | Tentorium cerebelli            |
| 14 | Middle cerebral artery            | 34 | Inferior temporal gyrus        |
| 15 | Hypothalamus                      | 35 | Anterior cerebellar lobulus    |
| 16 | Chiasmatic cistern                | 36 | Temporal bone                  |
| 17 | Uncus of parahippocampal gyrus    | 37 | Lambdoid suture                |
| 18 | Posterior communicating artery    | 38 | Medial occipitotemporal gyrus  |
| 19 | Lateral ventricle (temporal horn) | 39 | Superior sagittal sinus        |
|    |                                   | 40 | Lateral occipitotemporal gyrus |
|    |                                   | 41 | Occipital bone                 |
|    |                                   | 42 | Straight sinus                 |

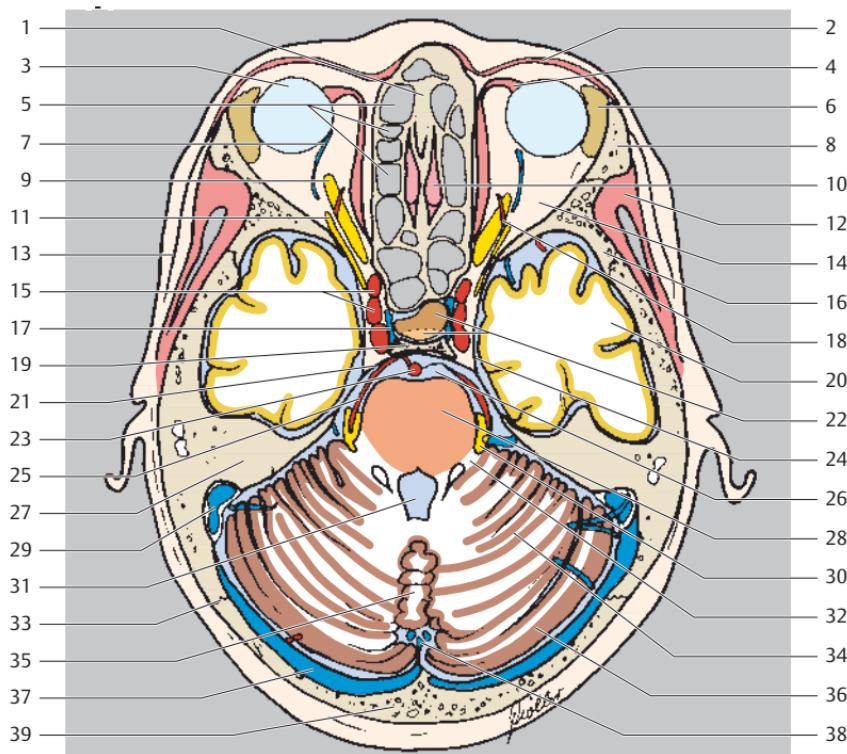




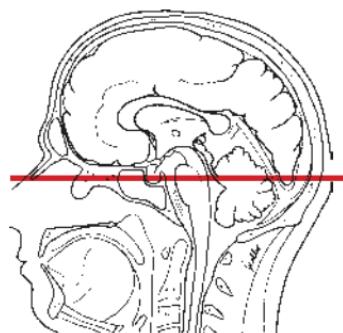
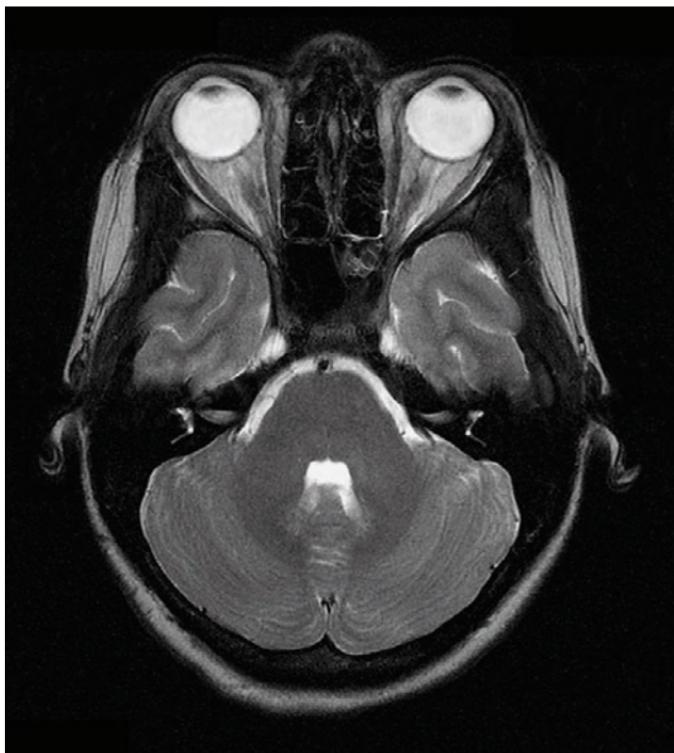
- Frontal bone
- Frontal sinus
- Eyeball
- Lacrimal gland
- Superior rectus muscle
- Ophthalmic vein
- Ethmoidal cells
- Straight gyrus
- Sphenoidal bone
- Superior orbital fissure
- Optic nerve
- Temporal parietal muscle
- Superior temporal gyrus
- Temporal muscle
- Sphenoidal sinus
- Middle cerebral artery
- Internal carotid artery
- Uncus of parahippocampal gyrus
- Pituitary gland
- Amygdaloid body

- Abducent nerve
- Lateral ventricle (temporal horn)
- Dorsum sellae
- Hippocampus
- Basilar artery
- Middle temporal gyrus
- Parahippocampal gyrus
- Preopticine cistern
- Posterior cerebral artery
- Pons
- Superior cerebellar peduncle
- Fourth ventricle
- Anterior lobe of cerebellum
- Tentorium cerebelli
- Temporal bone
- Vermis of cerebellum
- Lambdoid suture
- Occipital gyri
- Internal occipital protuberance
- Confluence of sinuses
- Occipital bone

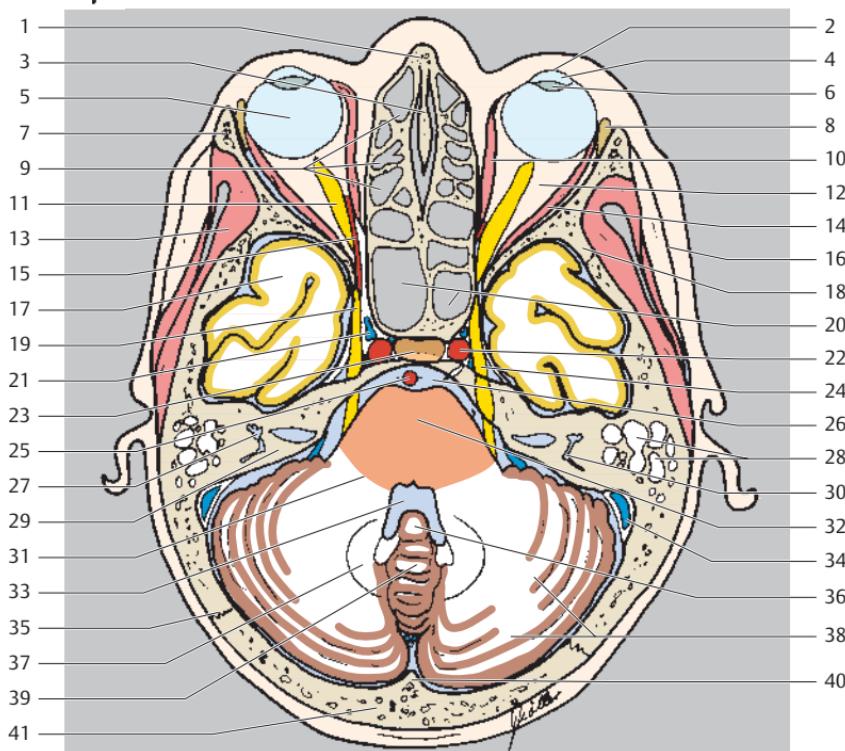




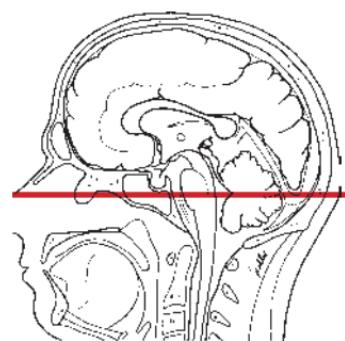
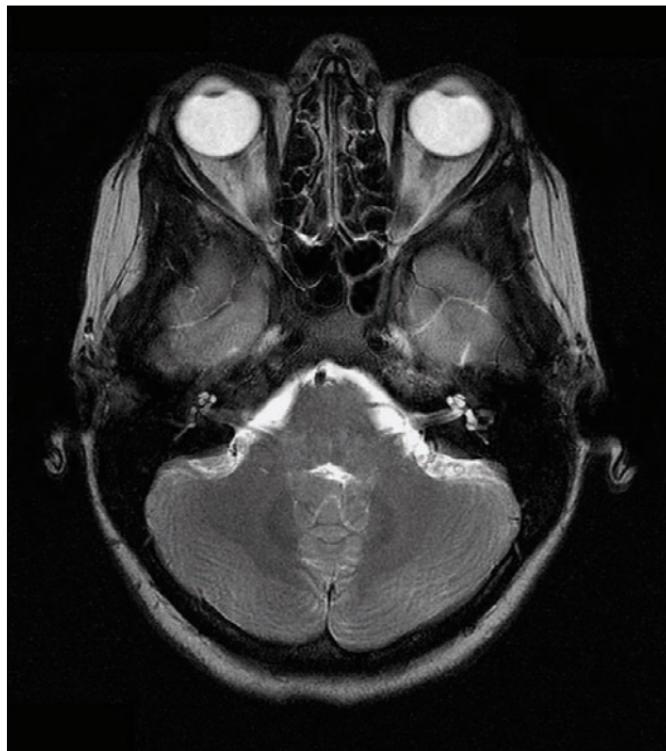
- |  |  |
|--|--|
| 1 Ethmoidal bone                                     | 20 Inferior temporal gyrus                               |
| 2 Orbicularis oris muscle and occipitofrontal muscle | 21 Posterior petroclinoid ligament                       |
| 3 Eyeball  | 22 Pituitary gland (neurohypophysis and adenohypophysis) |
| 4 Medial rectus muscle                               | 23 Basilar artery  |
| 5 Ethmoidal cells                                    | 24 Anterior petroclinoid ligament                        |
| 6 Lacrimal gland                                     | 25 Posterior cerebral artery                             |
| 7 Superior ophthalmic vein                           | 26 Preopticine cistern                                   |
| 8 Zygomatic bone                                     | 27 Petrous part of temporal bone                         |
| 9 Optic nerve  | 28 Pons  |
| 10 Olfactory bulb                                    | 29 Sigmoid sinus   |
| 11 Oculomotor (III) and abducent (VI) nerves         | 30 Trigeminal nerve (V)                                  |
| 12 Temporal muscle                                   | 31 Fourth ventricle                                      |
| 13 Temporoparietal muscle                            | 32 Middle cerebellar peduncle                            |
| 14 Retro-orbital fatty tissue                        | 33 Lambdoid suture                                       |
| 15 Internal carotid artery                           | 34 Anterior lobe of cerebellum                           |
| 16 Sphenoidal bone                                   | 35 Vermis of cerebellum                                  |
| 17 Cavernous sinus                                   | 36 Posterior lobe of cerebellum                          |
| 18 Ophthalmic artery                                 | 37 Transverse sinus                                      |
| 19 Dorsum sellae                                     | 38 Occipital sinus                                       |
|  | 39 Occipital bone  |



- Temporal lobe
- Cerebellum
- Pons

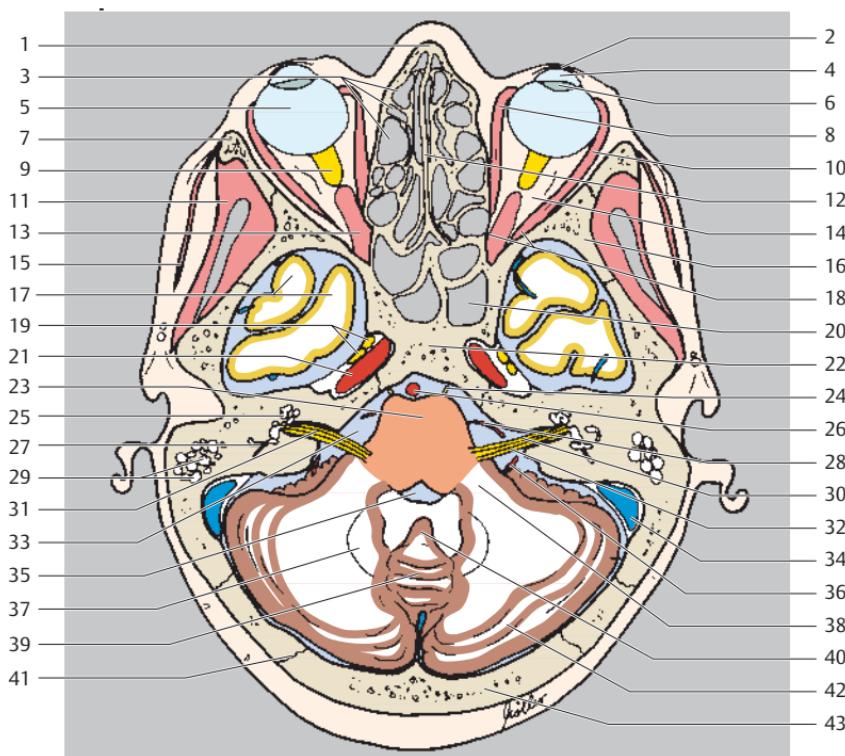


- |                                  |                                    |
|----------------------------------|------------------------------------|
| 1 Nasal bone                     | 22 Internal carotid artery         |
| 2 Cornea                         | 23 Pituitary gland                 |
| 3 Nasal septum                   | 24 Trigeminal ganglion             |
| 4 Anterior chamber of eyeball    | 25 Basilar artery                  |
| 5 Eyeball                        | 26 Preopticine cistern             |
| 6 Lens                           | 27 Cochlea                         |
| 7 Zygomatic bone                 | 28 Mastoid cells                   |
| 8 Lacrimal gland                 | 29 Petrous part of temporal bone   |
| 9 Ethmoidal cells                | 30 Semicircular canal              |
| 10 Medial rectus muscle          | 31 Middle cerebellar peduncle      |
| 11 Optic nerve                   | 32 Pons                            |
| 12 Retro-orbital fatty tissue    | 33 Fourth ventricle                |
| 13 Temporal muscle               | 34 Sigmoid sinus                   |
| 14 Lateral rectus muscle         | 35 Lambdoid suture                 |
| 15 Ophthalmic artery             | 36 Uvula of vermis                 |
| 16 Temporoparietal muscle        | 37 Dentate nucleus                 |
| 17 Temporal lobe (temporal pole) | 38 Posterior lobe of cerebellum    |
| 18 Sphenoidal bone               | 39 Vermis of cerebellum            |
| 19 Oculomotor nerve              | 40 Internal occipital protuberance |
| 20 Sphenoidal sinus              | 41 Occipital bone                  |
| 21 Cavernous sinus               |                                    |

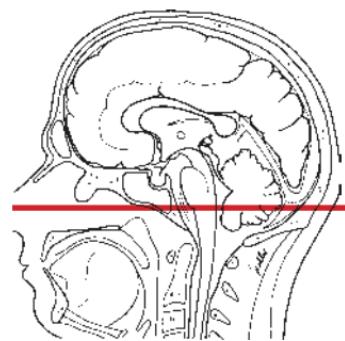
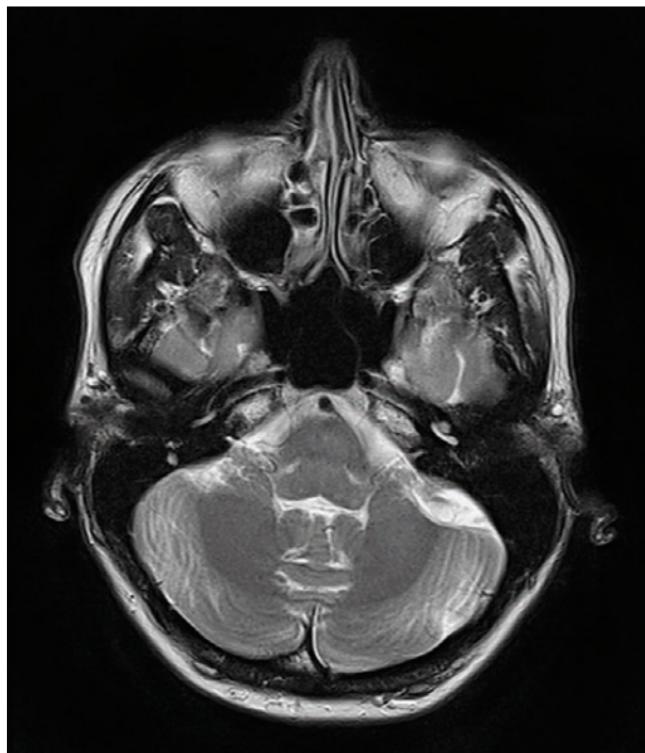


- Temporal lobe
- Cerebellum
- Pons

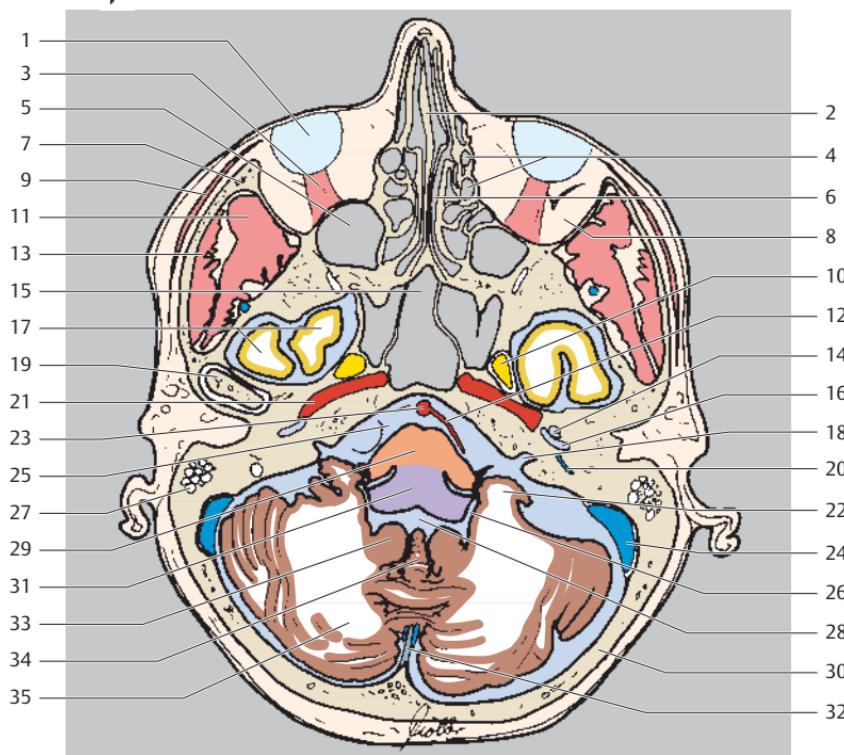
- |                               |                          |
|-------------------------------|--------------------------|
| 1 Nasal bone                  | 6 Lens                   |
| 2 Cornea                      | 7 Zygomatic bone         |
| 3 Ethmoidal cells             | 8 Medial rectus muscle   |
| 4 Anterior chamber of eyeball | 9 Optic nerve            |
| 5 Eyeball                     | 10 Lateral rectus muscle |



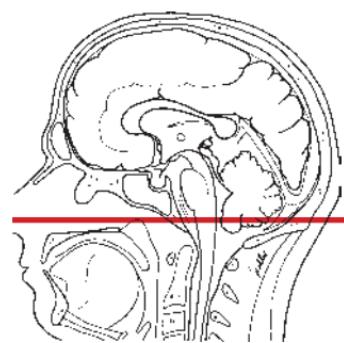
- |   |  |
|---|--|
| 11 Temporal muscle  | 27 Posterior semicircular canal              |
| 12 Nasal septum   | 28 Superior cerebellar artery                |
| 13 Superior rectus muscle and levator palpebrae superioris muscle | 29 Mastoid cells                             |
| 14 Retro-orbital fatty tissue                                     | 30 Facial nerve (VII) and intermediate nerve |
| 15 Temporoparietal muscle   | 31 Internal acoustic meatus                  |
| 16 Sphenoidal bone  | 32 Vestibulocochlear (auditory) nerve (VIII) |
| 17 Temporal pole  | 33 Pontocerebellar cistern                   |
| 18 Superior orbital fissure                                       | 34 Sigmoid sinus                             |
| 19 Maxillary and mandibular nerves                                | 35 Fourth ventricle                          |
| 20 Sphenoidal sinus   | 36 Anterior inferior cerebellar artery       |
| 21 Internal carotid artery  | 37 Dentate nucleus                           |
| 22 Clivus   | 38 Middle cerebellar peduncle                |
| 23 Pons   | 39 Vermis of cerebellum                      |
| 24 Abducent nerve (VI)  | 40 Uvula of vermis                           |
| 25 Cochlea  | 41 Lambdoid suture                           |
| 26 Basilar artery   | 42 Caudal lobule of cerebellum               |
|   | 43 Occipital bone                            |



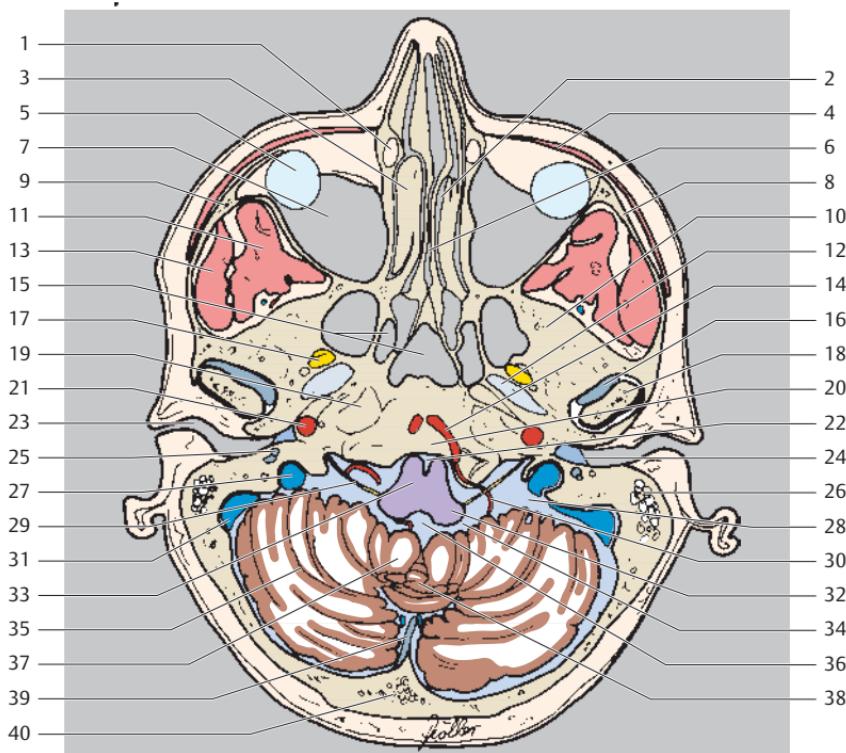
- Cerebellum
- Pons
- Medulla oblongata



- |    |  |    |  |
|----|--|----|--|
| 1  | Eyeball                                | 19 | Head of mandible   |
| 2  | Nasal septum                           | 20 | Posterior semicircular canal                                 |
| 3  | Inferior rectus muscle                 | 21 | Internal carotid artery                                      |
| 4  | Ethmoidal cells                        | 22 | Flocculus  |
| 5  | Maxillary sinus                        | 23 | Basilar artery   |
| 6  | Nasal sinus                            | 24 | Transverse sinus   |
| 7  | Zygomatic bone                         | 25 | Pontocerebellar cistern                                      |
| 8  | Retrobulbar fat                        | 26 | Lateral aperture of fourth ventricle<br>(foramen of Luschka) |
| 9  | Orcibularis oris muscle                | 27 | Mastoid cells  |
| 10 | Trigeminal nerve (V)                   | 28 | Fourth ventricle   |
| 11 | Temporal muscle                        | 29 | Pons   |
| 12 | Anterior inferior cerebellar<br>artery | 30 | Occipital bone   |
| 13 | Masseter muscle                        | 31 | Medulla oblongata  |
| 14 | Cochlea                                | 32 | Falx cerebelli   |
| 15 | Sphenoidal sinus                       | 33 | Tonsil of cerebellum   |
| 16 | Vestibule                              | 34 | Vermis of cerebellum   |
| 17 | Inferior temporal gyrus                | 35 | Cerebellum   |
| 18 | Internal acoustic meatus               |    |  |



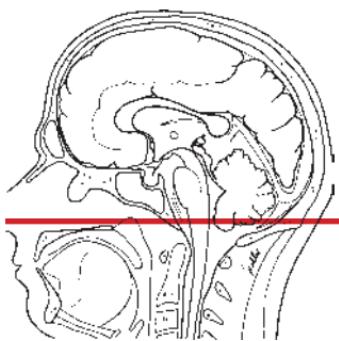
Cerebellum  
Medulla oblongata



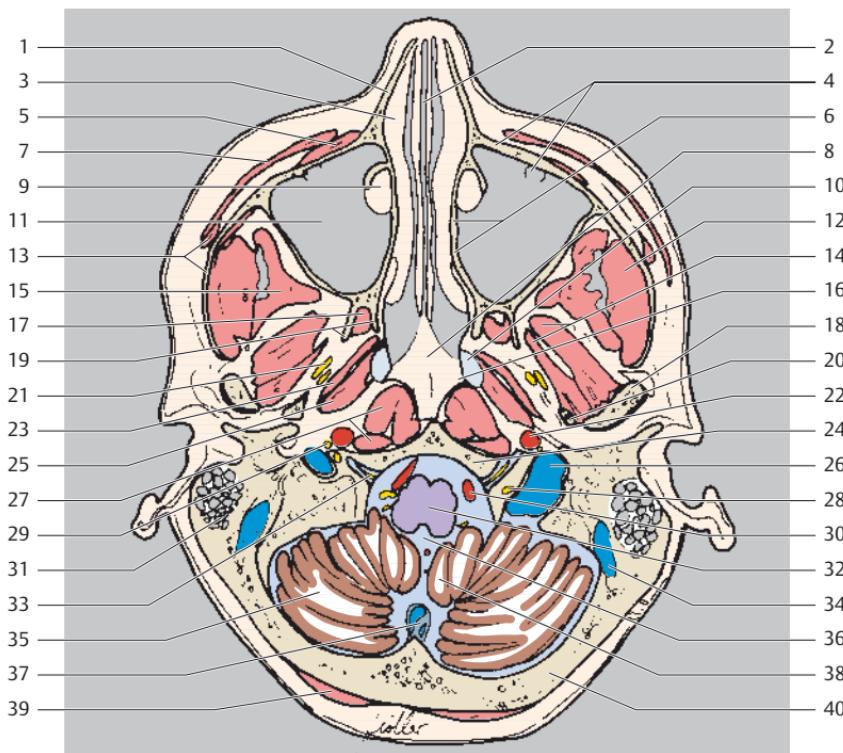
- 1 Nasolacrimal duct  
 2 Nasal cavity  
 3 Nasal concha  
 4 Orbicularis oris muscle  
 5 Eyeball  
 6 Nasal septum  
 7 Maxillary sinus  
 8 Sphenoidal bone  
 9 Zygomatic bone  
 10 Temporal bone  
 11 Temporal muscle  
 12 Pharyngotympanic tube (auditory tube)  
 13 Masseter muscle  
 14 Vertebral artery  
 15 Sphenoidal bone  
 16 Articular disc  
 17 Trigeminal nerve (V)  
 18 Head of mandible  
 19 Foramen lacerum  
 20 Clivus  
 21 Internal carotid artery  
 22 Ventral median fissure  
 23 External acoustic meatus  
 24 Tympanic membrane  
 25 Cochlea  
 26 Mastoid cells  
 27 Internal jugular vein  
 28 Pontocerebellar cistern  
 29 Glossopharyngeal nerve (IX) and vagus nerve (X)  
 30 Anterior inferior cerebellar artery  
 31 Sigmoid sinus  
 32 Medulla oblongata (caudal cerebellar peduncle)  
 33 Medulla oblongata (olivary nucleus)  
 34 Lateral aperture of fourth ventricle (foramen of Luschka)  
 35 Cerebellum (posterior lobe)  
 36 Fourth ventricle  
 37 Tonsil of cerebellum  
 38 Vermis of cerebellum  
 39 Falx cerebelli  
 40 Occipital bone



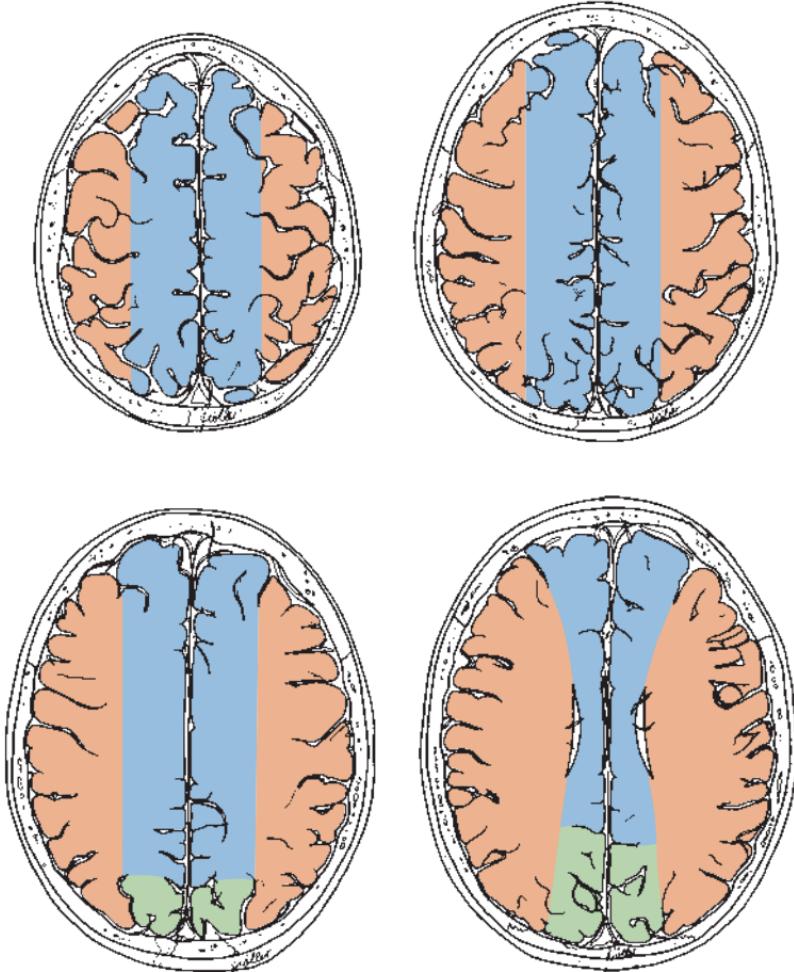
Cerebellum  
Medulla oblongata



- |   |   |
|---|---|
| 1 Nasal bone                            | 5 Levator labii superioris muscle                           |
| 2 Nasal septum                          | 6 Medial wall of maxillary sinus<br>(with maxillary hiatus) |
| 3 Superior nasal concha                 | 7 Orbicularis oris muscle                                   |
| 4 Maxilla (with infra-orbital<br>canal) | 8 Vomer (sphenoidal bone)                                   |



- |  |   |
|--|---|
| 9 Nasolacrimal duct  | 23 Tensor veli palatini muscle                  |
| 10 Pharyngotympanic tube<br>(auditory tube)                  | 24 Clivus                                       |
| 11 Maxillary sinus   | 25 Levator veli palatini muscle                 |
| 12 Masseter muscle   | 26 Internal jugular vein (bulb)                 |
| 13 Zygomatic bone and zygomaticus muscles                    | 27 Longus capitis muscle                        |
| 14 Lateral pterygoid muscle<br>(superior and inferior heads) | 28 Vagus (X) and accessory (XI) nerves          |
| 15 Temporal muscles  | 29 Glossopharyngeal nerve (IX)                  |
| 16 Pharyngeal recess   | 30 Vertebral artery                             |
| 17 Medial pterygoid muscle                                   | 31 Mastoid cells                                |
| 18 Head of mandible  | 32 Medulla oblongata                            |
| 19 Pterygoid process (medial and lateral plates)             | 33 Hypoglossal nerve (XII)                      |
| 20 Sphenoidal bone (tip)                                     | 34 Sigmoid sinus                                |
| 21 Mandibular nerve and auriculotemporal nerve               | 35 Hemisphere of cerebellum<br>(posterior lobe) |
| 22 Internal carotid artery                                   | 36 Fourth ventricle (medial aperture)           |
|  | 37 Falx cerebelli with occipital sinus          |
|  | 38 Tonsil of cerebellum                         |
|  | 39 Semispinalis capitis muscle                  |
|  | 40 Occipital bone                               |



**Anterior cerebral artery**

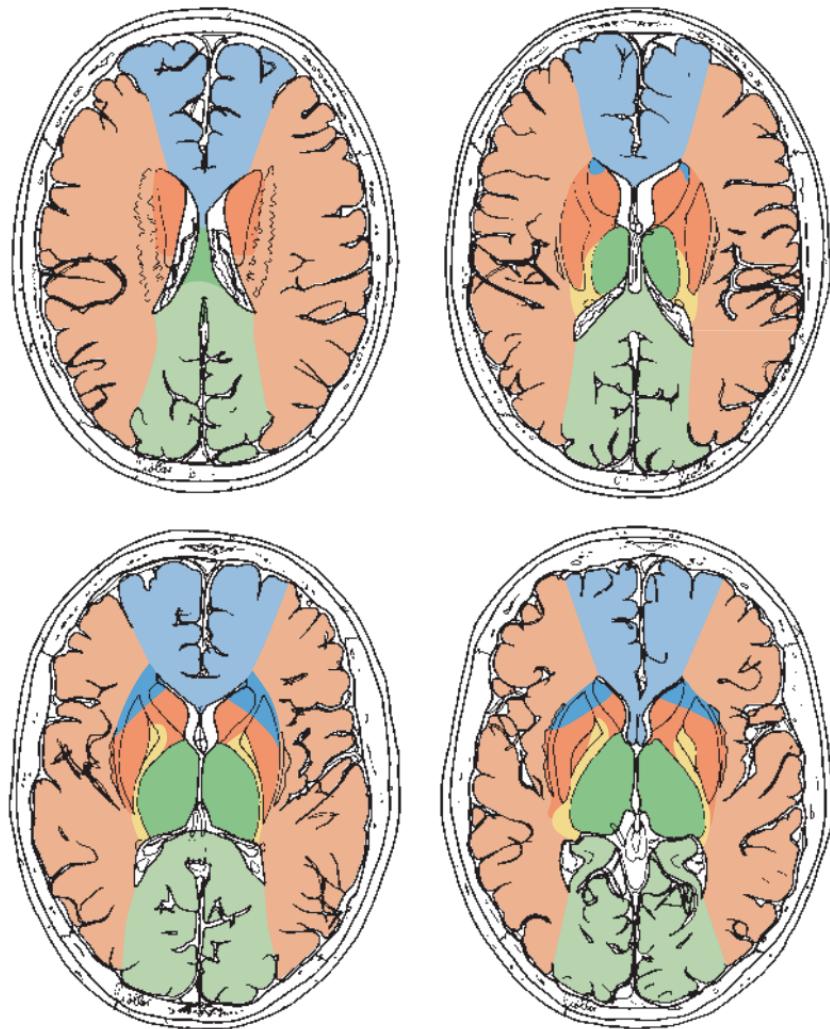
Terminal branches

**Middle cerebral artery**

Terminal branches

**Posterior cerebral artery**

Terminal branches

**Anterior cerebral artery**

- Terminal branches
- Central branches (striated branches arteries and Huebner's recurrent including distal medial striate artery)

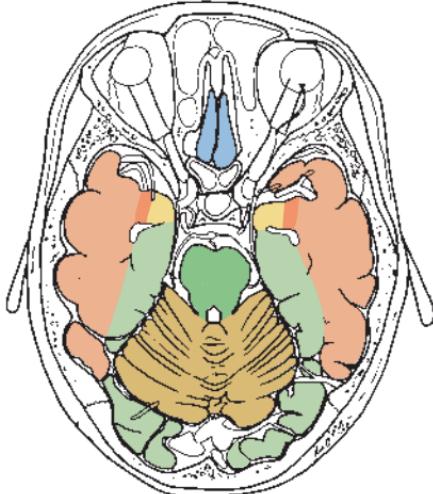
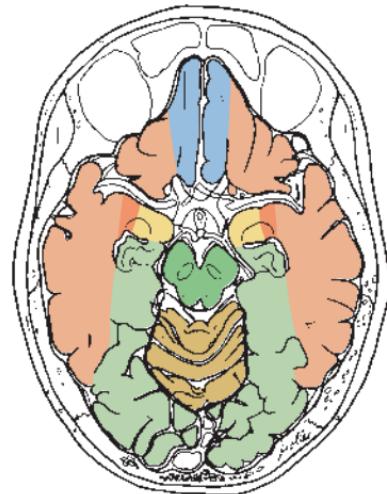
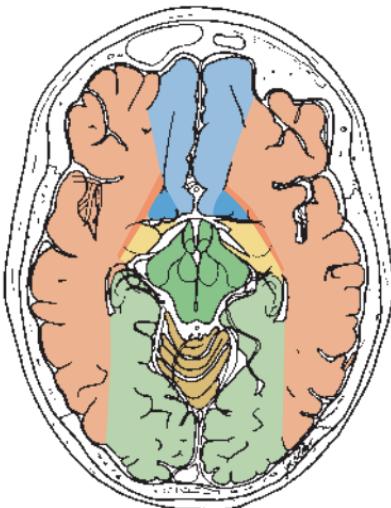
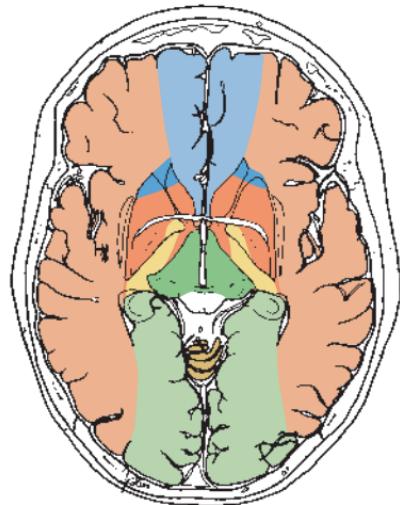
**Middle cerebral artery**

- Terminal branches
- Central branches (striated branches)

**Posterior cerebral artery**

- Terminal branches
- Central branches (including the posterior communicating artery)

- Anterior choroidal artery



#### **Anterior cerebral artery**

Terminal branches

Central branches (striated branches)

#### **Posterior cerebral artery**

Terminal branches

Central branches (including the posterior communicating artery)

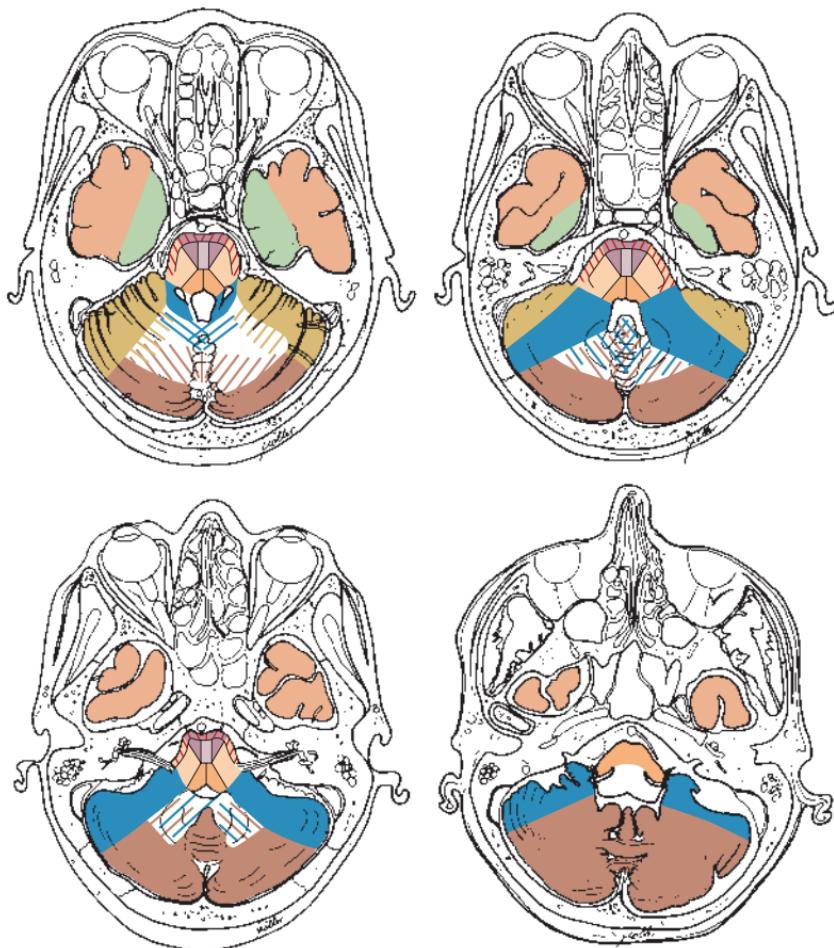
#### **Middle cerebral artery**

Terminal branches

Central branches (striated branches)

Anterior choroidal artery

Superior cerebellar artery

**Middle cerebral artery**

Terminal branches

**Posterior cerebral artery**

Terminal branches

**Basilar artery: superficial arteries**

- Median brain-stem arteries
- Short circumferential artery
- Long circumferential artery

**Basilar artery: central arteries**

Anteromedial

Anterolateral

Lateral

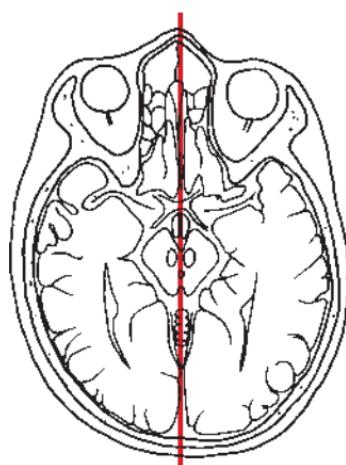
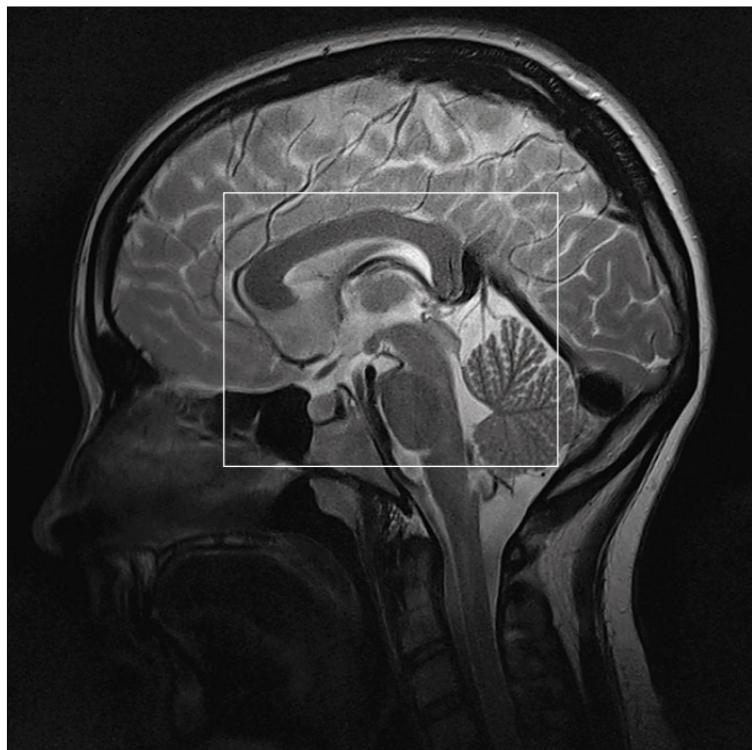
Dorsal

Superior cerebellar artery

Anterior inferior cerebellar artery

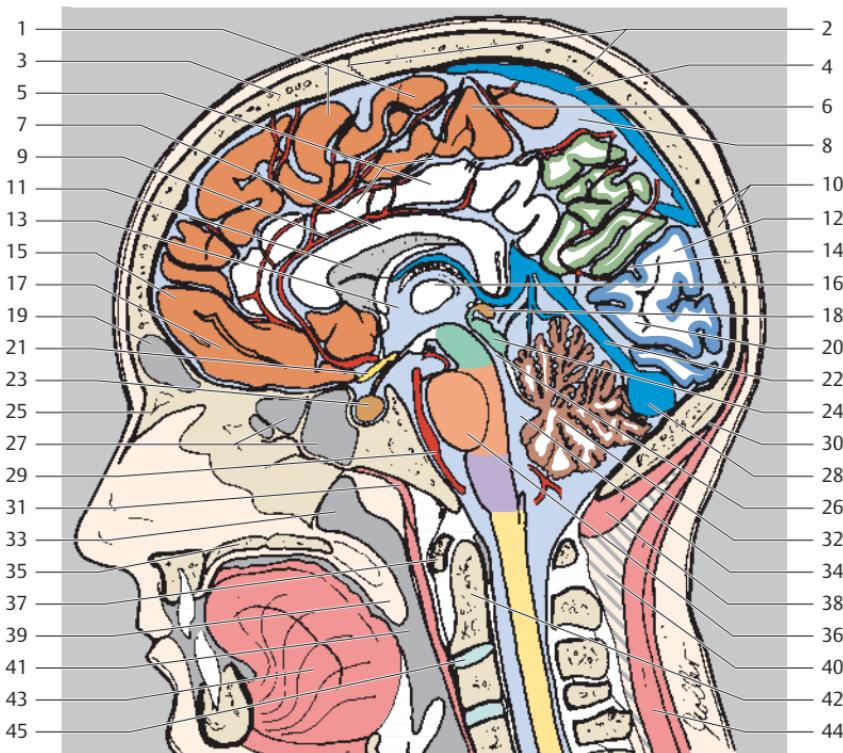
Border region

Posterior inferior cerebellar artery

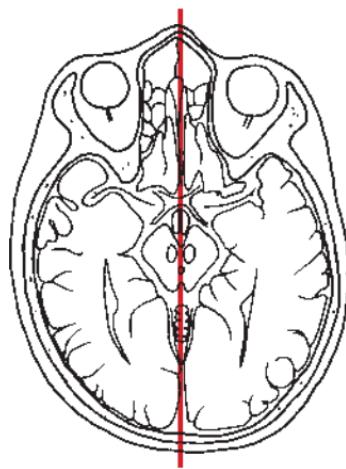
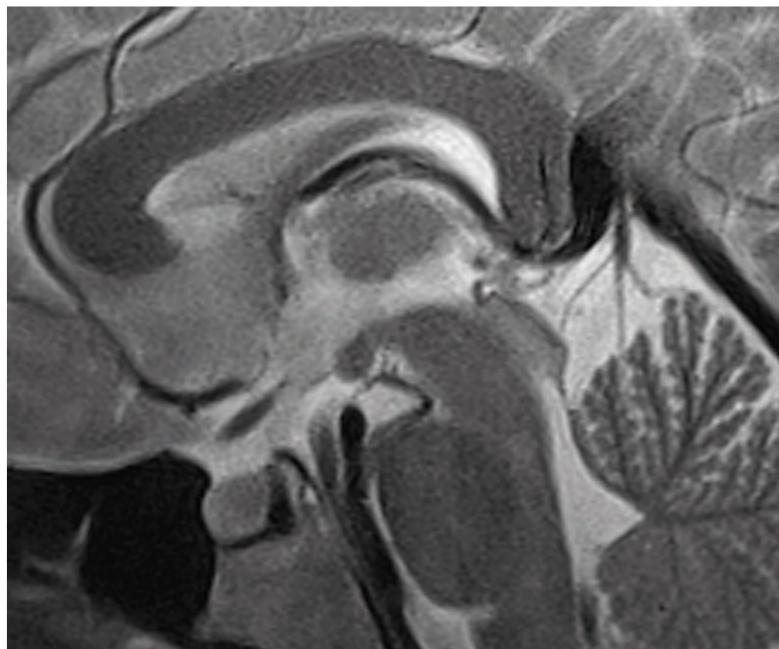


Frontal lobe
Parietal lobe
Occipital lobe
Cerebellum
Mesencephalon
Pons
Medulla oblongata

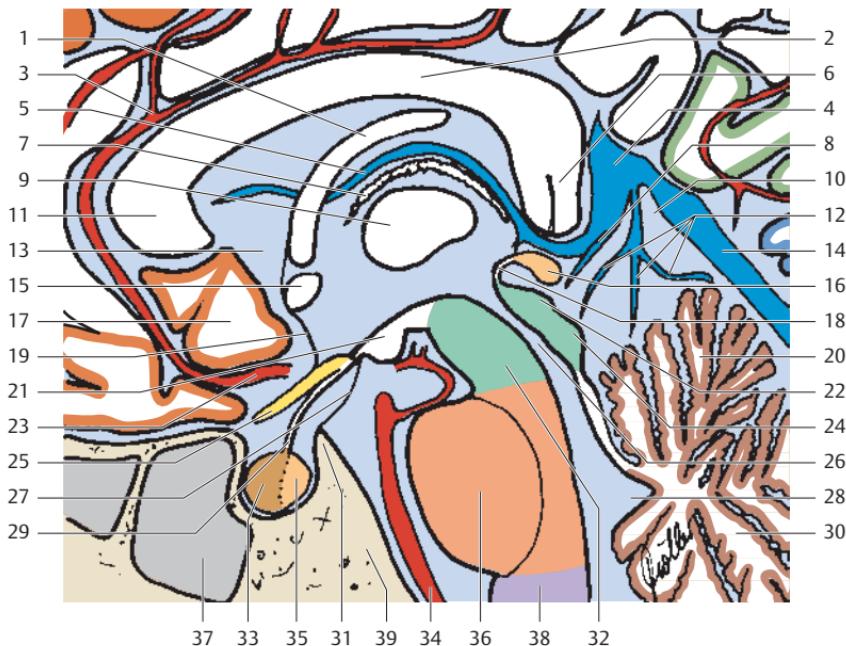
- 1 Superior frontal gyrus
- 2 Parietal bone and coronal suture
- 3 Frontal bone
- 4 Superior sagittal sinus
- 5 Cingulate gyrus and sulcus
- 6 Precentral gyrus
- 7 Corpus callosum (genu)



- |    |   |    |  |
|----|---|----|--|
| 8  | Falx cerebri in Longitudinal cerebral fissure | 27 | Ethmoid sinus and sphenoidal sinus     |
| 9  | Pericallosal artery                           | 28 | Confluence of sinuses                  |
| 10 | Occipital bone and lambdoid suture            | 29 | Basilar artery                         |
| 11 | Septum pellucidum                             | 30 | External occipital protuberance        |
| 12 | Cuneus  | 31 | Superior constrictor muscle of pharynx |
| 13 | Third ventricle                               | 32 | Cerebellum                             |
| 14 | Parieto-occipital sulcus                      | 33 | Nasopharynx                            |
| 15 | Frontal pole                                  | 34 | Fourth ventricle                       |
| 16 | Interthalamic adhesion                        | 35 | Hard palate                            |
| 17 | Straight gyrus                                | 36 | Pons                                   |
| 18 | Cerebral epiphysis                            | 37 | Atlas, anterior arch                   |
| 19 | Frontal sinus                                 | 38 | Rectus capitis posterior minor muscle  |
| 20 | Lingual gyrus                                 | 39 | Uvula                                  |
| 21 | Optic nerve (II)                              | 40 | Ligamentum nuchae (nuchal ligament)    |
| 22 | Straight sinus                                | 41 | Oropharynx                             |
| 23 | Pituitary gland                               | 42 | Dens of axis                           |
| 24 | Quadrigejimal plate                           | 43 | Tongue                                 |
| 25 | Nasal bone                                    | 44 | Semispinalis capitis muscle            |
| 26 | Aqueduct                                      | 45 | Intervertebral disc (C2/C3)            |

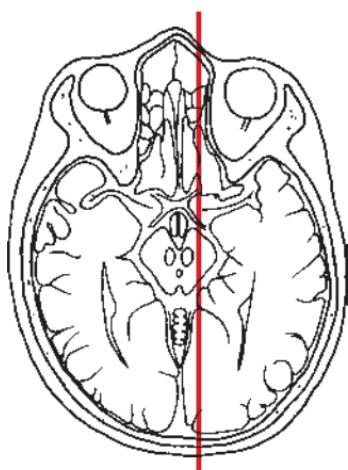
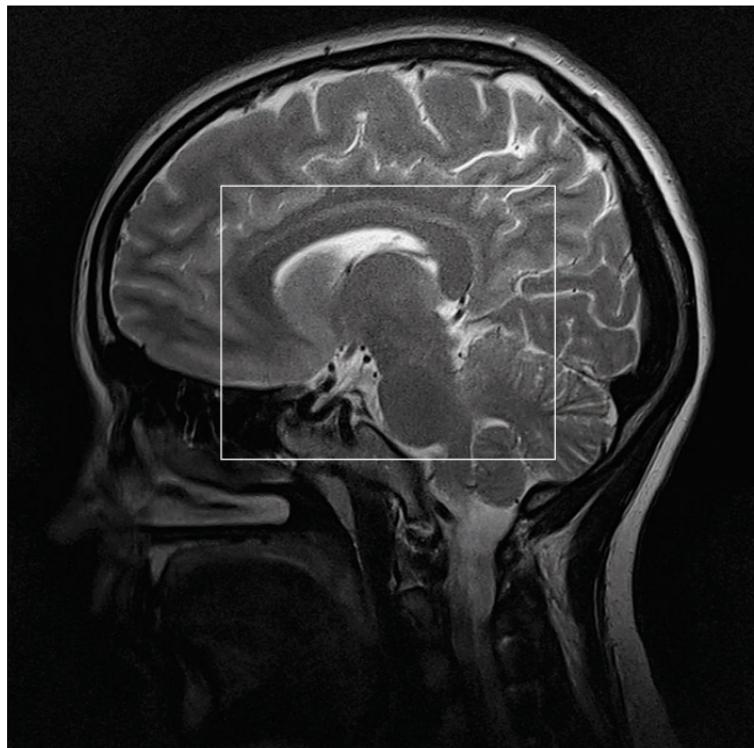


- Frontal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum
- Mesencephalon
- Pons
- Medulla oblongata



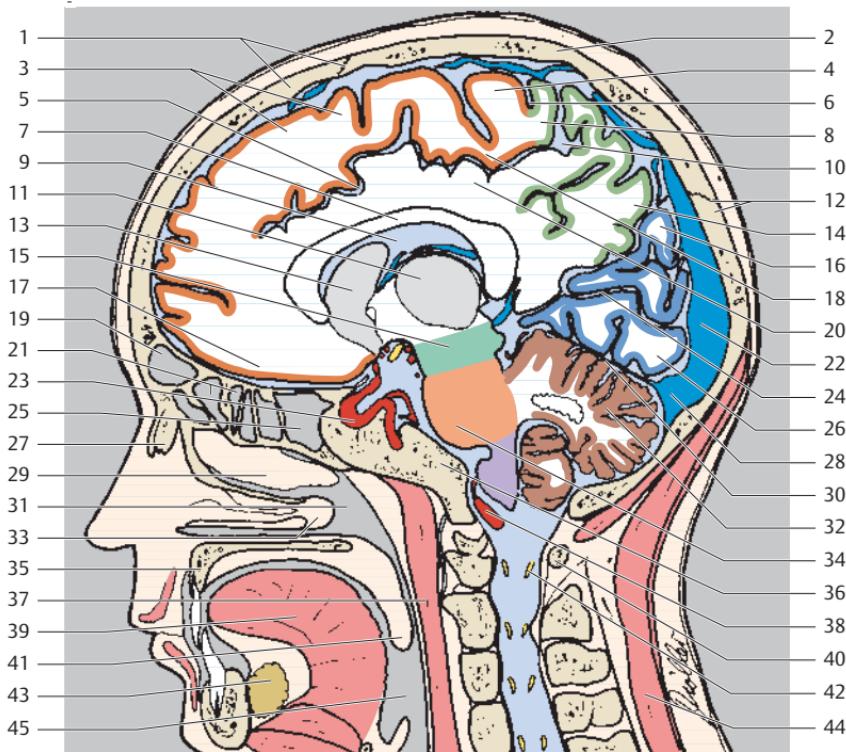
- 1 Fornix (body)
- 2 Corpus callosum (trunk)
- 3 Pericallosal artery
- 4 Great cerebral vein
- 5 Internal cerebral vein
- 6 Corpus callosum (splenium)
- 7 Choroid plexus
- 8 Basal vein
- 9 Interthalamic adhesion
- 10 Cistern of great cerebral vein
- 11 Corpus callosum (genu)
- 12 Cerebellar veins
- 13 Third ventricle
- 14 Straight sinus
- 15 Anterior commissure
- 16 Pineal body
- 17 Paraterminal gyrus
- 18 Posterior commissure
- 19 Lamina terminalis
- 20 Hemisphere of cerebellum  
(anterior lobe)
- 21 Mammillary body
- 37 Sphenoidal sinus
- 38 Medulla oblongata
- 39 Clivus

- 22 Tectal (quadrigeminal) plate (superior colliculus)
- 23 Anterior cerebral artery
- 24 Tectal (quadrigeminal) plate (posterior colliculus)
- 25 Optic nerve (II)
- 26 Aqueduct
- 27 Liliequist's membrane
- 28 Fourth ventricle (roof)
- 29 Infundibulum of pituitary gland
- 30 Hemisphere of cerebellum  
(posterior lobe)
- 31 Dorsum sellae
- 32 Mesencephalon (midbrain)
- 33 Anterior lobe of pituitary gland  
(adenohypophysis)
- 34 Basilar artery
- 35 Posterior lobe of pituitary gland  
(neurohypophysis)
- 36 Pons
- 32 Mesencephalon (midbrain)
- 33 Anterior lobe of pituitary gland  
(adenohypophysis)
- 34 Basilar artery
- 35 Posterior lobe of pituitary gland  
(neurohypophysis)
- 36 Pons
- 37 Sphenoidal sinus
- 38 Medulla oblongata
- 39 Clivus

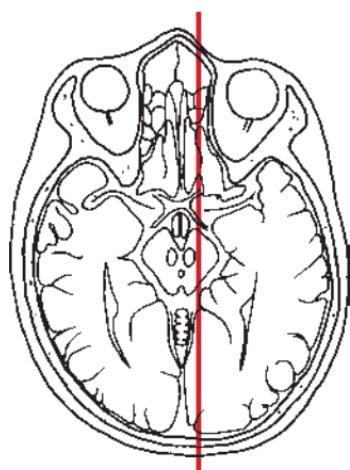
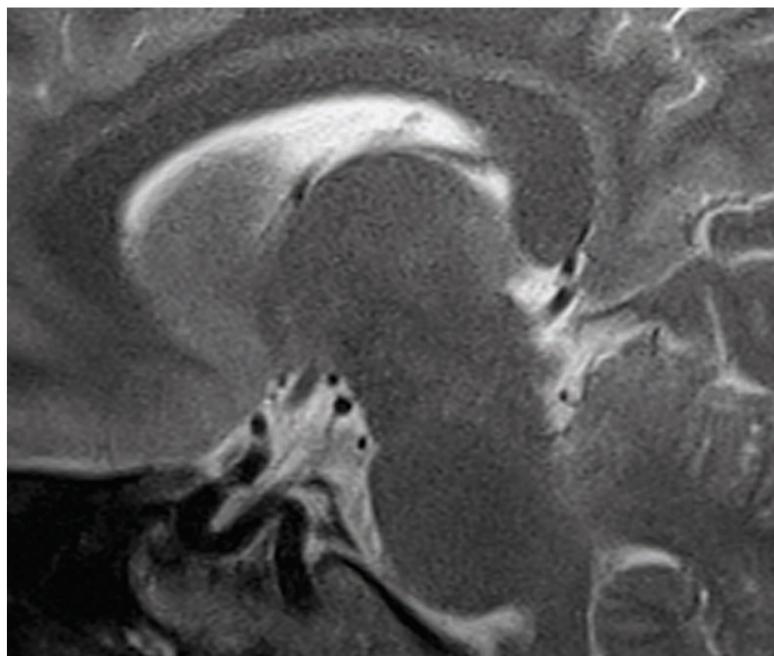


- Frontal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum
- Mesencephalon
- Pons
- Medulla oblongata

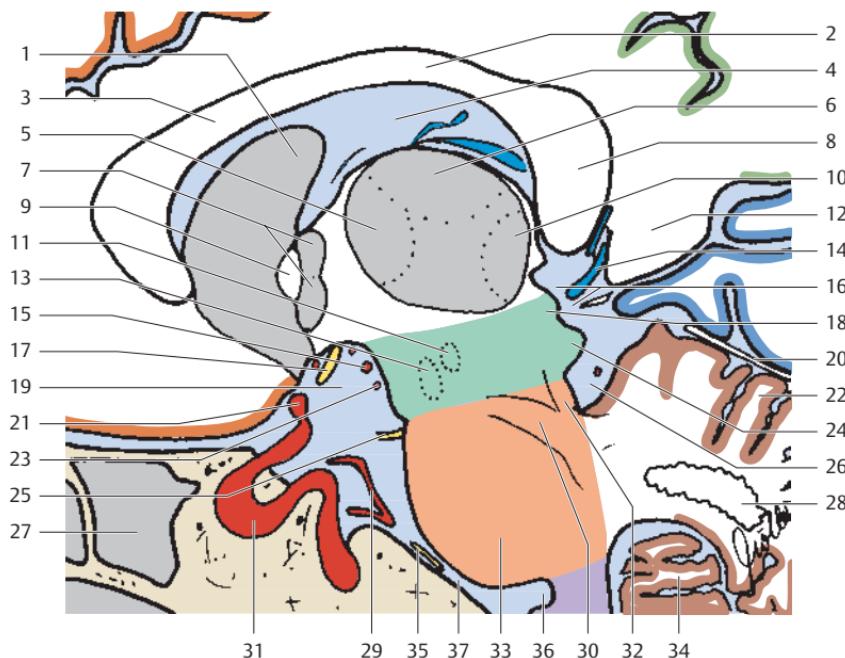
- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Superior frontal gyrus
- 4 Precentral gyrus
- 5 Cingulate gyrus
- 6 Central sulcus
- 7 Corpus callosum
- 8 Postcentral gyrus



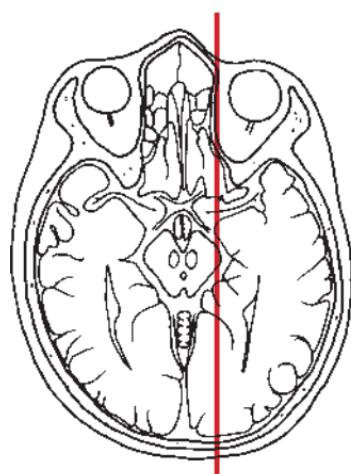
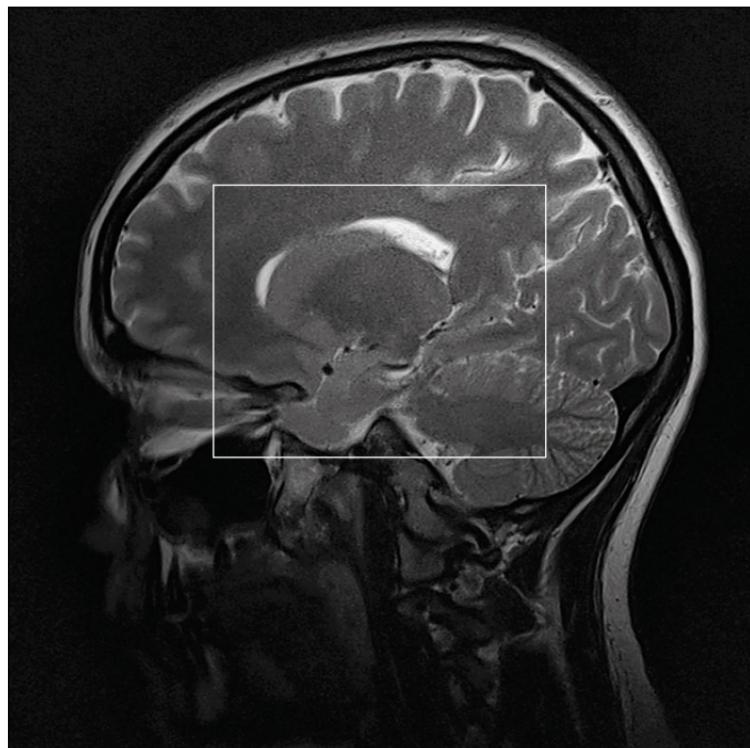
- |                                       |                                |
|---------------------------------------|--------------------------------|
| 9 Lateral ventricle (central part)    | 27 Nasal bone                  |
| 10 Postcentral sulcus                 | 28 Confluence of sinuses       |
| 11 Thalamus                           | 29 Middle nasal concha         |
| 12 Occipital bone and lambdoid suture | 30 Tentorium cerebelli         |
| 13 Caudate nucleus (head)             | 31 Nasopharynx                 |
| 14 Precuneus                          | 32 Cerebellum                  |
| 15 Cerebral peduncle                  | 33 Inferior nasal concha       |
| 16 Cuneus                             | 34 Pons                        |
| 17 Straight gyrus                     | 35 Hard palate                 |
| 18 Precentral lobule                  | 36 Clivus                      |
| 19 Frontal sinus                      | 37 Longus capitis muscle       |
| 20 Cingulate gyrus                    | 38 Vertebral artery            |
| 21 Ethmoidal sinus                    | 39 Tongue                      |
| 22 Superior sagittal sinus            | 40 Atlas, posterior arch       |
| 23 Internal carotid artery (syphon)   | 41 Uvula                       |
| 24 Calcarine sulcus                   | 42 Nerve roots                 |
| 25 Sphenoidal sinus                   | 43 Sublingual gland            |
| 26 Medial occipitotemporal gyrus      | 44 Semispinalis capitis muscle |
|                                       | 45 Oropharynx                  |



- Frontal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum
- Mesencephalon
- Pons
- Medulla oblongata

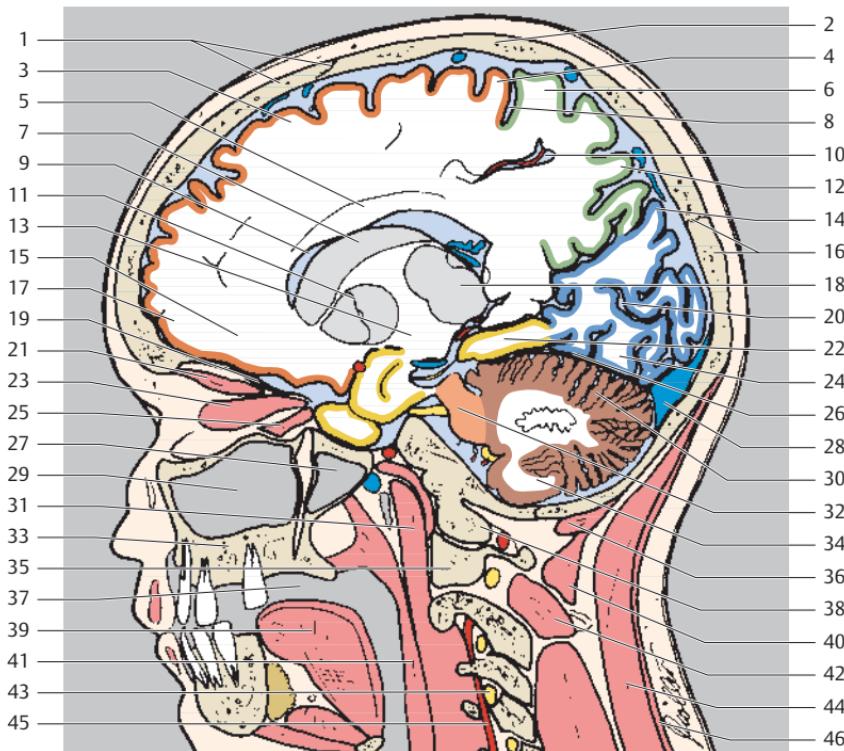


- |  |   |
|--|---|
| 1 Head of caudate nucleus                                | 19 Interpeduncular cistern                                |
| 2 Corpus callosum (trunk)                                | 20 Tentorium cerebelli                                    |
| 3 Corpus callosum (genu)                                 | 21 Anterior cerebral artery                               |
| 4 Lateral ventricle                                      | 22 Hemisphere of cerebellum<br>(anterior lobe)            |
| 5 Thalamus (ventral lateral complex)                     | 23 Superior cerebellar artery                             |
| 6 Thalamus (posterior lateral complex)                   | 24 Tectal (quadrigeminal) plate<br>(posterior colliculus) |
| 7 Globus pallidus (lateral and medial segments)          | 25 Trigeminal nerve (V)                                   |
| 8 Corpus callosum (splenium)                             | 26 Ambient cistern  |
| 9 Anterior commissure                                    | 27 Sphenoidal sinus                                       |
| 10 Thalamus (pulvinar)                                   | 28 Dentate nucleus  |
| 11 Red nucleus   | 29 Posterior communicating artery                         |
| 12 Parahippocampal gyrus                                 | 30 Cerebellar peduncle                                    |
| 13 Substantia nigra                                      | 31 Internal carotid artery                                |
| 14 Great cerebral vein                                   | 32 Lateral lemniscus                                      |
| 15 Posterior cerebral artery                             | 33 Pons   |
| 16 Quadrigeminal cistern                                 | 34 Tonsil of cerebellum                                   |
| 17 Optic tract   | 35 Abducent nerve (VI)                                    |
| 18 Tectal (quadrigeminal) plate<br>(superior colliculus) | 36 Fourth ventricle (lateral aperture)                    |
|  | 37 Pontocerebellar cistern                                |

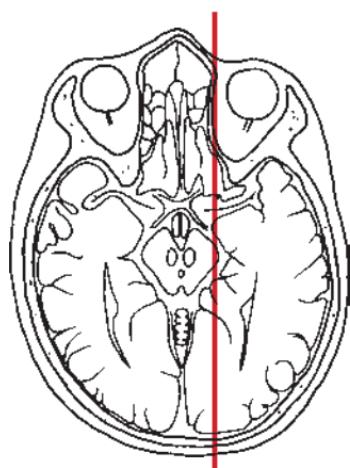
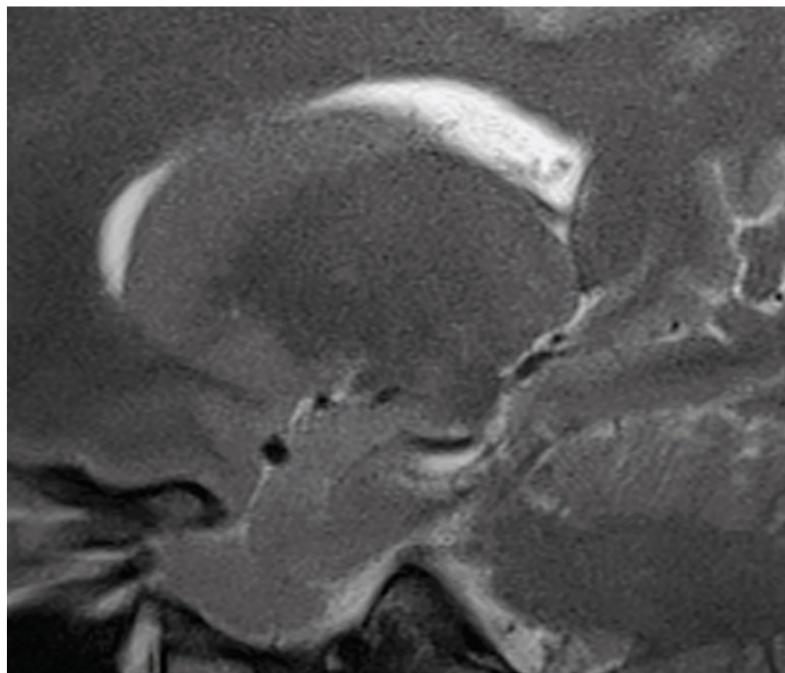


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum
- Pons

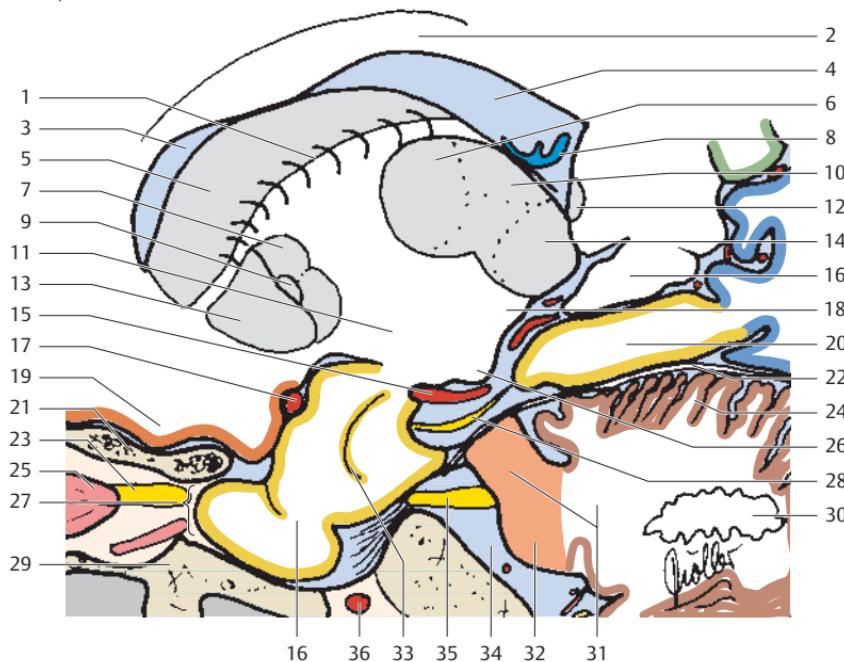
- 1 bone
- 2 Frontal bone and coronal suture
- 3 Parietal Superior frontal gyrus
- 4 Precentral gyrus
- 5 Corpus callosum
- 6 Postcentral gyrus
- 7 Caudate nucleus (body)
- 8 Central sulcus



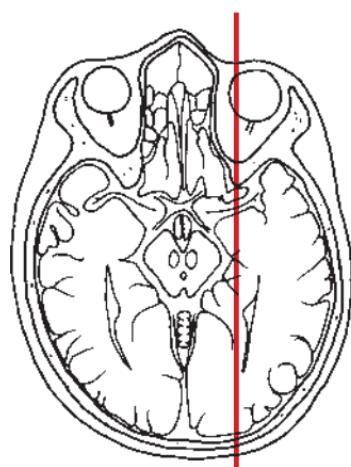
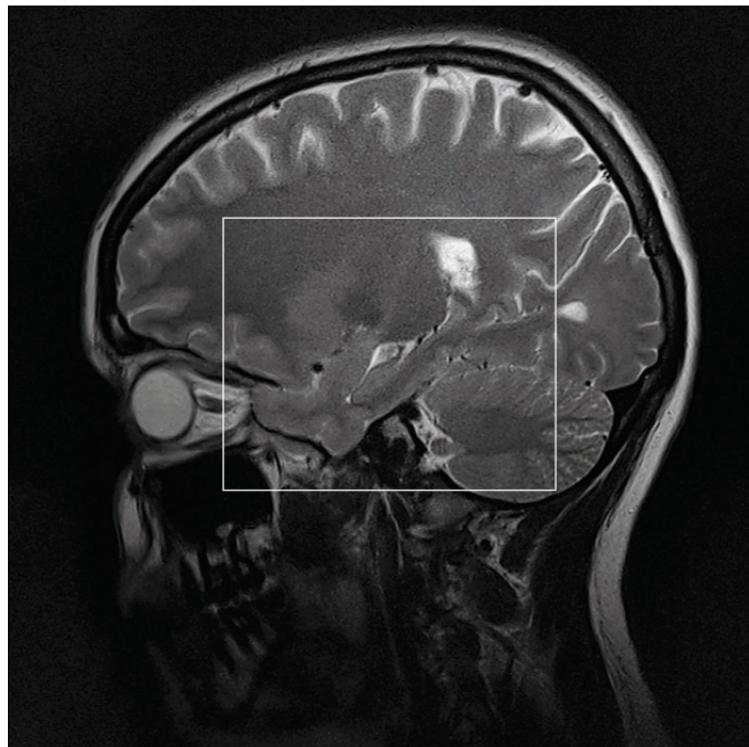
- |                                       |  |
|---------------------------------------|--|
| 9 Lateral ventricle (frontal horn)    | 28 Transverse sinus                      |
| 10 Postcentral sulcus                 | 29 Maxillary sinus                       |
| 11 Basal nuclei                       | 30 Superior cerebellar lobe              |
| 12 Precuneus                          | 31 Longus capitis muscle                 |
| 13 Cerebral peduncle                  | 32 Middle cerebral peduncle              |
| 14 Cuneus                             | 33 Maxilla                               |
| 15 Orbital gyrus                      | 34 Inferior cerebellar lobe              |
| 16 Occipital bone and lambdoid suture | 35 Atlas, lateral mass                   |
| 17 Inferior frontal gyrus             | 36 Rectus capitis posterior minor muscle |
| 18 Thalamus                           | 37 Oropharynx                            |
| 19 Roof of orbit                      | 38 Occipital condyle                     |
| 20 Calcarine sulcus                   | 39 Tongue                                |
| 21 Superior rectus muscle             | 40 Rectus capitis posterior major muscle |
| 22 Parahippocampal gyrus              | 41 Middle constrictor muscle of pharynx  |
| 23 Medial rectus muscle               | 42 Obliquus capitis inferior muscle      |
| 24 Medial occipitotemporal gyrus      | 43 Spinal nerve root C4                  |
| 25 Inferior rectus muscle             | 44 Splenius capitis muscle               |
| 26 Tentorium cerebelli                | 45 Vertebral artery                      |
| 27 Sphenoidal sinus                   | 46 Trapezius muscle                      |



- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum
- Pons

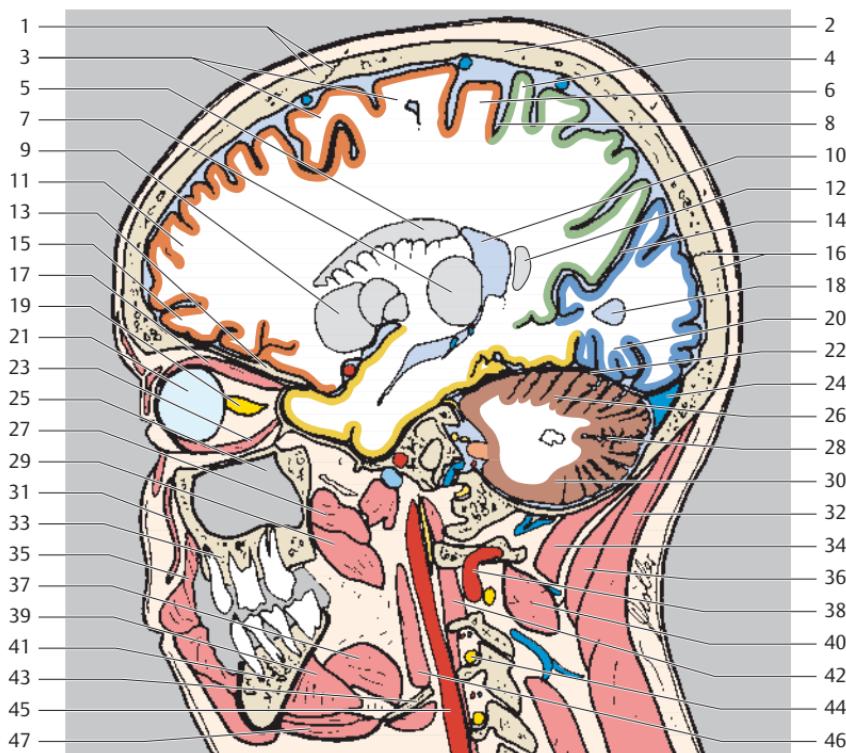


- |   |   |
|---|---|
| 1 Corpus striatum                       | 19 Orbital gyrus                            |
| 2 Corpus callosum (trunk)               | 20 Lingual gyrus                            |
| 3 Lateral ventricle (frontal horn)      | 21 Sphenoidal bone (lesser wing)            |
| 4 Lateral ventricle                     | 22 Tentorium cerebelli                      |
| 5 Caudate nucleus (head)                | 23 Optic nerve (II)                         |
| 6 Thalamus (ventral lateral complex)    | 24 Hemisphere of cerebellum (anterior lobe) |
| 7 Globus pallidus                       | 25 Medial rectus muscle                     |
| 8 Choroid plexus                        | 26 Lateral geniculate body                  |
| 9 Anterior commissure                   | 27 Superior orbital fissure                 |
| 10 Thalamus (posterior lateral complex) | 28 Trochlear nerve (IV)                     |
| 11 Internal capsule                     | 29 Oculomotor nerve (III)                   |
| 12 Fornix (crus)                        | 30 Dentate nucleus                          |
| 13 Putamen                              | 31 Middle cerebellar peduncle               |
| 14 Thalamus (pulvinar)                  | 32 Pons                                     |
| 15 Posterior cerebral artery            | 33 Lateral ventricle (temporal horn)        |
| 16 Parahippocampal gyrus                | 34 Pontocerebellar cistern                  |
| 17 Middle cerebral artery               | 35 Trigeminal nerve (V)                     |
| 18 Medial geniculate body               | 36 Internal carotid artery                  |

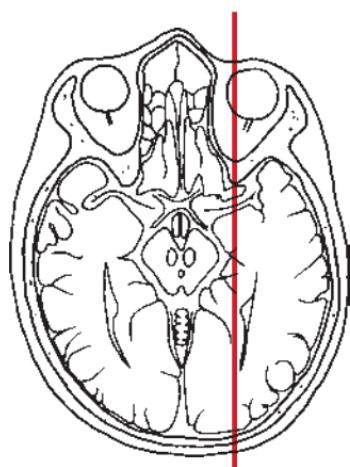
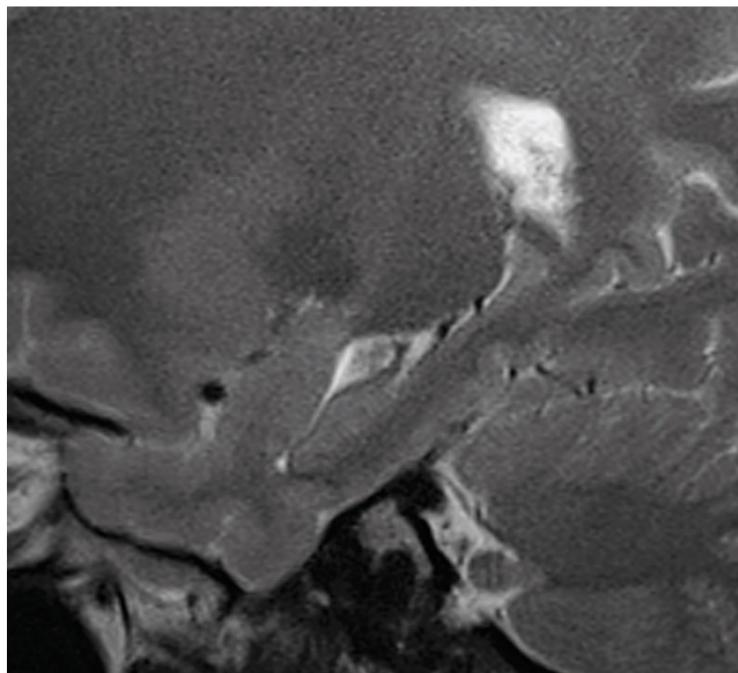


Frontal lobe
Temporal lobe
Parietal lobe
Occipital lobe
Cerebellum

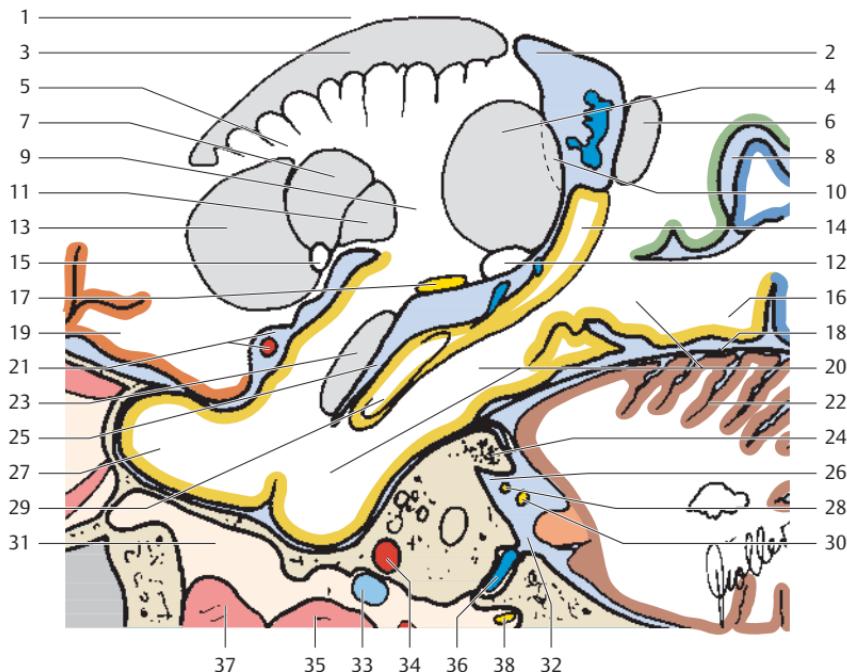
- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Superior frontal gyrus
- 4 Postcentral gyrus
- 5 Caudate nucleus (body)
- 6 Precentral gyrus
- 7 Thalamus
- 8 Central sulcus



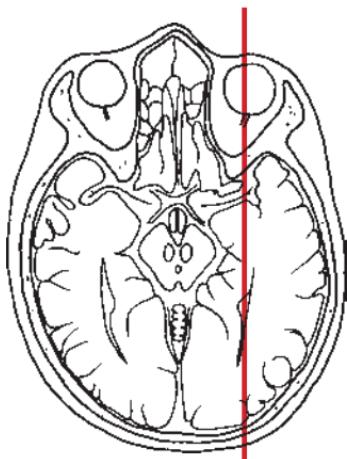
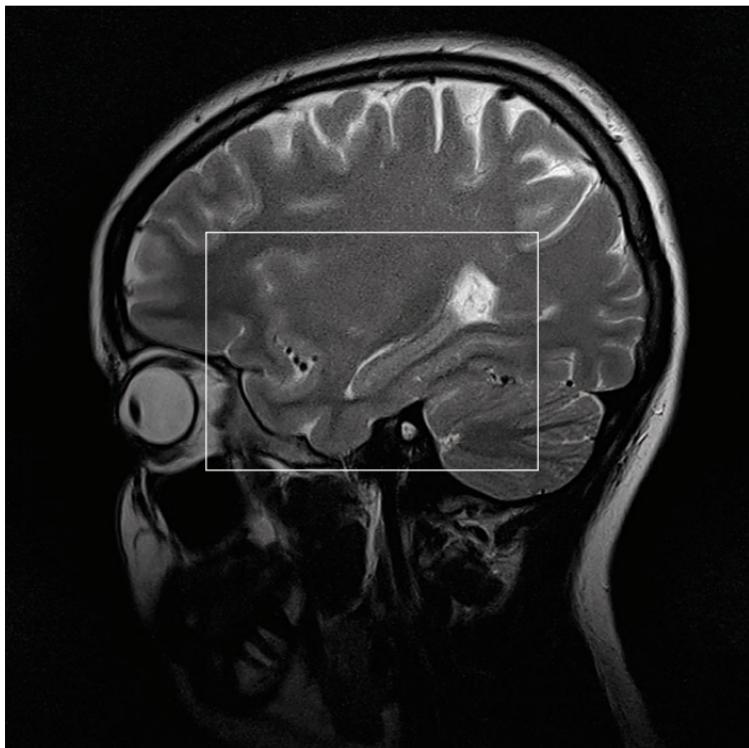
- 9 Basal nuclei
- 10 Lateral ventricle
- 11 Middle frontal gyrus
- 12 Corpus callosum  
(major forceps)
- 13 Roof of orbit
- 14 Parieto-occipital sulcus
- 15 Orbital gyrus
- 16 Occipital bone and lambdoid suture
- 17 Superior rectus muscle
- 18 Lateral ventricle (occipital horn)
- 19 Optic nerve (II)
- 20 Medial occipitotemporal gyrus
- 21 Eyeball
- 22 Tentorium cerebelli
- 23 Inferior rectus muscle
- 24 Transverse sinus
- 25 Maxillary sinus
- 26 Anterior lobe of cerebellum
- 27 Levator veli palatini muscle
- 28 Horizontal fissure
- 29 Medial pterygoid muscle
- 30 Posterior lobe of cerebellum
- 31 Levator labii superioris muscle
- 32 Splenius capitis muscle
- 33 Maxilla
- 34 Rectus capitis posterior major muscle
- 35 Orbicularis oris muscle
- 36 Semispinalis capitis muscle
- 37 Hypoglossus muscle
- 38 Vertebral artery
- 39 Mylohyoid muscle
- 40 Obliquus capitis inferior muscle
- 41 Mandible
- 42 Longus capitis muscle
- 43 Hyoid bone
- 44 Spinal nerve root C3
- 45 Internal carotid artery
- 46 Middle constrictor muscle of pharynx
- 47 Digastric muscle



- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum

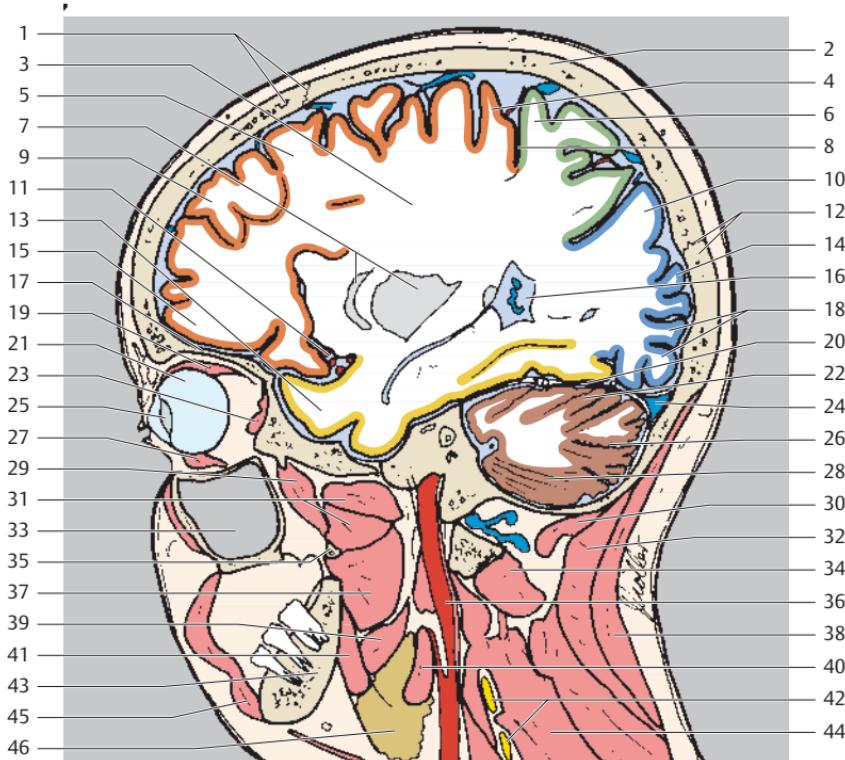


- 1 Corpus callosum (trunk)  
 2 Lateral ventricle (central part)  
 3 Caudate nucleus (body)  
 4 Thalamus (pulvinar)  
 5 Internal capsule (anterior limb)  
 6 Corpus callosum (major forceps)  
 7 Globus pallidus (lateral segment)  
 8 Parieto-occipital sulcus  
 9 Internal capsule (posterior limb)  
 10 Fornix (crus)  
 11 Globus pallidus (medial segment)  
 12 Lateral geniculate body  
 13 Putamen  
 14 Subiculum of hippocampus  
 15 Anterior commissure  
 16 Medial occipitotemporal gyrus  
 17 Optic tract  
 18 Tentorium cerebelli  
 19 Orbital gyrus  
 20 Parahippocampal gyrus  
 21 Middle cerebral artery in cistern of lateral cerebral fossa  
 22 Hemisphere of cerebellum (anterior lobe)  
 23 Amygdaloid nucleus  
 24 Petrous pyramid  
 25 Lateral ventricle (temporal horn)  
 26 Internal acoustic meatus  
 27 Temporal pole  
 28 Facial nerve (VII)  
 29 Dentate gyrus  
 30 Vestibulocochlear (acoustic) nerve (VIII)  
 31 Infratemporal fossa  
 32 Pontocerebellar cistern  
 33 Pharyngotympanic tube (auditory tube)  
 34 Internal carotid artery (petrous part)  
 35 Elevator muscle of the soft palate  
 36 Internal jugular vein in the jugular foramen  
 37 Medial pterygoid muscle  
 38 Hypoglossal nerve (XII) in hypoglossal canal

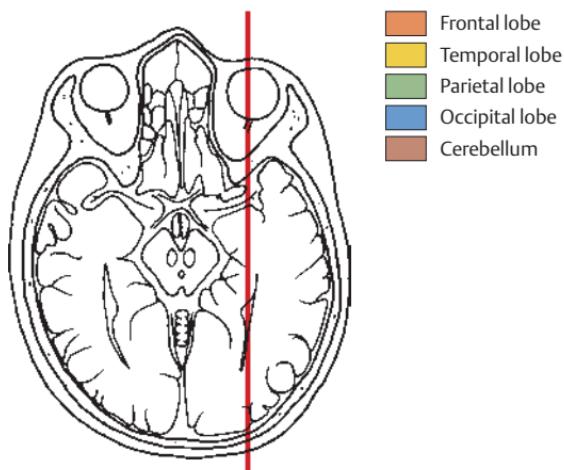
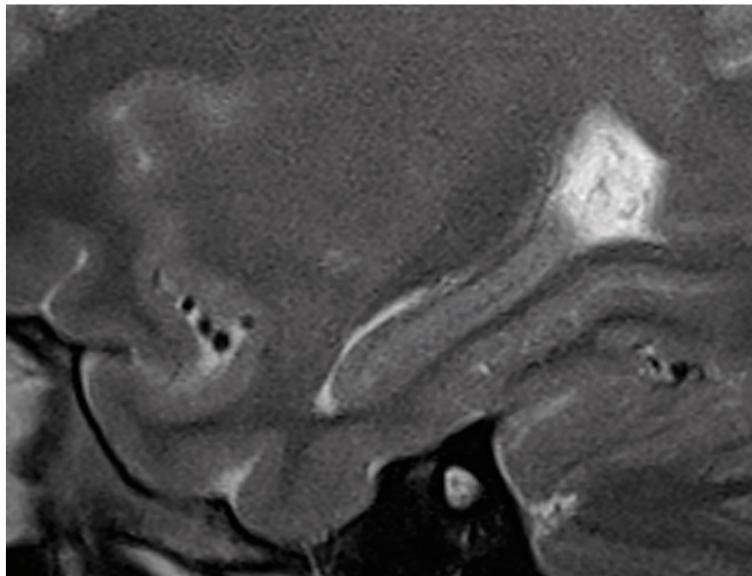


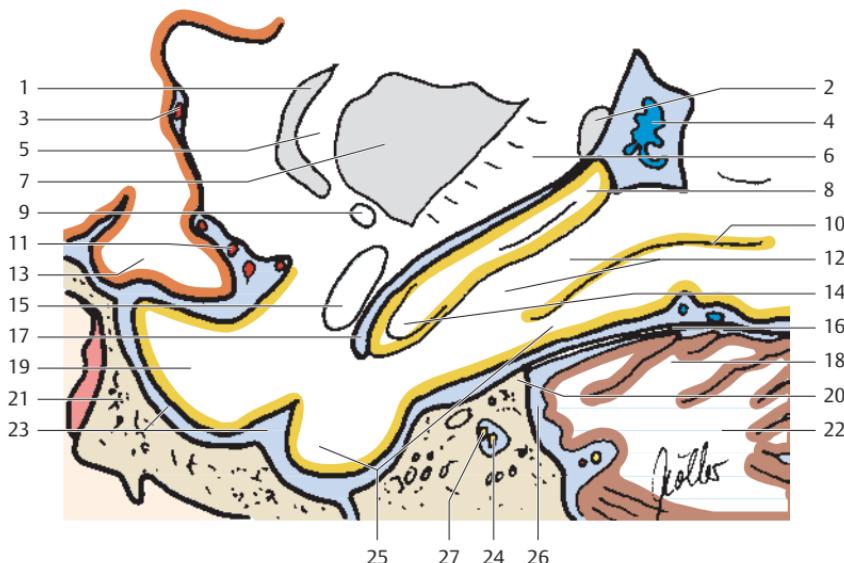
- █ Frontal lobe
- █ Temporal lobe
- █ Parietal lobe
- █ Occipital lobe
- █ Cerebellum

- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Cerebral white matter (semioval center)
- 4 Precentral gyrus
- 5 Superior frontal gyrus
- 6 Postcentral gyrus
- 7 Basal ganglia



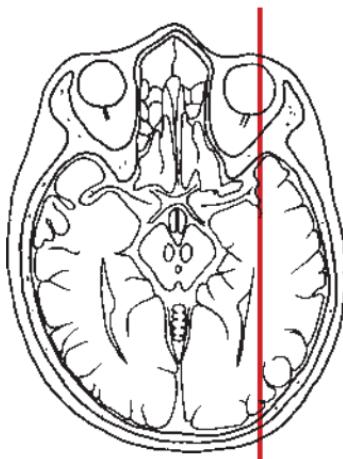
- |                                       |  |
|---------------------------------------|--|
| 8 Central sulcus                      | 27 Inferior rectus muscle                |
| 9 Middle frontal gyrus                | 28 Posterior lobe of cerebellum          |
| 10 Precuneus                          | 29 Temporal muscle                       |
| 11 Insular arteries                   | 30 rectus capitis posterior major muscle |
| 12 Occipital bone and lambdoid suture | 31 Lateral pterygoid muscle              |
| 13 Temporal pole                      | 32 Semispinalis capitis muscle           |
| 14 Cuneus                             | 33 Maxillary sinus                       |
| 15 Orbital gyrus                      | 34 Obliquus capitis inferior muscle      |
| 16 Lateral ventricle (occipital horn) | 35 Pterygoid process, lateral plate      |
| 17 Roof of orbit                      | 36 Internal carotid artery               |
| 18 Occipital gyri                     | 37 Medial pterygoid muscle               |
| 19 Superior rectus muscle             | 38 Trapezius muscle                      |
| 20 Tentorium cerebelli                | 39 Styloglossus muscle                   |
| 21 Eyeball                            | 40 Digastric muscle                      |
| 22 Anterior lobe of cerebellum        | 41 Mylohyoid muscle                      |
| 23 Lateral rectus muscle              | 42 Spinal nerve roots (cervical plexus)  |
| 24 Transverse sinus                   | 43 Mandible                              |
| 25 Lens                               | 44 Levator scapulae muscle               |
| 26 Horizontal fissure                 | 45 Orbicularis oris muscle               |
|                                       | 46 Submandibular gland                   |





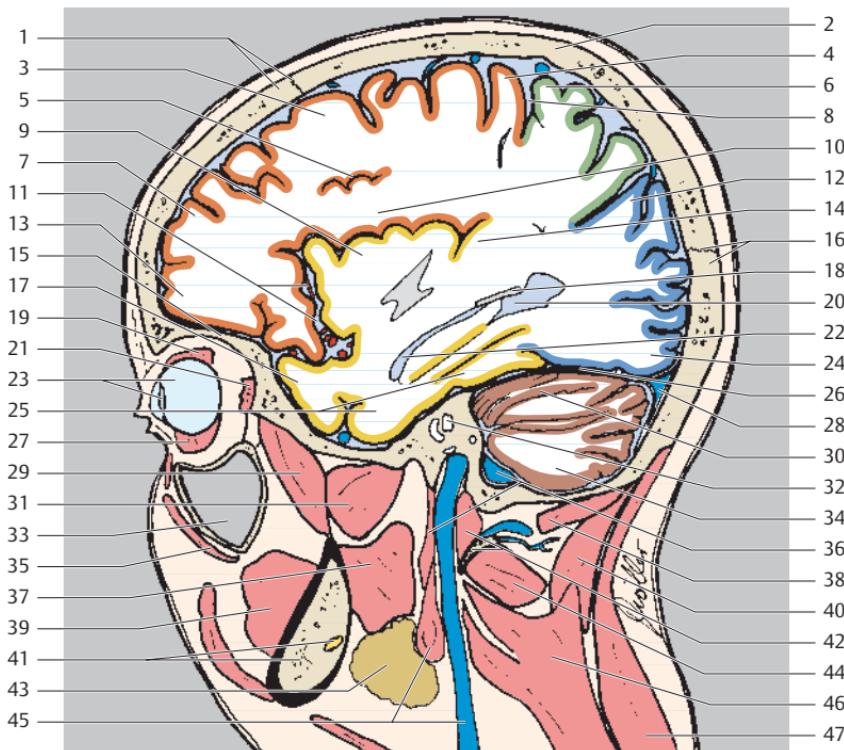
- 1 Claustrum
- 2 Caudate nucleus (tail)
- 3 Insular arteries
- 4 Lateral ventricle (central part)  
with choroid plexus
- 5 External capsule
- 6 Internal capsule
- 7 Putamen
- 8 Subiculum of hippocampus
- 9 Anterior commissure
- 10 Collateral sulcus
- 11 Middle cerebral artery
- 12 Parahippocampal gyrus
- 13 Orbital gyrus
- 14 Dentate gyrus
- 15 Amygdaloid nucleus

- 16 Tentorium cerebelli
- 17 Lateral ventricle (temporal horn)
- 18 Anterior lobe of cerebellum
- 19 Temporal lobe (temporal pole)
- 20 Petrous part of temporal bone  
(superior margin)
- 21 Sphenoidal bone (greater wing)
- 22 Cerebellum (cerebellar white matter)
- 23 Middle cranial fossa
- 24 Vestibulocochlear (acoustic) nerve  
(VIII) in Internal auditory meatus
- 25 Medial occipitotemporal gyrus
- 26 Pontocerebellar cistern
- 27 Facial nerve (VII) in Internal auditory  
meatus

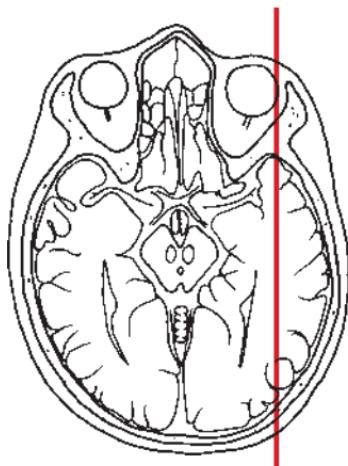
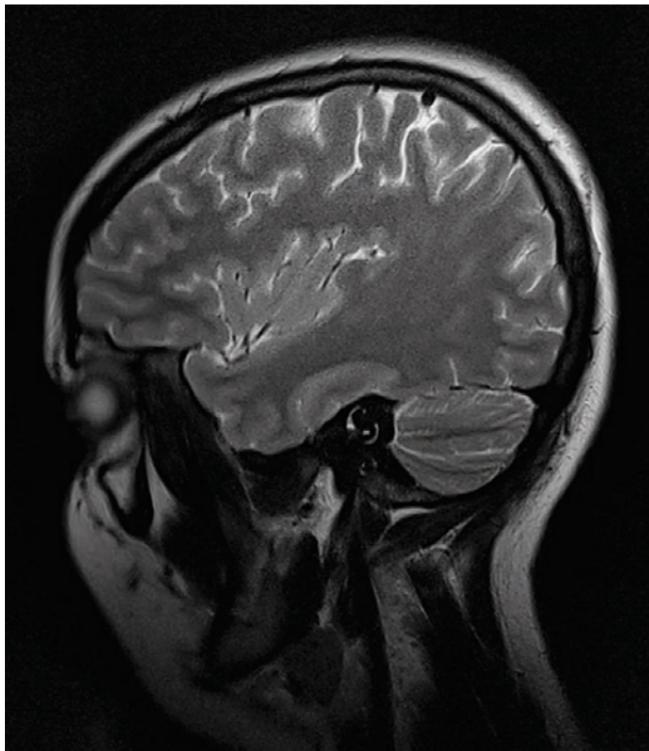


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Occipital lobe
- Cerebellum

- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Middle frontal gyrus
- 4 Precentral gyrus
- 5 Inferior frontal sulcus
- 6 Postcentral gyrus
- 7 Inferior frontal gyrus
- 8 Central sulcus
- 9 Insular gyri
- 10 Frontal operculum
- 11 Cistern of lateral cerebral fossa (insular cistern) and insular arteries

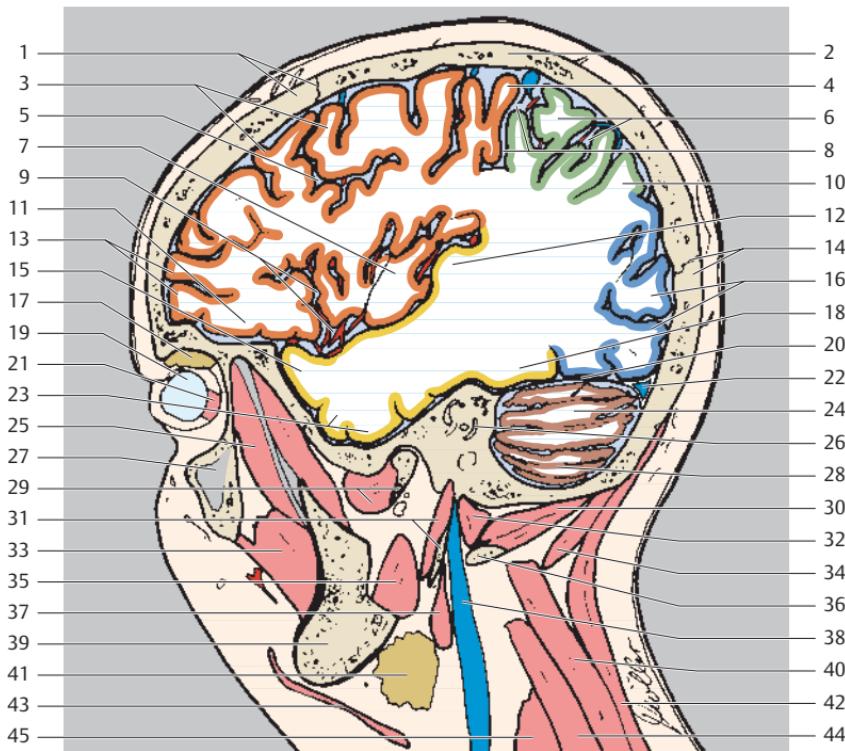


- |  |   |
|--|---|
| 12 Precuneus                           | 30 Anterior lobe of cerebellum                                    |
| 13 Orbital gyrus                       | 31 Lateral pterygoid muscle                                       |
| 14 Transverse temporal gyrus           | 32 Internal acoustic meatus                                       |
| 15 Roof of orbit                       | 33 Maxillary sinus  |
| 16 Occipital bone and lambdoid suture  | 34 Posterior lobe of cerebellum                                   |
| 17 Temporal pole                       | 35 Orbicularis oculi muscle                                       |
| 18 Caudate nucleus (tail)              | 36 Sigmoid sinus and stylopharyngeus muscle                       |
| 19 Levator palpebrae superioris muscle | 37 Medial pterygoid muscle  |
| 20 Lateral ventricle (occipital horn)  | 38 Rectus capitis posterior major muscle                          |
| 21 Lateral rectus muscle               | 39 Buccinator muscle  |
| 22 Lateral ventricle (temporal horn)   | 40 Semispinalis capitis muscle                                    |
| 23 Eyeball and lens                    | 41 Mandible and mandibular canal (inferior alveolar nerve)        |
| 24 Occipital gyri                      | 42 Atlas (transverse process) and rectus capitis lateralis muscle |
| 25 Medial occipitotemporal gyrus       | 43 Submandibular gland  |
| 26 Tentorium cerebelli                 | 44 Obliquus capitis inferior muscle                               |
| 27 Inferior oblique muscle             | 45 Internal jugular vein and digastric muscle                     |
| 28 Transverse sinus                    | 46 Levator scapulae muscle  |
| 29 Temporal muscle                     | 47 Splenius capitis muscle  |

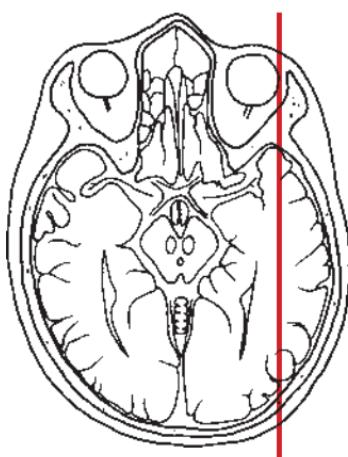
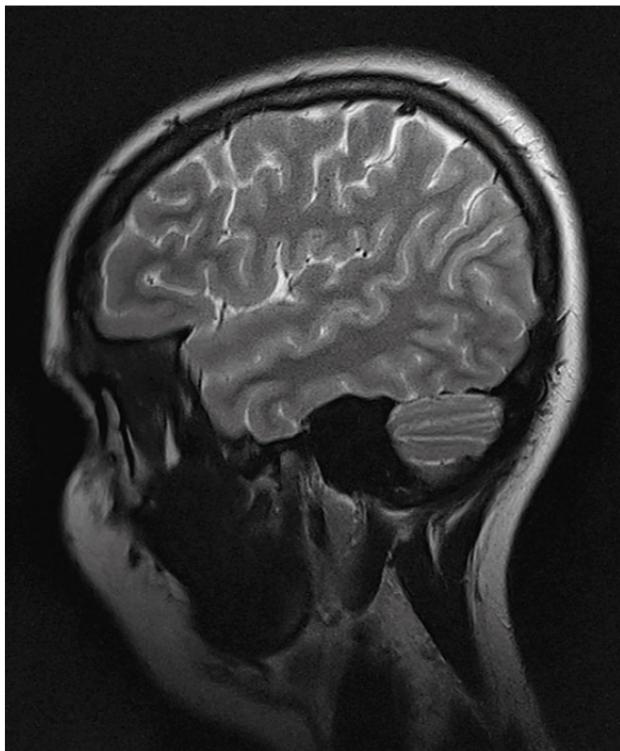


- 1 Frontal lobe
- 2 Temporal lobe
- 3 Parietal lobe
- 4 Occipital lobe
- 5 Cerebellum

- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Middle frontal gyrus
- 4 Precentral gyrus
- 5 Inferior frontal sulcus
- 6 Postcentral gyrus and postcentral sulcus
- 7 Insular gyri
- 8 Central sulcus

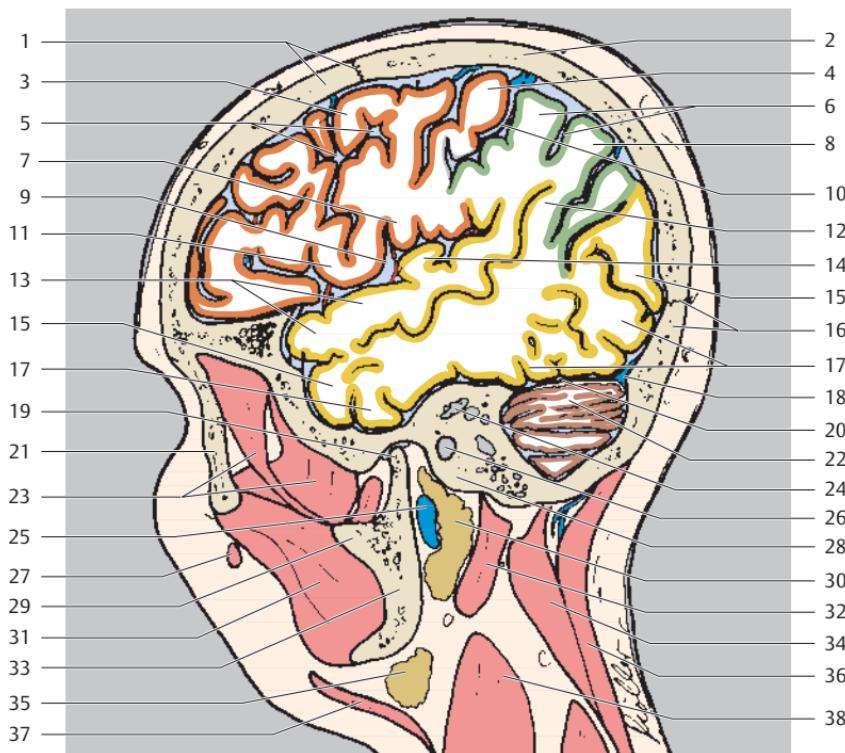


- 1 Cistern of lateral cerebral fossa (insular cistern) and insular arteries  
 2 Posterior semicircular canal  
 3 Angular gyrus  
 4 Maxillary sinus  
 5 Orbital gyrus  
 6 Posterior lobe of cerebellum  
 7 Transverse temporal gyrus  
 8 Lateral pterygoid muscle and head of mandible  
 9 Inferior frontal gyrus  
 10 Rectus capitis superior muscle  
 11 Occipital bone and lambdoid suture  
 12 Rectus capitis lateralis muscle  
 13 Styloid muscle and styloid process  
 14 Superior temporal gyrus  
 15 Buccinator muscle  
 16 Digastric muscle, posterior belly  
 17 Semispinalis capitis muscle  
 18 Internal jugular vein  
 19 Temporal pole and middle temporal gyrus  
 20 Mandible  
 21 Levator scapulae muscle  
 22 Transverse sinus  
 23 Submandibular gland  
 24 Temporal muscle  
 25 Anterior lobe of cerebellum  
 26 Platysma  
 27 Splenius capitis muscle  
 28 Splenius cervicis muscle  
 29 Temporal muscle  
 30 Scalenus posterior muscle  
 31 Lacrimal gland  
 32 Platysma  
 33 Transverse process  
 34 Anterior lobe of cerebellum  
 35 Temporal muscle  
 36 Digastric muscle, anterior belly  
 37 Submandibular gland  
 38 Levator scapulae muscle  
 39 Transverse sinus  
 40 Temporal muscle  
 41 Platysma  
 42 Scalenus posterior muscle  
 43 Anterior lobe of cerebellum  
 44 Temporal muscle  
 45 Submandibular gland

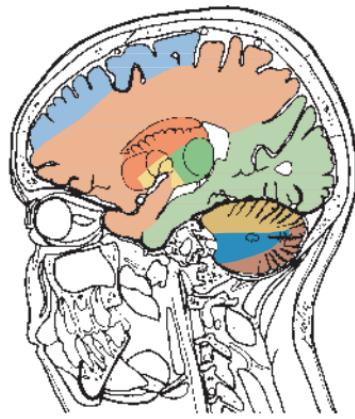
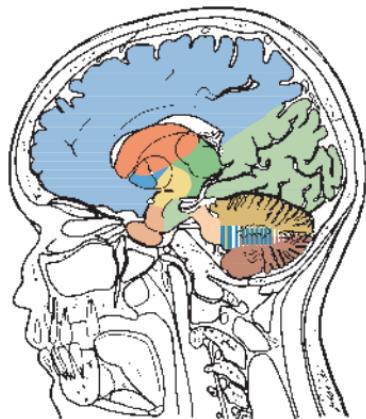
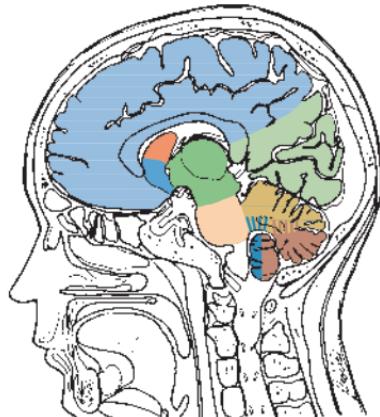
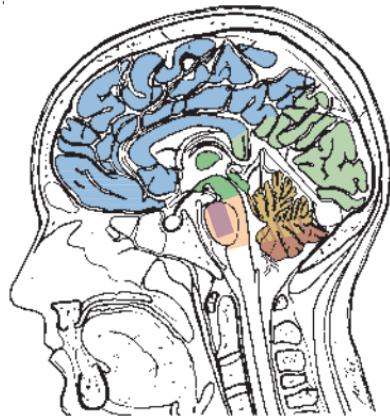


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Cerebellum

- 1 Frontal bone and coronal suture
- 2 Parietal bone
- 3 Middle frontal gyrus
- 4 Precentral gyrus
- 5 Inferior frontal sulcus
- 6 Postcentral gyrus and postcentral sulcus



- |   |                                      |
|---|--------------------------------------|
| 7 Inferior frontal gyrus, insular cortex  | 22 Posterior lobe of cerebellum      |
| 8 Supramarginal gyrus                     | 23 Temporal muscle                   |
| 9 Lateral sulcus                          | 24 Mastoid antrum                    |
| 10 Central sulcus                         | 25 Retromandibular vein              |
| 11 Inferior frontal gyrus, opercular part | 26 External acoustic meatus          |
| 12 Angular gyrus                          | 27 Zygomatic muscle                  |
| 13 Superior temporal gyrus                | 28 Mastoid process                   |
| 14 Transverse temporal gyrus              | 29 Coronoid process                  |
| 15 Middle temporal gyrus                  | 30 Parotid gland                     |
| 16 Occipital bone and lambdoid suture     | 31 Masseter muscle                   |
| 17 Inferior temporal gyrus                | 32 Digastric muscle, posterior belly |
| 18 Transverse sinus                       | 33 Mandible (ramus)                  |
| 19 Head of mandible                       | 34 Semispinalis capitis muscle       |
| 20 Tentorium cerebelli                    | 35 Submandibular gland               |
| 21 Zygomatic bone                         | 36 Splenius capitis muscle           |
|   | 37 Platysma                          |
|   | 38 Sternocleidomastoid muscle        |

**Anterior cerebral artery**

Terminal branches

Central branches (striate arteries  
including distal medial striate artery)**Middle cerebral artery**

Terminal branches

Central branches (striate branches)

**Posterior cerebral artery**

Terminal branches

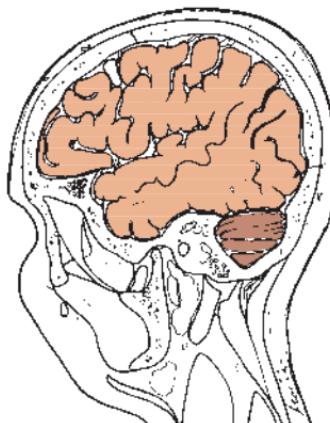
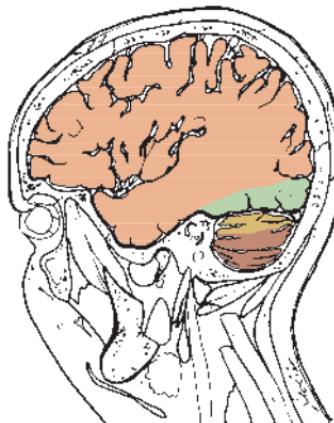
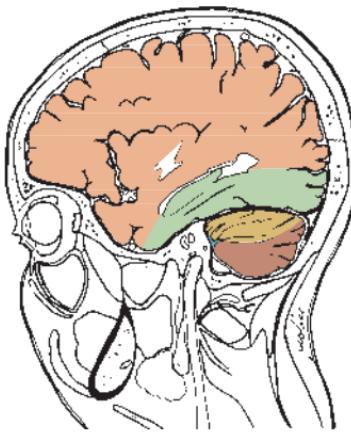
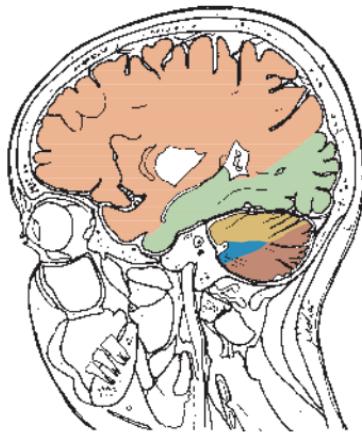
Central branches (including the  
posterior communicating artery)**Basilar artery**Anteromedial and anterolateral  
paramedian branchesCircumferential arteries and  
lateral and dorsal paramedian  
branches

Superior cerebellar artery

Anterior superior cerebellar artery

Boundary region

Posterior inferior cerebellar artery

**Middle cerebral artery**

Terminal branches

Central branches (striate branches)

**Posterior cerebral artery**

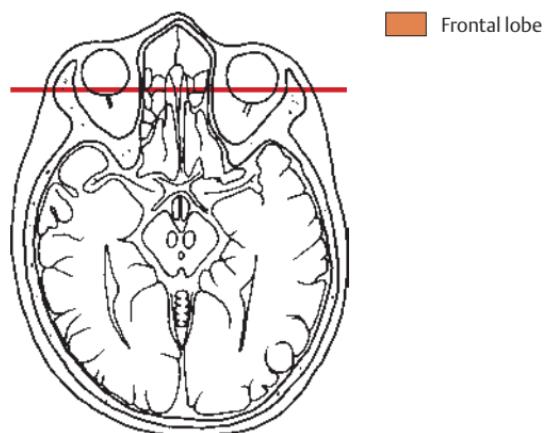
Terminal branches

Superior cerebellar artery

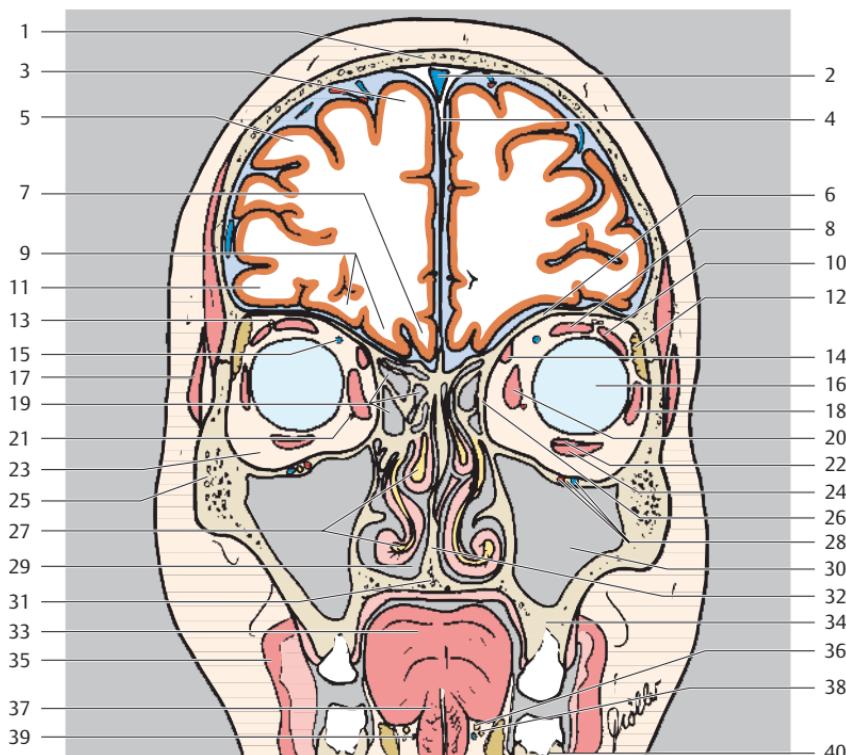
Anterior superior cerebellar artery

Posterior inferior cerebellar artery

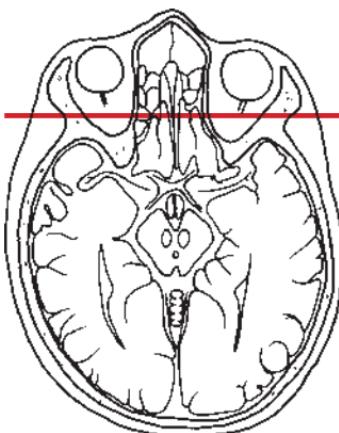
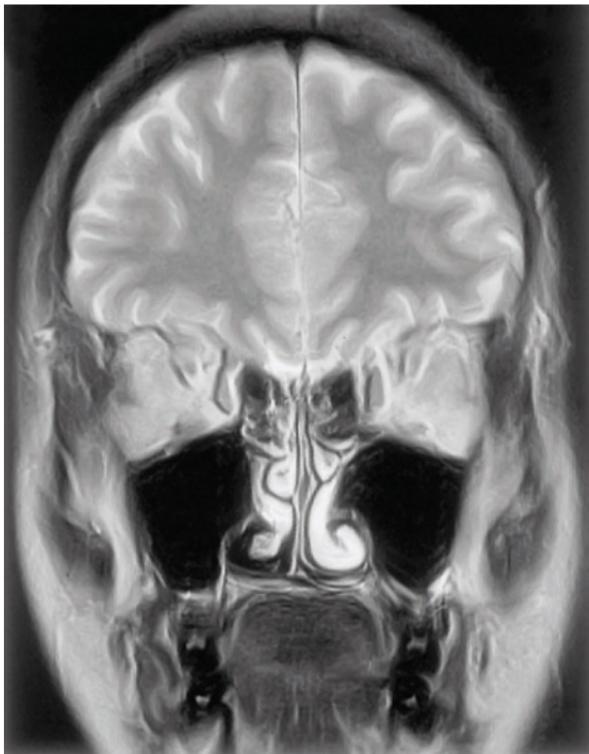
Anterior choroidal artery



Frontal lobe

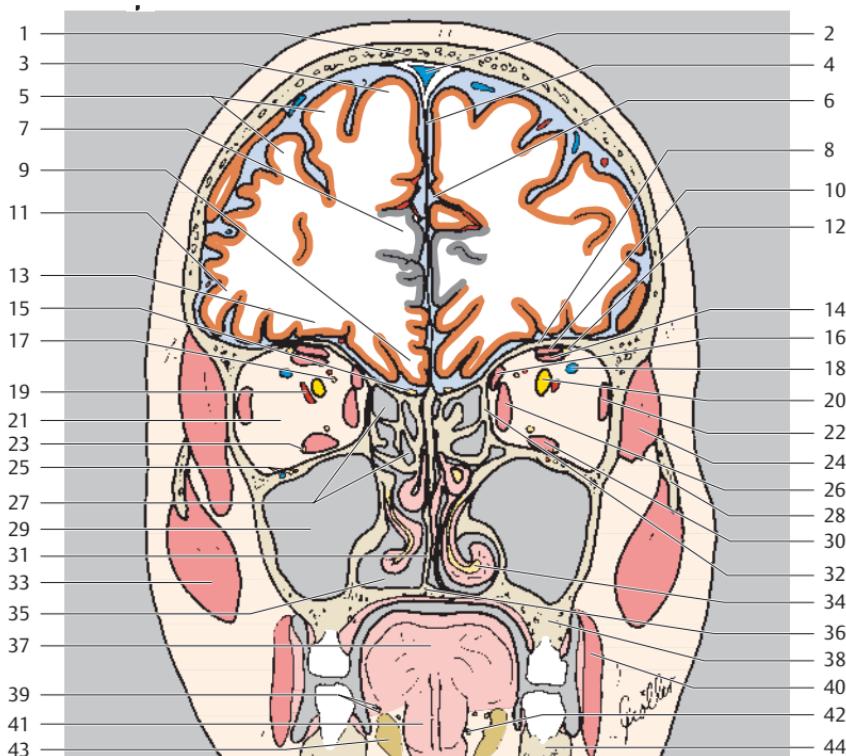


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|----|-------------------------------------|----|--------------------------------------|
| 1  | Frontal bone                        | 21 | Ophthalmic artery                    |
| 2  | Superior sagittal sinus             | 22 | Inferior rectus muscle               |
| 3  | Superior frontal gyrus              | 23 | Orbit (retrobulbar fat)              |
| 4  | Falx cerebri                        | 24 | Inferior oblique muscle              |
| 5  | Middle frontal gyrus                | 25 | Zygomatic bone                       |
| 6  | Roof of orbit                       | 26 | Orbital plate                        |
| 7  | Straight gyrus                      | 27 | Middle and inferior nasal conchas    |
| 8  | Levator palpebrae superioris muscle | 28 | Infraorbital artery, vein, and nerve |
| 9  | Orbital gyri                        | 29 | Nasal sinus                          |
| 10 | Superior rectus muscle              | 30 | Maxillary sinus                      |
| 11 | Inferior frontal gyrus              | 31 | Hard palate                          |
| 12 | Lacrimal gland                      | 32 | Nasal septum                         |
| 13 | Supraorbital nerve                  | 33 | Tongue                               |
| 14 | Superior oblique muscle             | 34 | Maxilla (alveolar process)           |
| 15 | Superior ophthalmic vein            | 35 | Depressor anguli oris muscle         |
| 16 | Eyeball                             | 36 | Lingual nerve                        |
| 17 | Orbicularis oculi muscle            | 37 | Genioglossus muscle                  |
| 18 | Lateral rectus muscle               | 38 | Hypoglossal nerve (XII)              |
| 19 | Ethmoidal cells                     | 39 | Submandibular duct                   |
| 20 | Medial rectus muscle                | 40 | Body of mandible                     |

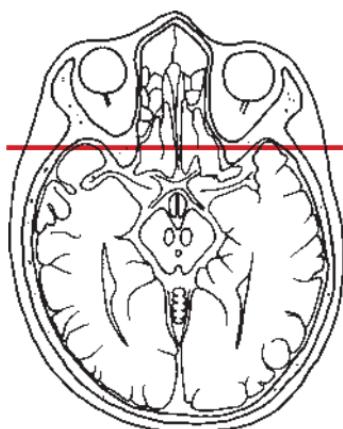


Frontal lobe

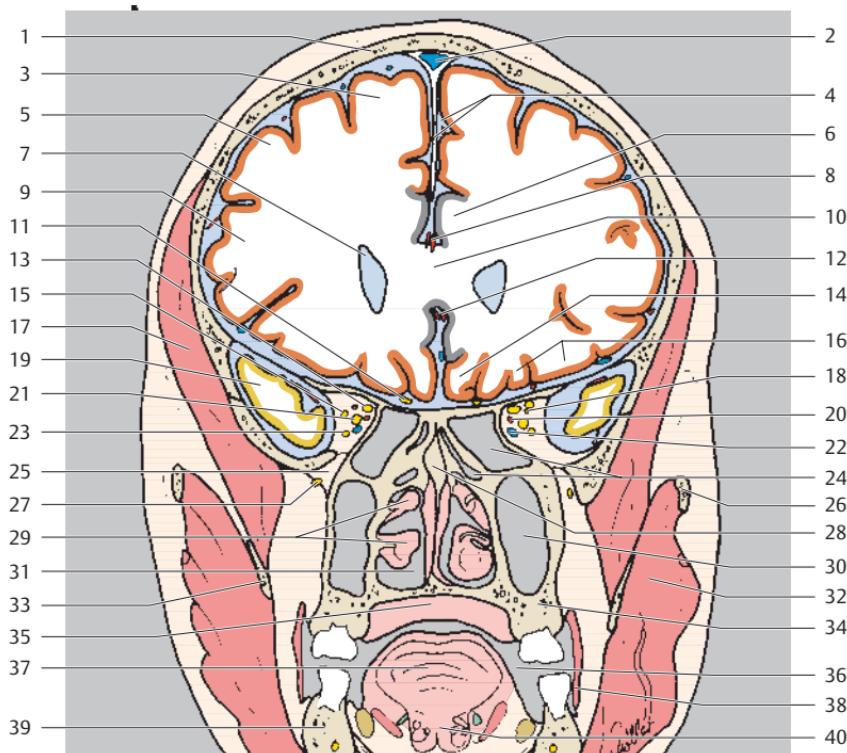
- 1 Frontal bone
- 2 Superior sagittal sinus
- 3 Superior frontal gyrus
- 4 Falx cerebri
- 5 Middle frontal gyrus
- 6 Longitudinal cerebral
- 7 Cingulate gyrus



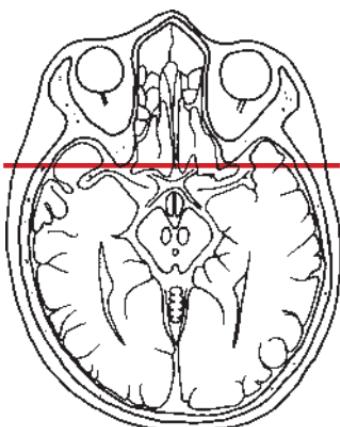
- 8 Roof of orbit
- 26 Medial rectus muscle
- 9 Straight gyrus
- 27 Ethmoidal cells
- 10 Levator palpebrae superioris muscle
- 28 Zygomatic bone
- 11 Inferior frontal gyrus
- 29 Maxillary sinus
- 12 Supraorbital nerve
- 30 Inferior rectus muscle
- 13 Orbital gyri
- 31 Nasal septum
- 14 Superior rectus muscle
- 32 Orbital plate
- 15 Olfactory bulb
- 33 Masseter muscle
- 16 Superior oblique muscle
- 34 Inferior nasal concha
- 17 Nasociliary nerve
- 35 Nasal cavity
- 18 Superior ophthalmic vein
- 36 Hard palate
- 19 Ophthalmic artery
- 37 Tongue
- 20 Optic nerve (II)
- 38 Maxilla (alveolar process)
- 21 Orbit (retrobulbar fat)
- 39 Lingual nerve and hypoglossal nerve (XII)
- 22 Lateral rectus muscle
- 40 Depressor anguli oris muscle
- 23 Oculomotor nerve (III), inferior part
- 41 Genioglossus muscle
- 24 Temporal muscle
- 42 Submandibular duct
- 25 Infraorbital nerve, artery, and vein
- 43 Submandibular gland
- 44 Body of mandible



- Frontal lobe
- Temporal lobe

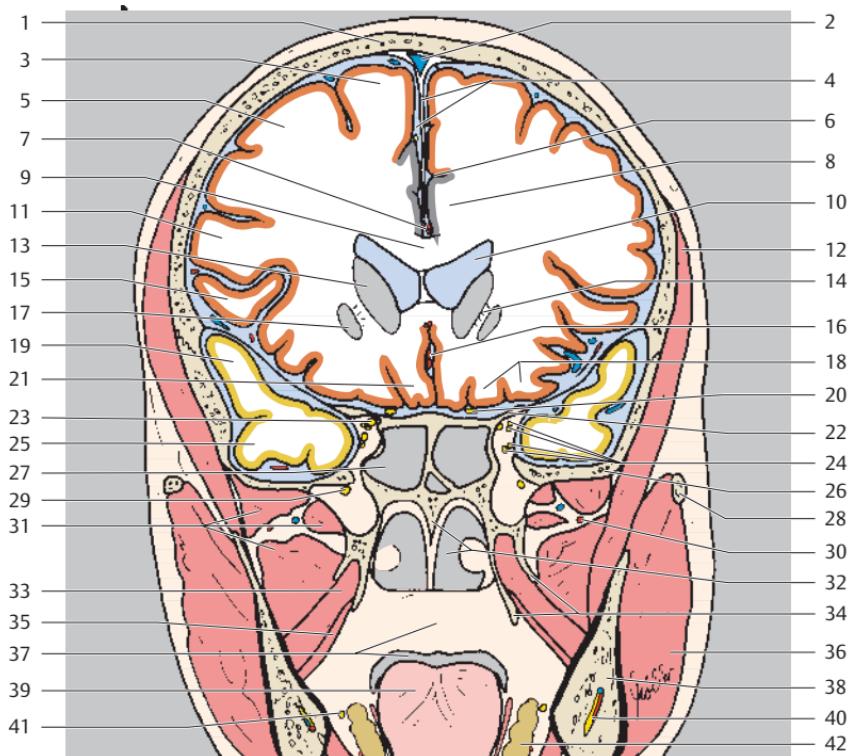


- |    |  |    |   |
|----|--|----|---|
| 1  | Frontal bone                             | 21 | Ophthalmic nerve (first division of trigeminal nerve) |
| 2  | Superior sagittal sinus                  | 22 | Superior ophthalmic vein                              |
| 3  | Superior frontal gyrus                   | 23 | Abducent nerve (VI)                                   |
| 4  | Falx cerebri in interhemispheric fissure | 24 | Ethmoidal cells                                       |
| 5  | Middle frontal gyrus                     | 25 | Pterygopalatine fossa                                 |
| 6  | Cingulate gyrus                          | 26 | Zygomatic arch  |
| 7  | Lateral ventricle (frontal horn)         | 27 | Maxillary nerve (second division of trigeminal nerve) |
| 8  | Pericallosal artery                      | 28 | Nasal septum  |
| 9  | Inferior frontal gyrus                   | 29 | Middle and inferior nasal conchas                     |
| 10 | Corpus callosum (genu)                   | 30 | Maxillary sinus                                       |
| 11 | Olfactory tract                          | 31 | Nasal sinus   |
| 12 | Anterior cerebral artery                 | 32 | Masseter muscle                                       |
| 13 | Optic nerve (II)                         | 33 | Ramus of mandible                                     |
| 14 | Straight gyrus                           | 34 | Maxilla (alveolar process)                            |
| 15 | Oculomotor nerve (III)                   | 35 | Soft palate   |
| 16 | Orbital gyri                             | 36 | Oral cavity   |
| 17 | Temporal muscle                          | 37 | Tongue  |
| 18 | Trochlear nerve (IV)                     | 38 | Buccinator muscle                                     |
| 19 | Temporal lobe (temporal pole)            | 39 | Body of mandible                                      |
| 20 | Ophthalmic artery                        | 40 | Genioglossus muscle                                   |

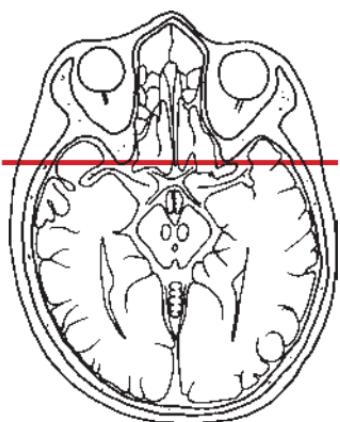
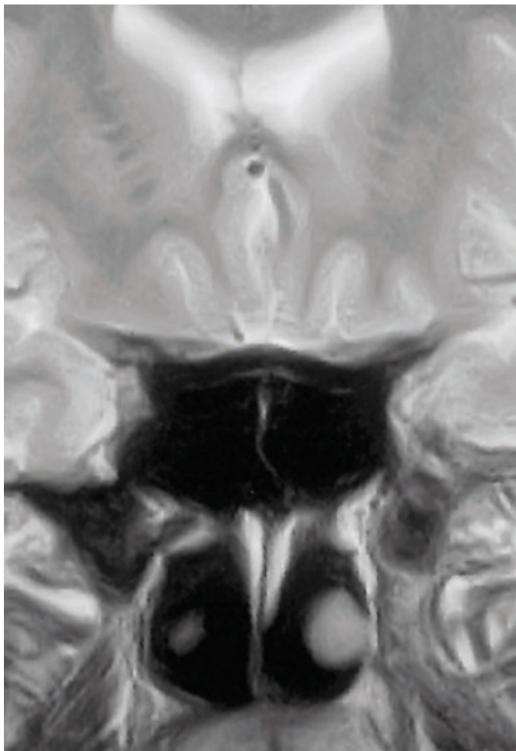


Frontal lobe  
Temporal lobe

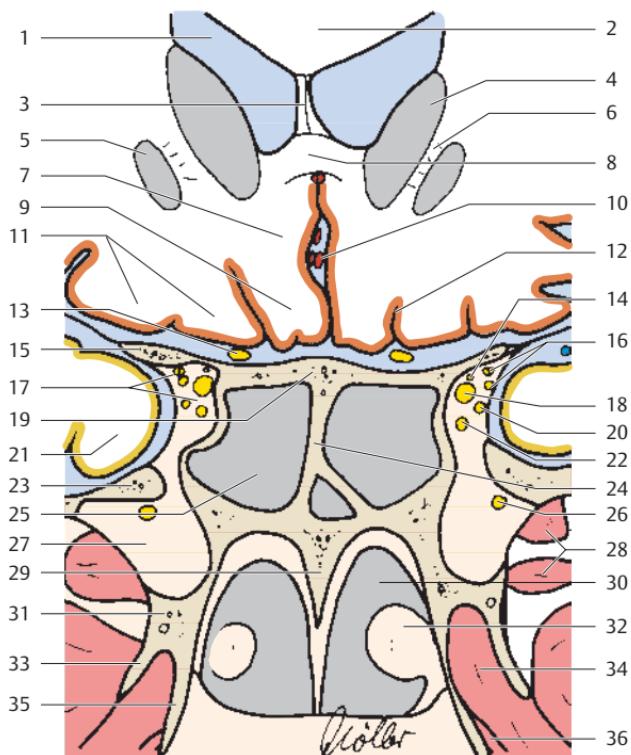
- 1 Frontal bone
- 2 Superior sagittal sinus
- 3 Superior frontal gyrus
- 4 Falx cerebri in Longitudinal cerebral
- 5 Middle frontal gyrus
- 6 Cingulate sulcus
- 7 Pericallosal artery



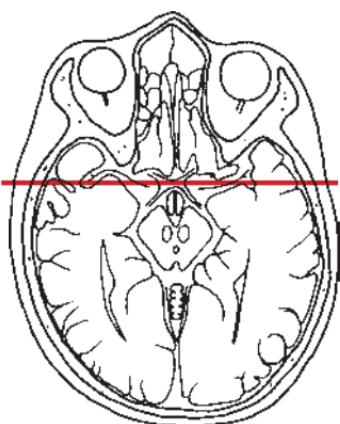
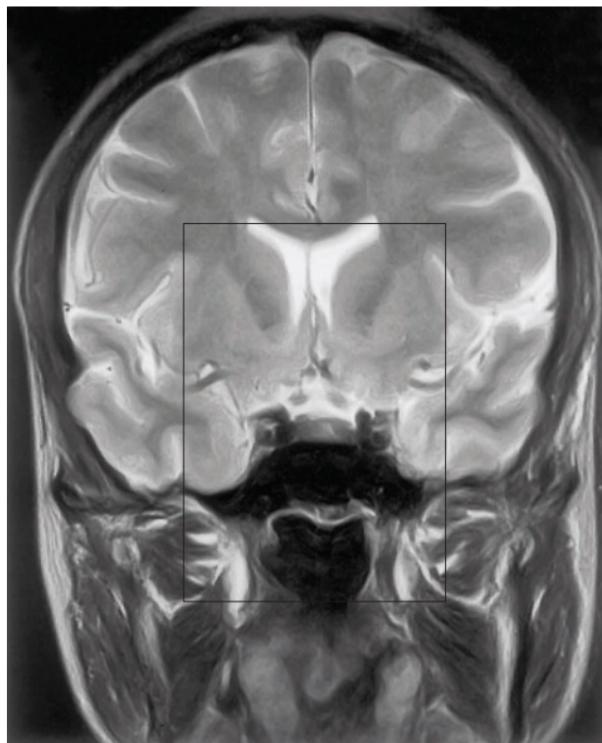
- |  |  |
|--|--|
| 8 Cingulate gyrus  | 26 Temporal bone   |
| 9 Corpus callosum (trunk)  | 27 Sphenoidal sinus  |
| 10 Lateral ventricle (frontal horn)  | 28 Zygomatic arch  |
| 11 Inferior frontal gyrus  | 29 Maxillary nerve in pterygopalatine fossa                      |
| 12 Temporal muscle   | 30 Maxillary artery  |
| 13 Head of caudate nucleus   | 31 Lateral pterygoid muscle in infratemporal fossa               |
| 14 Internal capsule (anterior limb)  | 32 Nasal septum and sinus  |
| 15 Frontal operculum   | 33 Medial pterygoid muscle                                       |
| 16 Anterior cerebral artery  | 34 Pterygoid process (medial and lateral plates)                 |
| 17 Putamen   | 35 Tensor veli palatini muscle                                   |
| 18 Orbital gyrus   | 36 Masseter muscle   |
| 19 Superior temporal gyrus   | 37 Soft palate and oral cavity                                   |
| 20 Olfactory tract   | 38 Ramus of mandible   |
| 21 Straight gyrus  | 39 Tongue  |
| 22 Sphenoidal bone (less wing)   | 40 Inferior alveolar artery, vein, and nerve in mandibular canal |
| 23 Optic nerve (II)  | 41 Lingual nerve   |
| 24 Trochlear (IV), oculomotor (III), ophthalmic (first division of trigeminal), and abducent (VI) nerves | 42 Submandibular gland   |
| 25 Middle temporal gyrus   |  |



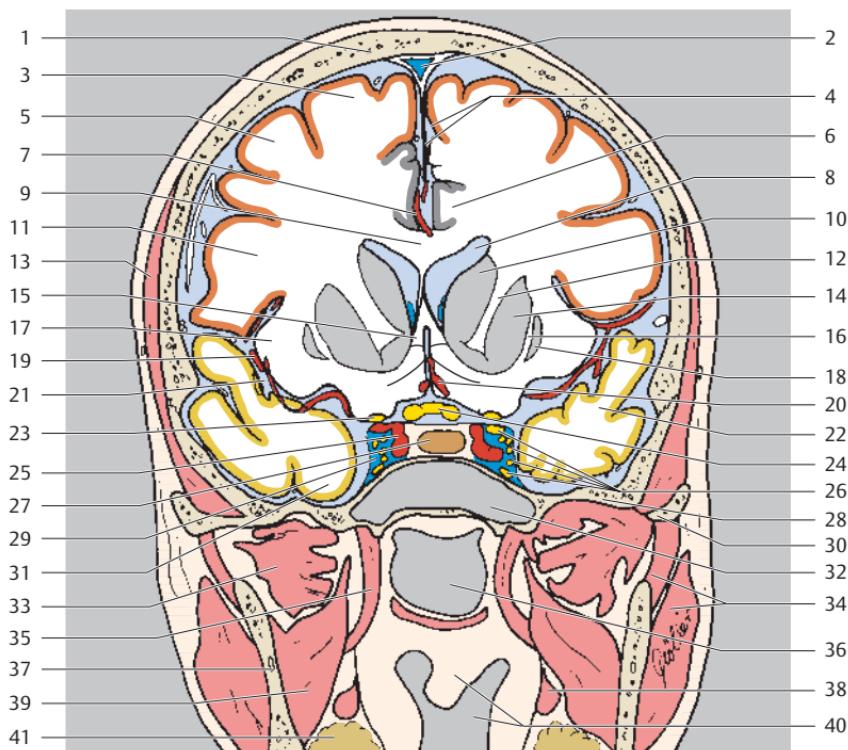
Frontal lobe  
Temporal lobe



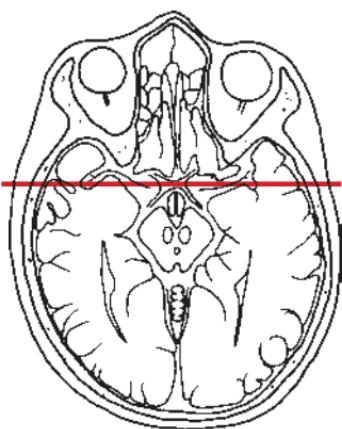
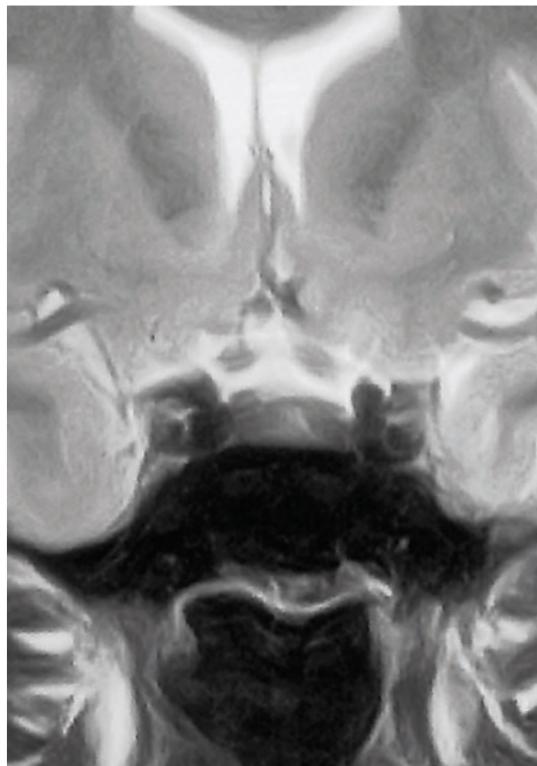
- 1 Lateral ventricle (frontal horn)  
 2 Corpus callosum (trunk)  
 3 Septum pellucidum  
 4 Head of caudate nucleus  
 5 Putamen  
 6 Internal capsule (anterior limb)  
 7 Subcallosal gyrus  
 8 Corpus callosum (genu)  
 9 Straight gyrus  
 10 Pericallosal artery  
 11 Orbital gyri  
 12 Olfactory sulcus  
 13 Olfactory tract  
 14 Oculomotor nerve (III, superior branch)  
 15 Anterior clinoid process (sphenoidal bone, lesser wing)  
 16 Ophthalmic nerve (frontal, lacrimal, and nasociliary nerves) = superior branch of trigeminal nerve (V)  
 17 Superior orbital fissure  
 18 Optic nerve (II)  
 19 Sphenoid plane  
 20 Abducent nerve (VI)  
 21 Temporal pole  
 22 Oculomotor nerve (III), inferior branch  
 23 Sphenoidal bone, lesser wing  
 24 Septum of sphenoidal sinus  
 25 Sphenoidal sinus  
 26 Maxillary nerve in pterygopalatine fossa  
 27 Pterygopalatine fossa  
 28 Lateral pterygoid muscle  
 29 Vomer  
 30 Nasal sinus  
 31 Pterygoid process (sphenoidal bone)  
 32 Middle nasal concha  
 33 Pterygoid process (lateral plate)  
 34 Medial pterygoid muscle  
 35 Pterygoid process (medial plate)  
 36 Tensor veli palatini muscle



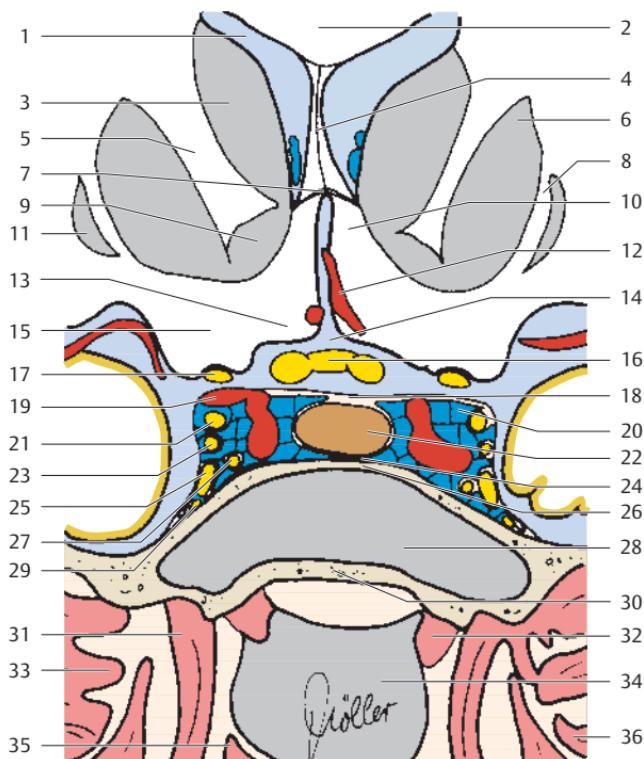
- █ Frontal lobe
- █ Temporal lobe



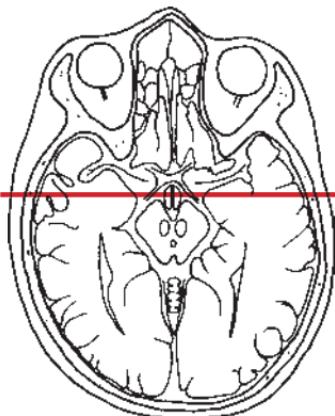
- |  |   |
|--|---|
| 1 Frontal bone                             | 22 Superior temporal gyrus  |
| 2 Superior sagittal sinus                  | 23 Olfactory tract  |
| 3 Superior frontal gyrus                   | 24 Optic chiasm   |
| 4 Falx cerebri in<br>Longitudinal cerebral | 25 Internal carotid artery (syphon)   |
| 5 Middle frontal gyrus                     | 26 Trochlear (IV), oculomotor (III),<br>ophthalmic, and abducent (V) nerves |
| 6 Cingulate gyrus                          | 27 Pituitary gland  |
| 7 Pericallosal artery                      | 28 Temporal bone  |
| 8 Lateral ventricle (frontal horn)         | 29 Cavernous sinus  |
| 9 Corpus callosum (genu)                   | 30 Zygomatic bone   |
| 10 Head of caudate nucleus                 | 31 Middle temporal gyrus  |
| 11 Inferior frontal gyrus                  | 32 Sphenoidal sinus   |
| 12 Internal capsule (anterior limb)        | 33 Lateral pterygoid muscle   |
| 13 Temporal muscle                         | 34 Masseter muscle  |
| 14 Putamen                                 | 35 Tensor veli palatini muscle  |
| 15 Subcallosal gyrus                       | 36 Nasopharynx  |
| 16 External capsule                        | 37 Ramus of mandible  |
| 17 Insula                                  | 38 Styloglossus muscle  |
| 18 Claustrum                               | 39 Medial pterygoid muscle  |
| 19 Insular arteries                        | 40 Uvula and oropharynx   |
| 20 Anterior cerebral artery                | 41 Submandibular gland  |
| 21 Lateral sulcus                          |   |



Temporal lobe

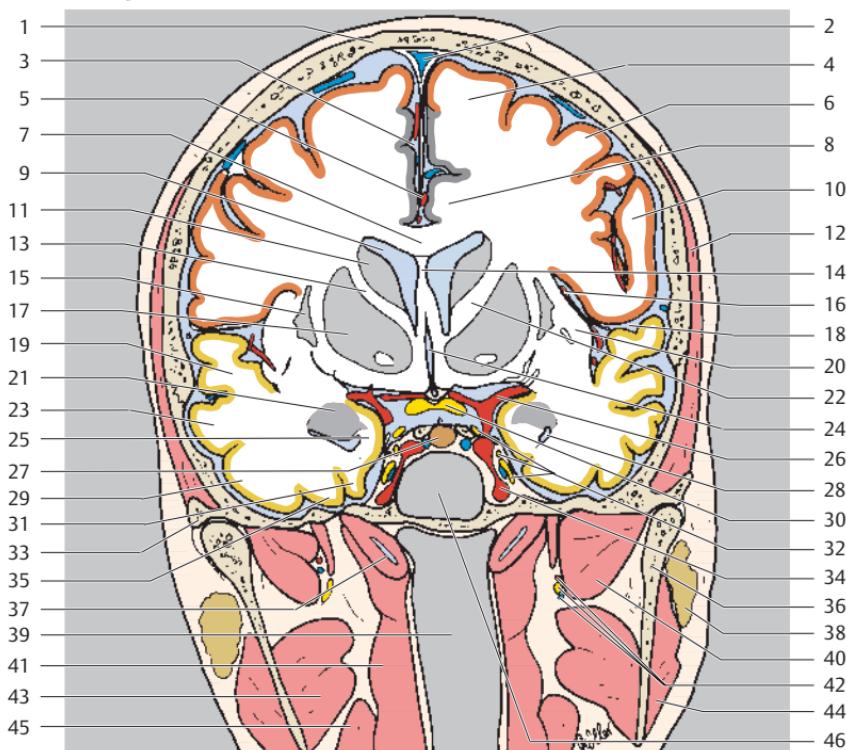


- |                                     |   |
|-------------------------------------|---|
| 1 Lateral ventricle (frontal horn)  | 20 Cavernous sinus                          |
| 2 Corpus callosum (trunk)           | 21 Oculomotor nerve (III)                   |
| 3 Head of caudate nucleus           | 22 Pituitary gland                          |
| 4 Septum pellucidum                 | 23 Trochlear nerve (IV)                     |
| 5 Internal capsule (anterior limb)  | 24 Inferior intercavernous sinus            |
| 6 Putamen                           | 25 Ophthalmic nerve ( $V_1$ )               |
| 7 Corpus callosum (rostrum)         | 26 Floor of sella                           |
| 8 External capsule                  | 27 Abducent nerve (VI)                      |
| 9 Nucleus accumbens                 | 28 Sphenoidal sinus                         |
| 10 Subcallosal gyrus                | 29 Maxillary nerve ( $V_2$ )                |
| 11 Claustrum                        | 30 Sphenoidal bone (body)                   |
| 12 Anterior cerebral artery         | 31 Tensor veli palatini muscle              |
| 13 Straight gyrus                   | 32 Pharyngotympanic tube<br>(auditory tube) |
| 14 Chiasmatic cistern               | 33 Lateral pterygoid muscle                 |
| 15 Orbital gyri                     | 34 Nasopharynx                              |
| 16 Optic chiasm                     | 35 Levator veli palatini muscle             |
| 17 Olfactory tract                  | 36 Medial pterygoid muscle                  |
| 18 Sellar diaphragm                 |   |
| 19 Internal carotid artery (syphon) |   |

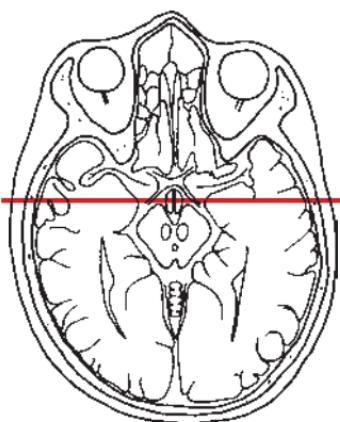


Frontal lobe  
Temporal lobe

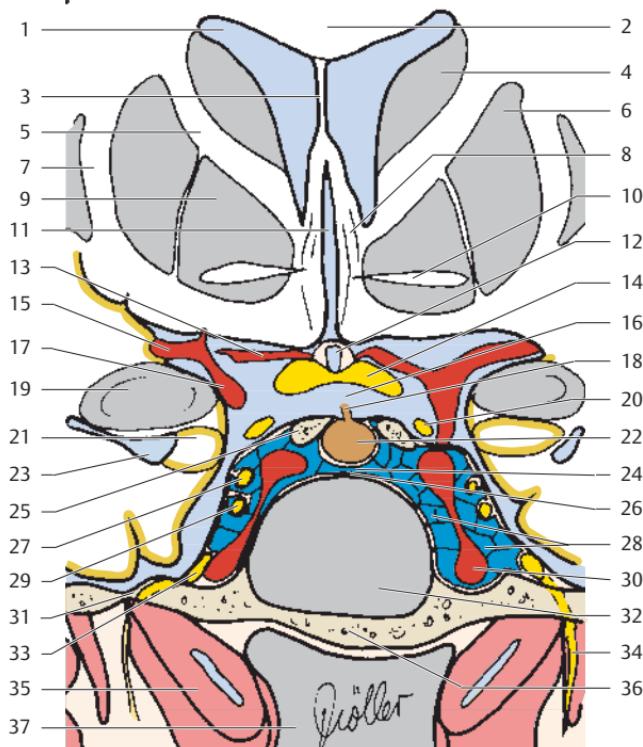
- 1 Frontal bone
- 2 Superior sagittal sinus
- 3 Falx cerebri in Longitudinal cerebral
- 4 Superior frontal gyrus
- 5 Pericallosal artery
- 6 Middle frontal gyrus
- 7 Corpus callosum (genu)



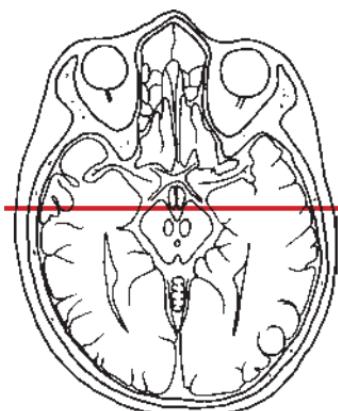
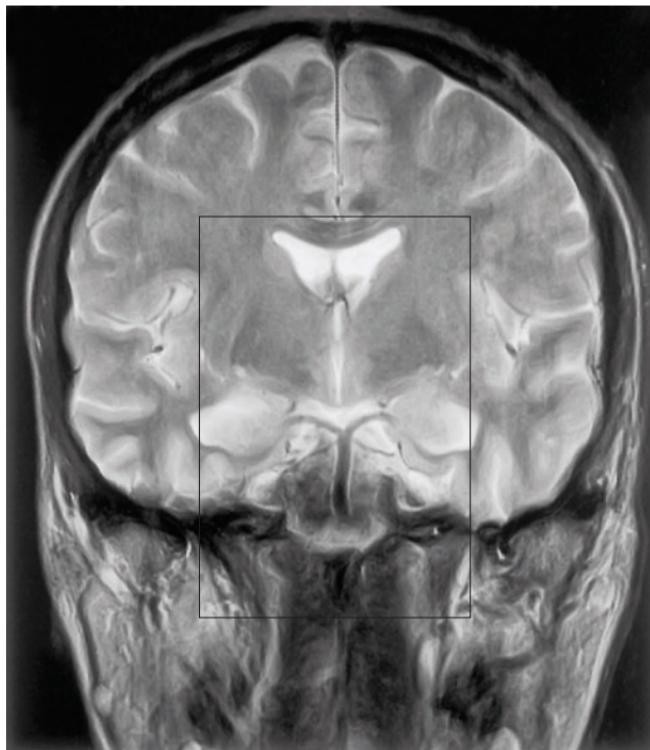
- |                                      |   |
|--------------------------------------|---|
| 8 Cingulate gyrus                    | 29 Inferior temporal gyrus  |
| 9 Lateral ventricle (frontal horn)   | 30 Optic chiasm   |
| 10 Inferior frontal gyrus            | 31 Parahippocampal gyrus  |
| 11 Head of caudate nucleus           | 32 Trochlear (IV), oculomotor (III) and abducent (VI) nerves, trigeminal ganglion |
| 12 Temporal muscle                   | 33 Temporal bone (zygomatic process)  |
| 13 External capsule                  | 34 Internal carotid artery (syphon)   |
| 14 Septum pellucidum                 | 35 Lateral occipitotemporal gyrus   |
| 15 Claustrum                         | 36 Head of mandible   |
| 16 Insular arteries                  | 37 Pharyngotympanic tube (auditory tube)  |
| 17 Putamen                           | 38 Parotid gland  |
| 18 Lateral sulcus                    | 39 Pharynx  |
| 19 Superior temporal gyrus           | 40 Lateral pterygoid muscle   |
| 20 Insula                            | 41 Superior constrictor muscle of pharynx   |
| 21 Amygdaloid body                   | 42 Mandibular artery, vein, and nerve   |
| 22 Internal capsule (anterior limb)  | 43 Medial pterygoid muscle  |
| 23 Middle temporal gyrus             | 44 Masseter muscle  |
| 24 Longitudinal cerebral             | 45 Styloglossus muscle  |
| 25 Hippocampus                       | 46 Sphenoidal sinus   |
| 26 Middle cerebral artery            |   |
| 27 Pituitary gland                   |   |
| 28 Lateral ventricle (temporal horn) |   |



Temporal lobe

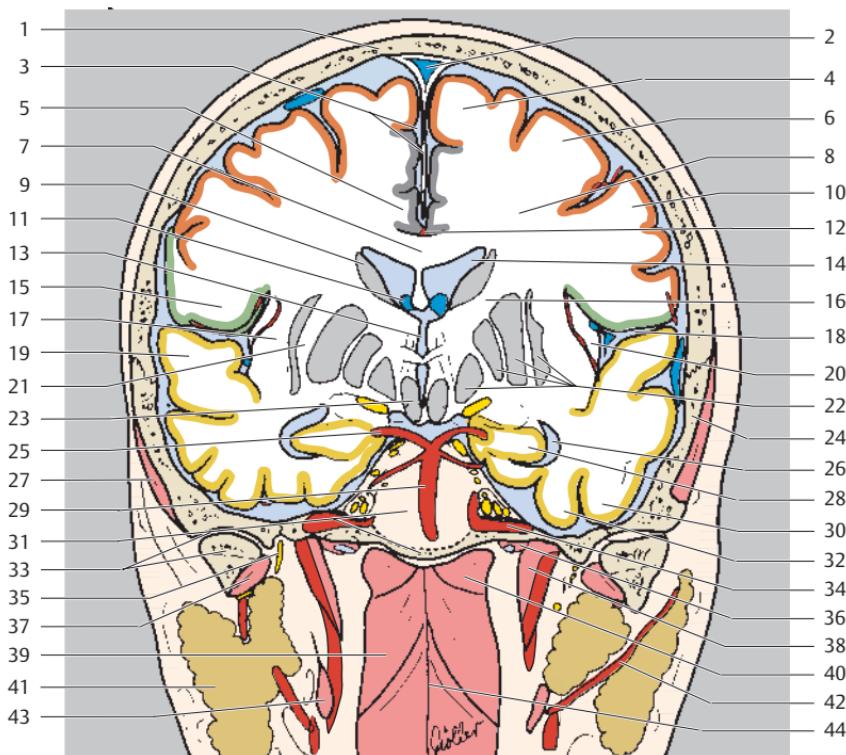


- |  |   |
|--|---|
| 1 Lateral ventricle (frontal horn)       | 20 Oculomotor nerve (III)                   |
| 2 Corpus callosum (trunk)                | 21 Hippocampus                              |
| 3 Septum pellucidum                      | 22 Pituitary gland                          |
| 4 Head of caudate nucleus                | 23 Lateral ventricle (temporal horn)        |
| 5 Internal capsule (anterior limb)       | 24 Inferior intercavernous sinus            |
| 6 Putamen                                | 25 Posterior clinoid process                |
| 7 External capsule                       | 26 Floor of sella                           |
| 8 Precommissural fornix                  | 27 Trochlear nerve (IV)                     |
| 9 Globus pallidus                        | 28 Cavernous sinus                          |
| 10 Anterior commissure                   | 29 Abducent nerve (VI), trigeminal ganglion |
| 11 Longitudinal cerebral                 | 30 Internal carotid artery (syphon)         |
| 12 Supraoptic recess                     | 31 Foramen ovale                            |
| 13 Anterior cerebral artery (A1 segment) | 32 Sphenoidal sinus                         |
| 14 Optic chiasm                          | 33 Trigeminal (V) ganglion                  |
| 15 Middle cerebral artery                | 34 Mandibular nerve (V <sub>3</sub> )       |
| 16 Suprasellar cistern                   | 35 Pharyngotympanic (auditory) tube         |
| 17 Internal carotid artery               | 36 Sphenoidal bone (body)                   |
| 18 Infundibulum                          | 37 Nasopharynx                              |
| 19 Amygdaloid body                       |   |

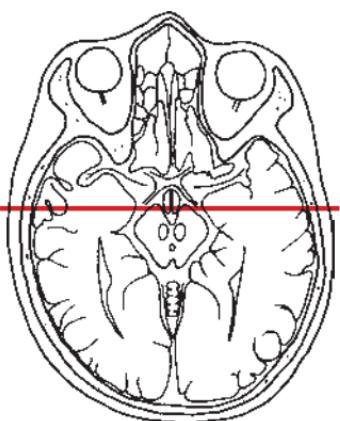


- Frontal lobe
- Temporal lobe
- Parietal lobe

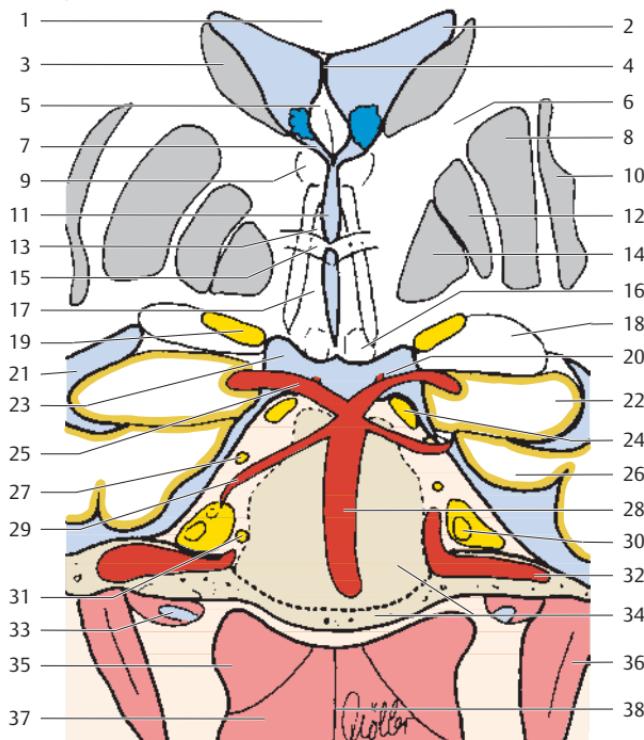
- 1 Frontal bone
- 2 Superior sagittal sinus
- 3 Falx cerebri in Longitudinal cerebral
- 4 Superior frontal gyrus
- 5 Cingulate gyrus
- 6 Middle frontal gyrus
- 7 Corpus callosum (trunk)
- 8 Cerebral white matter (semioval center)



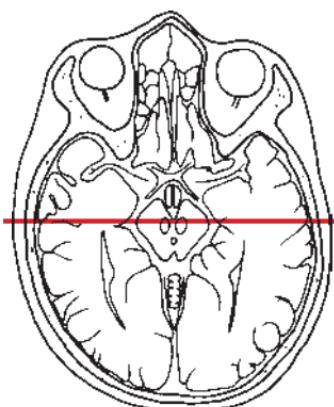
- |   |  |
|---|--|
| 9 Caudate nucleus (body)                | 27 Temporal muscle   |
| 10 Inferior frontal gyrus               | 28 Hippocampus   |
| 11 Interventricular foramen             | 29 Basilar artery  |
| 12 Pericallosal artery                  | 30 Middle temporal gyrus   |
| 13 Third ventricle                      | 31 Occipital bone (clivus)   |
| 14 Lateral ventricle (frontal horn)     | 32 Lateral occipitotemporal gyrus                                    |
| 15 Frontal operculum                    | 33 Head of mandible and<br>temporomandibular joint                   |
| 16 Internal capsule (genu)              | 34 Internal carotid artery (syphon)                                  |
| 17 Extreme capsule                      | 35 Mandibular nerve  |
| 18 Lateral sulcus                       | 36 Pharyngotympanic (auditory) tube                                  |
| 19 Superior temporal gyrus              | 37 Lateral pterygoid muscle  |
| 20 Insula                               | 38 Levator veli palatini muscle                                      |
| 21 External capsule                     | 39 Constrictor muscle of pharynx<br>(superior, middle, and inferior) |
| 22 Basal nuclei<br>(lentiform nucleus)  | 40 Pharyngobasilar fascia  |
| 23 Mammillary body and<br>hypothalamus  | 41 Parotid gland   |
| 24 Temporal bone                        | 42 External carotid artery   |
| 25 Posterior cerebral artery            | 43 Stylopharyngeus muscle  |
| 26 Lateral ventricle (temporal<br>horn) | 44 Pharyngeal raphe  |



Temporal lobe

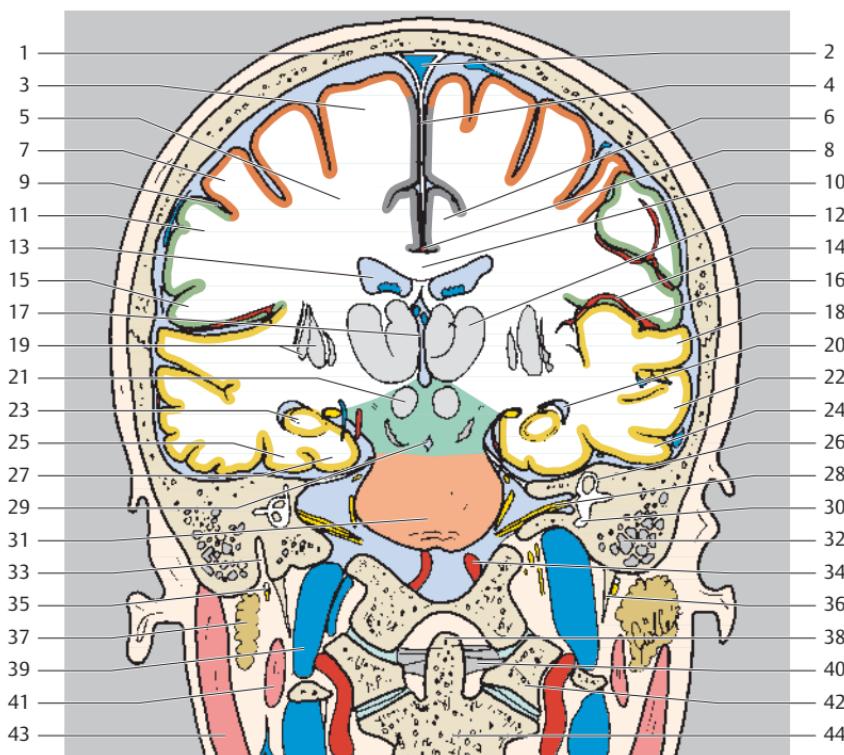


- |                                       |   |
|---------------------------------------|---|
| 1 Corpus callosum (trunk)             | 20 Posterior communicating artery         |
| 2 Lateral ventricle (frontal horn)    | 21 Lateral ventricle (temporal horn)      |
| 3 Body of caudate nucleus             | 22 Hippocampus                            |
| 4 Septum pellucidum                   | 23 Ambient cistern                        |
| 5 Fornix (body)                       | 24 Oculomotor nerve (III)                 |
| 6 Internal capsule (genu)             | 25 Posterior cerebral artery              |
| 7 Interventricular foramen            | 26 Parahippocampal gyrus                  |
| 8 Putamen                             | 27 Trochlear nerve (IV)                   |
| 9 Thalamus (anterior ventral nucleus) | 28 Basilar artery                         |
| 10 Claustrum                          | 29 Superior cerebellar artery             |
| 11 Third ventricle                    | 30 Trigeminal nerve (ganglion, V)         |
| 12 Globus pallidus lateral segment    | 31 Abducent nerve (VI)                    |
| 13 Fornix (column)                    | 32 Internal carotid artery (syphon)       |
| 14 Globus pallidus medial segment     | 33 Pharyngotympanic (auditory) tube       |
| 15 Anterior commissure                | 34 Occipital bone (basilar part), clivus  |
| 16 Mammillary body                    | 35 Pharyngobasilar fascia                 |
| 17 Hypothalamus                       | 36 Levator veli palatini muscle           |
| 18 Amygdaloid body                    | 37 Superior constrictor muscle of pharynx |
| 19 Optic tract                        | 38 Pharyngeal raphe                       |

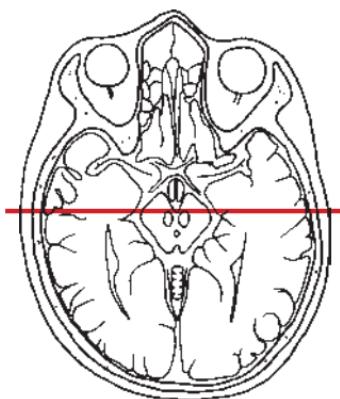


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Mesencephalon
- Pons

- 1 Parietal bone
- 2 Superior sagittal sinus
- 3 Superior frontal gyrus
- 4 Falx cerebri
- 5 Central white matter (semioval center)
- 6 Cingulate gyrus
- 7 Precentral gyrus
- 8 Pericallosal artery
- 9 Central sulcus

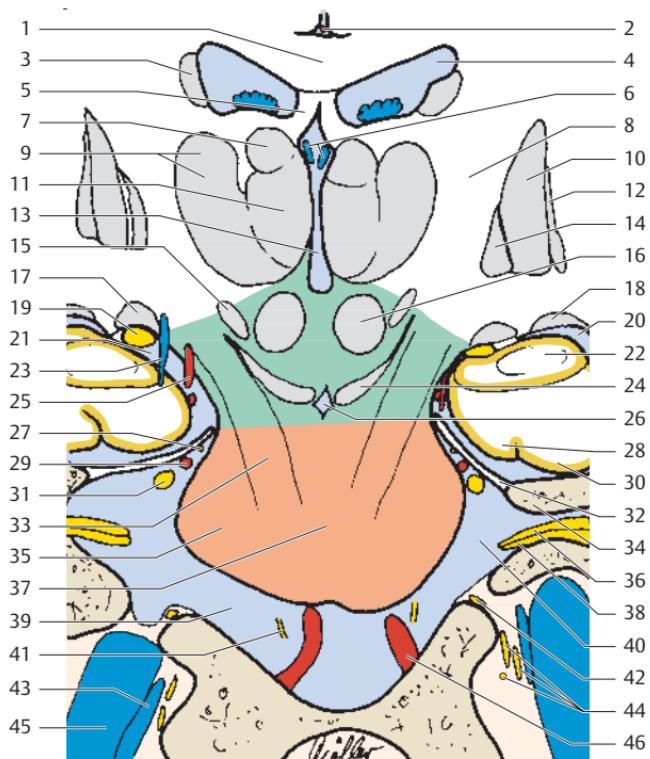


- |    |   |    |  |
|----|---|----|--|
| 10 | Corpus callosum (trunk)                       | 28 | Vestibulocochlear (VIII) and facial (VII) nerves in internal acoustic meatus |
| 11 | Postcentral gyrus                             | 29 | Interpeduncular cistern  |
| 12 | Thalamus                                      | 30 | Cochlea  |
| 13 | Lateral ventricle                             | 31 | Pons   |
| 14 | Insular arteries                              | 32 | Mastoid process with mastoid cells   |
| 15 | Parietal operculum                            | 33 | Styломastoid foramen   |
| 16 | Lateral sulcus                                | 34 | Vertebral artery   |
| 17 | Third ventricle                               | 35 | Facial nerve (VII)   |
| 18 | Superior temporal gyrus                       | 36 | Styloid process  |
| 19 | Basal nuclei (lentiform nucleus)              | 37 | Parotid gland  |
| 20 | Lateral ventricle (temporal horn)             | 38 | Dens   |
| 21 | Red nucleus                                   | 39 | Internal jugular vein  |
| 22 | Middle temporal gyrus                         | 40 | Transverse ligament of atlas   |
| 23 | Hippocampus                                   | 41 | Digastric muscle (posterior belly)   |
| 24 | Inferior temporal gyrus                       | 42 | Atlas (lateral mass)   |
| 25 | Lateral occipitotemporal gyrus                | 43 | Sternocleidomastoid muscle   |
| 26 | Membranous semicircular canal (superior part) | 44 | Axis   |
| 27 | Parahippocampal gyrus                         |    |  |

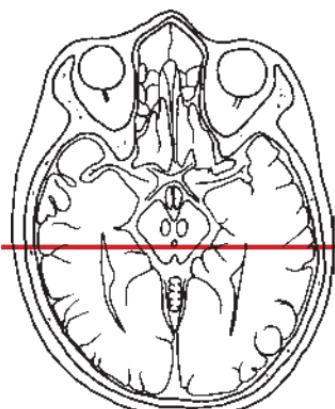
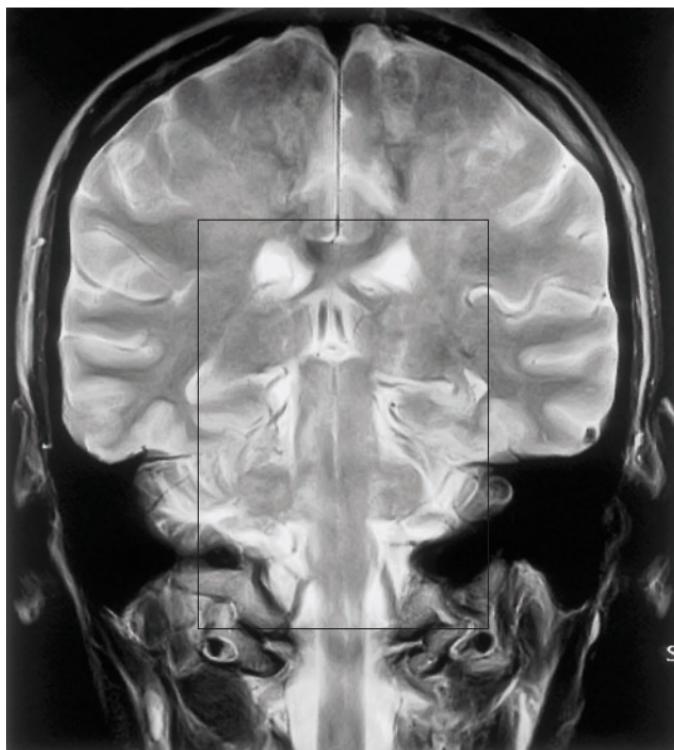


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Mesencaphalon
- Pons
- Medulla oblongata

- 1 Corpus callosum (trunk)
- 2 Pericallosal artery
- 3 Caudate nucleus (body)
- 4 Lateral ventricle
- 5 Fornix (crus)
- 6 Internal cerebral vein
- 7 Thalamus (lateral dorsal nucleus)
- 8 Internal capsule (posterior limb)

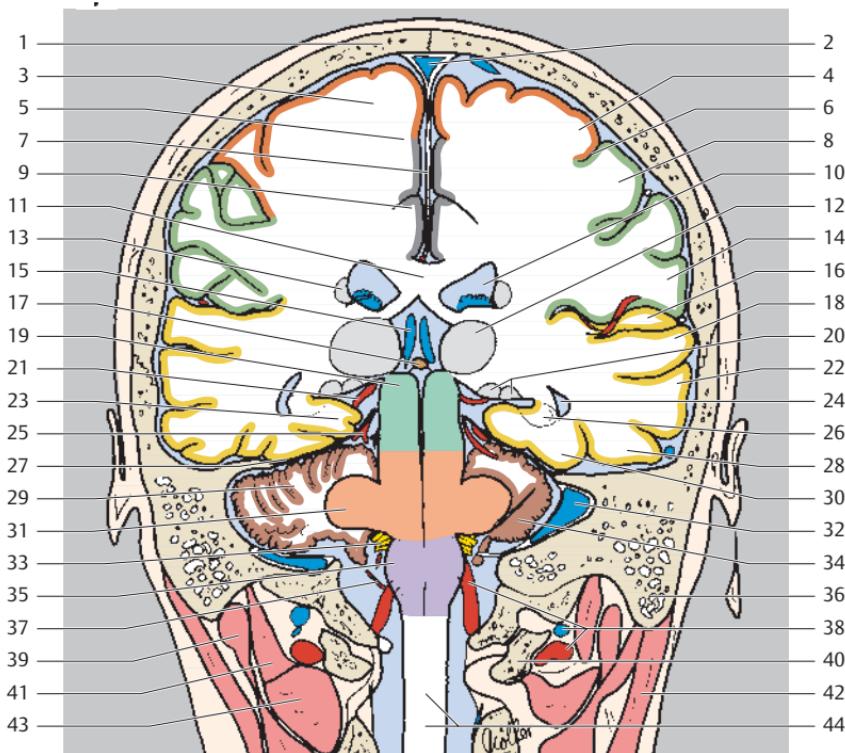


- 9 Thalamus (ventral lateral complex)  
 10 Putamen  
 11 Thalamus (medial nuclei)  
 12 Claustrum  
 13 Third ventricle  
 14 Globus pallidus  
 15 Subthalamic nucleus  
 16 Red nucleus  
 17 Lateral geniculate body  
 18 Caudate nucleus (tail)  
 19 Optic tract  
 20 Lateral ventricle (temporal horn)  
 21 Ambient cistern  
 22 Hippocampus  
 23 Basal vein  
 24 Substantia nigra  
 25 Posterior cerebral artery  
 26 Interpeduncular cistern  
 27 Trochlear nerve (IV)  
 28 Parahippocampal gyrus  
 29 Superior cerebellar artery  
 30 Lateral occipitotemporal gyrus  
 31 Trigeminal nerve (V)  
 32 Tentorium cerebelli  
 33 Corticospinal tract  
 34 Petrous part of temporal bone  
 35 Middle cerebellar peduncle  
 36 Facial nerve (VII) in internal acoustic meatus  
 37 Pons  
 38 Vestibulocochlear nerve (VIII) in internal acoustic meatus  
 39 Preoptic cistern  
 40 Pontocerebellar cistern  
 41 Abducent nerve (VI)  
 42 Glossopharyngeal nerve (IX)  
 43 Vertebral vein  
 44 Vagus nerve (X), accessory nerve (XI), hypoglossal nerve (XII)  
 45 Internal jugular vein  
 46 Vertebral artery

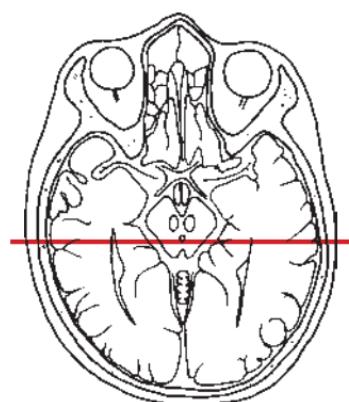
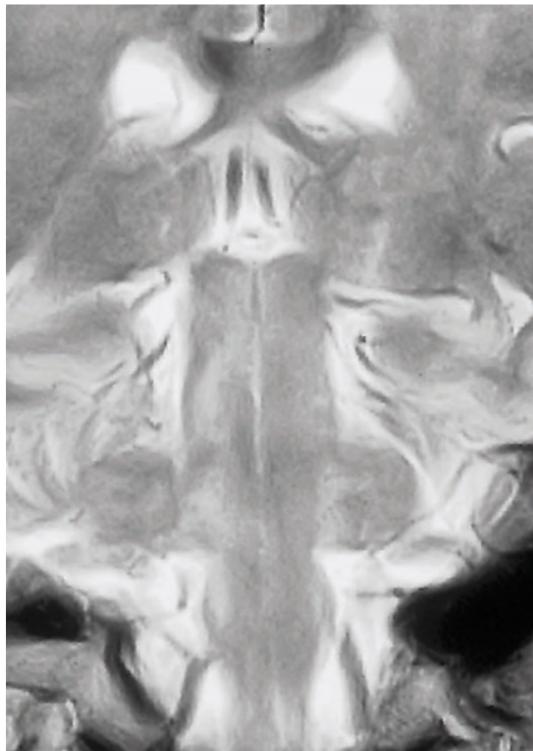


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Cerebellum
- Mesencephalon
- Pons
- Medulla oblongata

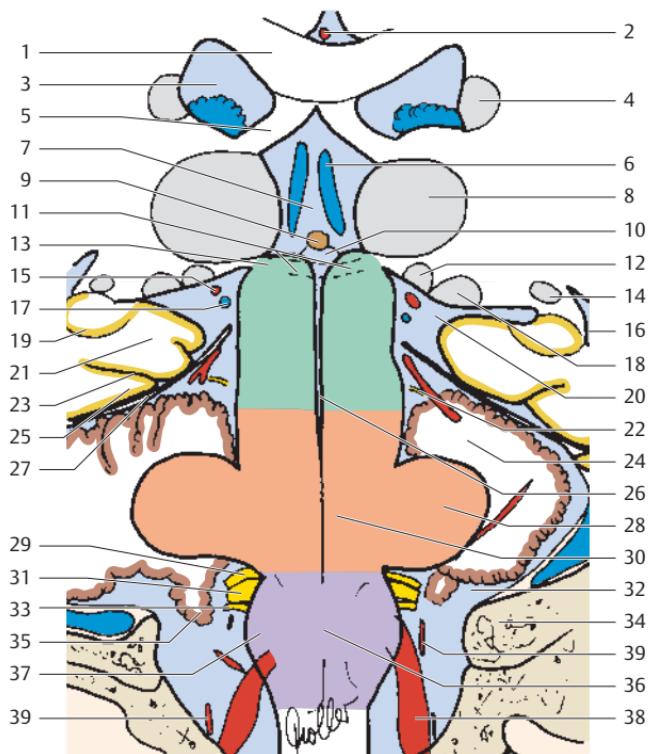
- 1 Parietal bone
- 2 Superior sagittal sinus
- 3 Superior frontal gyrus
- 4 Precentral gyrus
- 5 Paracentral lobe
- 6 Central sulcus
- 7 Falx cerebri
- 8 Postcentral gyrus
- 9 Cingulate gyrus



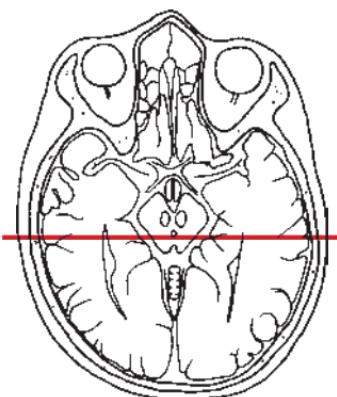
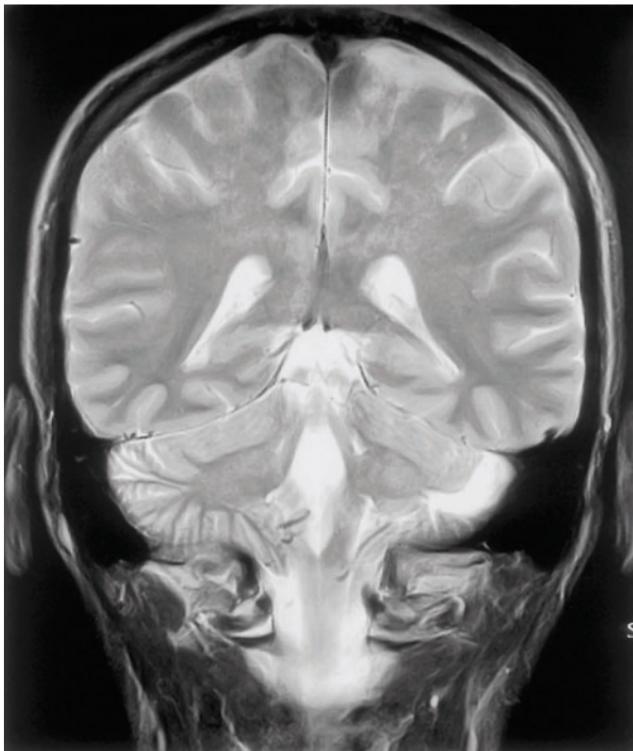
- 10 Lateral ventricle
- 11 Corpus callosum
- 12 Thalamus
- 13 Caudate nucleus
- 14 Supramarginal gyrus
- 15 Internal cerebral vein
- 16 Transverse temporal gyrus
- 17 Pineal body
- 18 Superior temporal gyrus
- 19 Cranial colliculus
- 20 Medial geniculate body and lateral geniculate body
- 21 Occipital artery
- 22 Middle temporal gyrus
- 23 Parahippocampal gyrus
- 24 Lateral ventricle (temporal horn)
- 25 Superior cerebellar artery
- 26 Hippocampus
- 27 Tentorium cerebelli
- 28 Inferior temporal gyrus
- 29 Anterior lobe of cerebellum
- 30 Lateral occipitotemporal gyrus
- 31 Middle cerebellar peduncle
- 32 Sigmoid sinus
- 33 Facial nerve (VII), vestibulocochlear nerve (VIII), glossopharyngeal nerve (IX)
- 34 Flocculus
- 35 Inferior olivary complex
- 36 Mastoid process with mastoid cells
- 37 Posterior inferior cerebellar artery
- 38 Vertebral artery and vein
- 39 Digastric muscle (posterior belly)
- 40 Atlas (lateral mass)
- 41 Obliquus capitis superior muscle
- 42 Sternocleidomastoid muscle
- 43 Obliquus capitis inferior muscle
- 44 Spinal cord with median fissure



- █ Temporal lobe
- █ Cerebellum
- █ Mesencephalon
- █ Pons
- █ Medulla oblongata

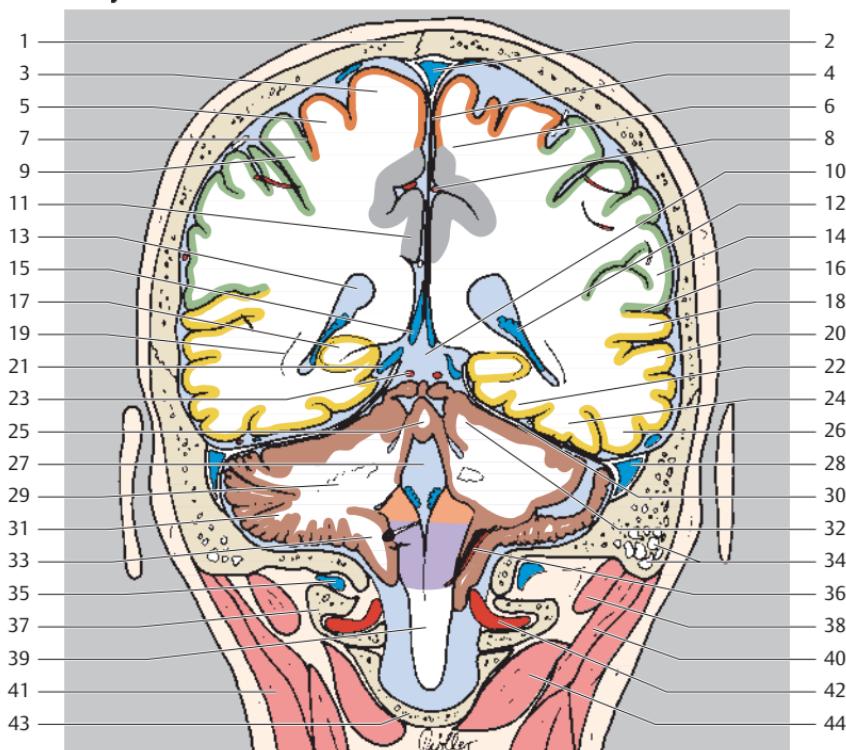


- |                                      |   |
|--------------------------------------|---|
| 1 Corpus callosum (trunk)            | 20 Ambient cistern                      |
| 2 Pericallosal artery                | 21 Parahippocampal gyrus                |
| 3 Lateral ventricle                  | 22 Trochlear nerve (IV)                 |
| 4 Body of caudate nucleus            | 23 Collateral sulcus                    |
| 5 Fornix (crus)                      | 24 Anterior lobe of cerebellum          |
| 6 Internal cerebral vein             | 25 Lateral occipitotemporal gyrus       |
| 7 Suprapineal recess                 | 26 Aqueduct                             |
| 8 Thalamus (pulvinar)                | 27 Tentorium cerebelli                  |
| 9 Pineal body                        | 28 Middle cerebellar peduncle           |
| 10 Aqueduct of midbrain              | 29 Glossopharyngeal nerve (XI)          |
| 11 Posterior commissure              | 30 Pons                                 |
| 12 Medial geniculate body            | 31 Vagus nerve (X)                      |
| 13 Cranial colliculus                | 32 Pontocerebellar cistern              |
| 14 Lateral geniculate body           | 33 Accessory nerve (XI)                 |
| 15 Posterior cerebral artery         | 34 Occipital bone                       |
| 16 Caudate nucleus (tail)            | 35 Flocculus                            |
| 17 Basal vein                        | 36 Medulla oblongata                    |
| 18 Lateral ventricle (temporal horn) | 37 Inferior olive complex               |
| 19 Hippocampus                       | 38 Vertebral artery                     |
|                                      | 39 Posterior inferior cerebellar artery |

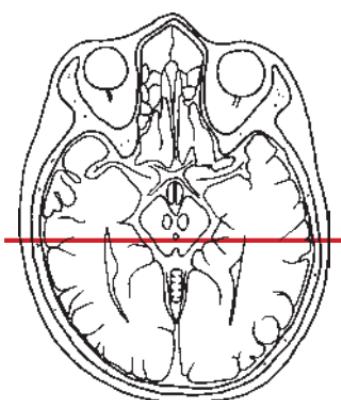
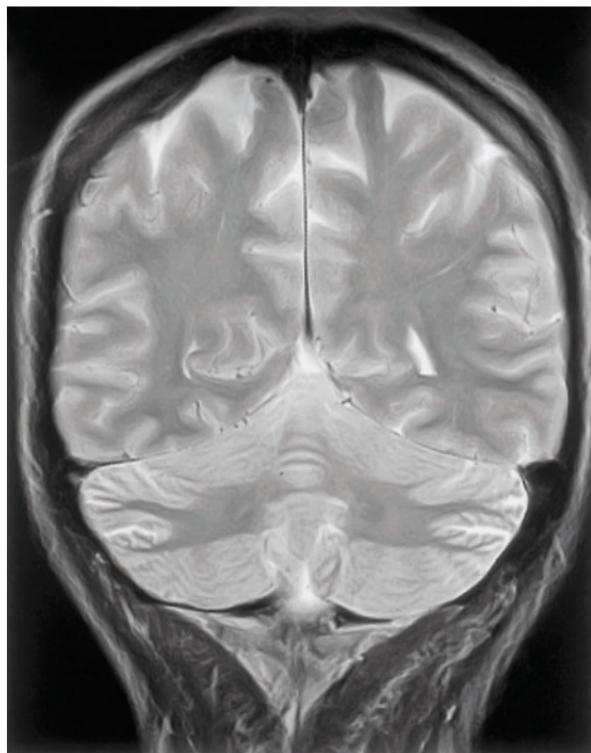


- Frontal lobe
- Temporal lobe
- Parietal lobe
- Cerebellum

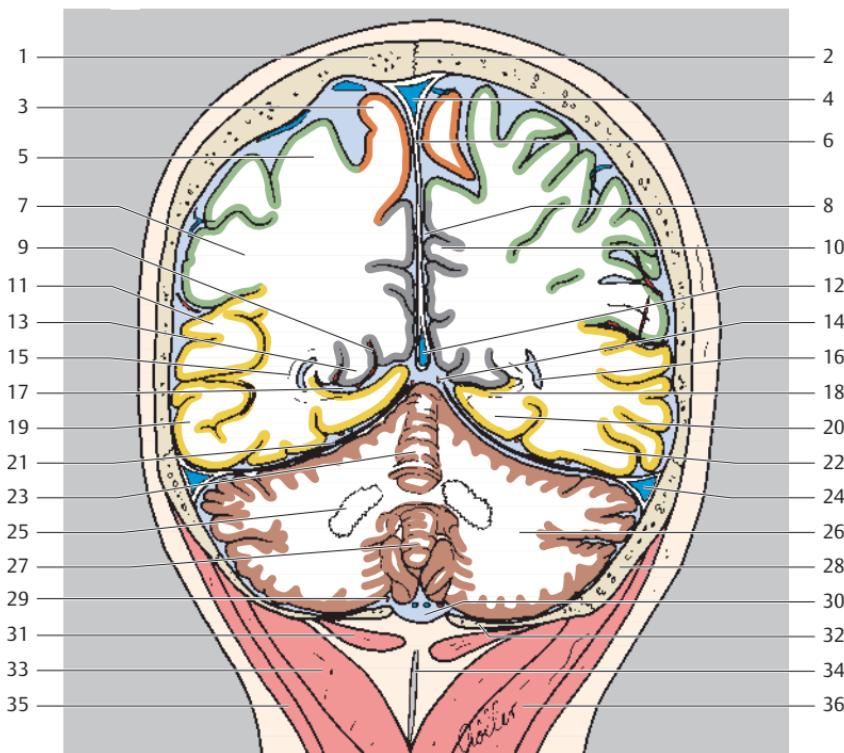
- 1 Parietal bone
- 2 Superior sagittal sinus
- 3 Superior frontal gyrus
- 4 Falx cerebri
- 5 Precentral gyrus
- 6 Paracentral lobule
- 7 Central sulcus



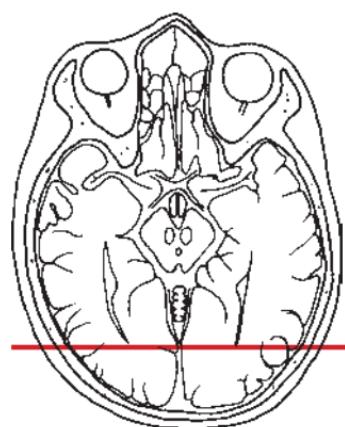
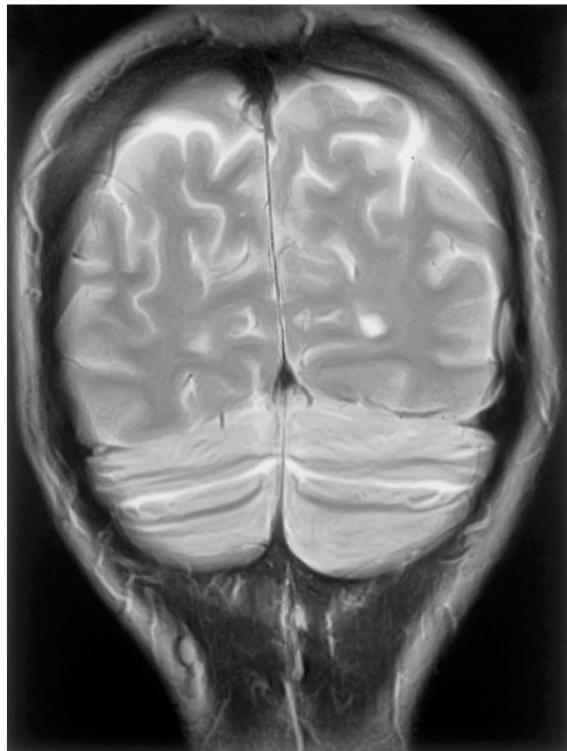
- |   |   |
|---|---|
| 8 Precuneal artery                        | 26 Inferior temporal gyrus              |
| 9 Postcentral gyrus                       | 27 Fourth ventricle                     |
| 10 Quadrigeminal cistern                  | 28 Transverse sinus                     |
| 11 Precuneus                              | 29 Dentate nucleus                      |
| 12 Choroid plexus                         | 30 Tentorium cerebelli                  |
| 13 Lateral ventricle (collateral trigone) | 31 Posterior lobe of cerebellum         |
| 14 Supramarginal gyrus                    | 32 Anterior lobe of cerebellum          |
| 15 Internal cerebral vein                 | 33 Tonsil of cerebellum                 |
| 16 Lateral sulcus                         | 34 Mastoid cells in mastoid process     |
| 17 Hippocampus                            | 35 Vertebral vein                       |
| 18 Superior temporal gyrus                | 36 Posterior inferior cerebellar artery |
| 19 Optic radiation                        | 37 Atlas (lateral mass)                 |
| 20 Middle temporal gyrus                  | 38 Obliquus capitis superior muscle     |
| 21 Basal vein                             | 39 Spinal cord                          |
| 22 Medial occipitotemporal gyrus          | 40 Longus capitis muscle                |
| 23 Superior cerebellar artery             | 41 Sternocleidomastoid muscle           |
| 24 Lateral occipitotemporal gyrus         | 42 Vertebral artery                     |
| 25 Vermis of cerebellum                   | 43 Third cervical vertebra (arch)       |
|   | 44 Obliquus capitis inferior muscle     |



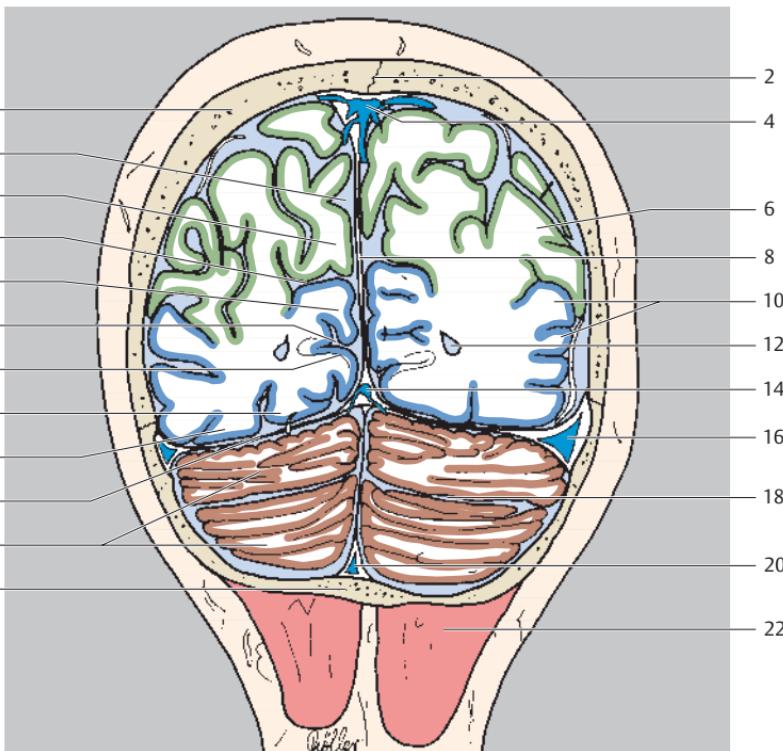
- Frontal lobe
- Temporal lobe
- Parietal lobe
- Cerebellum



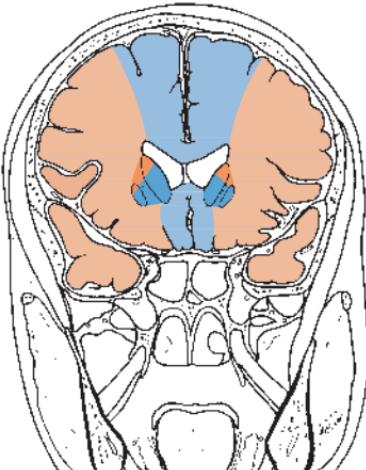
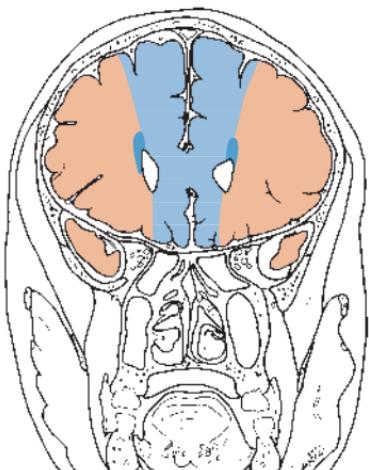
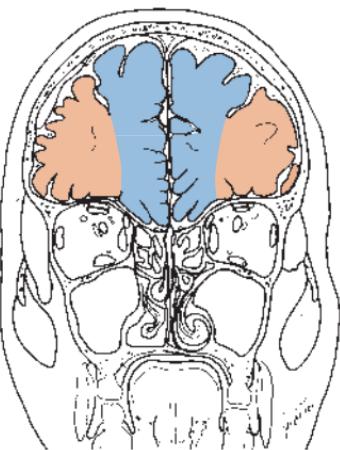
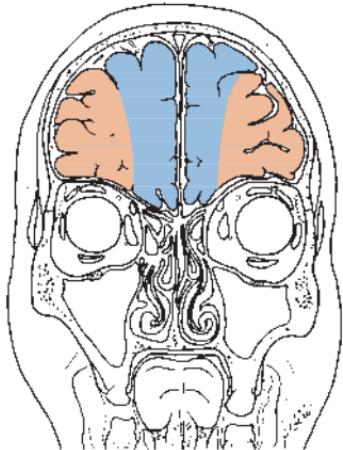
- |                                 |  |
|---------------------------------|--|
| 1 Parietal bone                 | 19 Inferior temporal gyrus               |
| 2 Sagittal suture               | 20 Medial occipitotemporal gyrus         |
| 3 Precentral gyrus              | 21 Tentorium cerebelli                   |
| 4 Superior sagittal sinus       | 22 Lateral occipitotemporal gyrus        |
| 5 Postcentral gyrus             | 23 Vermis of cerebellum                  |
| 6 Falx cerebri                  | 24 Transverse sinus                      |
| 7 Supramarginal gyrus           | 25 Dentate nucleus                       |
| 8 Longitudinal cerebral         | 26 Posterior lobe of cerebellum          |
| 9 Parieto-occipital sulcus      | 27 Uvula of vermis                       |
| 10 Precuneus                    | 28 Temporal bone                         |
| 11 Middle temporal gyrus        | 29 Posterior inferior cerebellar artery  |
| 12 Straight sinus               | 30 Cisterna magna                        |
| 13 Cuneus                       | 31 Rectus capitis posterior minor muscle |
| 14 Superior cerebellar artery   | 32 Occipital bone                        |
| 15 Optic radiation              | 33 Rectus capitis posterior major muscle |
| 16 Lateral ventricle (occipital | 34 Nuchal ligament                       |
| horn)                           | 35 Splenius capitis muscle               |
| 17 Calcarine sulcus             | 36 Semispinalis capitis muscle           |
| 18 Striate cortex               |  |



- [Green square] Parietal lobe
- [Blue square] Occipital lobe
- [Brown square] Cerebellum



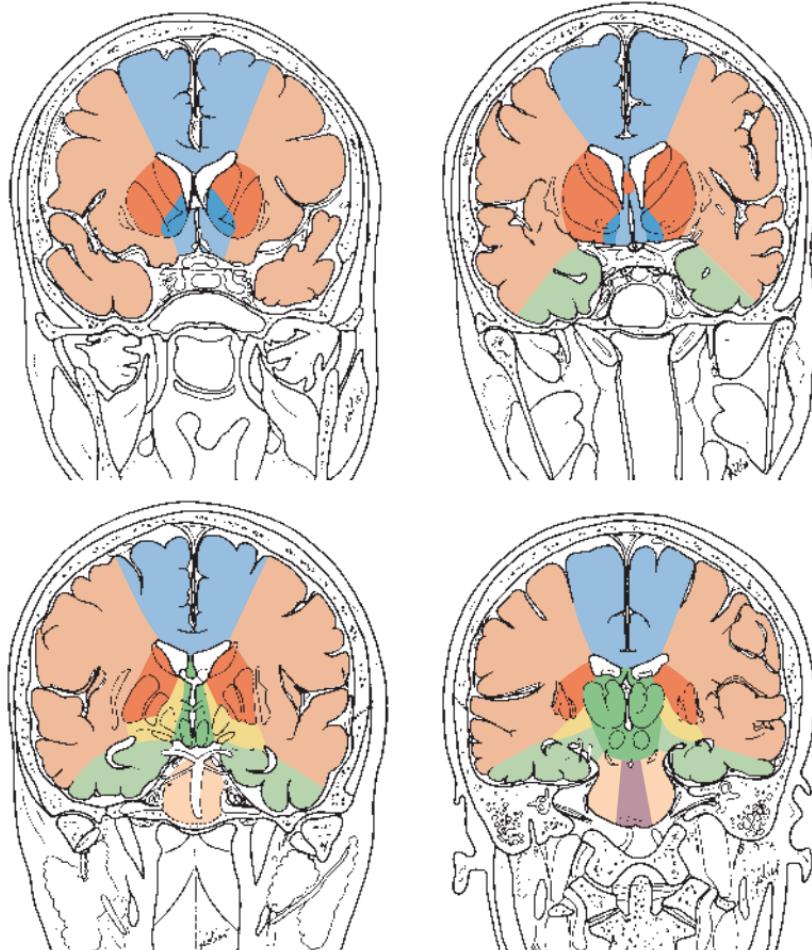
- |                            |                                       |
|----------------------------|---------------------------------------|
| 1 Parietal bone            | 12 Lateral ventricle (occipital horn) |
| 2 Sagittal suture          | 13 Striate cortex                     |
| 3 Longitudinal cerebral    | 14 Straight sinus                     |
| 4 Superior sagittal sinus  | 15 Medial occipitotemporal gyrus      |
| 5 Precuneus                | 16 Transverse sinus                   |
| 6 Angular gyrus            | 17 Lateral occipitotemporal gyrus     |
| 7 Parieto-occipital sulcus | 18 Horizontal fissure                 |
| 8 Falx cerebri             | 19 Tentorium cerebelli                |
| 9 Cuneus                   | 20 Occipital sinus                    |
| 10 Occipital gyri          | 21 Posterior lobe of cerebellum       |
| 11 Calcarine sulcus        | 22 Semispinalis capitis muscle        |
|                            | 23 Occipital bone                     |

**Anterior cerebral artery**

- [Blue square] Terminal branches
- [Blue square] Central branches

**Middle cerebral artery**

- [Orange square] Terminal branches
- [Dark Orange square] Central branches

**Anterior cerebral artery**

Terminal branches

Central branches (striate arteries  
including distal medial striate artery)**Middle cerebral artery**

Terminal branches

Central branches (striate branches)

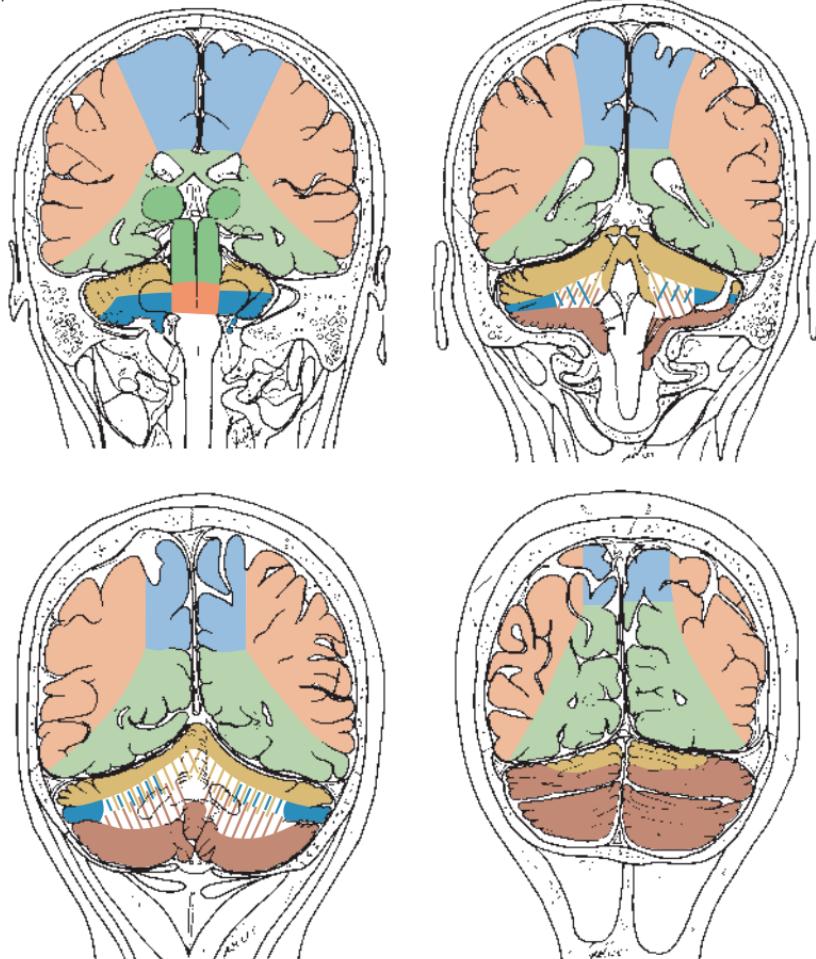
**Posterior cerebral artery**

Terminal branches

Central branches (including posterior  
communicating artery)

Anterior choroidal artery

**Basilar artery**Anteromedial and anterolateral  
paramedian branchesCircumferential arteries and lateral  
and dorsal paramedian branches

**Anterior cerebral artery**

Terminal branches

**Middle cerebral artery**

Terminal branches

**Posterior cerebral artery**

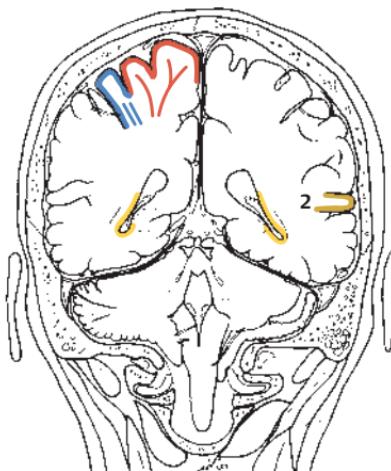
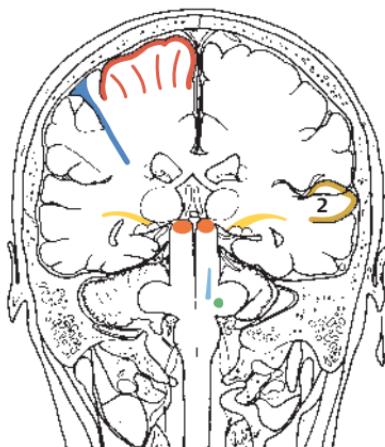
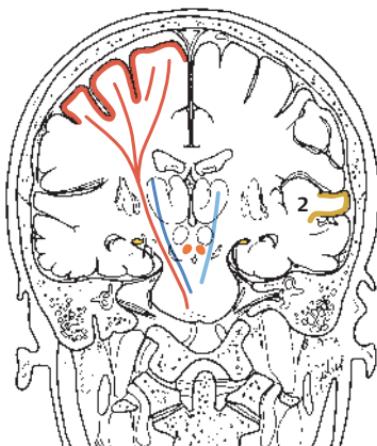
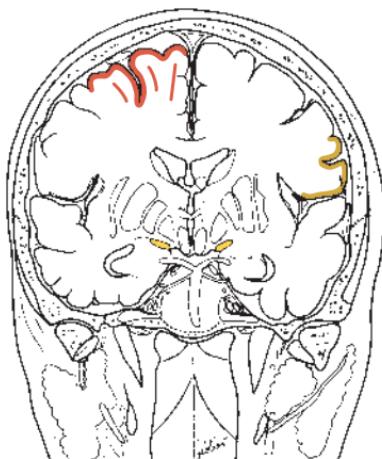
Terminal branches

Central branches (including posterior communicating artery)

**Anterior choroidal artery****Basilar artery**

Circumferential arteries and lateral and dorsal paramedian branches

**Superior cerebellar artery****Anterior inferior cerebellar artery****Border area****Posterior inferior cerebellar artery**

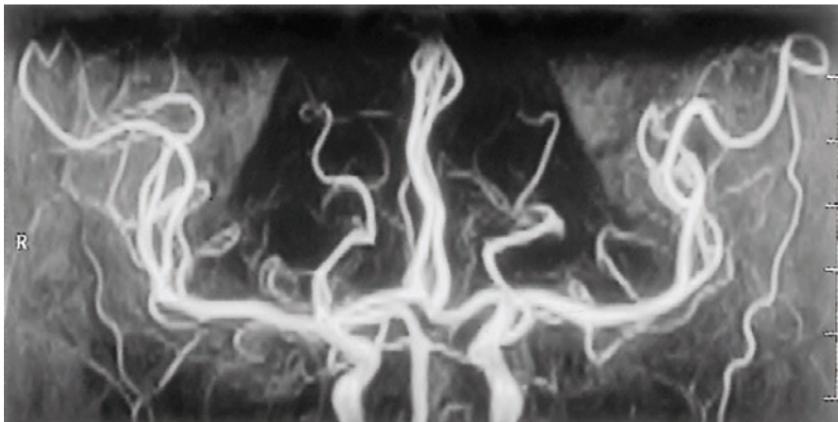


Motor system

#### Sensory system

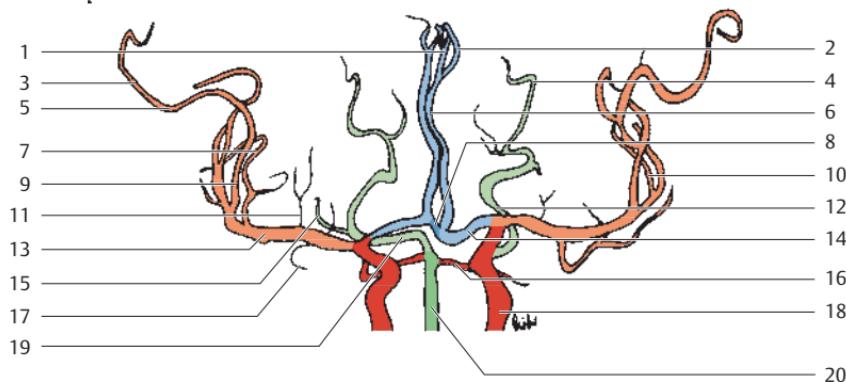
- Medial lemniscus
- Spinothalamic tract
- Mesencephalic nucleus of trigeminal nerve

- Oculomotor nucleus and pathways
- Optic tract
- Speech center  
(1 = motor, 2 = sensory)

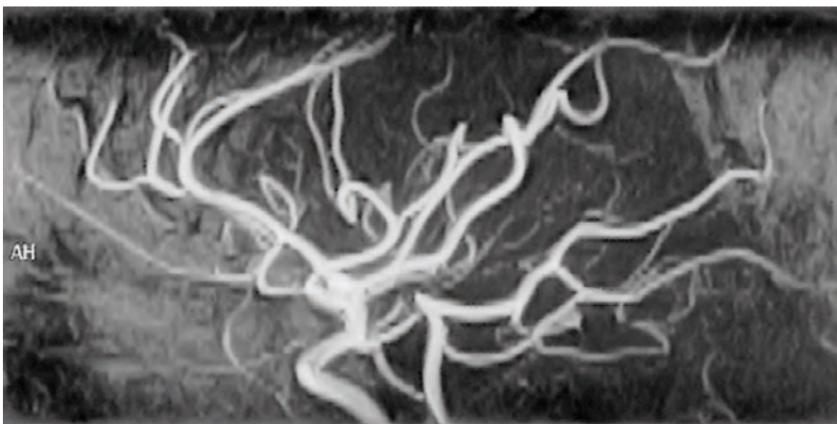


Frontal view

- Anterior cerebral artery
- Middle cerebral artery
- Posterior cerebral artery

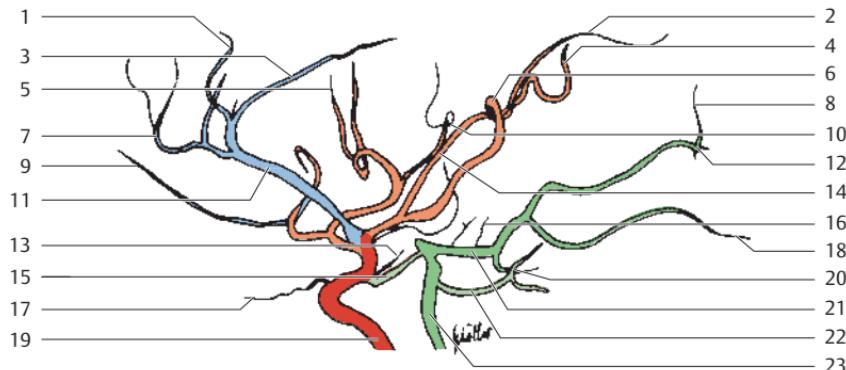


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|--|---|
| 1 Callosomarginal artery                               | 11 Striate artery   |
| 2 Pericallosal artery                                  | 12 Left posterior cerebral artery (from internal carotid artery, variant) |
| 3 Superior parietal artery                             | 13 Middle cerebral artery (sphenoid part, M1 segment)                     |
| 4 Posterior cerebral artery (parieto-occipital ramus)  | 14 Anterior cerebral artery (precommunicating part)                       |
| 5 Middle cerebral artery (opercular part, M3 segment)  | 15 Posterior cerebral artery (temporal and occipitotemporal branches)     |
| 6 Anterior cerebral artery (postcommunicating part)    | 16 Superior cerebellar artery   |
| 7 Insular arteries                                     | 17 Polar temporal artery  |
| 8 Anterior communicating artery                        | 18 Internal carotid artery  |
| 9 Middle cerebral artery (insular part, M2 segment)    | 19 Right posterior cerebral artery  |
| 10 Anterior temporal artery and middle temporal artery | 20 Basilar artery   |



Lateral view

- Anterior cerebral artery
- Middle cerebral artery
- Posterior cerebral artery

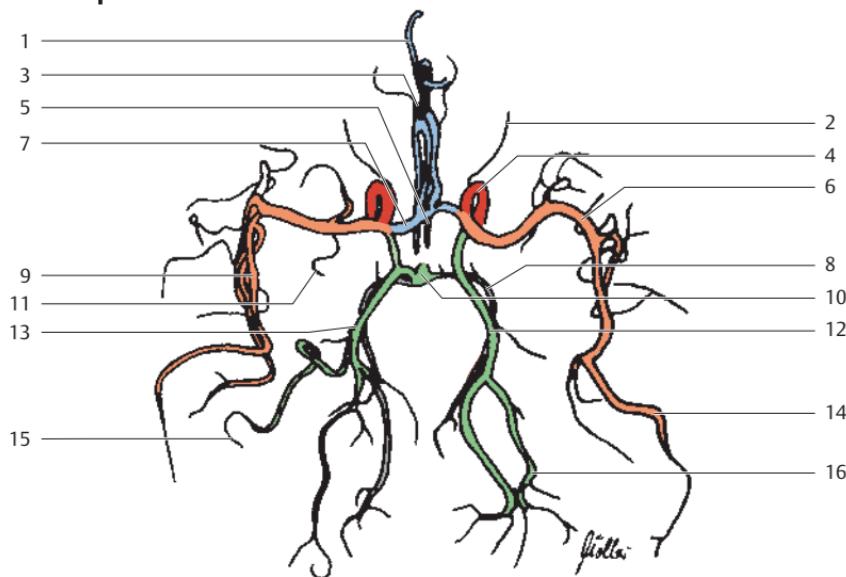


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|---|--|
| 1 Callosomarginal artery  | 12 Medial occipital artery             |
| 2 Parietal artery   | 13 Anterior choroidal artery           |
| 3 Pericallosal artery   | 14 Middle cerebral artery (M2 segment) |
| 4 Artery of angular gyrus   | 15 Posterior communicating artery      |
| 5 Artery of precentral sulcus   | 16 Posteromedial central arteries      |
| 6 Middle cerebral artery<br>(opercular part)                              | 17 Ophthalmic artery                   |
| 7 Polar frontal artery  | 18 Occipitotemporal branch             |
| 8 Parieto-occipital artery  | 19 Internal carotid artery             |
| 9 Medial frontobasal artery   | 20 Posterior temporal artery           |
| 10 Artery of central sulcus   | 21 Posterior cerebral artery           |
| 11 Anterior cerebral artery<br>(postcommunicating segment,<br>A2 segment) | 22 Superior cerebellar artery          |
|   | 23 Basilar artery                      |



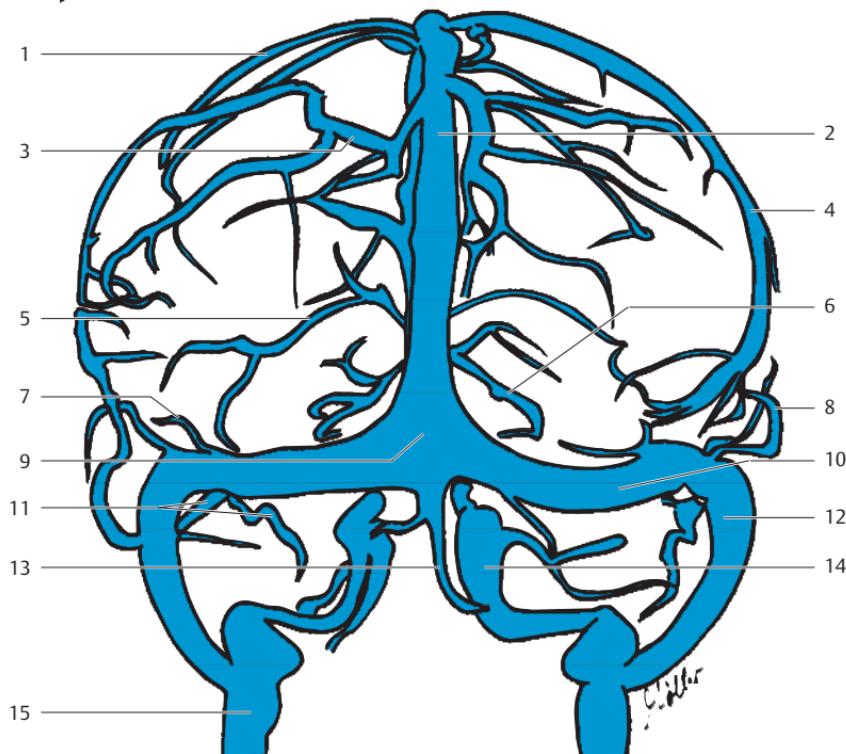
Cranial view

- Anterior cerebral artery
- Middle cerebral artery
- Posterior cerebral artery



- |   |   |
|---|---|
| 1 Anteromedial frontal branch of anterior cerebral artery | 8 Superior cerebellar artery  |
| 2 Ophthalmic artery                                       | 9 Middle cerebral artery (insular part)                                   |
| 3 Anterior cerebral artery (postcommunicating part)       | 10 Basilar artery   |
| 4 Internal carotid artery                                 | 11 Anterior choroidal artery  |
| 5 Anterior communicating artery                           | 12 Left posterior cerebral artery (from internal carotid artery, variant) |
| 6 Middle cerebral artery (sphenoid part)                  | 13 Right posterior cerebral artery  |
| 7 Anterior cerebral artery (precommunicating part)        | 14 Middle cerebral artery (opercular part)                                |
|   | 15 Temporal artery  |
|   | 16 Parieto-occipital artery   |

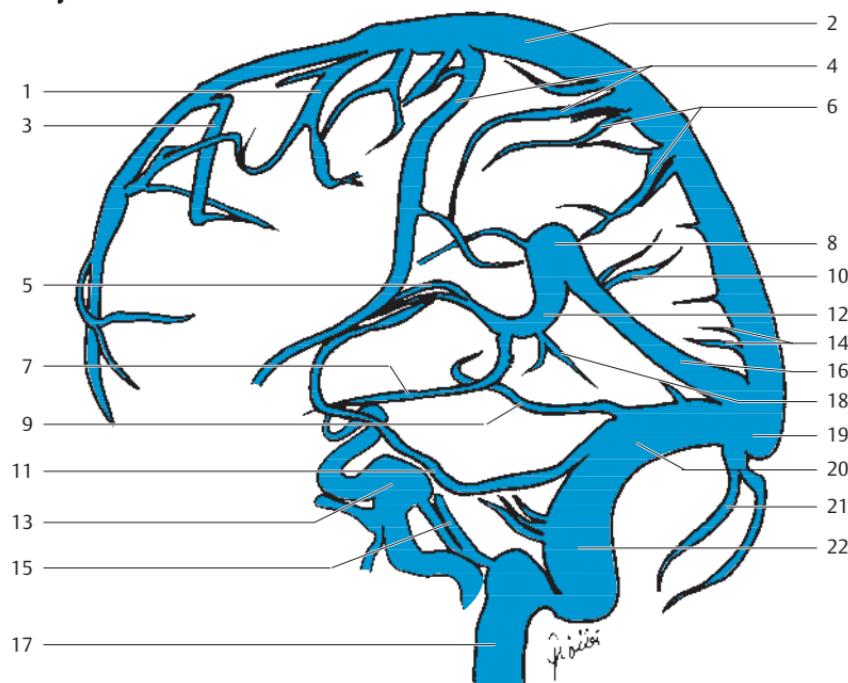




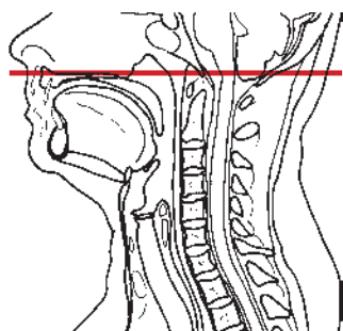
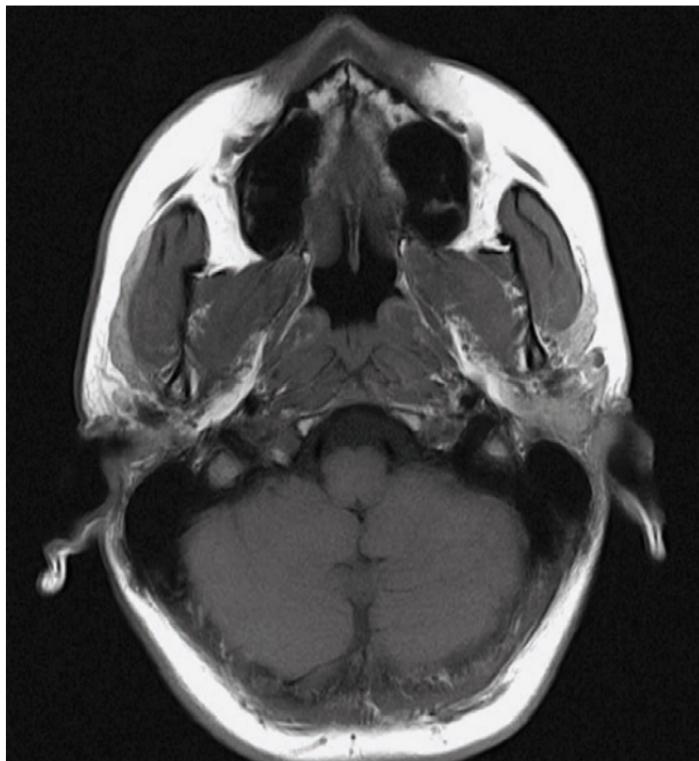
- 1 Superior cerebral veins
- 2 Superior sagittal sinus
- 3 Parietal veins
- 4 Superior anastomotic vein (Trolard)
- 5 Frontal veins
- 6 Basal vein
- 7 Middle cerebral veins (deep and superficial)

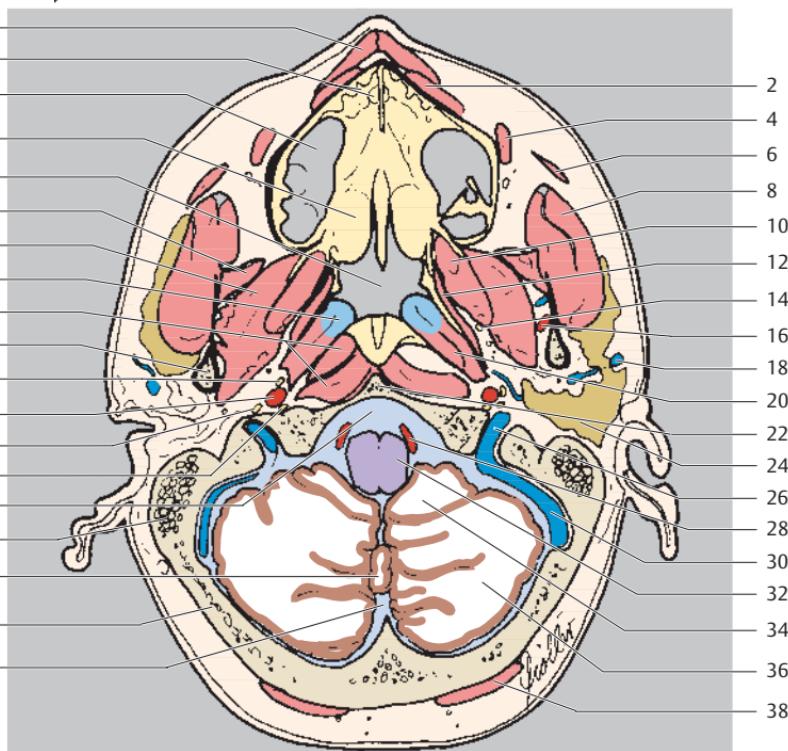
- 8 Sphenoparietal sinus
- 9 Confluence of sinuses
- 10 Transverse sinus
- 11 Superior veins of cerebellar hemisphere
- 12 Sigmoid sinus
- 13 Inferior of cerebellar hemisphere
- 14 Cavernous sinus
- 15 Internal jugular vein



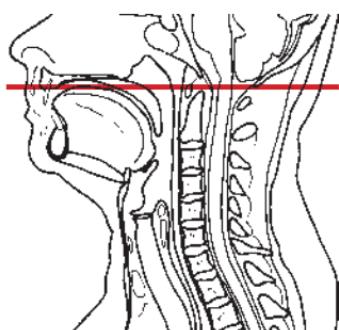
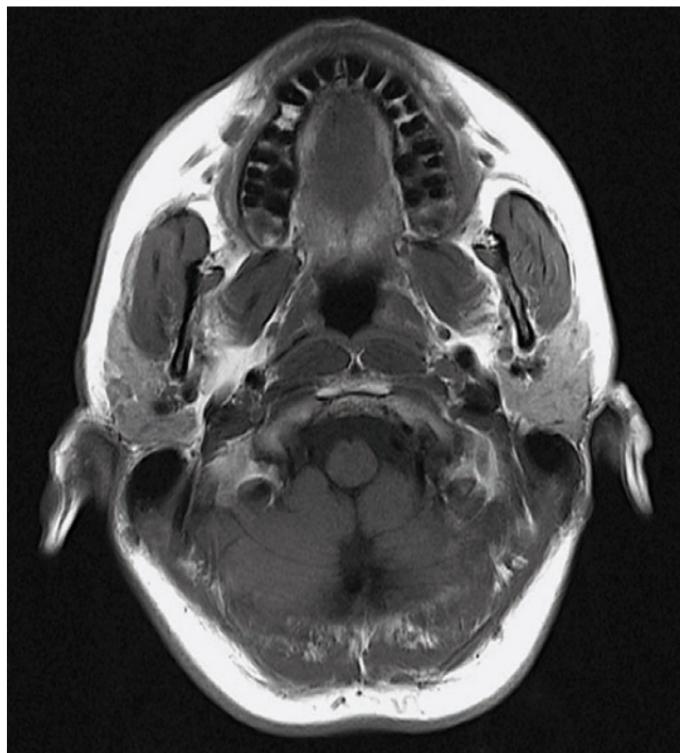


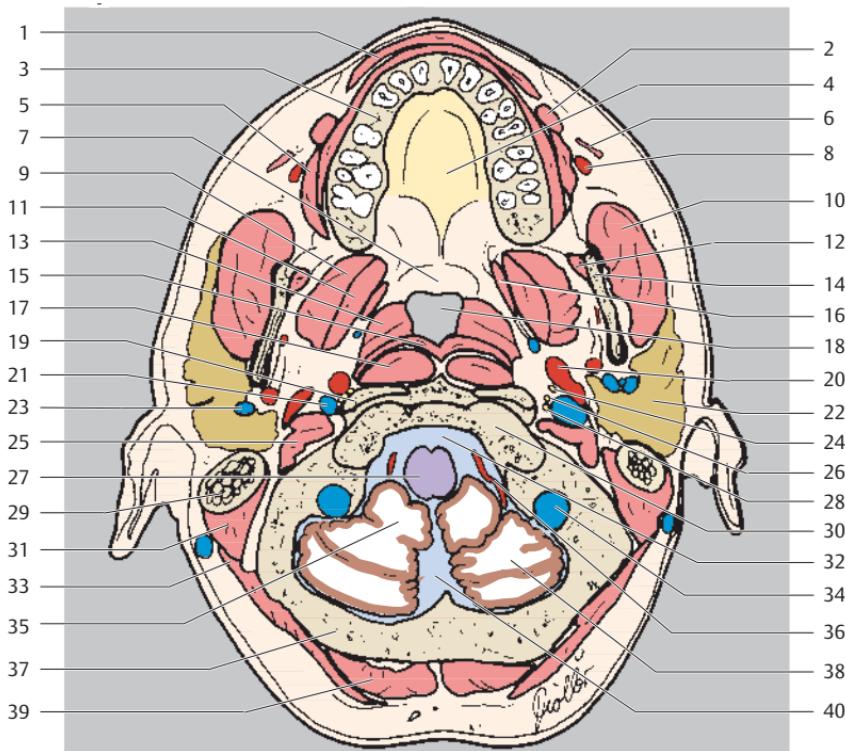
- |  |  |
|--|--|
| 1 Precentral cerebellar veins          | 12 Great cerebral vein                     |
| 2 Superior sagittal sinus              | 13 Cavernous sinus                         |
| 3 Frontal veins                        | 14 Posterior cerebral veins                |
| 4 Superior cerebral veins              | 15 Inferior petrosal sinus                 |
| 5 Internal cerebral veins              | 16 Straight sinus                          |
| 6 Parietal veins                       | 17 Internal jugular vein                   |
| 7 Basal vein                           | 18 Superior veins of cerebellar hemisphere |
| 8 Falcotentorial confluence of sinuses | 19 Confluence of sinuses                   |
| 9 Inferior anastomotic vein (Labbé)    | 20 Transverse sinus                        |
| 10 Internal occipital vein             | 21 Inferior veins of cerebellar hemisphere |
| 11 Superior petrosal sinus             | 22 Sigmoid sinus                           |



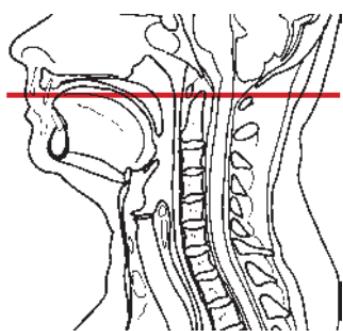


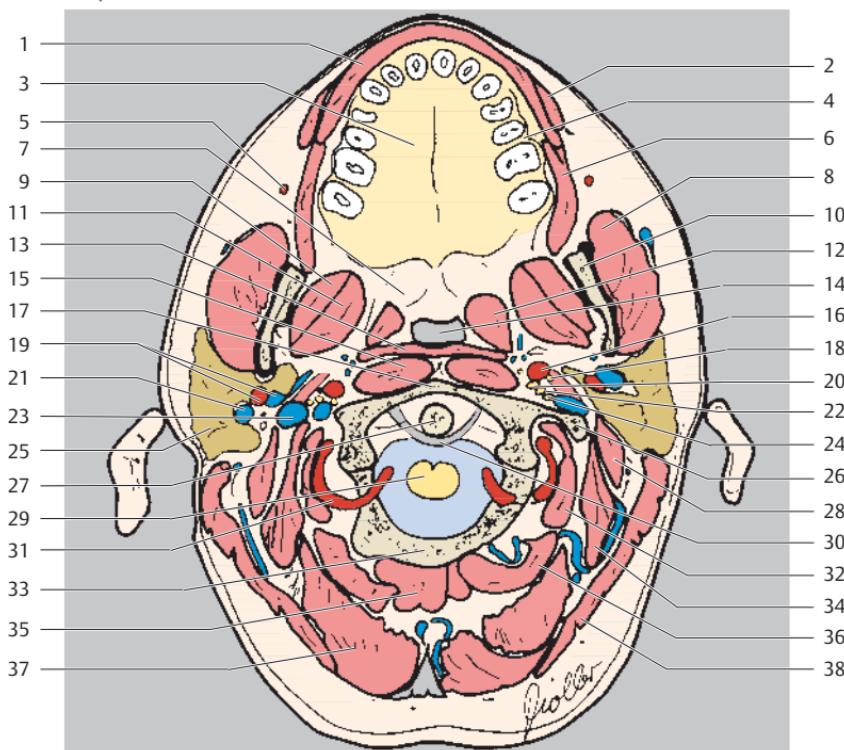
- 1 Orbicularis oris muscle  
 2 Levator labii superioris muscle  
 3 Maxilla (palatine process) and incisive canal  
 4 Levator anguli oris muscle  
 5 Maxillary sinus  
 6 Major zygomaticus muscle  
 7 Soft palate  
 8 Masseter muscle  
 9 Nasopharynx  
 10 Medial pterygoid muscle  
 11 Temporal muscle  
 12 Tensor veli palatini muscle  
 13 Lateral pterygoid muscle  
 14 Mandibular nerve ( $V_3$ )  
 15 Pharyngotympanic tube (auditory tube) (torus levatorius)  
 16 Maxillary artery  
 17 Longus capitis muscle  
 18 Retromandibular vein  
 19 Ramus of mandible  
 20 Levator veli palatini muscle  
 21 Glossopharyngeal nerve (IX)  
 22 Occipital bone, basilar part (basion)  
 23 Internal carotid artery  
 24 Parotid gland  
 25 Vagus nerve (X)  
 26 Internal jugular vein (superior bulb)  
 27 Hypoglossal nerve (XII)  
 28 Vertebral artery  
 29 Interpeduncular cistern  
 30 Sigmoid sinus  
 31 Mastoid cells  
 32 Medulla oblongata  
 33 Vermis  
 34 Tonsil of cerebellum  
 35 Occipital bone  
 36 Cerebellar hemisphere (posterior lobe)  
 37 Cisterna magna (posterior cerebellomedullary cistern)  
 38 Semispinalis capitis muscle



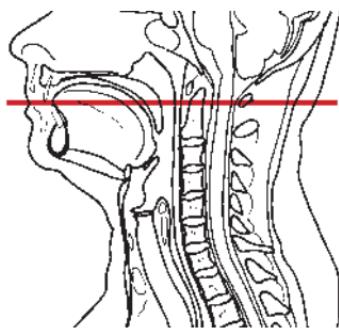


- |                                 |   |
|---------------------------------|---|
| 1 Orbicularis oris muscle       | 23 Retromandibular vein                                     |
| 2 Levator anguli oris muscle    | 24 Vagus nerve (X)  |
| 3 Maxilla (alveolar process)    | 25 Rectus capitis lateralis muscle                          |
| 4 Hard palate                   | 26 Hypoglossal nerve (XII)                                  |
| 5 Buccinator muscle             | 27 Medulla oblongata  |
| 6 Zygomaticus muscle            | 28 Accessory nerve (XI)                                     |
| 7 Soft palate                   | 29 Mastoid cells (mastoid process)                          |
| 8 Facial artery                 | 30 Occipital bone, basilar part<br>(basion)                 |
| 9 Lateral pterygoid muscle      | 31 Digastric muscle (posterior belly)                       |
| 10 Masseter muscle              | 32 Interpeduncular cistern                                  |
| 11 Medial pterygoid muscle      | 33 Splenius capitis muscle                                  |
| 12 Temporal muscle              | 34 Condylar canal with emissary veins                       |
| 13 Levator veli palatini muscle | 35 Tonsil of cerebellum                                     |
| 14 Ramus of mandible            | 36 Vertebral artery   |
| 15 Splenius capitis muscle      | 37 Occipital bone   |
| 16 Tensor veli palatini muscle  | 38 Cerebellar hemisphere<br>(posterior lobe)                |
| 17 Longus capitis muscle        | 39 Semispinalis capitis muscle                              |
| 18 Nasopharynx                  | 40 Cisterna magna (posterior<br>cerebellomedullary cistern) |
| 19 Anterior arch of atlas       |   |
| 20 Internal carotid artery      |   |
| 21 Internal jugular vein        |   |
| 22 Parotid gland                |   |



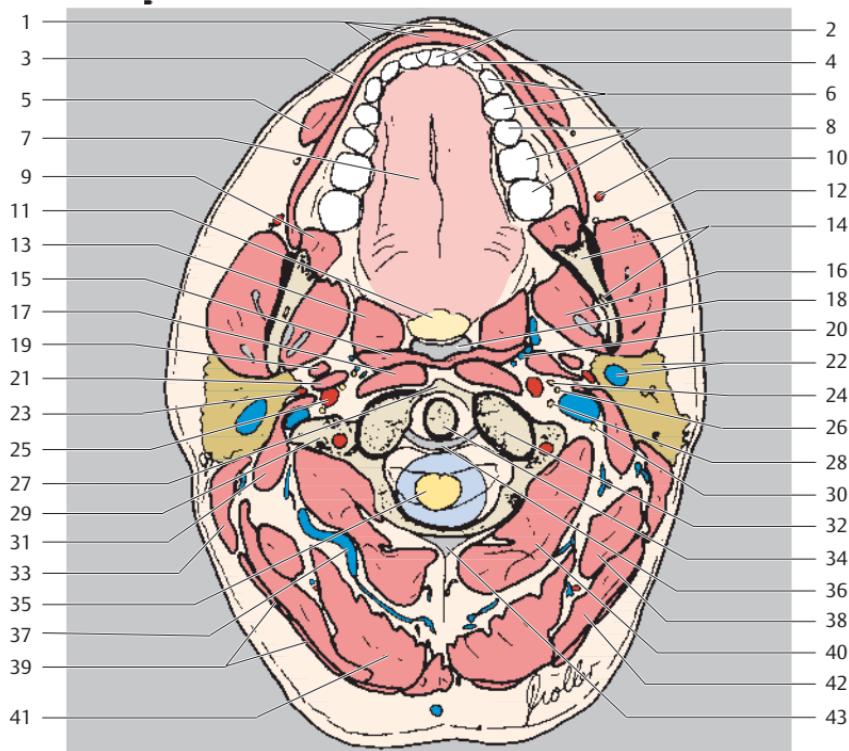


- |   |  |
|---|--|
| 1 Orbicularis oris muscle                 | 20 Vagus nerve (X)                       |
| 2 Levator anguli oris muscle              | 21 Retromandibular vein                  |
| 3 Hard palate                             | 22 Hypoglossal nerve (XII)               |
| 4 Maxilla (alveolar process)              | 23 Stylopharyngeus muscle                |
| 5 Facial artery                           | 24 Accessory nerve (XI)                  |
| 6 Buccinator muscle                       | 25 Parotid gland                         |
| 7 Soft palate                             | 26 Atlas, transverse process             |
| 8 Masseter muscle                         | 27 Dens of axis                          |
| 9 Lateral pterygoid muscle                | 28 Digastric muscle (posterior belly)    |
| 10 Ramus of mandible                      | 29 Medulla oblongata                     |
| 11 Medial pterygoid muscle                | 30 Transverse ligament of atlas          |
| 12 Tensor veli palatini muscle            | 31 Vertebral artery                      |
| 13 Superior constrictor muscle of pharynx | 32 Rectus capitis lateralis muscle       |
| 14 Pharynx                                | 33 Atlas, posterior arch                 |
| 15 Longus capitis muscle                  | 34 Obliquus capitis superior muscle      |
| 16 Internal carotid artery                | 35 Rectus capitis posterior minor muscle |
| 17 Atlas (anterior arch)                  | 36 Obliquus capitis inferior muscle      |
| 18 Glossopharyngeal nerve (IX)            | 37 Semispinalis capitis muscle           |
| 19 Maxillary artery and vein              | 38 Splenius capitis muscle               |

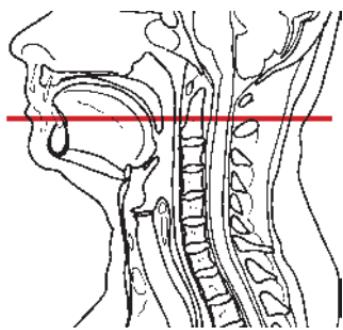


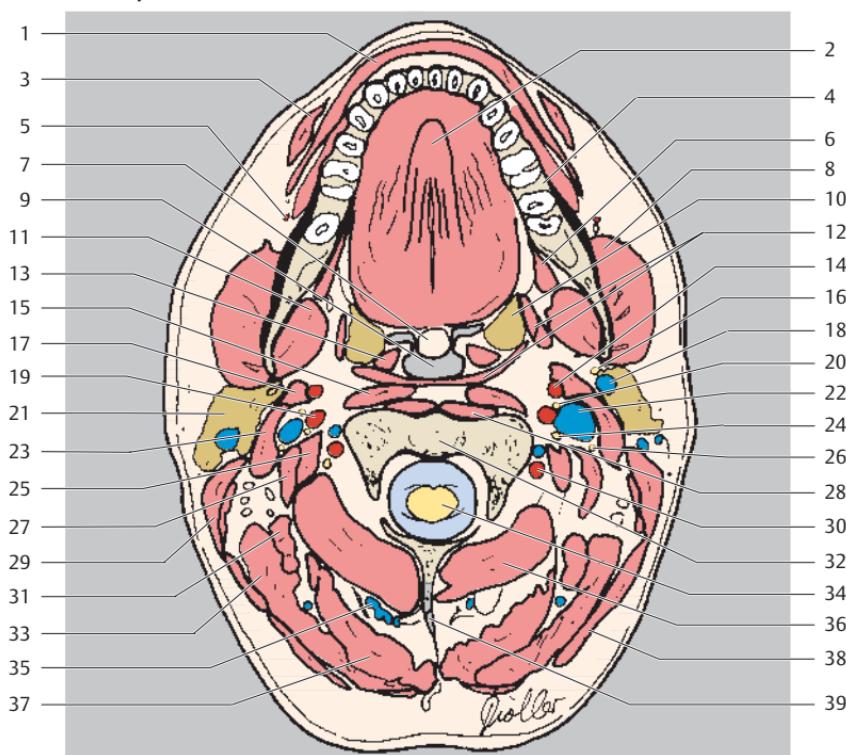
- 1 Upper lip
- 2 Incisors (1 and 2 left)
- 3 Orbicularis oris muscle

- 4 Canine tooth (3 left)
- 5 Levator anguli oris muscle
- 6 Premolar teeth (4 and 5 left)

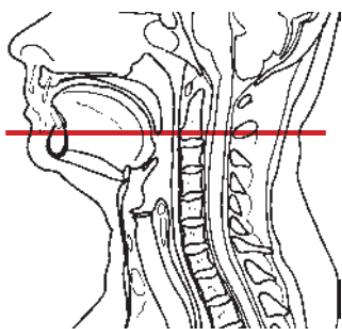


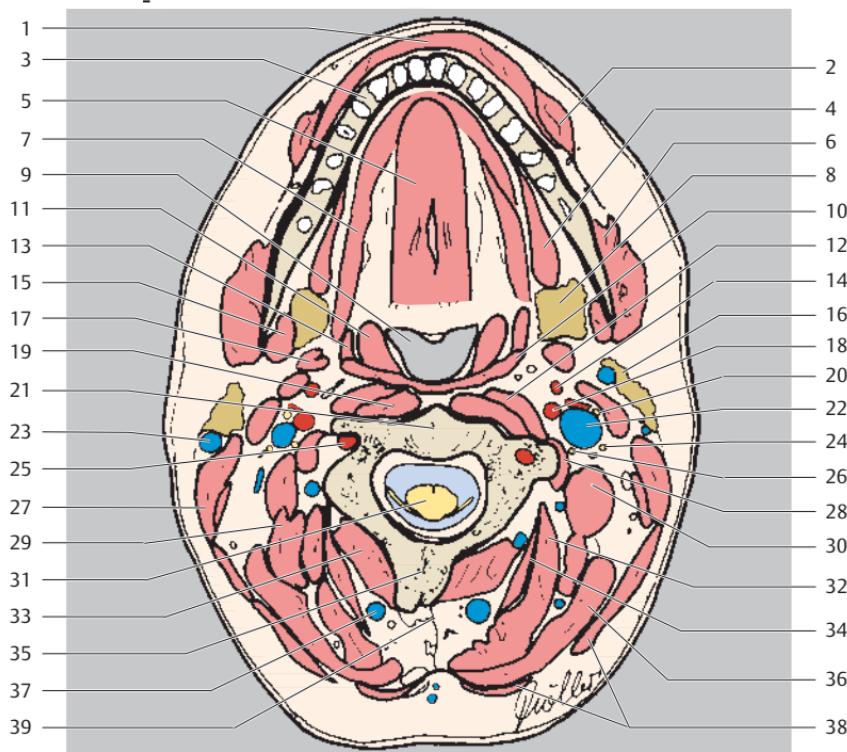
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|---|--|
| 7 Tongue                                  | 25 Internal carotid artery                       |
| 8 Molar teeth (6,7 and 8)                 | 26 Hypoglossus nerve (XII)                       |
| 9 Buccinator muscle                       | 27 Atlas (anterior arch)                         |
| 10 Facial artery                          | 28 Vagus nerve (X)                               |
| 11 Uvula                                  | 29 Transverse process and foramen transversarium |
| 12 Masseter muscle                        | 30 Accessory nerve (XI)                          |
| 13 Tensor veli palatini muscle            | 31 Digastric muscle (posterior belly)            |
| 14 Ramus of mandible with alveolar canal  | 32 Atlas, lateral mass                           |
| 15 Superior constrictor muscle of pharynx | 33 Sternocleidomastoid muscle                    |
| 16 Medial pterygoid muscle                | 34 Dens of axis                                  |
| 17 Longus capitis muscle                  | 35 Spinal cord                                   |
| 18 Oropharynx                             | 36 Transverse ligament of atlas                  |
| 19 Styloglossus muscle                    | 37 Deep cervical veins                           |
| 20 Pharyngeal venous plexus               | 38 Longissimus capitis muscle                    |
| 21 Stylopharyngeus muscle                 | 39 Trapezius muscle                              |
| 22 Parotid gland and retromandibular vein | 40 Obliquus capitis inferior muscle              |
| 23 Maxillary artery                       | 41 Semispinalis capitis muscle                   |
| 24 Glossopharyngeal nerve (IX)            | 42 Splenius capitis muscle                       |
|   | 43 Nuchal ligament                               |



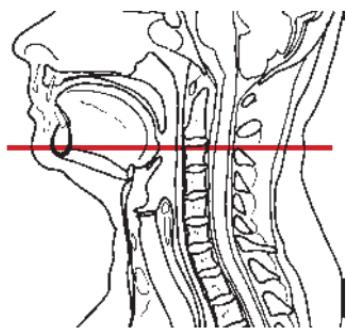


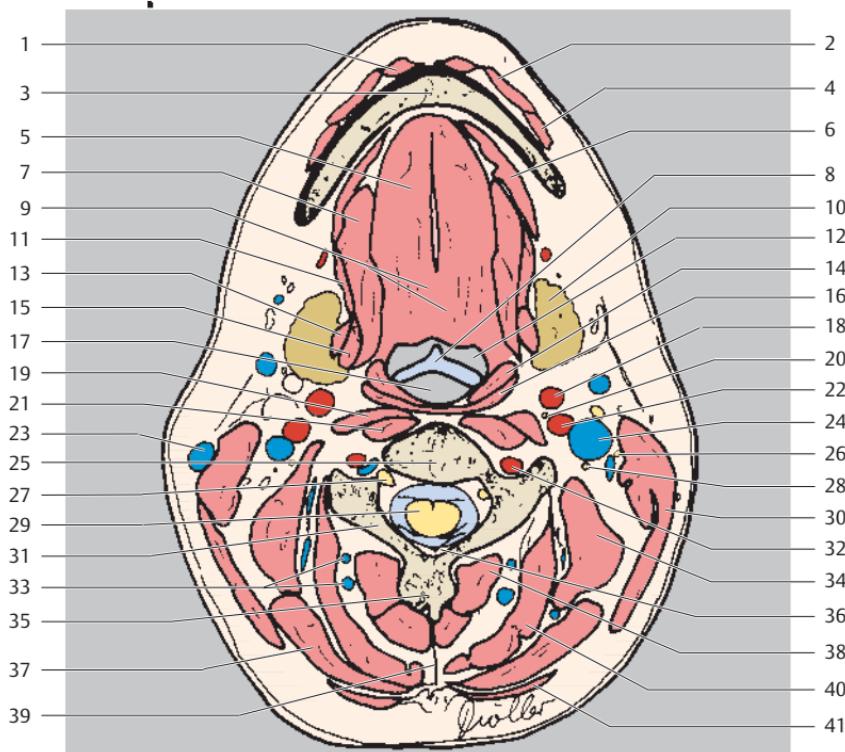
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|---|---------------------------------------|
| 1 Orbicularis oris muscle                 | 20 Hypoglossus nerve (XII)            |
| 2 Tongue (genioglossus muscle)            | 21 Parotid gland                      |
| 3 Levator anguli oris muscle              | 22 Internal jugular vein              |
| 4 Mandible                                | 23 Digastric muscle (posterior belly) |
| 5 Facial artery                           | 24 Vagus nerve (X)                    |
| 6 Hypoglossus muscle                      | 25 Longissimus cervicis muscle        |
| 7 Uvula                                   | 26 Accessory nerve (XI)               |
| 8 Masseter muscle                         | 27 Levator scapulae muscle            |
| 9 Oropharynx                              | 28 Longus colli muscle                |
| 10 Palatine tonsil                        | 29 Sternocleidomastoid muscle         |
| 11 Medial pterygoid muscle                | 30 Vertebral artery                   |
| 12 Superior constrictor muscle of pharynx | 31 Longissimus capitis muscle         |
| 13 Palatopharyngeus muscle                | 32 Axis, body                         |
| 14 External carotid artery                | 33 Splenius capitis muscle            |
| 15 Longus capitis muscle                  | 34 Spinal cord                        |
| 16 Facial nerve (VII)                     | 35 Deep cervical veins                |
| 17 Stylohyoid muscle, styloglossus muscle | 36 Obliquus capitis inferior muscle   |
| 18 Retromandibular vein                   | 37 Semispinalis capitis muscle        |
| 19 Internal carotid artery                | 38 Trapezius muscle                   |
|   | 39 Nuchal ligament                    |



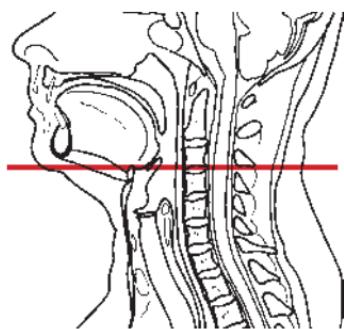


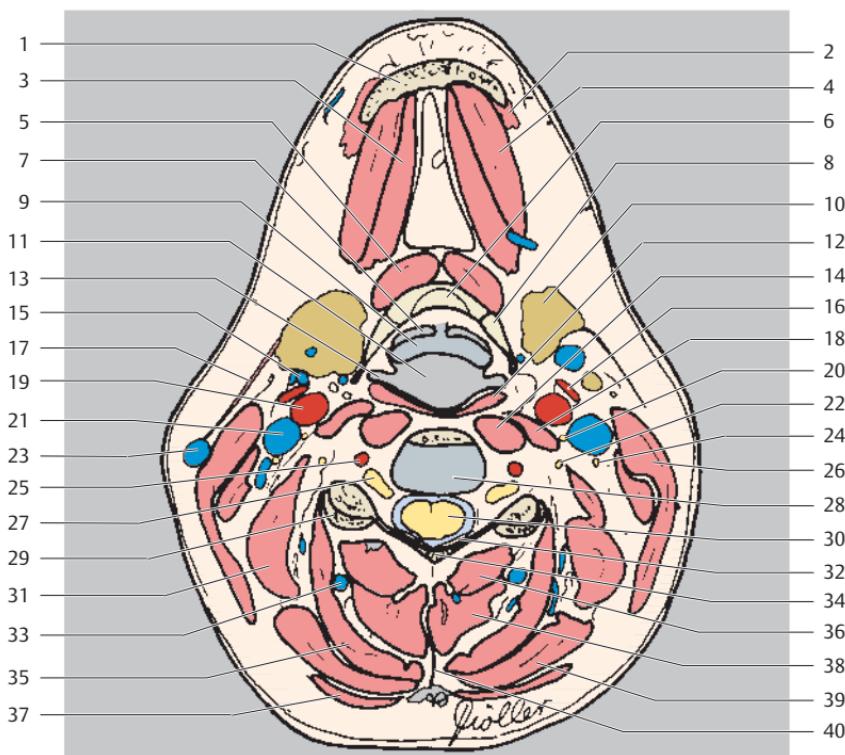
- |  |  |
|--|--|
| 1 Orbicularis oris muscle                    | 20 Hypoglossal nerve (XII)                       |
| 2 Depressor anguli oris muscle               | 21 Axis, body                                    |
| 3 Mandible                                   | 22 Internal jugular vein                         |
| 4 Mylohyoid muscle                           | 23 Retromandibular vein                          |
| 5 Genioglossus muscle                        | 24 Accessory nerve (XI)                          |
| 6 Masseter muscle                            | 25 Vertebral artery                              |
| 7 Hyoglossus muscle                          | 26 Vagus nerve (X)                               |
| 8 Submandibular gland                        | 27 Sternocleidomastoid muscle                    |
| 9 Oropharynx                                 | 28 Longissimus cervicis muscle                   |
| 10 Superior constrictor muscle of pharynx    | 29 Longissimus capitis muscle                    |
| 11 Palatopharyngeus muscle                   | 30 Levator scapulae muscle                       |
| 12 Longus capitis muscle                     | 31 Spinal cord                                   |
| 13 Middle constrictor muscle of pharynx      | 32 Semispinalis capitis muscle                   |
| 14 External carotid artery                   | 33 Spinalis capitis muscle and multifidus muscle |
| 15 Medial pterygoid muscle                   | 34 Semispinalis cervicis muscle                  |
| 16 Parotid gland                             | 35 Spinous process of vertebra                   |
| 17 Styloglossus muscle and stylohyoid muscle | 36 Splenius capitis muscle                       |
| 18 Internal carotid artery                   | 37 Deep cervical veins                           |
| 19 Longus colli muscle                       | 38 Trapezius muscle                              |
|  | 39 Nuchal ligament                               |



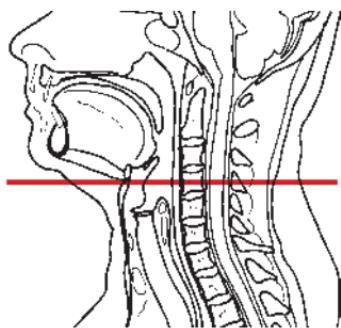


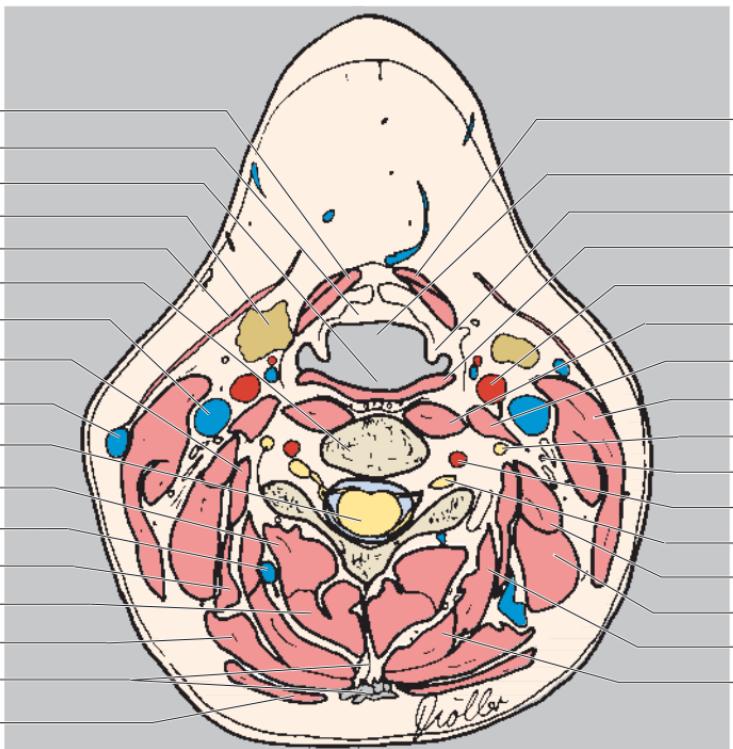
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|---|--------------------------------|
| 1 Mentalis muscle                       | 21 Longus colli muscle         |
| 2 Depressor anguli oris muscle          | 22 Internal carotid artery     |
| 3 Mandible                              | 23 External jugular vein       |
| 4 Platysma                              | 24 Internal jugular vein       |
| 5 Genioglossus muscle                   | 25 Cervical vertebra C3 (body) |
| 6 Mylohyoid muscle                      | 26 Accessory nerve (XI)        |
| 7 Hyoglossus muscle                     | 27 Spinal nerve root C4        |
| 8 Epiglottis                            | 28 Vagus nerve (X)             |
| 9 Root of tongue                        | 29 Spinal cord                 |
| 10 Submandibular gland                  | 30 Sternocleidomastoid muscle  |
| 11 Styloglossus muscle                  | 31 Posterior arch of C3        |
| 12 Oropharynx                           | 32 Vertebral artery            |
| 13 Stylohyoid muscle                    | 33 Deep cervical veins         |
| 14 Palatopharyngeus muscle              | 34 Levator scapulae muscle     |
| 15 Digastric muscle (posterior belly)   | 35 Spinous process             |
| 16 Middle constrictor muscle of pharynx | 36 Ligamentum flavum           |
| 17 Hypopharynx                          | 37 Splenius capitis muscle     |
| 18 External carotid artery              | 38 Spinalis cervicis muscle    |
| 19 Longus capitis muscle                | 39 Nuchal ligament             |
| 20 Superior laryngeal nerve (vagus)     | 40 Semispinalis capitis muscle |
|   | 41 Trapezius muscle            |



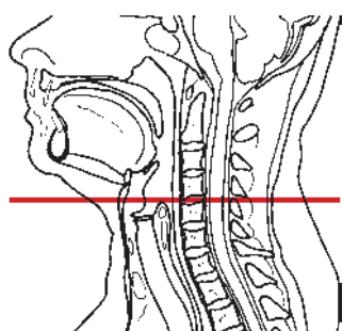


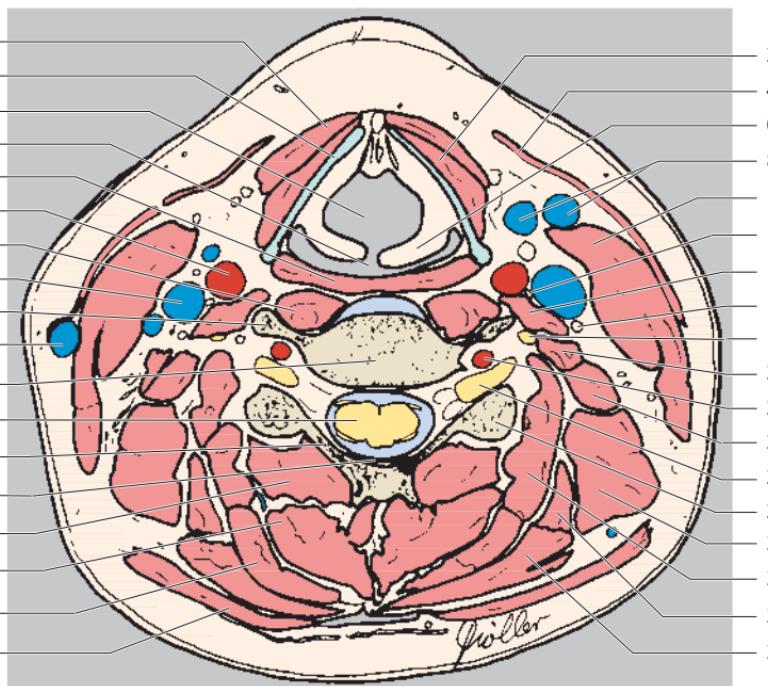
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|---|----------------------------------|
| 1 Mandible                                | 20 Vagus nerve (X)               |
| 2 Depressor anguli oris muscle            | 21 Internal jugular vein         |
| 3 Mylohyoid muscle                        | 22 Spinal nerve (C3)             |
| 4 Digastric muscle (anterior belly)       | 23 External jugular vein         |
| 5 Geniohyoid muscle                       | 24 Spinal nerve (C2)             |
| 6 Hyoid bone (body)                       | 25 Vertebral artery              |
| 7 Epiglottic vallecula                    | 26 Sternocleidomastoid muscle    |
| 8 Hyoid bone (greater horn)               | 27 Spinal nerve root (C4)        |
| 9 Epiglottis                              | 28 Intervertebral space (C3/C4)  |
| 10 Submandibular gland                    | 29 Zygopophyseal joint           |
| 11 Hypopharynx                            | 30 Spinal cord                   |
| 12 Inferior constrictor muscle of pharynx | 31 Levator scapulae muscle       |
| 13 Piriform recess                        | 32 Ligamentum flavum             |
| 14 Longus colli muscle                    | 33 Deep cervical veins           |
| 15 Retromandibular vein                   | 34 Posterior arch of C3 vertebra |
| 16 Superior thyroid artery                | 35 Semispinalis capitis muscle   |
| 17 Platysma                               | 36 Spinalis cervicis muscle      |
| 18 Longus capitis muscle                  | 37 Trapezius muscle              |
| 19 Common carotid artery (bifurcation)    | 38 Semispinalis cervicis muscle  |
|   | 39 Splenius capitis muscle       |
|   | 40 Nuchal ligament               |



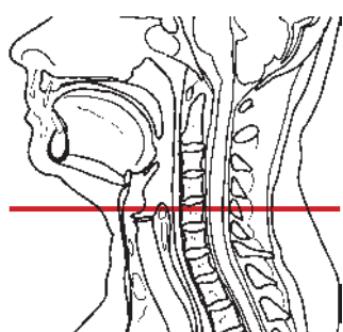


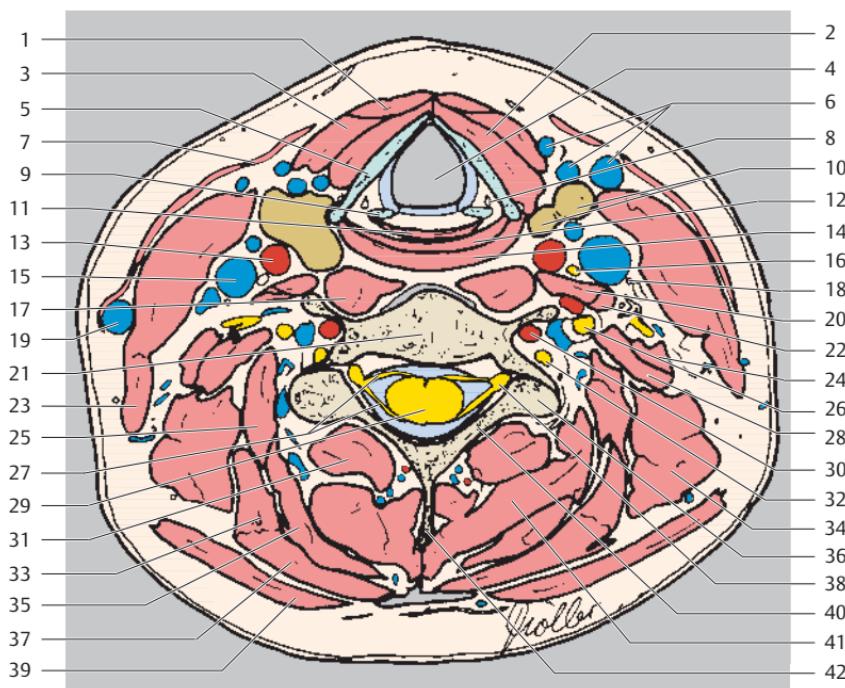
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|--|---------------------------------|
| 1 Thyrohyoid muscle                      | 17 External jugular vein        |
| 2 Sternohyoid muscle                     | 18 Spinal nerve (C4)            |
| 3 Epiglottis (cartilage)                 | 19 Spinal cord                  |
| 4 Laryngeal vestibule                    | 20 Spinal nerve (C3)            |
| 5 Hypopharynx                            | 21 Spinalis cervicis muscle     |
| 6 Aryepiglottic fold                     | 22 Vertebral artery             |
| 7 Submandibular gland                    | 23 Deep cervical veins          |
| 8 Inferior constrictor muscle of pharynx | 24 Spinal nerve root (C5)       |
| 9 Platysma                               | 25 Longissimus cervicis muscle  |
| 10 Common carotid artery                 | 26 Middle scalene muscle        |
| 11 Cervical vertebra C4 (body)           | 27 Semispinalis cervicis muscle |
| 12 Longus colli muscle                   | 28 Levator scapulae muscle      |
| 13 Internal jugular vein                 | 29 Splenius capitis muscle      |
| 14 Longus capitis muscle                 | 30 Splenius cervicis muscle     |
| 15 Longissimus capitis muscle            | 31 Nuchal ligament              |
| 16 Sternocleidomastoid muscle            | 32 Semispinalis capitis muscle  |
|  | 33 Trapezius muscle             |



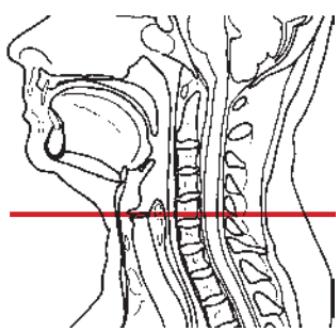


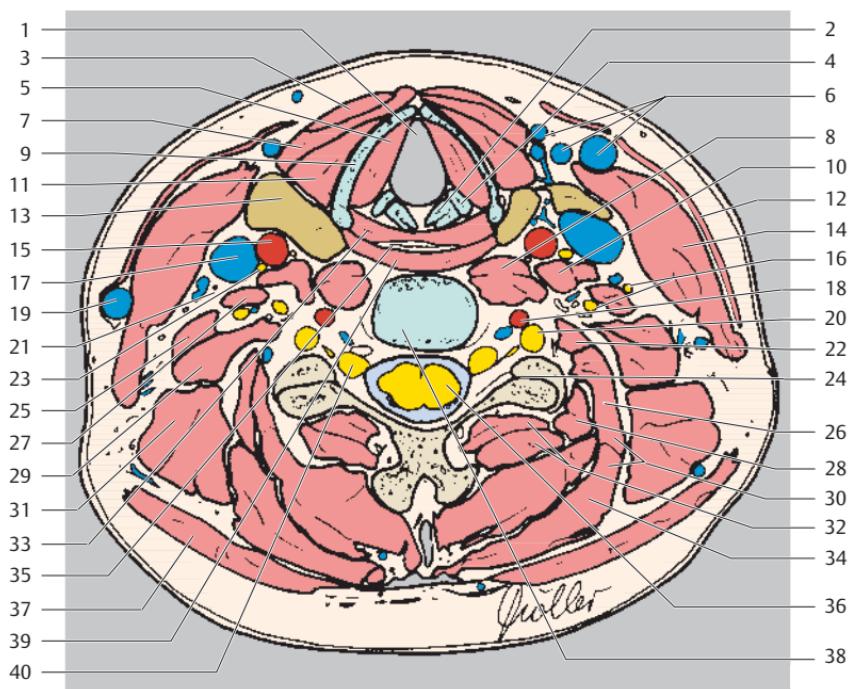
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|--|---|
| 1 Sternohyoid muscle                     | 19 External jugular vein                          |
| 2 Thyrohyoid muscle                      | 20 Middle scalene muscle                          |
| 3 Thyroid cartilage (lamina)             | 21 Cervical vertebra C5 (body)                    |
| 4 Platysma                               | 22 Vertebral artery                               |
| 5 Laryngeal vestibule                    | 23 Spinal cord                                    |
| 6 Aryepiglottic fold                     | 24 Posterior scalene muscle                       |
| 7 Hypopharynx                            | 25 Posterior arch of C6 vertebra                  |
| 8 Anterior jugular vein                  | 26 Spinal nerve root (C6)                         |
| 9 Inferior constrictor muscle of pharynx | 27 Ligamentum flavum                              |
| 10 Sternocleidomastoid muscle            | 28 Inferior articular process of vertebra         |
| 11 Common carotid artery                 | 29 Spinalis cervicis muscle and multifidus muscle |
| 12 Vagus nerve (X)                       | 30 Levator scapulae muscle                        |
| 13 Longus colli muscle                   | 31 Semispinalis cervicis muscle                   |
| 14 Longus capitis muscle                 | 32 Longissimus cervicis muscle                    |
| 15 Internal jugular vein                 | 33 Semispinalis capitis muscle                    |
| 16 Spinal nerve (C4)                     | 34 Splenius cervicis muscle                       |
| 17 Transverse process of C5 vertebra     | 35 Trapezius muscle                               |
| 18 Spinal nerve (C5)                     | 36 Splenius capitis muscle                        |



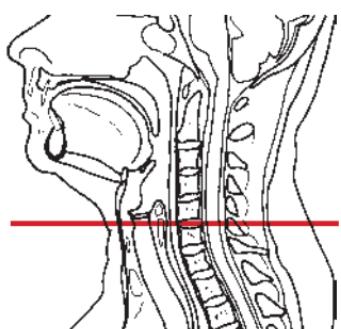


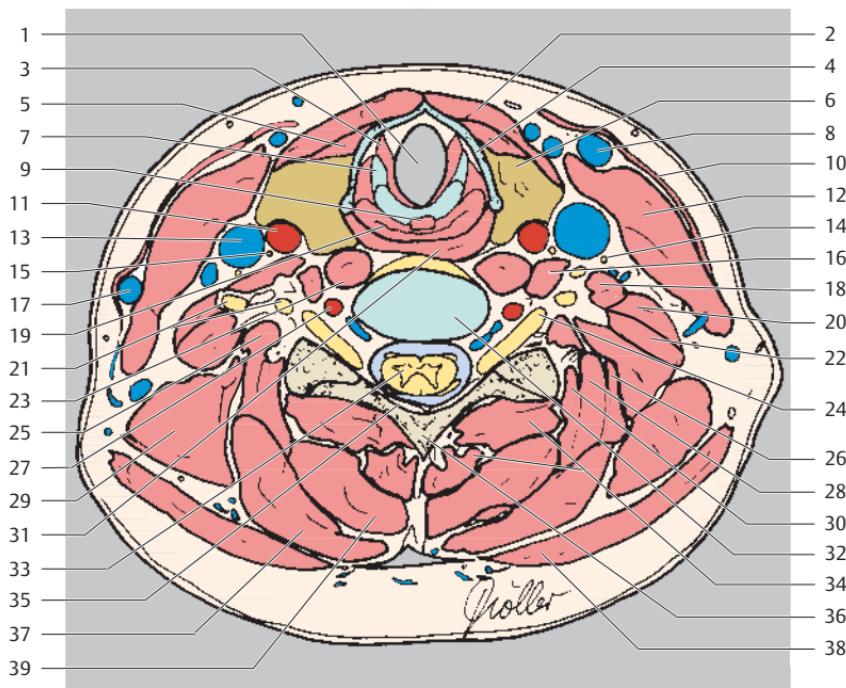
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|--|--|
| 1 Sternohyoid muscle                         | 22 Anterior scalene muscle                           |
| 2 Thyrohyoid muscle                          | 23 Sternocleidomastoid muscle                        |
| 3 Omohyoid muscle                            | 24 Posterior scalene muscle                          |
| 4 Larynx                                     | 25 Longissimus cervicis muscle                       |
| 5 Thyroid cartilage (lamina)                 | 26 Spinal nerve (C4)                                 |
| 6 Anterior jugular vein                      | 27 Anterior and posterior nerve roots                |
| 7 Platysma                                   | 28 Middle scalene muscle                             |
| 8 Piriform recess                            | 29 Spinal cord                                       |
| 9 Arytenoid cartilage                        | 30 Vertebral artery                                  |
| 10 Thyroid gland                             | 31 Spinalis cervicis muscle and<br>multifidus muscle |
| 11 Cricoid cartilage                         | 32 Spinal nerve (C5)                                 |
| 12 Hypopharynx                               | 33 Splenius cervicis muscle                          |
| 13 Common carotid artery                     | 34 Levator scapulae muscle                           |
| 14 Inferior constrictor muscle of<br>pharynx | 35 Semispinalis capitis muscle                       |
| 15 Internal jugular vein                     | 36 Inferior articular process of vertebra            |
| 16 Vagus nerve (X)                           | 37 Splenius capitis nerve                            |
| 17 Longus colli muscle                       | 38 Spinal nerve root (C6)                            |
| 18 Phrenic nerve                             | 39 Trapezius muscle                                  |
| 19 External jugular vein                     | 40 Posterior arch of C6 vertebra                     |
| 20 Longus capitis muscle                     | 41 Semispinalis cervicis muscle                      |
| 21 Cervical vertebra C5 (body)               | 42 Spinous process of C6 vertebra                    |



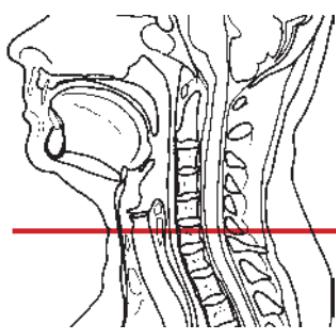


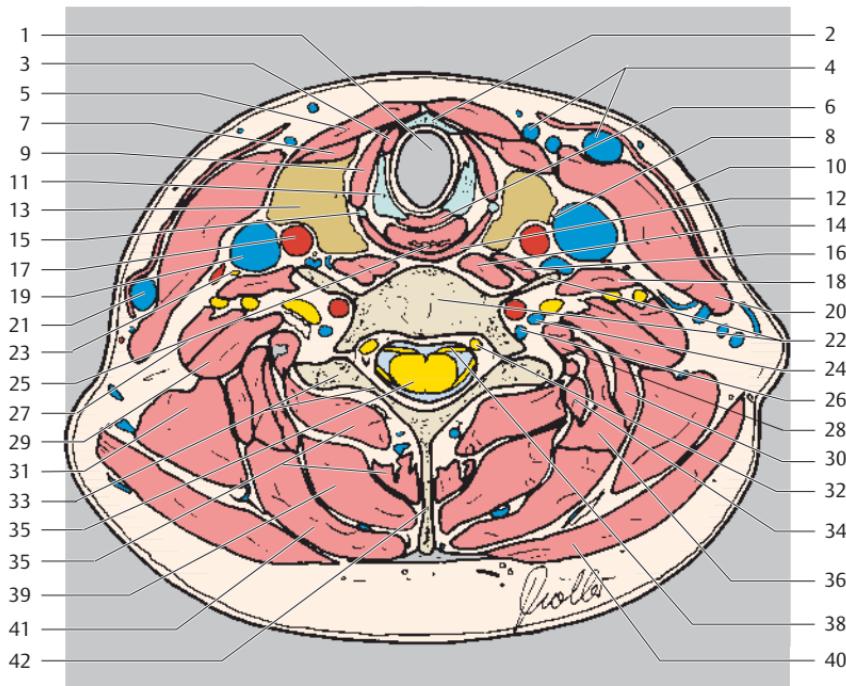
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|-------------------------------|---|
| 1 Glottis                     | 22 Longissimus capitis muscle                           |
| 2 Cricoid cartilage           | 23 Vagus nerve (X)                                      |
| 3 Sternohyoid muscle          | 24 Zygopophysial joint                                  |
| 4 Arytenoid cartilage         | 25 Middle scalene muscle                                |
| 5 Vocalis muscle              | 26 Longissimus cervicis muscle                          |
| 6 Anterior jugular vein       | 27 Anterior scalene muscle                              |
| 7 Omohyoid muscle             | 28 Semispinalis capitis muscle                          |
| 8 Longus colli muscle         | 29 Posterior scalene muscle                             |
| 9 Thyroid cartilage (lamina)  | 30 Splenius cervicis muscle and splenius capitis muscle |
| 10 Longus capitis muscle      | 31 Levator scapulae muscle                              |
| 11 Thyrohyoid muscle          | 32 Spinalis cervicis muscle and multifidus muscle       |
| 12 Platysma                   | 33 Posterior cricoarytenoid muscle                      |
| 13 Thyroid gland              | 34 Semispinalis cervicis muscle                         |
| 14 Sternocleidomastoid muscle | 35 Hypopharynx/esophagus                                |
| 15 Common carotid artery      | 36 Spinal cord  |
| 16 Spinal nerves (C4 and C5)  | 37 Trapezius muscle                                     |
| 17 Internal jugular vein      | 38 Cervical vertebra C5                                 |
| 18 Vertebral artery           | 39 Inferior constrictor muscle of pharynx               |
| 19 External jugular vein      | 40 Nerve root (C7)                                      |
| 20 Spinal nerve (C6)          |   |
| 21 Phrenic nerve              |   |



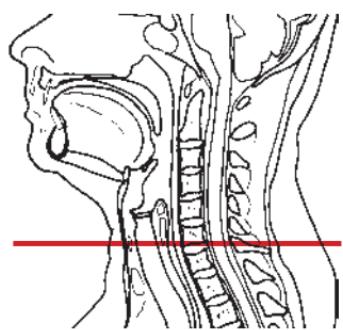
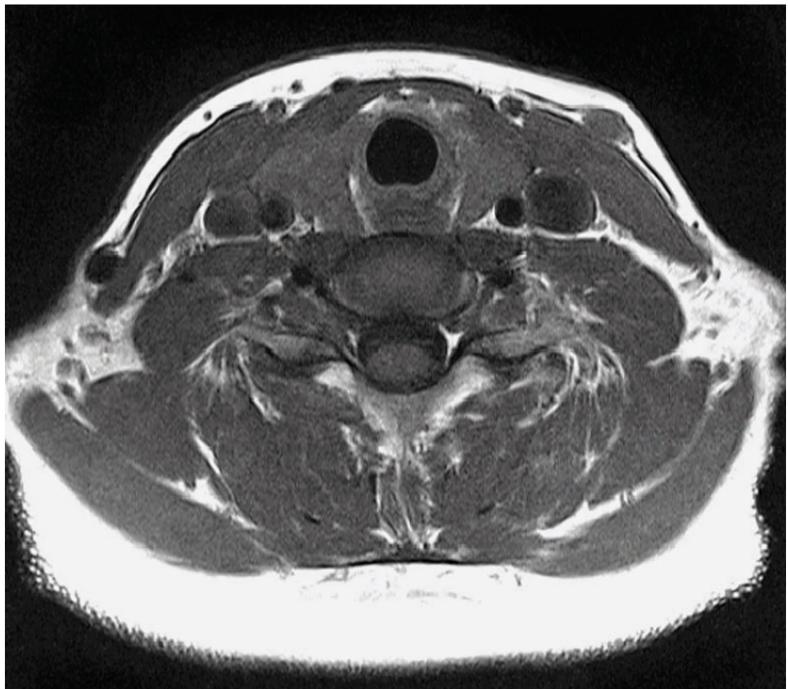


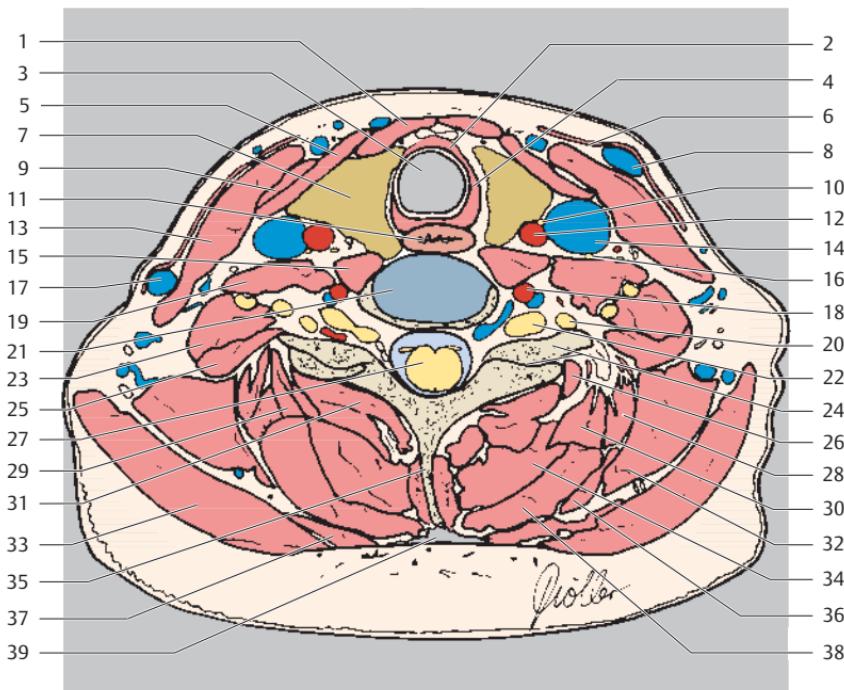
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|-------------------------------|--|
| 1 Larynx                      | 21 Spinal nerves (C4 and C5)                         |
| 2 Sternohyoid muscle          | 22 Posterior scalene muscle                          |
| 3 Vocalis muscle (vocal cord) | 23 Longus colli muscle                               |
| 4 Thyroid cartilage (lamina)  | 24 Spinal nerve root (C6)                            |
| 5 Thyrohyoid muscle           | 25 Longissimus capitis muscle                        |
| 6 Thyroid gland               | 26 Longissimus cervicis muscle                       |
| 7 Arytenoid cartilage         | 27 Vertebral artery                                  |
| 8 Anterior jugular vein       | 28 Splenius cervicis muscle                          |
| 9 Transverse arytenoid muscle | 29 Levator scapulae muscle                           |
| 10 Platysma                   | 30 Semispinalis capitis muscle                       |
| 11 Common carotid artery      | 31 Inferior constrictor muscle of pharynx            |
| 12 Sternocleidomastoid muscle | 32 Intervertebral space (C5/C6)                      |
| 13 Internal jugular vein      | 33 Spinal cord                                       |
| 14 Phrenic muscle             | 34 Spinalis cervicis muscle and<br>multifidus muscle |
| 15 Vagus nerve (X)            | 35 Ligamentum flavum                                 |
| 16 Longus capitis muscle      | 36 Posterior vertebral arch                          |
| 17 External jugular vein      | 37 Splenius capitis muscle                           |
| 18 Anterior scalene muscle    | 38 Trapezius muscle                                  |
| 19 Hypopharynx/esophagus      | 39 Semispinalis cervicis muscle                      |
| 20 Middle scalene muscle      |  |



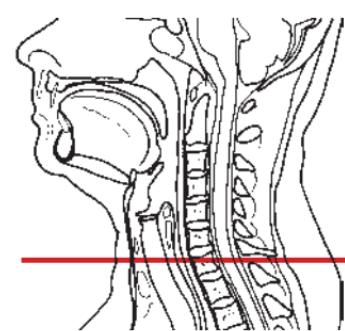


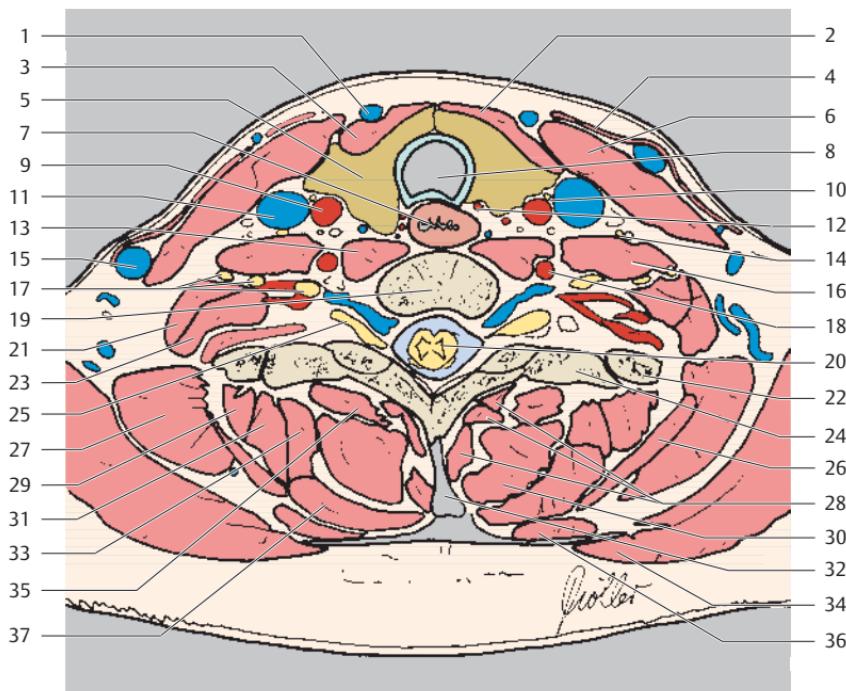
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|---|--|
| 1 Larynx                                  | 23 Phrenic nerve                                       |
| 2 Thyroid cartilage                       | 24 Spinal nerves (C4, C5, and C6)                      |
| 3 Thyro-arytenoid muscle                  | 25 Esophagus   |
| 4 Anterior jugular vein                   | 26 Vertebral artery                                    |
| 5 Sternohyoid muscle                      | 27 Middle scalene muscle                               |
| 6 Transverse arytenoid muscle             | 28 Longissimus capitis muscle                          |
| 7 Thyrohyoid muscle                       | 29 Posterior scalene muscle                            |
| 8 Vagus nerve (X)                         | 30 Longissimus cervicis muscle                         |
| 9 Sternothyroid muscle                    | 31 Levator scapulae muscle                             |
| 10 Platysma                               | 32 Spinal nerve root (C7)                              |
| 11 Cricoid cartilage (lamina)             | 33 Articular process and posterior arch of C7 vertebra |
| 12 Inferior constrictor muscle of pharynx | 34 Semispinalis capitis muscle                         |
| 13 Thyroid gland                          | 35 Spinal cord   |
| 14 Longus colli muscle                    | 36 Splenius cervicis muscle                            |
| 15 Thyroid cartilage (inferior horn)      | 37 Spinalis cervicis muscle and multifidus muscle      |
| 16 Longus capitis muscle                  | 38 Anterior and posterior spinal nerve roots (C8)      |
| 17 Common carotid artery                  | 39 Semispinalis cervicis muscle                        |
| 18 Anterior scalene muscle                | 40 Trapezius muscle                                    |
| 19 Internal jugular vein                  | 41 Splenius capitis muscle                             |
| 20 Sternocleidomastoid muscle             | 42 Spinous process of vertebra                         |
| 21 External jugular vein                  |  |
| 22 Cervical vertebra (C6)                 |  |





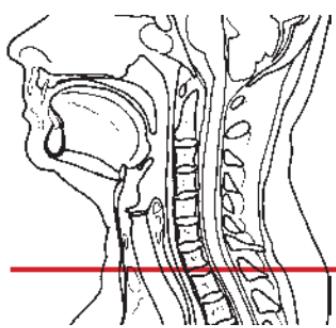
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|----|--------------------------------|----|---|
| 1  | Sternohyoid muscle             | 21 | Intervertebral space (C6/C7)                      |
| 2  | Cricoid cartilage (arch)       | 22 | Spinal nerve root (C7)                            |
| 3  | Trachea                        | 23 | Middle scalene muscle                             |
| 4  | Cricothyroid muscle            | 24 | Zygopophysial joint (C6/C7)                       |
| 5  | Sternothyroid muscle           | 25 | Posterior scalene muscle                          |
| 6  | Platysma                       | 26 | Longissimus capitis muscle                        |
| 7  | Thyroid gland                  | 27 | Spinal cord                                       |
| 8  | Anterior jugular vein          | 28 | Longissimus cervicis muscle                       |
| 9  | Omohyoid muscle                | 29 | Semispinalis capitis muscle                       |
| 10 | Vagus nerve (X)                | 30 | Splenius cervicis muscle                          |
| 11 | Esophagus                      | 31 | Spinalis cervicis muscle and<br>multifidus muscle |
| 12 | Common carotid artery          | 32 | Levator scapulae muscle                           |
| 13 | Sternocleidomastoid muscle     | 33 | Trapezius muscle                                  |
| 14 | Internal jugular vein          | 34 | Semispinalis cervicis muscle                      |
| 15 | Longus colli muscle            | 35 | Spinous process of vertebra                       |
| 16 | Phrenic muscle                 | 36 | Serratus posterior superior muscle                |
| 17 | External jugular vein          | 37 | Rhomboïd minor muscle                             |
| 18 | Vertebral artery               | 38 | Splenius capitis muscle                           |
| 19 | Anterior scalene muscle        | 39 | Nuchal ligament                                   |
| 20 | Spinal nerves (C4, C5, and C6) |    |   |

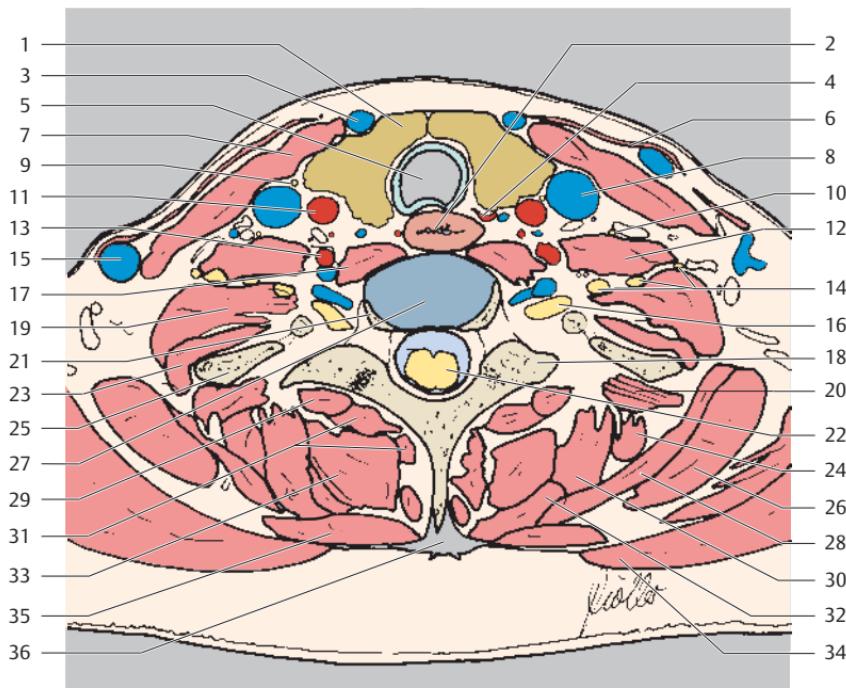




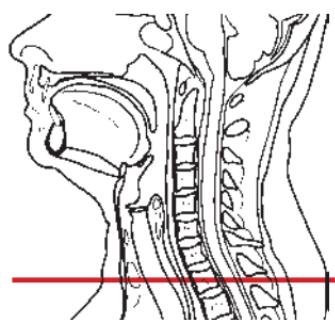
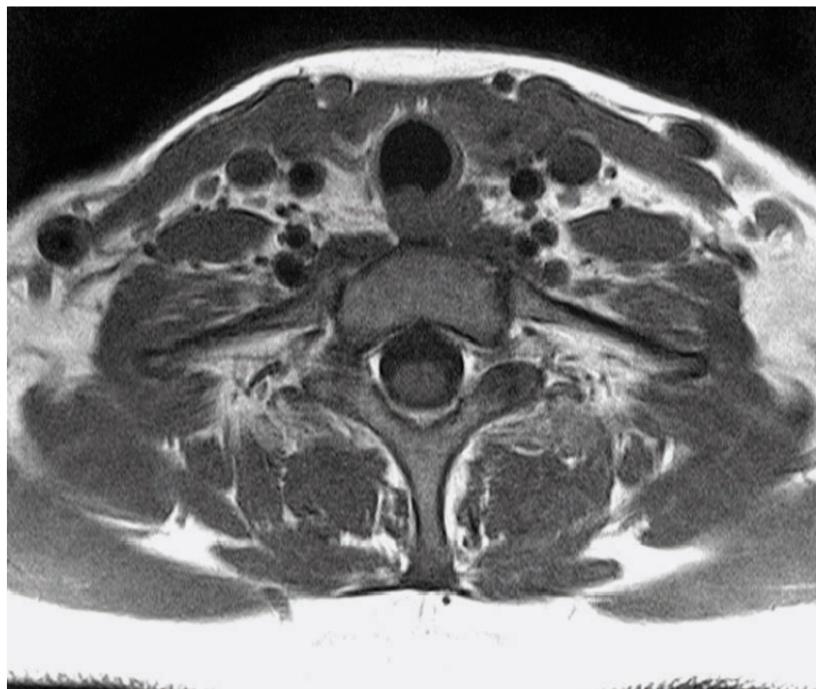
- 1 Anterior jugular vein
- 2 Sternohyoid muscle
- 3 Sternothyroid muscle
- 4 Platysma
- 5 Thyroid gland
- 6 Sternocleidomastoid muscle
- 7 Esophagus
- 8 Trachea
- 9 Common carotid artery
- 10 Vagus nerve (X)
- 11 Internal jugular vein
- 12 Inferior thyroid artery
- 13 Longus colli muscle
- 14 Phrenic nerve
- 15 External jugular vein
- 16 Anterior scalene muscle
- 17 Spinal nerves (C5, C6, and C7)
- 18 Vertebral artery
- 19 Cervical vertebra (C7)

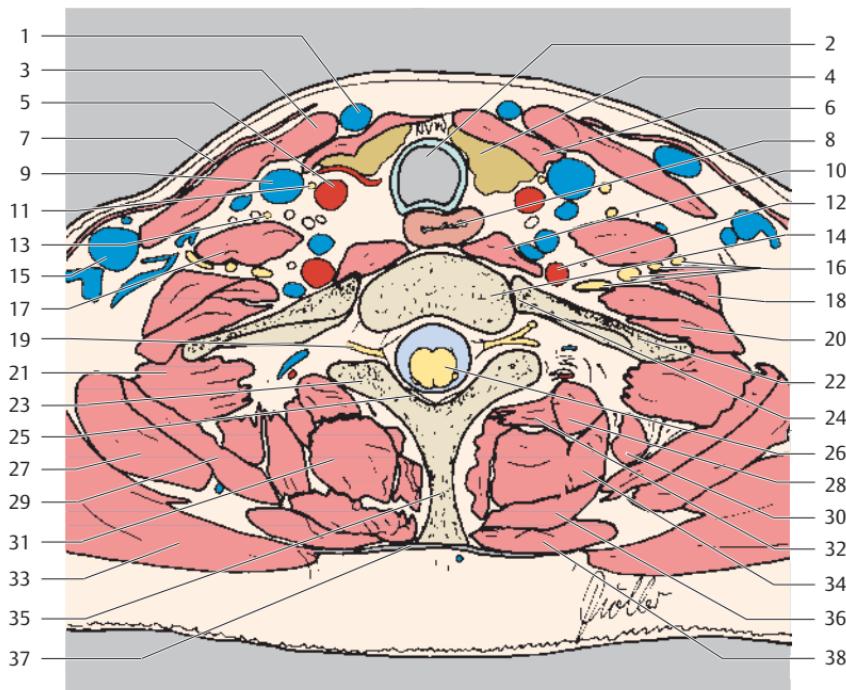
- 20 Spinal cord
- 21 Middle scalene muscle
- 22 First rib
- 23 Posterior scalene muscle
- 24 Transverse process of vertebra
- 25 Spinal nerve root (C8)
- 26 Serratus posterior superior muscle
- 27 Levator scapulae muscle
- 28 Spinalis cervicis muscle and multifidus muscle
- 29 Iliocostalis cervicis muscle
- 30 Semispinalis cervicis muscle
- 31 Longissimus cervicis muscle
- 32 Interspinous ligament
- 33 Splenius cervicis muscle
- 34 Trapezius muscle
- 35 Semispinalis capitis muscle
- 36 Rhomboid minor muscle
- 37 Splenius capitis muscle



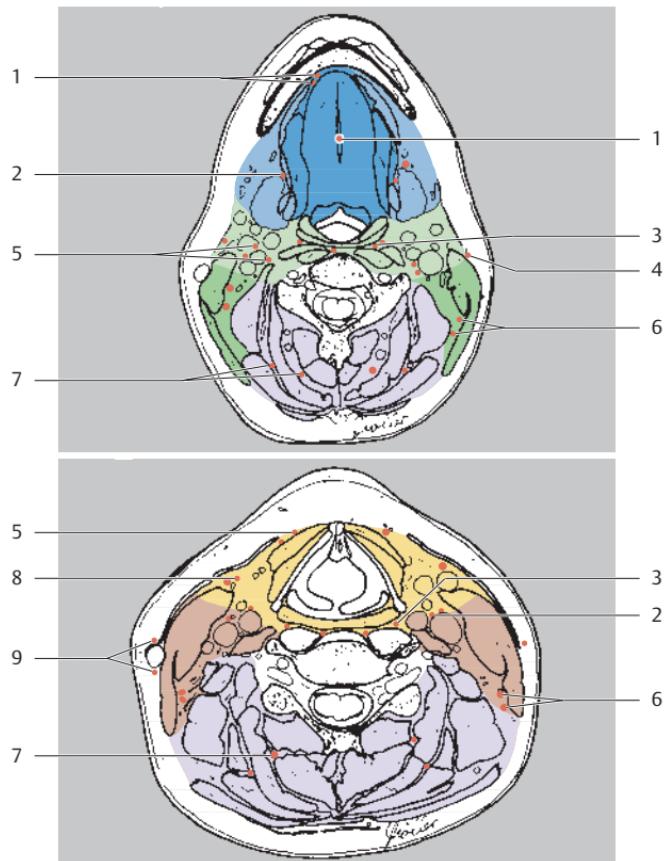


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|---|--|
| 1 Thyroid gland                         | 20 Intercostal muscles                               |
| 2 Esophagus                             | 21 Superior posterior margin of T1<br>vertebra       |
| 3 Anterior jugular vein                 | 22 Spinal cord                                       |
| 4 Inferior thyroid vein                 | 23 Posterior scalene muscle                          |
| 5 Trachea                               | 24 Iliocostalis cervicis muscle                      |
| 6 Platysma                              | 25 First rib   |
| 7 Sternocleidomastoid muscle            | 26 Levator scapulae muscle                           |
| 8 Internal jugular vein                 | 27 Intervertebral space (C7/T1)                      |
| 9 Vagus nerve (X)                       | 28 Serratus posterior superior<br>muscle             |
| 10 Phrenic nerve                        | 29 Semispinalis capitis muscle                       |
| 11 Common carotid artery                | 30 Splenius cervicis muscle                          |
| 12 Anterior scalene muscle              | 31 Spinalis cervicis muscle and<br>multifidus muscle |
| 13 Vertebral artery                     | 32 Splenius capitis muscle                           |
| 14 Spinal nerves (C5, C6, and C7)       | 33 Semispinalis cervicis muscle                      |
| 15 External jugular vein                | 34 Trapezius muscle                                  |
| 16 Spinal nerve root (C8)               | 35 Rhomboid minor muscle                             |
| 17 Longus colli muscle                  | 36 Interspinous ligament                             |
| 18 Transverse process of T1<br>vertebra |  |
| 19 Middle scalene muscle                |  |





- |                               |   |
|-------------------------------|---|
| 1 Anterior jugular vein       | 21 Intercostal muscles                            |
| 2 Trachea                     | 22 First rib                                      |
| 3 Sternocleidomastoid muscle  | 23 Transverse process of T1 vertebra              |
| 4 Thyroid gland               | 24 Costovertebral joint                           |
| 5 Common carotid artery       | 25 Ligamentum flavum                              |
| 6 Sternohyoid muscle          | 26 Spinal cord                                    |
| 7 Platysma                    | 27 Levator scapulae muscle                        |
| 8 Esophagus                   | 28 Semispinalis capitis muscle                    |
| 9 Internal jugular vein       | 29 Serratus posterior superior muscle             |
| 10 Longus colli muscle        | 30 Iliocostalis cervicis muscle                   |
| 11 Vagus nerve (X)            | 31 Semispinalis cervicis muscle                   |
| 12 Vertebral artery           | 32 Spinalis cervicis muscle and multifidus muscle |
| 13 Phrenic nerve              | 33 Trapezius muscle                               |
| 14 Vertebra (T1)              | 34 Splenius cervicis muscle                       |
| 15 External jugular vein      | 35 Spinous process of vertebra                    |
| 16 Cervical plexus (C5 to C8) | 36 Splenius capitis muscle                        |
| 17 Anterior scalene muscle    | 37 Interspinous ligament                          |
| 18 Middle scalene muscle      | 38 Rhomboid minor muscle                          |
| 19 Spinal nerve root (T1)     |   |
| 20 Posterior scalene muscle   |   |

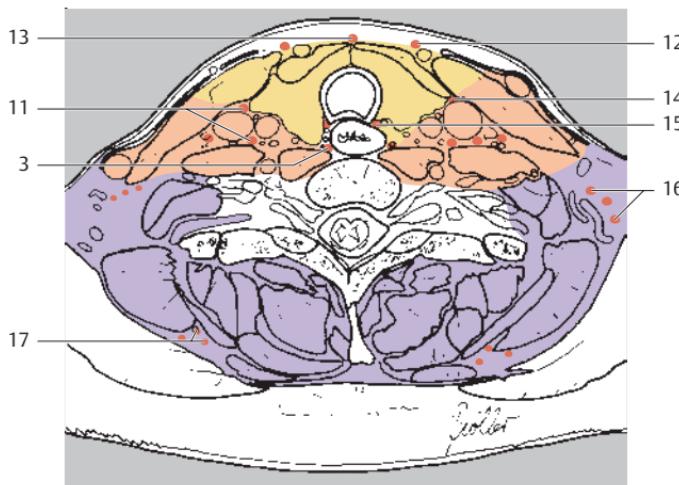
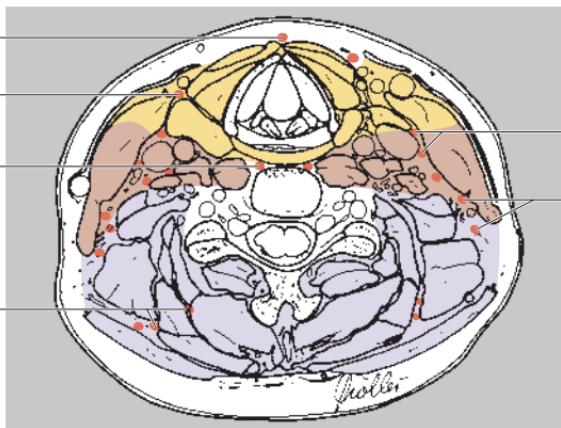


#### Cervical lymph nodes

- 1 Submental lymph nodes
- 2 Submandibular lymph nodes
- 3 Retropharyngeal lymph nodes
- 4 Preauricular lymph nodes
- 5 Superior jugular group of lymph nodes
- 6 Deep cervical lymph nodes
- 7 Nuchal lymph nodes
- 8 Anterior jugular lymph nodes
- 9 Superficial cervical lymph nodes

#### Lymph nodes (classified according to levels)

- Level 1a (submental lymph nodes between digastric muscles)
- Level 1b (submandibular lymph nodes)
- Level 2a (lymph nodes anterior, medial, or lateral to the internal jugular vein)
- Level 2b (Lymph nodes dorsal to the internal jugular vein and separated from the vein by a lamella of fat)
- Level 3 (lymph nodes along the jugular vein)
- Level 5a (lymph nodes in the posterior triangle, upper level = above arch of cricoid cartilage)
- Level 6 (upper visceral lymph nodes: ventral between the carotid arteries)

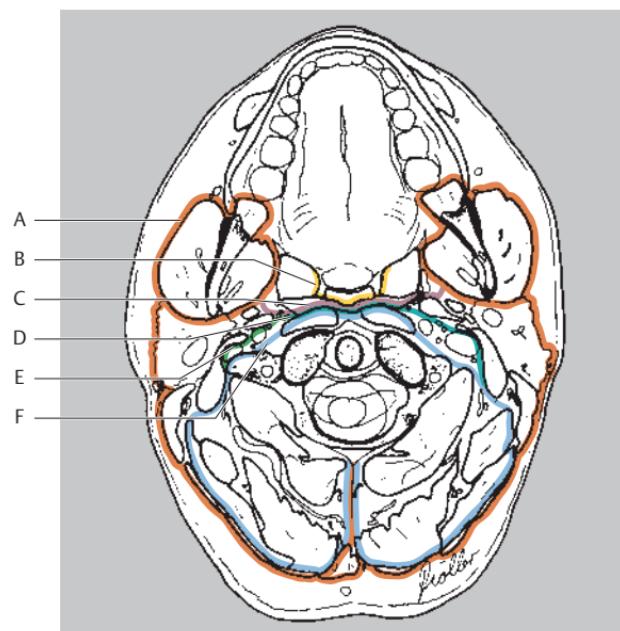
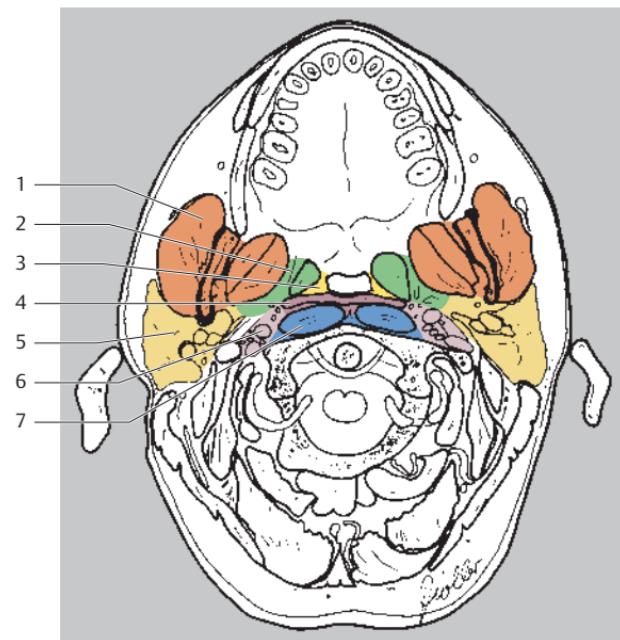


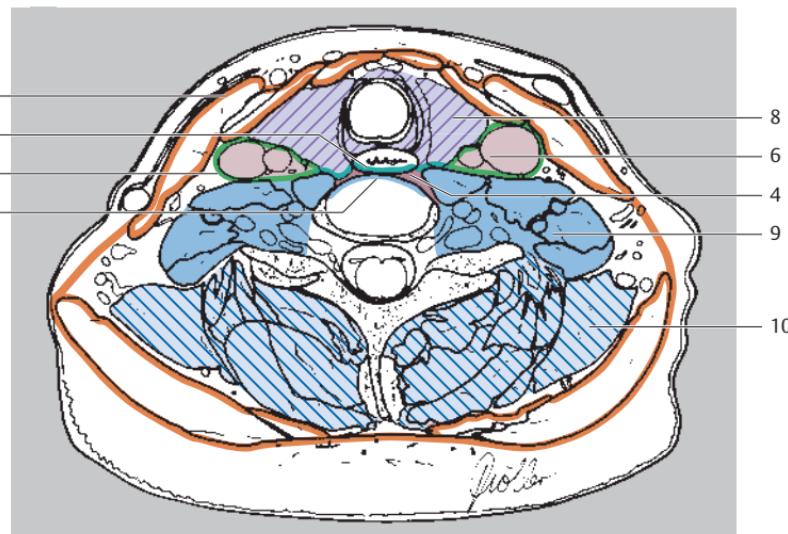
### Cervical lymph nodes

- 3 Retropharyngeal lymph nodes
- 6 Deep cervical lymph nodes
- 7 Nuchal lymph nodes
- 8 Anterior jugular lymph nodes
- 10 Prelaryngeal lymph nodes
- 11 Inferior jugular group of lymph nodes
- 12 Anterior cervical lymph nodes
- 13 Pretracheal lymph nodes
- 14 Thyroid lymph nodes
- 15 Paratracheal lymph nodes
- 16 Supraclavicular lymph nodes
- 17 Superficial cervical lymph nodes

### Lymph nodes (classified according to levels)

- Level 3 (lymph nodes along the jugular vein)
- Level 4 (lymph nodes of the lower jugular vein)
- Level 5a (lymph nodes of the posterior triangle, upper level = above arch of cricoid cartilage)
- Level 5b (lymph nodes of the posterior triangle, lower level = below arch of cricoid cartilage)
- Level 6 (upper visceral lymph nodes: ventral between the carotid arteries)



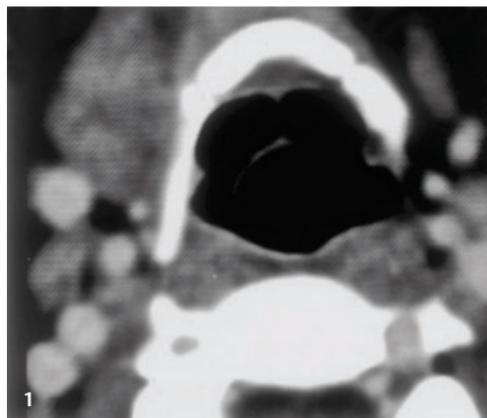


### Cervical spaces

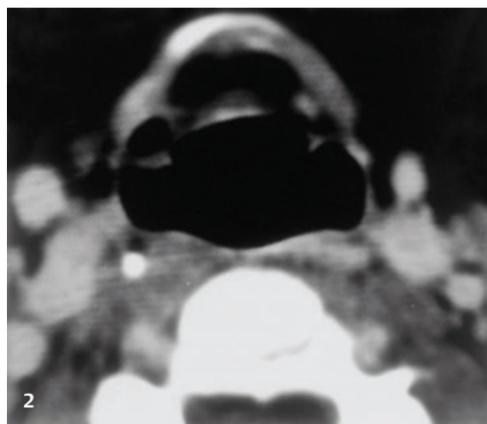
- 1 Masticatory space (chewing muscles, ramus and body of mandible, inferior alveolar nerve, maxillary artery, pterygoid plexus, lingual nerve)
- 2 Parapharyngeal space (trigeminal nerve, pharyngeal artery)
- 3 Superficial mucosal space (submucosal salivary glands, lymphatic tissue)
- 4 Retropharyngeal space
- 5 Parotid space (parotid gland, facial nerve, external carotid artery, retromandibular vein)
- 6 Carotid space (carotid artery, jugular vein, cranial nerves IX–XII, sympathetic trunk)
- 7 Prevertebral space (prevertebral and paraspinal muscles, phrenic nerve)
- 8 Visceral space (thyroid gland, paratracheal space)
- 9 Perivertebral space (prevertebral part)
- 10 Perivertebral space (paraspinal part)

### Cervical fasciae

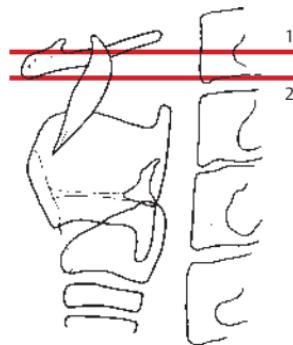
- A Superficial cervical fascia (fascia colli superficialis)
- B Pharyngobasilar fascia
- C Middle layer of deep cervical fascia (pretracheal layer)
- D Intercarotid fascia
- E Carotid sheath
- F Deep layer of deep cervical fascia (prevertebral layer)

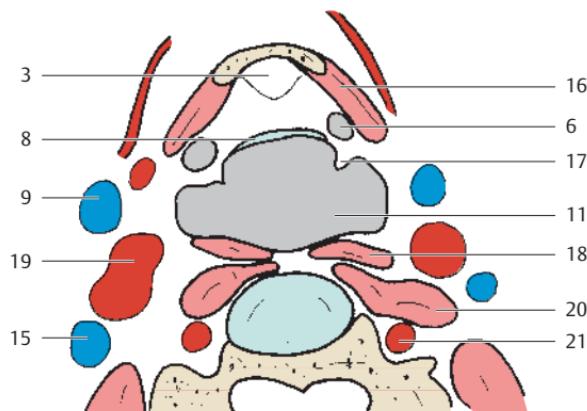
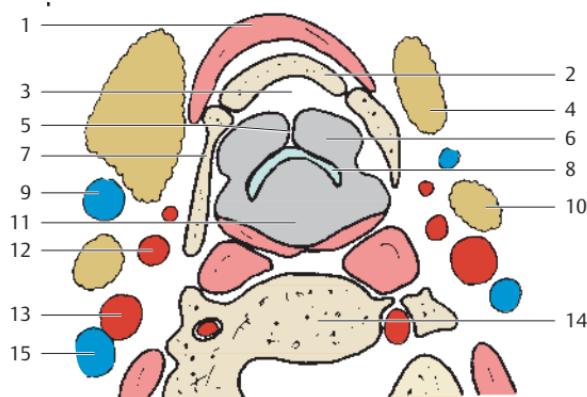


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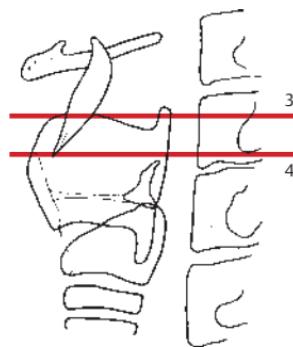
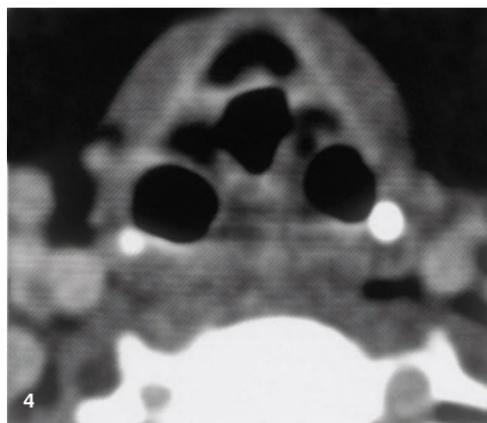
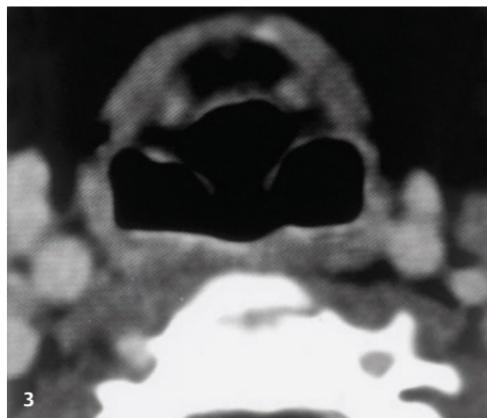


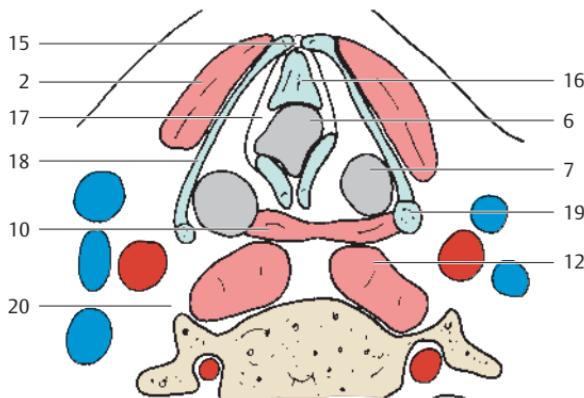
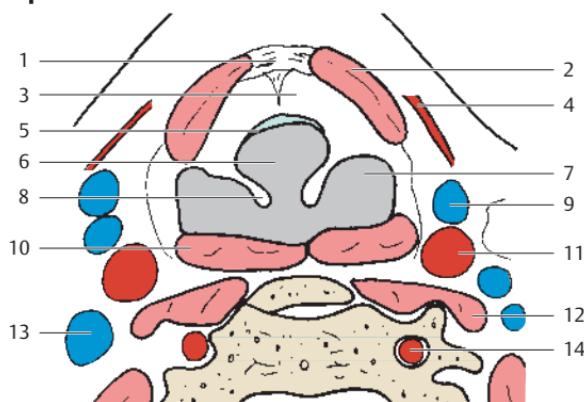
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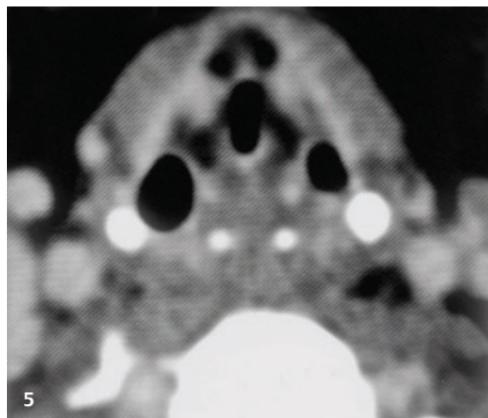


- |   |   |
|---|---|
| 1 Suprathyroid muscles (mylohyoid and geniohyoid muscles, hypoglossus muscle) | 12 External carotid artery                                      |
| 2 Hyoid bone (body)   | 13 Internal carotid artery                                      |
| 3 Pre-epiglottic space  | 14 Cervical vertebra (C3)                                       |
| 4 Submandibular gland   | 15 Internal jugular vein  |
| 5 Glossoepiglottic fold   | 16 Infrathyroid muscles (sternohyoid and sternothyroid muscles) |
| 6 Epiglottic vallecula  | 17 Pharyngoepiglottic fold                                      |
| 7 Hyoid bone (greater horn)   | 18 Inferior constrictor muscle of pharynx                       |
| 8 Epiglottis  | 19 Carotid bifurcation  |
| 9 Anterior jugular vein   | 20 Longus colli muscle  |
| 10 Parotid gland  | 21 Vertebral artery   |
| 11 Hypopharynx  |   |

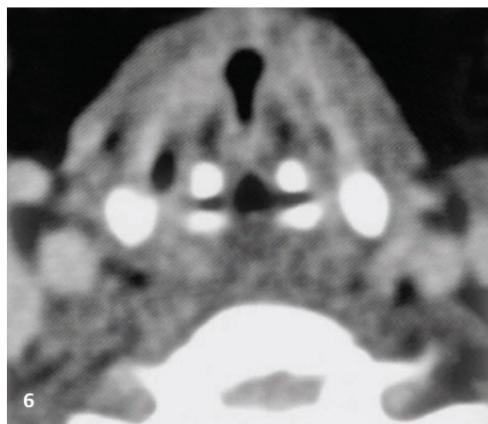




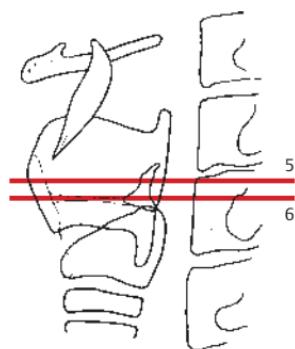
- |  |   |
|--|---|
| 1 Thyrohyoid membrane  | 10 Inferior constrictor muscle of pharynx |
| 2 Infrathyroid muscles<br>(sternothyroid, omohyoid,<br>thyrohyoid) | 11 Common carotid artery                  |
| 3 Pre-epiglottic space   | 12 Longus colli muscle                    |
| 4 Platysma   | 13 Internal jugular vein                  |
| 5 Epiglottis   | 14 Vertebral artery                       |
| 6 Larynx   | 15 Superior thyroid notch                 |
| 7 Piriform recess  | 17 Vestibular folds                       |
| 8 Aryepiglottic fold   | 18 Thyroid cartilage (lamina)             |
| 9 Anterior jugular vein  | 19 Thyroid cartilage (superior horn)      |
|  | 20 Body of cervical vertebra (C4)         |

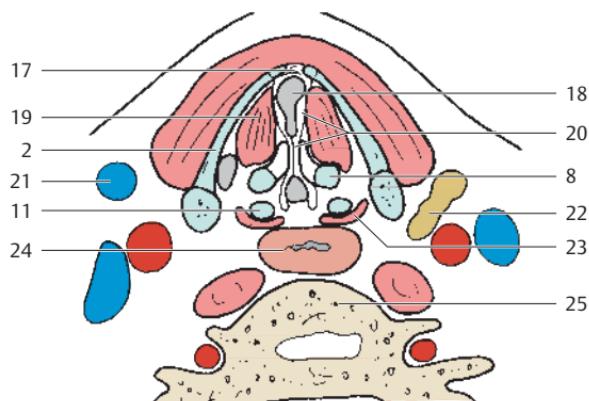
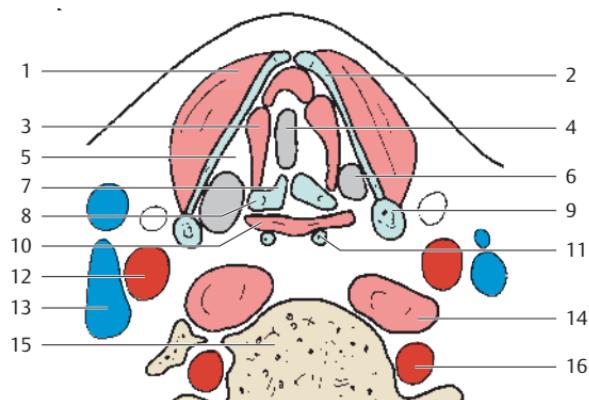


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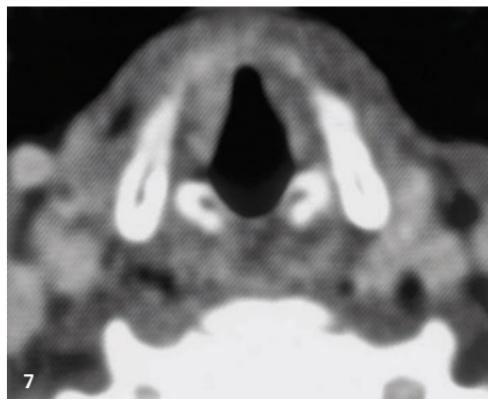


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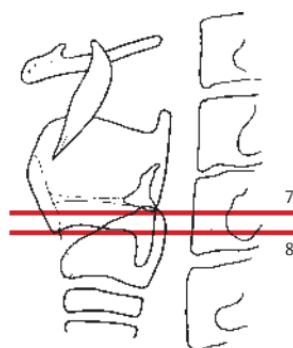
- |   |                                 |
|---|---------------------------------|
| 1 Infrathyroid muscles<br>(sternothyroid, omohyoid and<br>thyrohyoid muscles) | 12 Common carotid artery        |
| 2 Thyroid cartilage   | 13 Internal jugular vein        |
| 3 Thryo-arytenoid muscle  | 14 Longus colli muscle          |
| 4 Larynx (vestibule)  | 15 Body of cervical vertebra C4 |
| 5 Paralaryngeal space   | 16 Vertebral artery             |
| 6 Piriform recess   | 17 Laryngeal prominence         |
| 7 Arytenoid cartilage (vocal<br>process)                                      | 18 Rima glottidis               |
| 8 Arytenoid cartilage (body)  | 19 Vocalis muscle               |
| 9 Thyroid cartilage<br>(superior horn)  | 20 True vocal cord              |
| 10 Transverse arytenoid muscle  | 21 Anterior jugular vein        |
| 11 Cricoid cartilage  | 22 Thyroid gland                |
|   | 23 Oblique arytenoid muscle     |
|   | 24 Esophagus                    |
|   | 25 Body of cervical vertebra C5 |

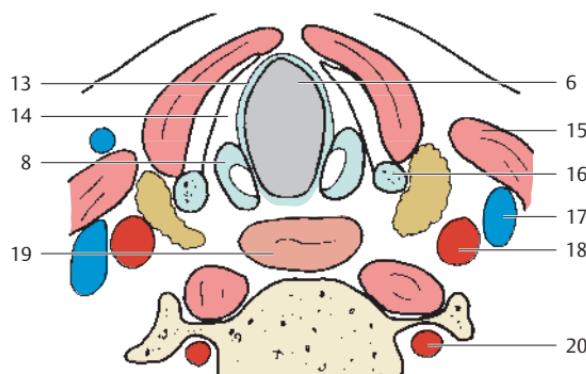
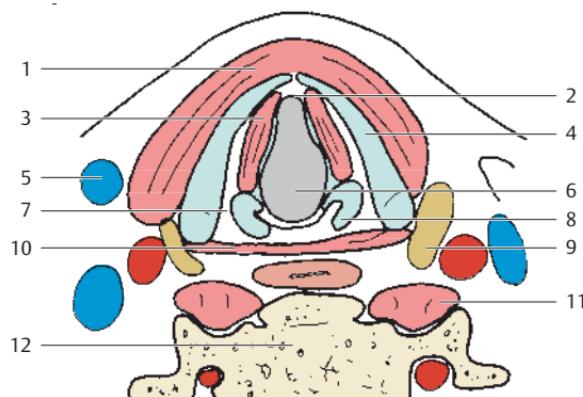


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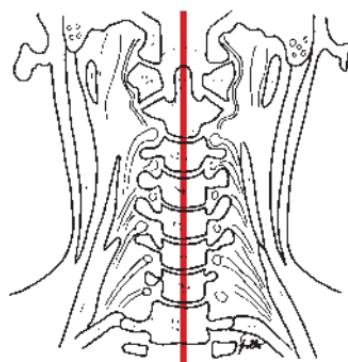
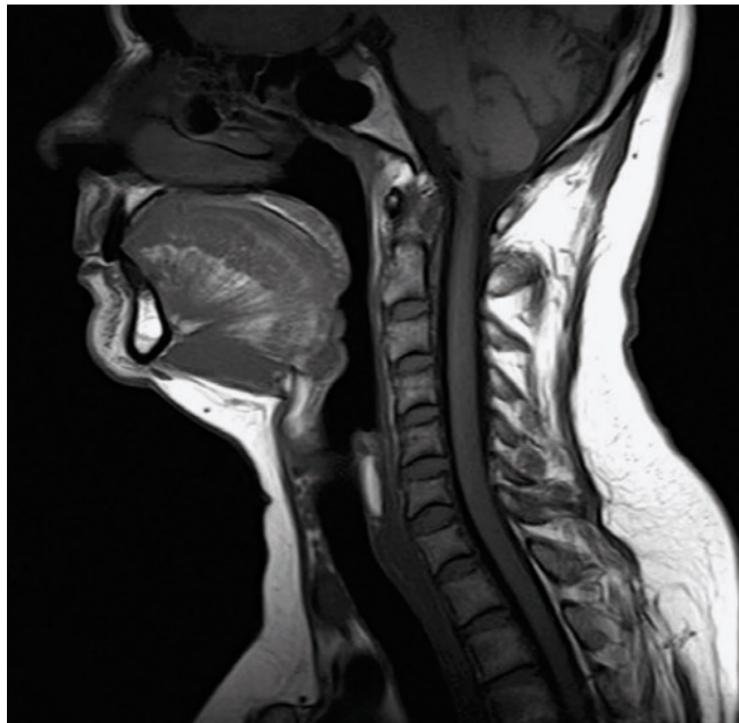


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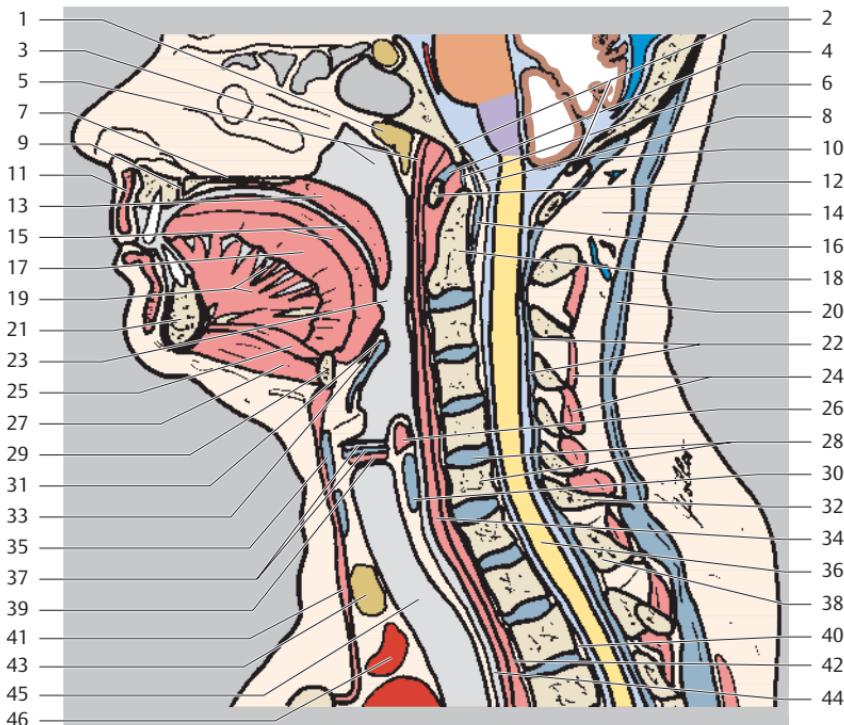




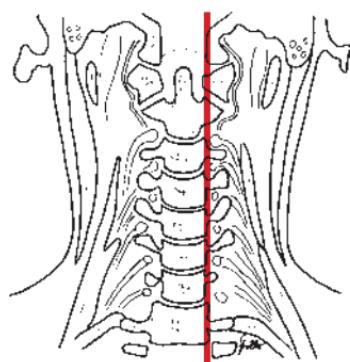
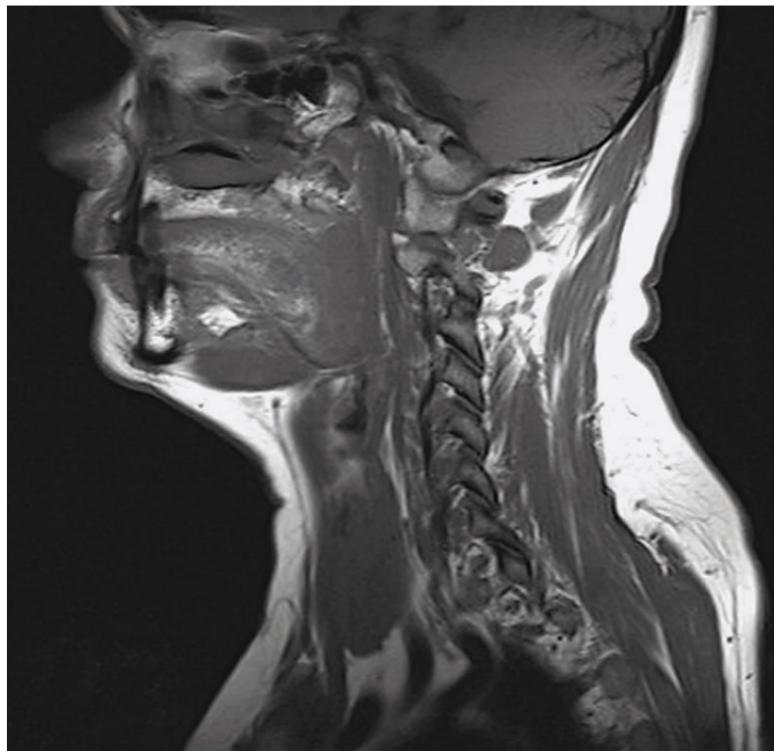
- |  |   |
|--|---|
| 1 Infrahyoid muscles<br>(sternohyoid, omohyoid and<br>sternothyroid muscles) | 11 Longus colli muscle                      |
| 2 Anterior laryngeal commissure  | 12 Body of cervical vertebra (C6)           |
| 3 Vocalis muscle   | 13 Conus elasticus (cricovocal<br>membrane) |
| 4 Thyroid cartilage  | 14 Paralaryngeal space                      |
| 5 Anterior jugular vein  | 15 Sternocleidomastoid muscle               |
| 6 Infraglottic cavity  | 16 Thyroid cartilage (inferior horn)        |
| 7 Cricothyroid joint   | 17 Internal jugular vein                    |
| 8 Cricoid cartilage (lamina)   | 18 Common carotid artery                    |
| 9 Thyroid gland  | 19 Esophagus                                |
| 10 Inferior constrictor muscle of<br>pharynx                                 | 20 Vertebral artery                         |



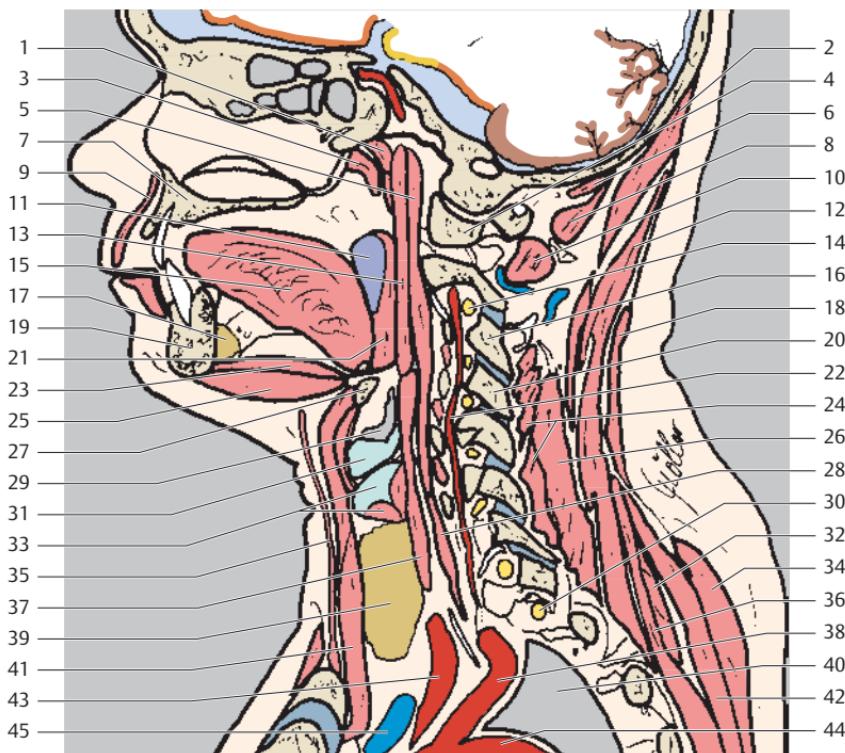
- 1 Palatine tonsil
- 2 Foramen magnum
- 3 Vomer
- 4 Anterior longitudinal ligament
- 5 Nasopharynx and longus colli muscle
- 6 Apical ligament of dens
- 7 Hard palate
- 8 Tectorial membrane
- 9 Incisive canal
- 10 Posterior atlanto-occipital membrane
- 11 Orbicularis oris muscle



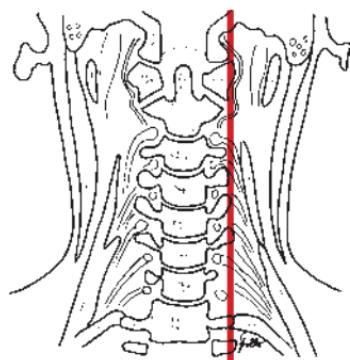
- 12 Anterior arch of atlas  
 13 Soft palate  
 14 Suboccipital fatty tissue  
 15 Superior longitudinal muscle of tongue and oral cavity  
 16 Transverse ligament of atlas (of cruciform ligament of atlas)  
 17 Transverse muscle of tongue  
 18 Dens of axis (C2)  
 19 Genioglossus muscle and lingual septum  
 20 Nuchal ligament  
 21 Mandible  
 22 Ligamentum flavum  
 23 Oropharynx  
 24 Interspinalis muscles  
 25 Geniohyoid muscle  
 26 Transverse and oblique arytenoid muscles  
 27 Mylohyoid muscle  
 28 Vertebra C6 and intervertebral disc  
 29 Hyoid bone  
 30 Larynx (lamina)  
 31 Epiglottis  
 32 Spinous process of C7  
 33 Epiglottic vallecula  
 34 Inferior constrictor muscle of pharynx  
 35 Thyroid cartilage  
 36 Spinal cord  
 37 Vestibular ligament and laryngeal ventricle (ventricle of Morgagni)  
 38 Spinous process  
 39 Vocal ligament (false vocal cord)  
 40 Posterior longitudinal ligament  
 41 Sternothyroid muscle  
 42 Anterior longitudinal ligament  
 43 Thyroid gland  
 44 Esophagus  
 45 Trachea  
 46 Brachiocephalic artery



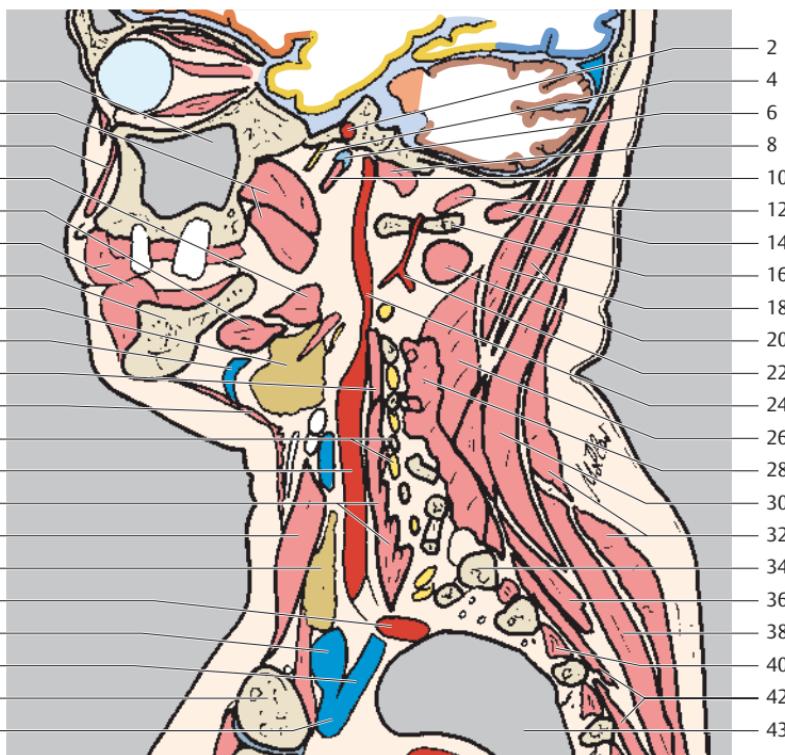
- 1 Levator veli palatini muscle
- 2 Semispinalis capitis muscle
- 3 Medial pterygoid muscle
- 4 Atlas (lateral mass)
- 5 Longus capitis muscle
- 6 Rectus capitis posterior minor muscle
- 7 Maxilla
- 8 Rectus capitis posterior major muscle



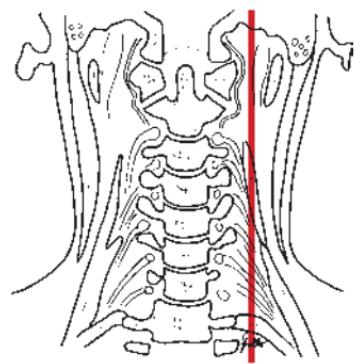
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|---|---|
| 9 Orbicularis oris muscle                 | 26 Semispinalis cervicis muscle           |
| 10 Inferior oblique muscle                | 27 Hyoid bone                             |
| 11 Palatine tonsil                        | 28 Longus colli muscle                    |
| 12 Splenius capitis muscle                | 29 Pharynx and epiglottic vallecula       |
| 13 Superior constrictor muscle of pharynx | 30 Spinal nerve root (T1)                 |
| 14 Spinal nerve root (C3)                 | 31 Thyroid cartilage                      |
| 15 Tongue                                 | 32 Serratus posterior superior muscle     |
| 16 Inferior articular process             | 33 Cricoid cartilage                      |
| 17 Sublingual gland                       | 34 Trapezius muscle                       |
| 18 Trapezius muscle<br>(descending part)  | 35 Platysma                               |
| 19 Mandible                               | 36 Splenius cervicis muscle               |
| 20 Superior articular process             | 37 Inferior constrictor muscle of pharynx |
| 21 Palatopharyngeus muscle                | 38 Left subclavian artery                 |
| 22 Vertebral artery                       | 39 Thyroid gland                          |
| 23 Mylohyoid muscle                       | 40 Left lung                              |
| 24 Multifidus muscle                      | 41 Sternohyoid muscle                     |
| 25 Digastric muscle (anterior belly)      | 42 Rhomboid (major and minor) muscle      |
|   | 43 Common carotid artery                  |
|   | 44 Aortic arch                            |
|   | 45 Left brachiocephalic vein              |

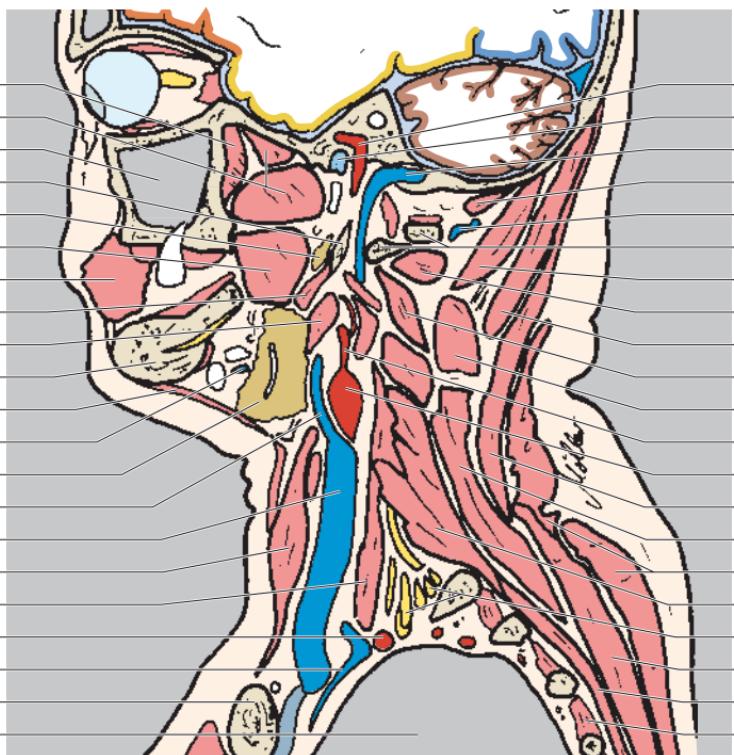


- 1 Maxillary sinus
- 2 Internal carotid artery (carotid syphon)
- 3 Medial pterygoid muscle
- 4 Mandibular nerve
- 5 Levator labii superioris muscle
- 6 Pharyngotympanic tube (auditory tube)
- 7 Digastric muscle

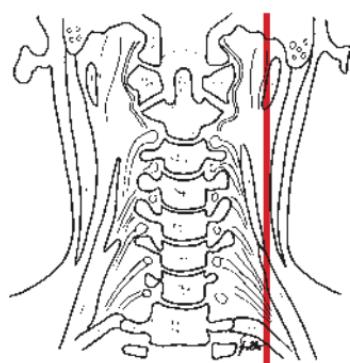


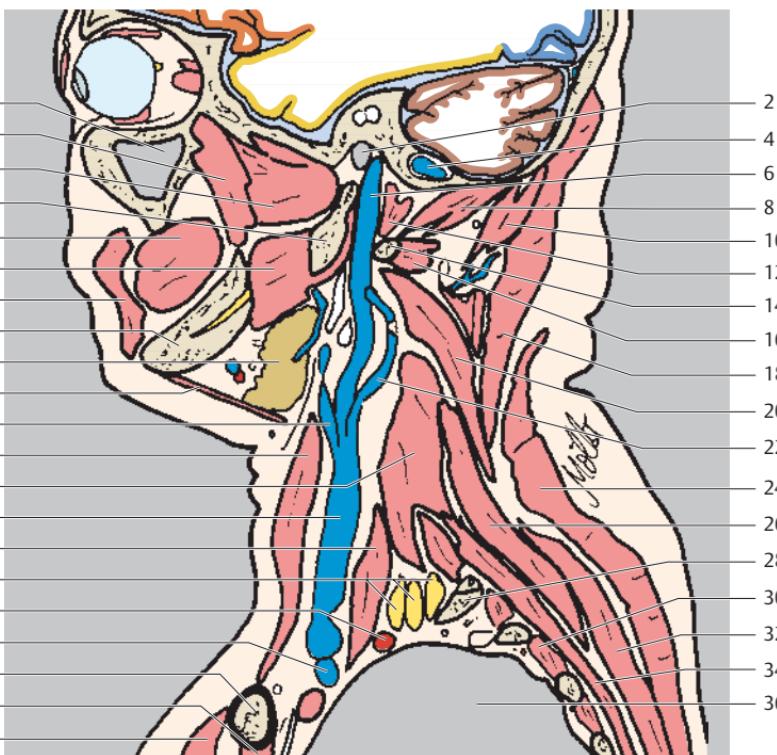
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|--|--------------------------------------|
| 8 Rectus capitis lateralis muscle              | 25 Common carotid artery             |
| 9 Mylohyoid muscle                             | 26 Semispinalis cervicis muscle      |
| 10 Tensor veli palatini muscle                 | 27 Scalenus anterior muscle          |
| 11 Orbicularis orbis muscle                    | 28 Scalenus posterior muscle         |
| 12 Obliquus capitis superior muscle            | 29 Sternocleidomastoid muscle        |
| 13 Mandible                                    | 30 Splenius capitis muscle           |
| 14 Rectus capitis posterior major muscle       | 31 Thyroid gland                     |
| 15 Submandibular gland                         | 32 Trapezius muscle                  |
| 16 Atlas (transverse process)                  | 33 Subclavian artery                 |
| 17 Facial vein                                 | 34 First rib                         |
| 18 Semispinalis capitis muscle                 | 35 Internal jugular vein             |
| 19 Longus colli muscle                         | 36 Semispinalis cervicis muscle      |
| 20 Obliquus capitis inferior muscle            | 37 Subclavian vein (left)            |
| 21 Platysma                                    | 38 Rhomboid (major and minor) muscle |
| 22 Vertebral artery                            | 39 Clavicle                          |
| 23 Transverse processes and spinal nerve roots | 40 Interspinalis muscle              |
| 24 Internal carotid artery                     | 41 Brachiocephalic vein (left)       |
|  | 42 Serratus anterior muscle          |
|  | 43 Lung (left)                       |



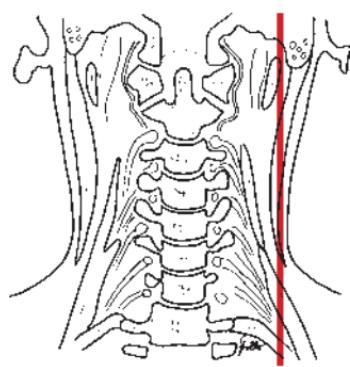
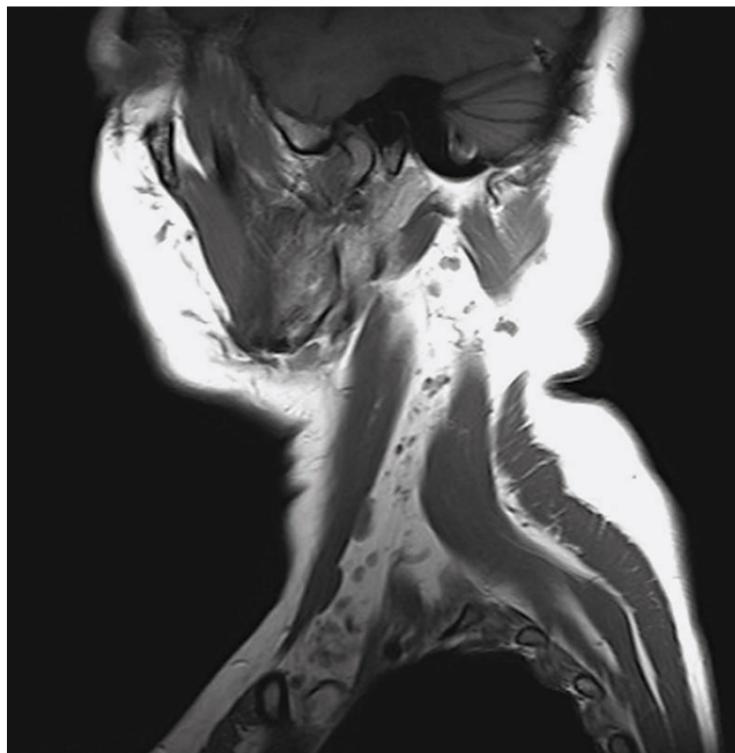


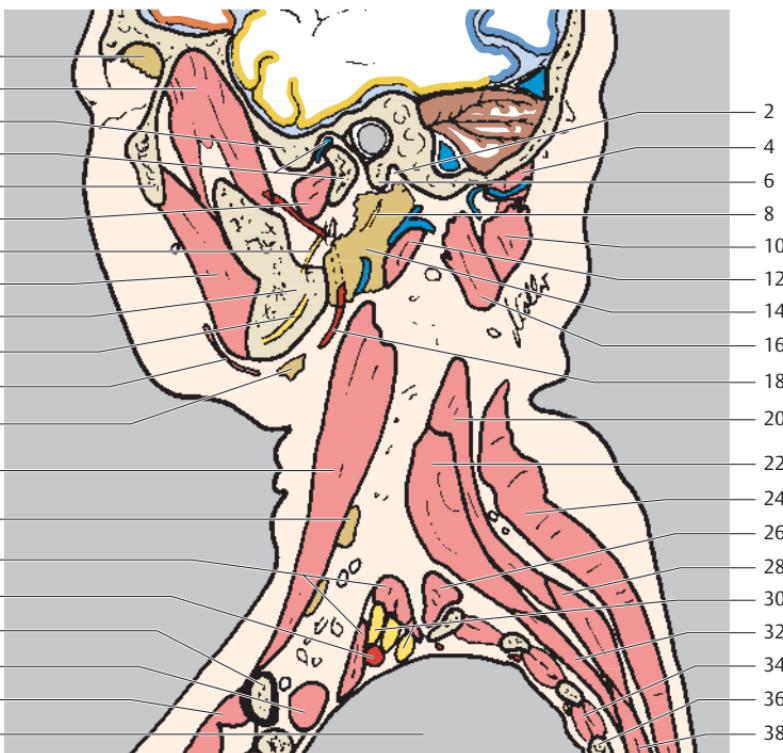
- |  |                                      |
|--|--------------------------------------|
| 1 Temporal muscle                        | 20 Levator scapulae muscle           |
| 2 Internal carotid artery (syphon)       | 21 Platysma                          |
| 3 Lateral pterygoid muscle               | 22 Semispinalis cervicis muscle      |
| 4 Pharyngotympanic tube (auditory tube)  | 23 Facial vein                       |
| 5 Maxillary sinus                        | 24 External carotid artery           |
| 6 Internal jugular vein                  | 25 Submandibular gland               |
| 7 Styloid process                        | 26 Common carotid artery             |
| 8 Rectus capitis posterior minor muscle  | 27 External jugular vein             |
| 9 Parotid gland                          | 28 Splenius capitis muscle           |
| 10 Deep cervical veins                   | 29 Sternocleidomastoid muscle        |
| 11 Medial pterygoid muscle               | 30 Semispinalis cervicis muscle      |
| 12 Atlas (transverse process)            | 31 Scalenus medius muscle            |
| 13 Buccinator muscle                     | 32 Trapezius muscle                  |
| 14 Rectus capitis posterior major muscle | 33 Subclavian artery (left)          |
| 15 Stylohyoid muscle                     | 34 Scalenus posterior muscle         |
| 16 Obliquus capitis muscle               | 35 Subclavian vein (left)            |
| 17 Digastric muscle                      | 36 Brachial plexus                   |
| 18 Semispinalis capitis muscle           | 37 Clavicle                          |
| 19 Mandible                              | 38 Rhomboid (major and minor) muscle |
|  | 39 Lung (left)                       |
|  | 40 Multifidus muscle                 |
|  | 41 Interspinalis muscle              |





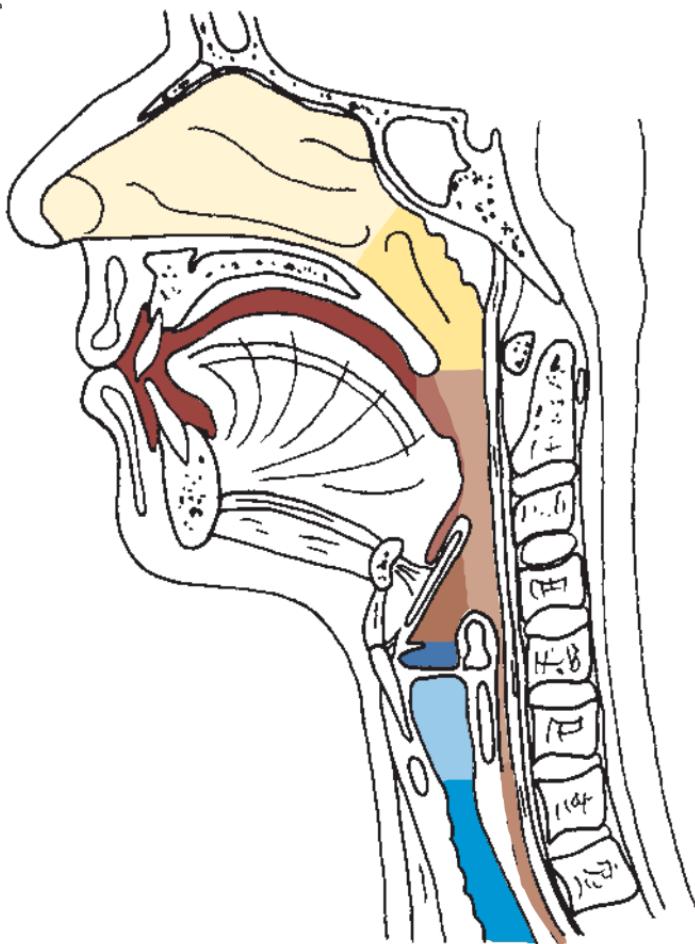
- |   |                                      |
|---|--------------------------------------|
| 1 Maxillary sinus                                       | 19 Platysma                          |
| 2 External acoustic meatus                              | 20 Levator scapulae muscle           |
| 3 Temporal muscle                                       | 21 Common facial vein                |
| 4 Sigmoid sinus   | 22 Cervical veins                    |
| 5 Lateral pterygoid muscle                              | 23 Sternocleidomastoid muscle        |
| 6 Internal jugular vein                                 | 24 Trapezius muscle                  |
| 7 Ramus of the mandible                                 | 25 Scalenus medius muscle            |
| 8 Obliquus capitis posterior<br>major and minor muscles | 26 Semispinalis cervicis muscle      |
| 9 Buccinator muscle                                     | 27 Internal jugular vein             |
| 10 Semispinalis capitis muscle                          | 28 First rib                         |
| 11 Medial pterygoid muscle                              | 29 Scalenus anterior muscle          |
| 12 Rectus capitis lateralis muscle                      | 30 Interspinalis muscle              |
| 13 Orbicularis oris muscle                              | 31 Brachial plexus                   |
| 14 Transverse process of cervical<br>vertebra C1        | 32 Rhomboid (major and minor) muscle |
| 15 Mandible   | 33 Subclavian artery (left)          |
| 16 Obliquus capitis superior<br>muscle                  | 34 Serratus anterior muscle          |
| 17 Submandibular gland                                  | 35 Subclavian vein (left)            |
| 18 Splenius capitis muscle                              | 36 Lung                              |
|   | 37 Clavicle                          |
|   | 38 Subclavian muscle                 |
|   | 39 Pectoralis major muscle           |

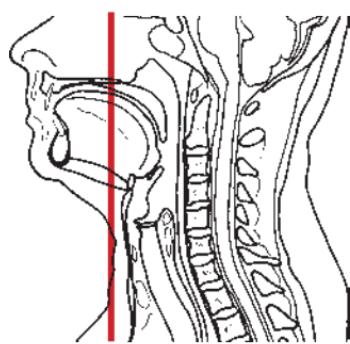
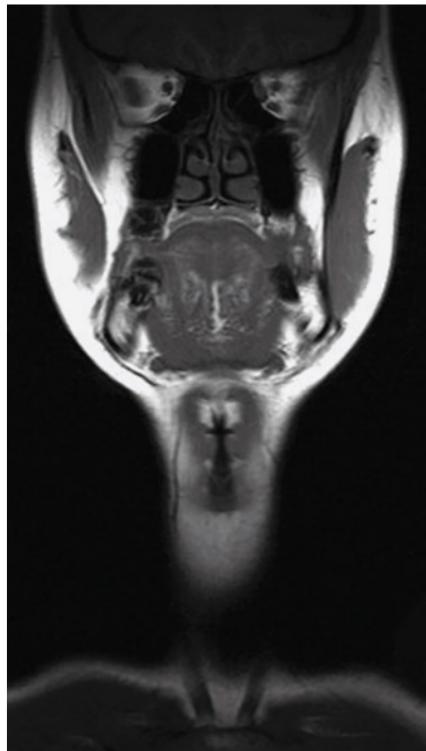


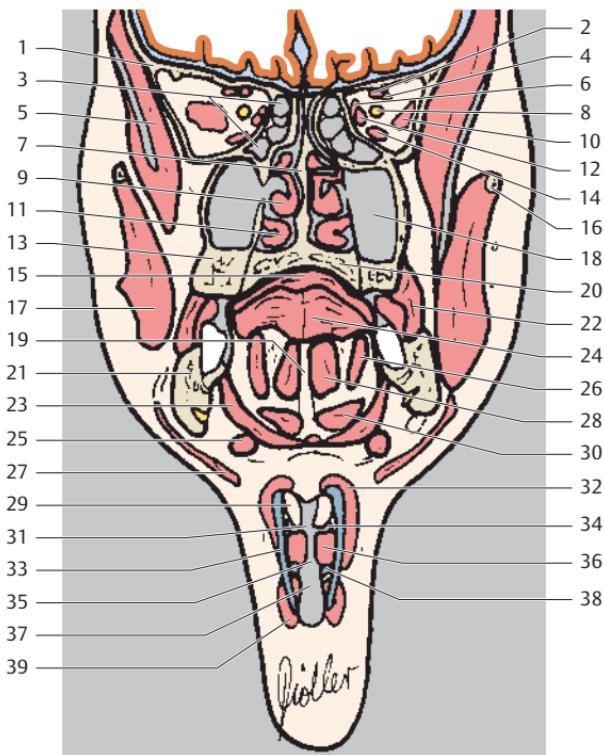


- |                                       |                               |
|---------------------------------------|-------------------------------|
| 1 Lacrimal gland                      | 19 Mandibular canal           |
| 2 Styломastoid foramen                | 20 Levator scapulae muscle    |
| 3 Temporal muscle                     | 21 Platysma                   |
| 4 Obliquus capitis superior muscle    | 22 Scalenus posterior muscle  |
| 5 Articular tubercle                  | 23 Submandibular gland        |
| 6 Styloid process                     | 24 Trapezius muscle           |
| 7 Head of mandible and articular disc | 25 Sternocleidomastoid muscle |
| 8 Facial nerve                        | 26 Scalenus medius muscle     |
| 9 Zygomatic bone                      | 27 Lymph nodes                |
| 10 Splenius capitis muscle            | 28 Rhomboid minor muscle      |
| 11 Lateral pterygoid muscle           | 29 Scalenus anterior muscle   |
| 12 Digastric muscle (posterior belly) | 30 Brachial plexus            |
| 13 Inferior alveolar nerve            | 31 Subclavian artery (left)   |
| 14 Parotid gland                      | 32 Serratus anterior muscle   |
| 15 Masseter muscle                    | 33 Clavicle                   |
| 16 Semispinalis capitis muscle        | 34 Interspinalis muscle       |
| 17 Mandible                           | 35 Subclavian muscle          |
| 18 External carotid artery            | 36 Fourth rib                 |
|                                       | 37 Pectoralis major muscle    |
|                                       | 38 Rhomboid major muscle      |
|                                       | 39 Lung (left)                |

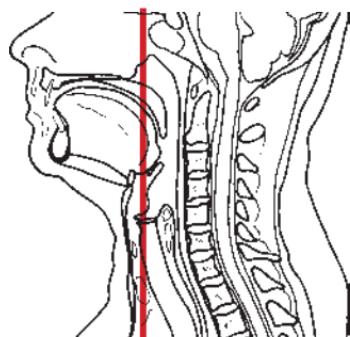
 Nasal vestibule (nasal cavity)	 Laryngeal part of pharynx
 Nasopharynx	 Esophagus
 Oral cavity proper	 Laryngeal vestibule
 Isthmus of fauces (oropharyngeal isthmus)	 Laryngeal ventricle
 Oropharynx	 Infraglottic cavity
	 Trachea





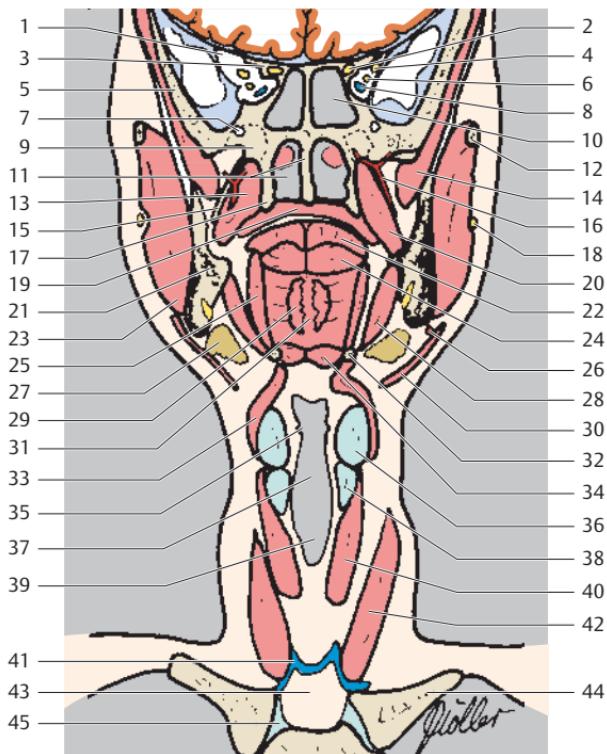


- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| 1 Sphenoidal bone (lesser wing)       | 20 Hard palate                       |
| 2 Levator palpebrae superioris muscle | 21 Mandible                          |
| 3 Ethmoidal cells (anterior)          | 22 Buccinator muscle                 |
| 4 Superior rectus muscle              | 23 Mylohyoid muscle                  |
| 5 Temporal muscle                     | 24 Transverse muscle of tongue       |
| 6 Superior oblique muscle             | 25 Digastric muscle (anterior belly) |
| 7 Nasal septum                        | 26 Hypoglossus muscle                |
| 8 Optic nerve (II)                    | 27 Platysma                          |
| 9 Middle nasal concha                 | 28 Genioglossus muscle               |
| 10 Lateral rectus muscle              | 29 Vestibular fold                   |
| 11 Inferior nasal concha              | 30 Geniohyoid muscle                 |
| 12 Medial rectus muscle               | 31 Glottis                           |
| 13 Mandible                           | 32 Thyrohyoid muscle                 |
| 14 Inferior rectus muscle             | 33 Thyroid cartilage                 |
| 15 Longitudinal muscle of tongue      | 34 Laryngeal ventricle               |
| 16 Zygomatic bone (temporal process)  | 35 Infraglottic cavity               |
| 17 Masseter muscle                    | 36 Vocalis muscle                    |
| 18 Maxillary sinus                    | 37 Trachea                           |
| 19 Lingual septum                     | 38 Cricoid cartilage                 |
|                                       | 39 Sternohyoid muscle                |

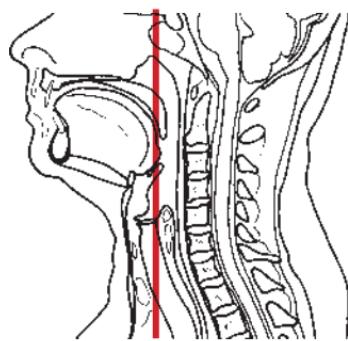
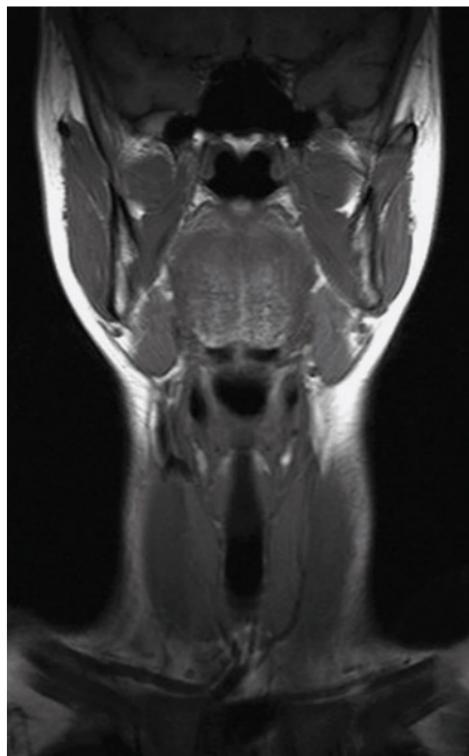


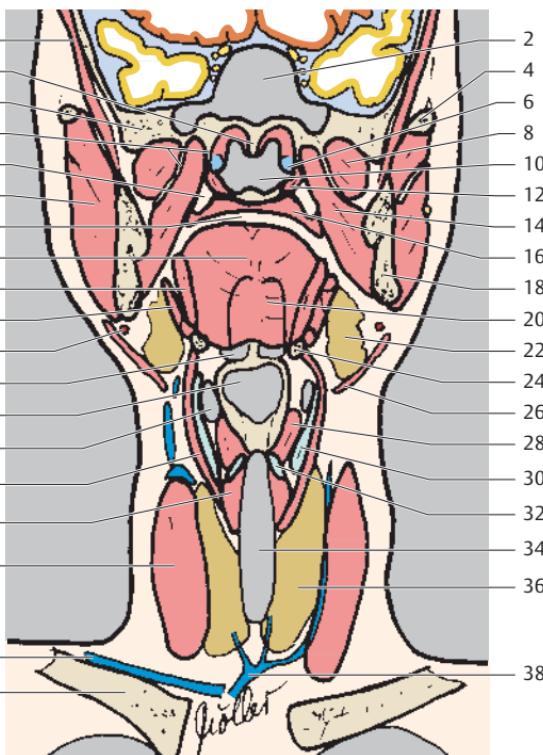
- 1 Superior orbital fissure
- 2 Optic nerve (II)
- 3 Sphenoidal bone (lesser wing)
- 4 Trochlear nerve (IV)

- 5 Temporal bone
- 6 Frontal nerve
- 7 Foramen rotundum with maxillary nerve (V2)

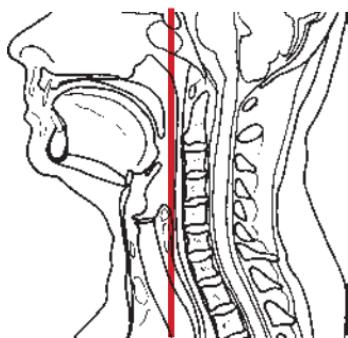
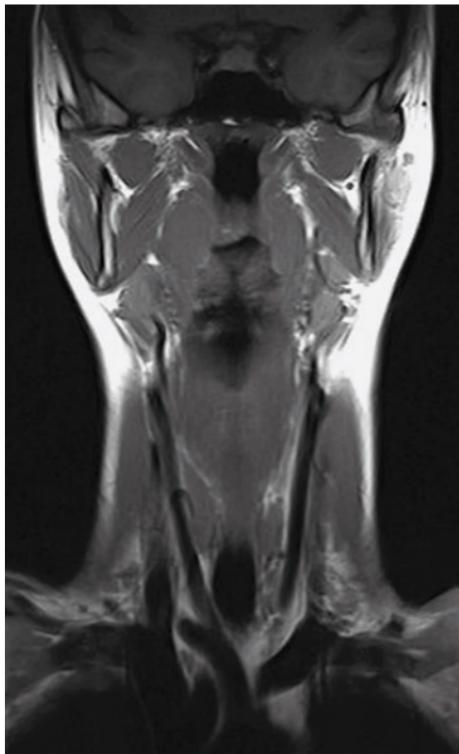


- |   |                              |
|---|------------------------------|
| 8 Superior ophthalmic vein              | 26 Facial artery             |
| 9 Pterygopalatine fossa                 | 27 Submandibular gland       |
| 10 Sphenoidal sinus                     | 28 Mylohyoid muscle          |
| 11 Dorsal nasal cavity and nasal septum | 29 Vertical muscle of tongue |
| 12 Zygomatic bone (temporal process)    | 30 Platysma                  |
| 13 Pterygoid fossa                      | 31 Lingual septum            |
| 14 Temporal muscle                      | 32 Hyoid bone                |
| 15 Lateral pterygoid process            | 33 Thyrohyoid muscle         |
| 16 Maxillary artery                     | 34 Geniohyoid muscle         |
| 17 Medial pterygoid process             | 35 Laryngeal ventricle       |
| 18 Facial nerve (VII)                   | 36 Thyroid cartilage         |
| 19 Soft palate                          | 37 Infraglottic cavity       |
| 20 Medial pterygoid muscle              | 38 Cricoid cartilage         |
| 21 Mandible (ramus)                     | 39 Larynx                    |
| 22 Longitudinal muscle of tongue        | 40 Cricothyroid muscle       |
| 23 Masseter muscle                      | 41 Anterior jugular vein     |
| 24 Transverse muscle of tongue          | 42 Sternohyoid muscle        |
| 25 Hypoglossus muscle                   | 43 Suprasternal space        |
|   | 44 Clavicle                  |
|   | 45 Sternoclavicular joint    |



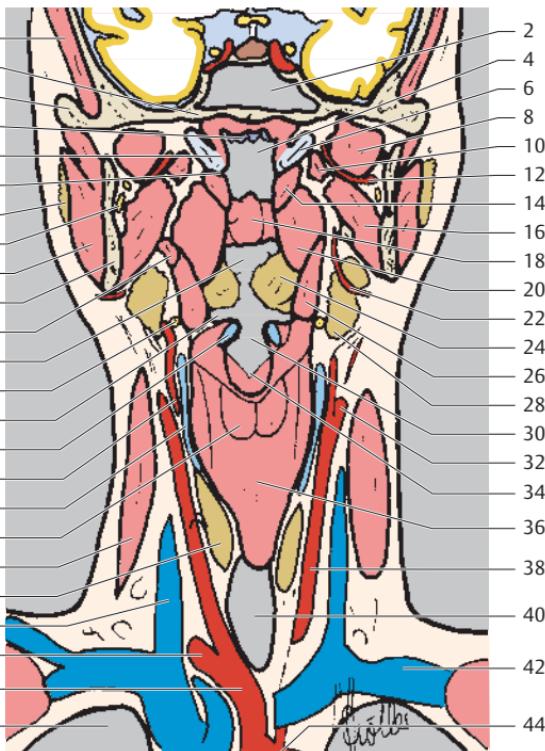


- |   |   |
|---|---|
| 1 Temporal muscle                                   | 19 Digastric muscle                             |
| 2 Sphenoidal sinus                                  | 20 Genioglossus muscle                          |
| 3 Vomer   | 21 Facial artery                                |
| 4 Zygomatic bone (temporal process)                 | 22 Submandibular gland                          |
| 5 Sphenoidal bone (greater wing)                    | 23 Epiglottic vallecula                         |
| 6 Pharyngotympanic tube (auditory tube) (cartilage) | 24 Hyoid bone (greater horn)                    |
| 7 Lateral and medial plates of pterygoid process    | 25 Laryngeal vestibule                          |
| 8 Lateral pterygoid muscle                          | 26 Platysma                                     |
| 9 Peripharyngeal space                              | 27 Piriform recess                              |
| 10 Nasopharynx                                      | 28 Aryepiglottic muscle with aryepiglottic fold |
| 11 Masseter muscle                                  | 29 Omohyoid muscle                              |
| 12 Levator veli palatini muscle                     | 30 Thyroid cartilage                            |
| 13 Oropharynx                                       | 31 Thyroarytenoid muscle                        |
| 14 Medial pterygoid muscle                          | 32 Arytenoid cartilage                          |
| 15 Transverse muscle of tongue                      | 33 Sternocleidomastoid muscle                   |
| 16 Soft palate                                      | 34 Trachea                                      |
| 17 Hypoglossus muscle                               | 35 Anterior jugular vein                        |
| 18 Mandible   | 36 Thyroid gland                                |
|   | 37 Clavicle                                     |
|   | 38 Inferior thyroid veins                       |

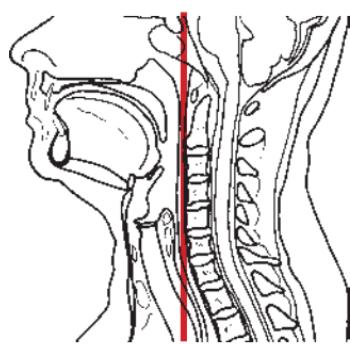
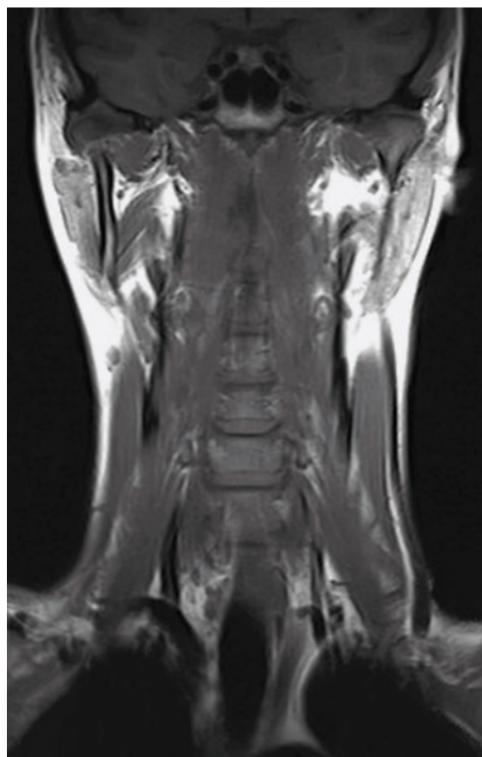


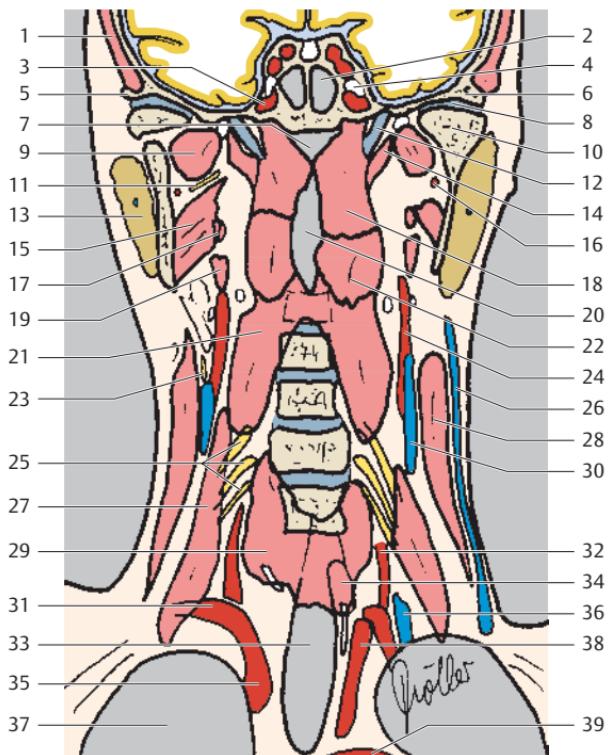
- 1 Temporal muscle
- 2 Sphenoidal sinus
- 3 Sphenoidal bone (greater wing)
- 4 Oropharynx

- 5 Zygomatic bone
- 6 Pharyngotympanic tube (auditory tube) (cartilage)
- 7 Pharyngeal tonsil

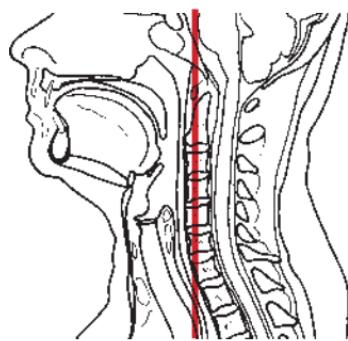


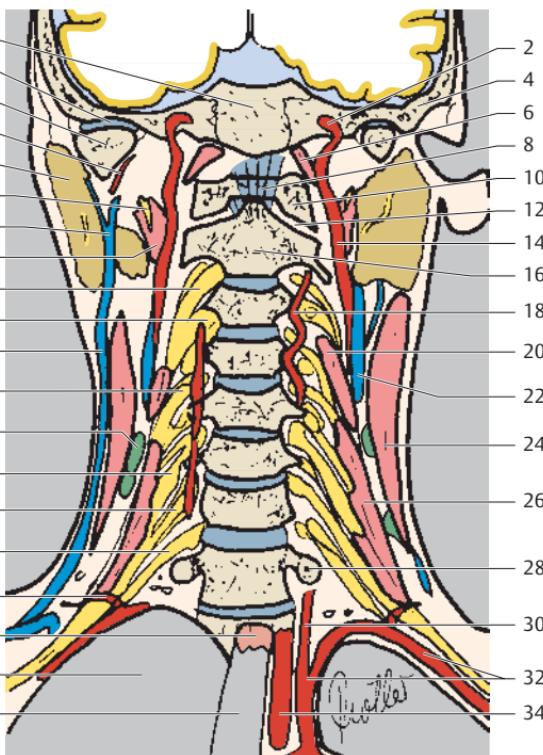
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| 8 Lateral pterygoid muscle             | 27 Epiglottic vallecula                 |
| 9 Torus tubarius                       | 28 Submandibular gland                  |
| 10 Tensor veli palatini muscle         | 29 Epiglottis                           |
| 11 Pharyngeal opening of auditory tube | 30 Laryngeal inlet                      |
| 12 Maxillary artery                    | 31 External carotid artery              |
| 13 Parotid gland                       | 32 Internal carotid artery              |
| 14 Levator veli palatini muscle        | 33 Thyroid cartilage                    |
| 15 Inferior alveolar nerve             | 34 Interarytenoid notch                 |
| 16 Medial pterygoid muscle             | 35 Posterior cricoarytenoid muscle      |
| 17 Masseter muscle                     | 36 Middle constrictor muscle of pharynx |
| 18 Soft palate and uvula               | 37 Sternocleidomastoid muscle           |
| 19 Ramus of mandible                   | 38 Common carotid artery                |
| 20 Palatopharyngeus muscle             | 39 Thyroid gland                        |
| 21 Styloglossus muscle                 | 40 Trachea                              |
| 22 Facial artery                       | 41 Internal jugular vein                |
| 23 Oropharynx                          | 42 Subclavian vein                      |
| 24 Palatine tonsil                     | 43 Subclavian artery (right)            |
| 25 Hyoid bone                          | 44 Aorta                                |
| 26 Digastric muscle                    | 45 Brachiocephalic trunk                |
|  | 46 Lung (right)                         |



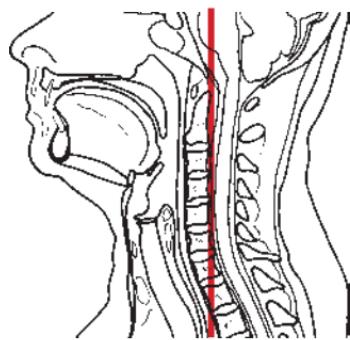
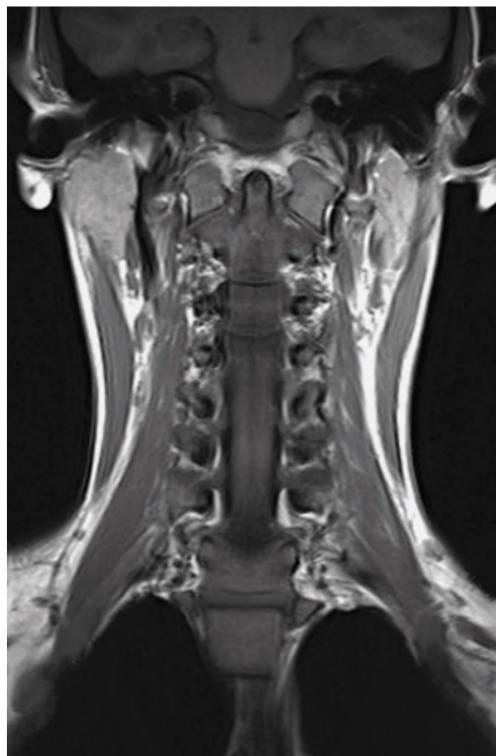


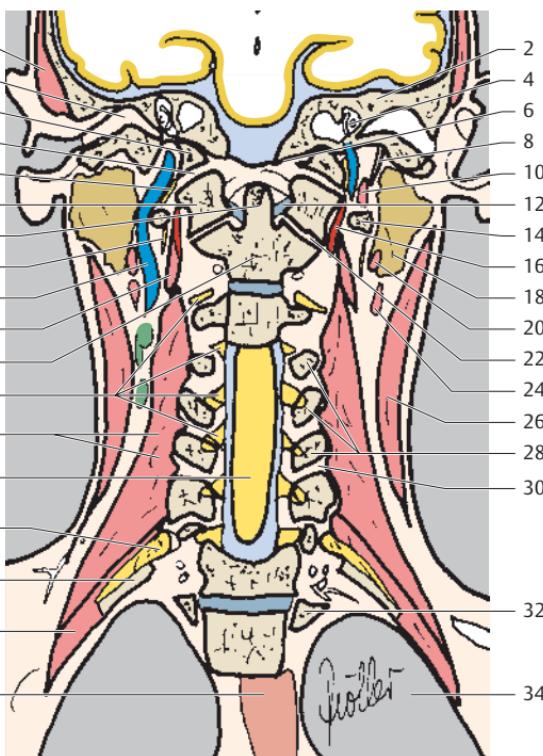
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|---|---|
| 1 Temporal muscle                                   | 20 Oropharynx                             |
| 2 Sphenoidal sinus                                  | 21 Longus colli muscle                    |
| 3 Internal carotid artery (syphon)                  | 22 Longus capitis muscle                  |
| 4 Trigeminal cavity                                 | 23 Vagus nerve (X)                        |
| 5 Zygomatic process                                 | 24 Internal carotid artery                |
| 6 Socket of temporomandibular joint (temporal bone) | 25 Spinal nerve roots (cervical plexus)   |
| 7 Nasopharynx                                       | 26 External jugular vein                  |
| 8 Articular disc                                    | 27 Anterior scalene muscle                |
| 9 Lateral pterygoid muscle                          | 28 Sternocleidomastoid muscle             |
| 10 Head of mandible                                 | 29 Inferior constrictor muscle of pharynx |
| 11 Lingual nerve                                    | 30 Internal jugular vein                  |
| 12 Pharyngotympanic tube (auditory tube)            | 31 Subclavian vein                        |
| 13 Parotid gland                                    | 32 Vertebral artery                       |
| 14 Levator veli palatini muscle                     | 33 Trachea                                |
| 15 Medial pterygoid muscle                          | 34 Esophagus                              |
| 16 Maxillary artery                                 | 35 Brachiocephalic trunk                  |
| 17 Stylopharyngeus muscle                           | 36 Vertebral vein                         |
| 18 Longus capitis muscle                            | 37 Lung (right)                           |
| 19 Digastric muscle                                 | 38 Common carotid artery                  |
|   | 39 Aortic arch                            |



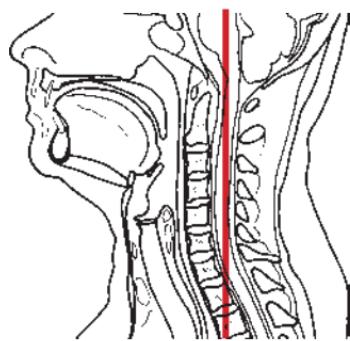
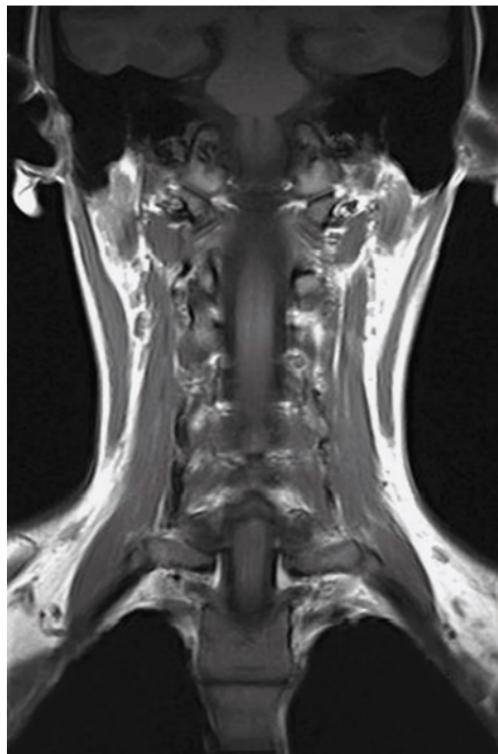


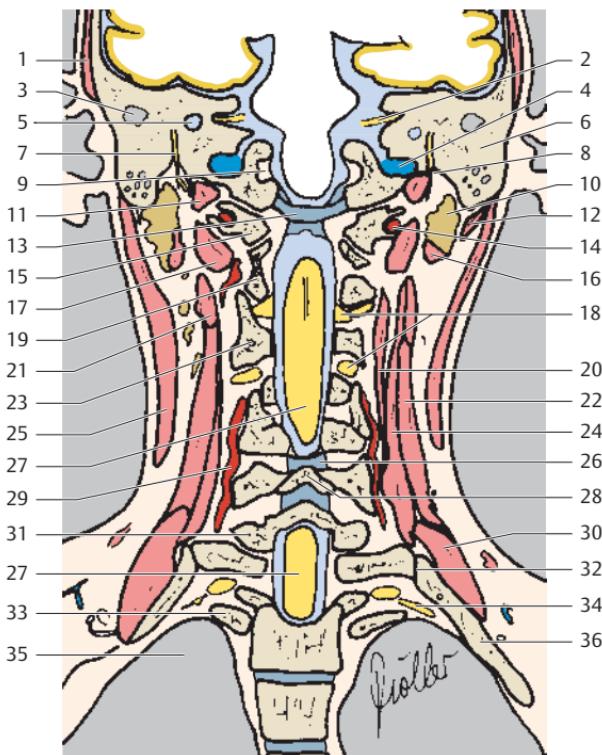
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|---------------------------------------|-------------------------------|
| 1 Clivus                              | 19 Spinal nerve root C4       |
| 2 Internal carotid artery (syphon)    | 20 Longus colli muscle        |
| 3 Articular disc                      | 21 External jugular vein      |
| 4 Petrous part of temporal bone       | 22 Internal jugular vein      |
| 5 Head of mandible                    | 23 Spinal nerve root C5       |
| 6 Rectus capitis anterior muscle      | 24 Sternocleidomastoid muscle |
| 7 Maxillary artery                    | 25 Lymph nodes                |
| 8 Anterior atlanto-occipital membrane | 26 Anterior scalene muscle    |
| 9 Parotid gland                       | 27 Spinal nerve root C6       |
| 10 Atlas (lateral mass)               | 28 Costal process             |
| 11 Styloid process                    | 29 Spinal nerve root C7       |
| 12 Atlanto-axial joint                | 30 Vertebral artery (left)    |
| 13 Retromandibular vein               | 31 Spinal nerve root C8       |
| 14 Internal carotid artery            | 32 Subclavian artery          |
| 15 Digastric muscle                   | 33 Suprascapular artery       |
| 16 Axis                               | 34 Internal carotid artery    |
| 17 Spinal nerve root C3               | 35 Esophagus                  |
| 18 Vertebral artery                   | 36 Lung (right)               |
|                                       | 37 Trachea                    |



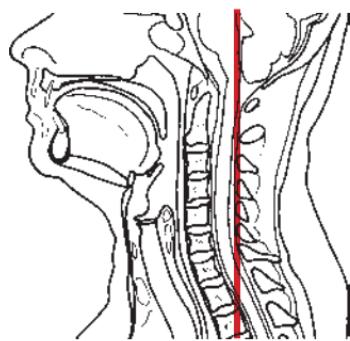
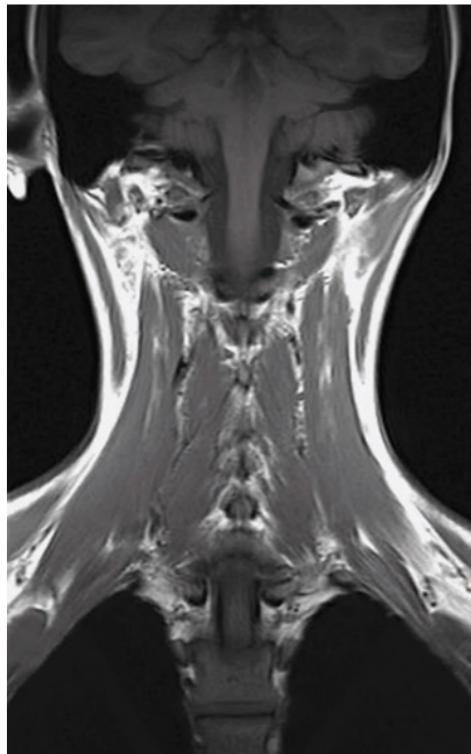


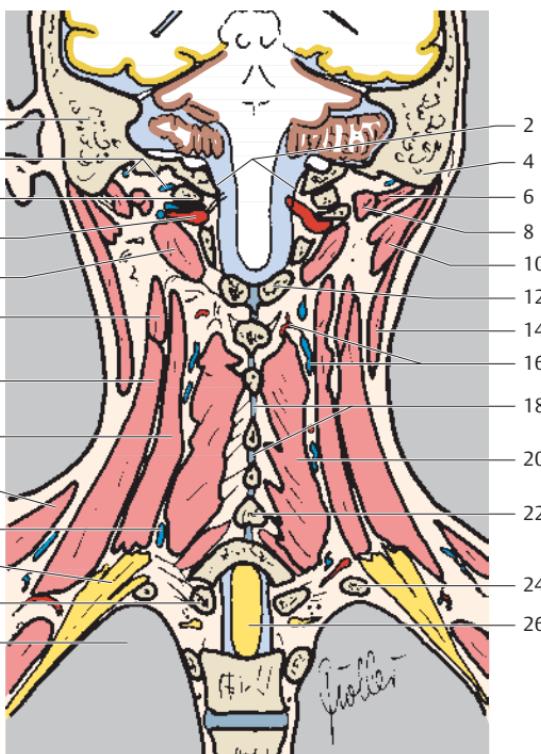
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|---|-------------------------------------|
| 1 Temporal muscle                                     | 18 Parotid gland                    |
| 2 Petrous part of temporal bone                       | 19 Obliquus capitis inferior muscle |
| 3 External acoustic meatus                            | 20 Stylohyoid muscle                |
| 4 Tympanic cavity                                     | 21 Axis (body)                      |
| 5 Occipital condyle                                   | 22 Atlanto-axial joint              |
| 6 Clivus  | 23 Spinal nerve roots C3–C6         |
| 7 Atlanto-occipital joint                             | 24 Digastric muscle                 |
| 8 Styloid process                                     | 25 Middle scalene muscle            |
| 9 Accessory nerve (XI) and<br>hypoglossus nerve (XII) | 26 Sternocleidomastoid muscle       |
| 10 Stylopharyngeus muscle                             | 27 Spinal cord                      |
| 11 Atlas (lateral mass)                               | 28 Articular processes C4–C6        |
| 12 Alar ligaments                                     | 29 Spinal nerve root C8             |
| 13 Dens of axis                                       | 30 Zygapophysial joint              |
| 14 Atlas (transverse process)                         | 31 First rib                        |
| 15 Vagus nerve (X)                                    | 32 Second rib                       |
| 16 Vertebral artery                                   | 33 Posterior scalene muscle         |
| 17 Internal jugular vein                              | 34 Lung (left)                      |
|   | 35 Esophagus                        |



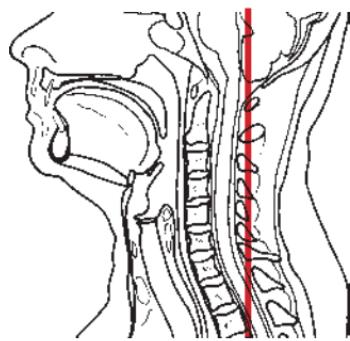
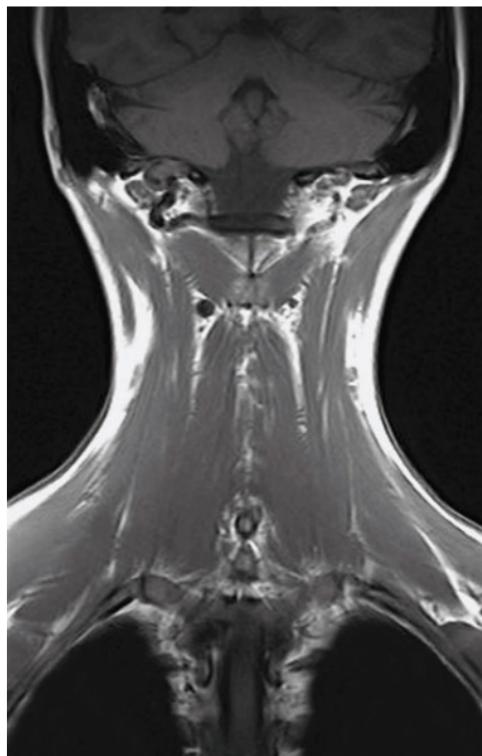


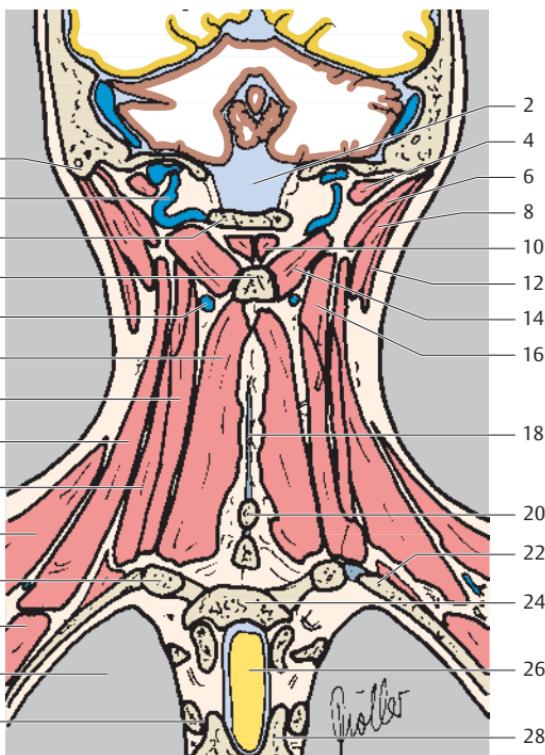
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|---------------------------------------|------------------------------------|
| 1 Temporal muscle                     | 18 Spinal nerve roots              |
| 2 Internal acoustic meatus            | 19 Inferior articular process (C2) |
| 3 Mastoid antrum                      | 20 Spinalis cervicis muscle        |
| 4 Jugular foramen                     | 21 Longissimus capitis muscle      |
| 5 Vestibule                           | 22 Anterior scalene muscle         |
| 6 Mastoid process                     | 23 Superior articular process (C3) |
| 7 Facial canal                        | 24 Levator scapulae muscle         |
| 8 Styломastoid foramen                | 25 Sternocleidomastoid muscle      |
| 9 Hypoglossal canal                   | 26 Ligamentum flavum               |
| 10 Parotid gland                      | 27 Spinal cord                     |
| 11 Rectus capitis lateralis muscle    | 28 Arch of C6 vertebra             |
| 12 Splenius capitis muscle            | 29 Vertebral artery                |
| 13 Transverse ligament                | 30 Scalenus medius muscle          |
| 14 Vertebral artery                   | 31 Transverse process (C7)         |
| 15 Atlas (posterior arch)             | 32 Costotransverse joint (T1)      |
| 16 Digastric muscle (posterior belly) | 33 Second rib (head)               |
| 17 Obliquus capitis inferior muscle   | 34 Thoracic nerve (T1)             |
|                                       | 35 Lung (right)                    |
|                                       | 36 First rib                       |



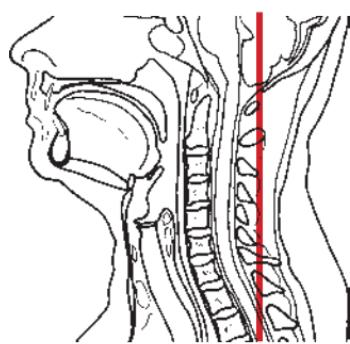
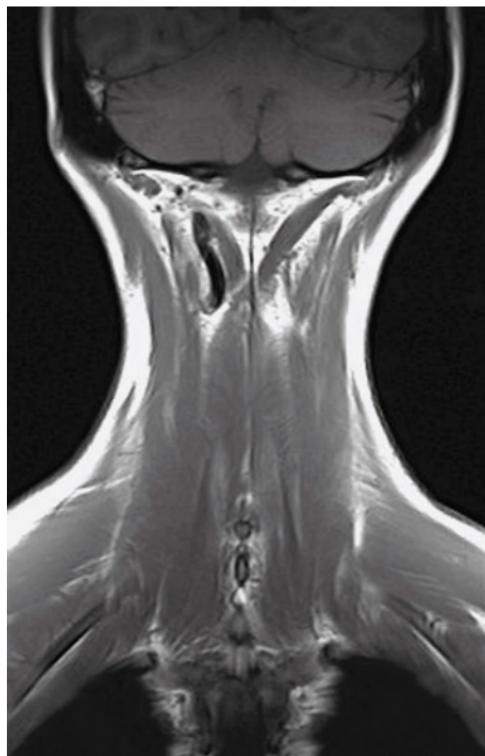


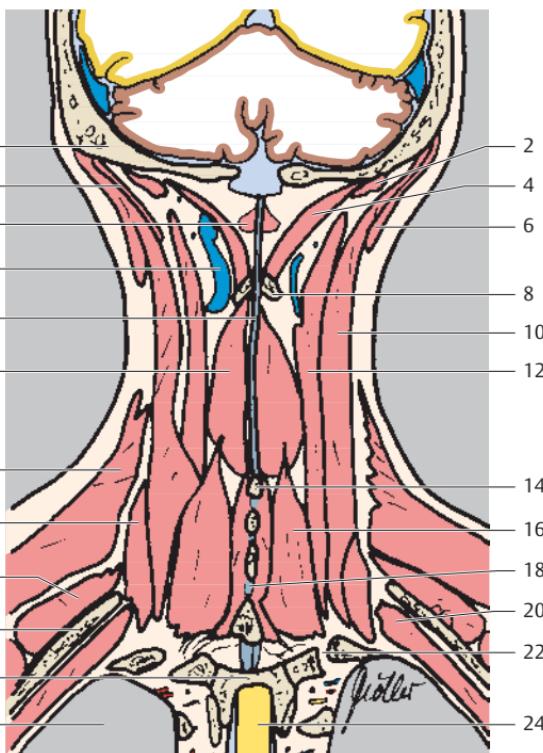
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| 1 Mastoid process (Petrosal part of temporal bone) | 12 Spinous process (C2)          |
| 2 Foramen magnum                                   | 13 Levator scapulae muscle       |
| 3 Suboccipital venous plexus                       | 14 Sternocleidomastoid muscle    |
| 4 Mastoid process                                  | 15 Splenius cervicis muscle      |
| 5 Atlas (posterior arch)                           | 16 Deep cervical artery and vein |
| 6 Digastric muscle (posterior belly)               | 17 Trapezius muscle              |
| 7 Vertebral artery                                 | 18 Interspinous ligaments        |
| 8 Obliquus capitis superior muscle                 | 19 Deep cervical vein            |
| 9 Obliquus capitis inferior muscle                 | 20 Multifidus muscle             |
| 10 Splenius capitis muscle                         | 21 Brachial plexus               |
| 11 Longissimus capitis muscle                      | 22 Spinous process (C7)          |
|  | 23 Costal process                |
|  | 24 First rib                     |
|  | 25 Lung (right)                  |
|  | 26 Spinal cord                   |



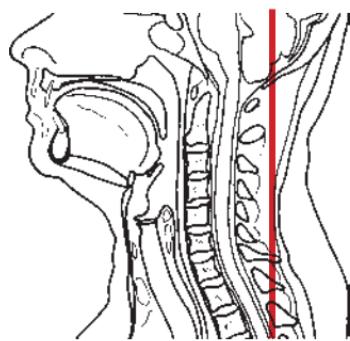
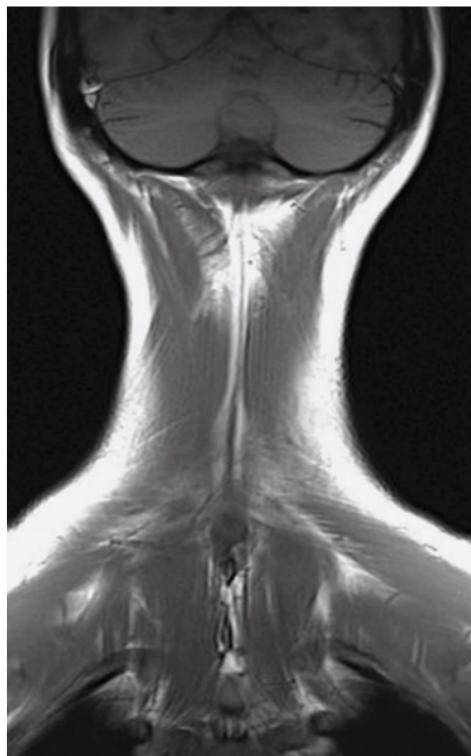


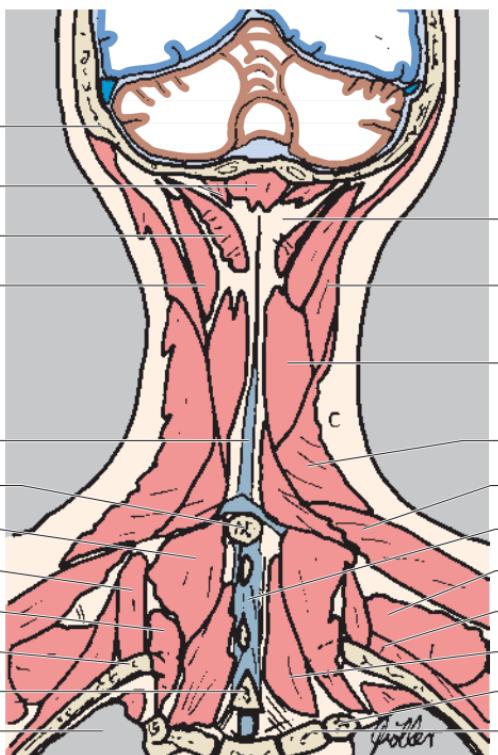
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| 1 Mastoid process                        | 15 Levator scapulae muscle                 |
| 2 Cisterna magna                         | 16 Semispinalis capitis muscle             |
| 3 Deep cervical vein                     | 17 Splenius cervicis muscle                |
| 4 Obliquus capitis superior muscle       | 18 Supraspinous and interspinous ligaments |
| 5 Atlas (posterior arch)                 | 19 Trapezius muscle                        |
| 6 Longissimus capitis muscle             | 20 Spinous process (C7)                    |
| 7 Spinous process of axis (C2)           | 21 Transverse process (T2)                 |
| 8 Splenius capitis muscle                | 22 Second rib                              |
| 9 Deep cervical vein                     | 23 Supraspinatus muscle                    |
| 10 Rectus capitis posterior major muscle | 24 Vertebra (T2)                           |
| 11 Semispinalis cervicis muscle          | 25 Lung (right)                            |
| 12 Sternocleidomastoid muscle            | 26 Spinal cord                             |
| 13 Longissimus cervicis muscle           | 27 Transverse process (T4)                 |
| 14 Obliquus capitis inferior muscle      | 28 Vertebra (T4)                           |





- |   |                                |
|---|--------------------------------|
| 1 Occipital bone                        | 12 Semispinalis capitis muscle |
| 2 Obliquus capitis superior muscle      | 13 Trapezius muscle            |
| 3 Longissimus capitis muscle            | 14 Spinous process             |
| 4 Rectus capitis posterior major muscle | 15 Rhomboid muscle             |
| 5 Rectus capitis posterior minor muscle | 16 Multifidus muscle           |
| 6 Sternocleidomastoid muscle            | 17 Levator scapulae muscle     |
| 7 Deep cervical vein                    | 18 Interspinous ligament       |
| 8 Spinous process of axis (C2)          | 19 Second rib                  |
| 9 Nuchal ligament                       | 20 Intercostal muscle          |
| 10 Splenius capitis muscle              | 21 Arch of T3 vertebra         |
| 11 Semispinalis cervicis muscle         | 22 Costotransverse joint (T3)  |
|   | 23 Lung (right)                |
|   | 24 Spinal cord                 |





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|---|---------------------------------------|
| 1 Occipital bone                                    | 11 Spinous process (C7)               |
| 2 Suboccipital fatty tissue                         | 12 Interspinous ligament              |
| 3 Rectus capitis posterior minor muscle             | 13 Splenius cervicis muscle           |
| 4 M. splenius capitis                               | 14 Levator scapulae muscle            |
| 5 Rectus capitis posterior major muscle             | 15 Rhomboid muscle                    |
| 6 Semispinalis cervicis muscle                      | 16 Intercostal muscle                 |
| 7 Semispinalis capitis muscle                       | 17 Serratus posterior superior muscle |
| 8 Trapezius muscle, descending part (superior part) | 18 Multifidus muscle                  |
| 9 Nuchal ligament                                   | 19 Third rib                          |
| 10 Trapezius muscle, transverse part (middle part)  | 20 Costotransverse joint (T4)         |
|   | 21 Spinous process (T3)               |
|   | 22 Costal process (T4)                |
|   | 23 Lung (right)                       |

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# Index

## A

- adhesion, interthalamic 60–61, 84–87  
 antrum, mastoid 18–21, 32–35, 108–109,  
     238–239  
 aorta 230–231  
 aqueduct 14–15, 84–87, 140–141  
     vestibular 30–31  
 arch  
     aortic 212–213, 232–233  
     vertebral, posterior 174–175, 186–187  
     zygomatic 24–25, 40–41, 116–119  
 artery  
     alveolar, inferior 118–119  
     angular gyrus 154–155  
     basilar 16–23, 66–75, 84–87, 130–133,  
         152–157  
     anterolateral 82–83  
     anterolateral paramedian 28, 110,  
         149  
     anteromedial 82–83  
     anteromedial paramedian 28, 110,  
         149  
     border 82–83  
     central branch 82–83  
     cerebellar posterior inferior 28  
     cerebellar superior 28  
     circumferential 28  
     dorsal 82–83  
     dorsal paramedian 28, 149–150  
     lateral 83  
     lateral paramedian 28, 149–150  
     superficial 82–83  
 brachiocephalic 210–211  
 brain-stem, median 82–83  
 callosomarginal 46–51, 152–155  
     paracentral 46–47  
 carotid  
     bifurcation 202–203  
     common 160–161, 176–197,  
         204–209, 212–217, 230–233  
     external 130–131, 170–175, 202–203,  
         216–217, 220–221, 230–231  
     internal 16–25, 30–33, 66–79, 90–91,  
         94–101, 128–129, 152–157,  
         162–163, 165–171, 173–175,  
         202–203, 214–215, 230–235  
     internal siphon 88–89, 122–133,  
         216–217, 232–235  
 cerebellar  
     anterior inferior 22–23, 72–77,  
         82–83, 150  
     anterior superior 110–111  
     posterior 132–133  
     posterior inferior 82–83, 110–111,  
         138–145, 150  
         *see also* artery, vertebral  
     superior 72–73, 82–83, 90–91,  
         110–111, 132–133, 136–139,  
         142–145, 150, 152–157  
 cerebral  
     anteromedial frontal 156–157  
     anterior 14–17, 58–65, 86–87,  
         116–119, 122–125, 128–129,  
         152–156  
     anterior central branch 27, 80–83,  
         110, 148–149  
     anterior postcommunicating  
         152–157  
     anterior precommunicating  
         152–153, 156–157  
     anterior striate 27, 80–83  
     anterior terminal branch 26–28,  
         80–83, 110, 148–150  
     Huebner's recurrent 80–81  
     insular part 156–157  
     middle 16–17, 64–67, 94–95, 98–99,  
         102–103, 126–129, 152–157  
     middle central branch 26, 80–83,  
         110–111, 148–149  
     middle insular part 152–153  
     middle opercular part 152–157  
     middle sphenoid part 152–153,  
         156–157  
     middle striate 26, 80–83, 111  
     middle terminal branch 26, 28,  
         80–83, 110–111, 148–150

- artery
- cerebellar
    - posterior 16–17, 62–69, 90–91, 94–95, 130–133, 136–137, 140–141, 152–157
    - posterior central branch 26–27, 80–83, 110, 149–150
    - posterior cerebellar 27
    - posterior choroidal 26–28
    - posterior communicating 26–27
    - posterior left 152–153, 156–157
    - posterior occipital branch 152–153
    - posterior right 152–153, 156–157
    - posterior temporal 152–153
    - posterior terminal branch 26–28, 80–83, 110–111, 149–150
  - cervical, deep 240–241
  - choroidal, anterior 80–83, 111, 149, 154–159
  - circumferential 149–150
    - dorsal paramedian 110
    - lateral paramedian 110
    - long 82–83
    - short 82–83
  - communicating
    - anterior 16–17, 152–153, 156–157
    - posterior 16–17, 64–65, 80–83, 90–91, 110, 132–133, 149–150, 154–155
  - facial 164–171, 226–231
  - frontal polar 154–155
  - frontobasal 154–155
  - infraorbital 112–115
  - insular 10–13, 56–63, 100–107, 122–123, 126–127, 134–135, 152–153
  - mandibular 126–127
  - maxillary 118–119, 162–163, 166–169, 226–227, 230–235
  - occipital 138–139
    - medial 154–155
  - occipitotemporal 154–155
  - ophthalmic 68–71, 112–117, 154–157
  - parietal 154–155
    - superior 152–153
  - parieto-occipital 52–53, 58–59, 154–157
  - pericallosal 50–56, 84–87, 116–123, 126–127, 130–131, 134–137, 140–141, 152–155
  - posteromedial, central branch 154–155
  - precuneal 142–143
  - striate 110, 152–153
    - distal medial 80–81, 110, 149
  - subclavian 214–215, 234–235
    - left 212–213, 216–221
    - right 230–231
  - sulcus
    - central 154–155
    - precentral 154–155
    - suprascapular 234–235
    - supratrochlear
      - mediomedial 46–49
      - posteromedial 44–45
    - temporal 156–157
      - anterior 152–153
      - middle 152–153
      - polar 152–153
      - posterior 154–155
    - thyroid
      - inferior 192–193
      - superior 176–177
    - vertebral 24–25, 76–79, 88–89, 92–93, 96–97, 134–143, 162–167, 170–183, 186–197, 202–209, 212–215, 232–239
      - left 234–235
    - see also* artery, cerebellar, posterior inferior
  - atlas (C1) 218–219
  - arch
    - anterior 84–85, 164–169, 210–211
    - posterior 88–89, 166–167, 238–241
    - lateral mass 92–93, 134–135, 138–139, 142–143, 168–169, 212–213, 234–237
    - ligament 134–135, 166–169
    - process 104–107, 166–167, 214–217, 236–237
  - see also* vertebra, cervical
  - axis (C2) 134–135, 234–235
  - body 170–173, 236–237
  - dens 84–85, 134–135, 166–169, 210–211, 236–237
  - spinous part 240–241, 244–245
  - see also* vertebra, cervical

**B**

## body

- amygdaloid 16–17, 62–67, 126–129, 132–133
- geniculate 12–13
  - lateral 60–61, 94–95, 98–99, 136–141
  - medial 60–61, 94–95, 138–141
- mammillary 62–63, 86–87, 130–133
- pineal 86–87, 138–141

## bone 92–93

- clivus *see* clivus
- condyle *see* condyle
- ear *see* ear
- ethmoidal 68–69

## cribriform plate 36–37

## nasal septum 38–39

- frontal 2–21, 36–39, 44–67, 88–89, 92–93, 96–97, 100–101, 104–109, 112–119, 122–123, 126–127, 130–131

- hyoid 96–97, 210–213, 226–227, 230–231

## body 176–177, 202–203

- greater horn 176–177, 202–203, 228–229

- nasal 24–25, 70–73, 78–79, 84–85, 88–89

- occipital 4–25, 50–79, 84–85, 88–89, 92–93, 96–97, 100–101, 104–109, 140–141, 144–147, 162–165, 244–247
- basilar 50–78, 130–133, 162–165

## orbital 48–49

## palatine 38–39

- parietal 2–15, 38–41, 44–59, 84–85, 88–89, 100–101, 104–107, 134–135, 138–139, 142–147

- sphenoidal 20–23, 40–41, 64–73, 76–79
- body 124–125

## foramen rotundum of 38–39

- greater wing 38–39, 102–103, 228–231

- lesser wing 38–39, 94–95, 118–121, 224–227

## tip 78–79

- temporal 12–13, 16–19, 22–25, 58–63, 65–67, 76–77, 118–119, 122–123, 130–131, 144–145, 226–227

## articular tubercle 40–41

## mastoid 32–33

- petrous part 34–35, 68–71, 102–103, 136–137, 234–237

## squamous part 38–41

## zygomatic process 126–127

- zygomatic 22–25, 38–39, 68–79, 108–109, 112–115, 122–123, 220–221, 230–231

## temporal process 224–229

## bulb, olfactory 20–21, 68–69, 114–115

**C**

## canal

## alveolar 168–169

## carotid 30–31

## condylar 164–165

## facial 30–31, 239

## hypoglossal 98–99, 238–239

## incisive 162–163, 210–211

## mandibular 104–105, 118–119, 220–221

## optic 38–39

## pterygoid 38–39

## semicircular 70–71

## anterior 34–35

## lateral 32–35

## posterior 32–35, 72–75, 106–107

## superior 134–135

## capsule

- external 12–13, 54–61, 102–103, 122–131

*see also* white matter

## extreme 12–13, 54–57, 60–61, 130–131

## internal 10–13, 94–95, 102–103

## anterior limb 54–60, 98–99, 118–129

## genu 54–55, 130–133

## posterior limb 54–55, 60–61, 98–99, 136–137

## cartilage

## arytenoid 182–187, 228–229

## body 206–207

## vocal process 206–207

## cricoid 182–185, 206–207, 212–213, 224–227

## arch 190–191

## lamina 188–189, 208–209

- cartilage  
 thyroid 188–189, 206–213, 224–231  
 inferior horn 188–189, 208–209  
 lamina 180–187, 204–205  
 superior horn 204–207
- cavity  
 infraglottic 208–209, 222–227  
 nasal 36–37, 40–42, 76–77, 114–115,  
 222–223  
 common meatus 38–39  
 dorsal 226–227
- oral 116–119, 210–211  
 proper 222–223
- orbital 40–42
- trigeminal 232–233
- tympanic 22–23, 34–35, 236–237
- cells  
 ethmoidal 22–25, 66–75, 112–117  
 anterior 36–37, 224–225  
 middle 36–37  
 posterior 38–39
- mastoid 20–23, 34–35, 70–79, 134–135,  
 138–139, 142–143, 162–165
- center  
 semioval 4–5  
 speech 29, 151
- cerebellum 10–24, 60–77, 84–109,  
 138–139, 142–146  
 caudal lobule 72–73  
 hemisphere 16–25, 164–165  
 tonsil 74–79, 90–91, 142–143, 162–165  
 vermis 10–21, 60–63, 66–77, 142–145  
 white matter 4–5, 102–103  
*see also* flocculus; lobe, cerebellar
- cerebrum 92–93  
 epiphysis 58–59
- chiasm, optic 16–17, 64–65, 122–129
- cingulum 8–9, 46–51
- cistern  
 ambient 12–15, 60–63, 90–91, 132–133,  
 136–137, 140–141  
 basal 16–17
- cerebellar, superior 58–59
- cerebellomedullary 162–165
- chiasmatic 64–65, 124–125
- cisterna magna 24–25, 144–145,  
 242–243  
 posterior 162–165
- insular 10–13, 58–59, 106–107  
 lateral cerebral fossa 98–99, 104–105
- interpeduncular 14–15, 34–35, 64–65,  
 90–91, 135–137, 162–165
- pontine 18–21
- pontocerebellar 20–21, 72–77, 90–91,  
 94–95, 98–99, 102–103, 136–137,  
 140–141
- preponitine 66–71, 136–137
- quadrigeminal 12–15, 60–63, 90–91,  
 142–143
- suprasellar 128–129
- claustrum 8–13, 54–61, 102–103, 122–127,  
 132–133, 136–137
- clavicle 214–221, 226–229
- clivus 22–23, 72–73, 76–79, 86–89,  
 234–237
- cochlea 32–33, 70–77, 134–135  
 basal turn 30–31
- colliculus  
 cranial 138–141  
 inferior 60–65
- commissure  
 anterior 60–61, 86–87, 90–91, 94–95,  
 98–99, 102–103, 128–129, 132–133  
 laryngeal, anterior 208–209
- posterior 60–61, 86–87, 140–141  
*see also* corpus callosum
- complex, olfactory, inferior 138–141
- concha, nasal 76–77  
 inferior 36–39, 88–89, 112–117  
 middle 36–39, 88–89, 112–113, 116–117,  
 120–121, 224–225  
 superior 36–39, 78–79
- condyle, occipital 92–93, 236–237
- conus elasticus 208–209
- cord  
 spinal 138–139, 142–143, 168–197,  
 210–211, 236–245  
 vocal 186–187  
 false 210–211  
 true 206–207
- cornea 70–73
- corona radiata 8–9, 50–53
- corpus callosum 6–13, 58–59, 88–89,  
 92–93, 138–139
- genu 52–57, 84–87, 90–91, 116–117,  
 120–127

- major forceps 96–99  
 rostrum 124–125  
 splenium 52–57, 86–87, 90–91  
 trunk 86–87, 90–91, 94–95, 98–99,  
   118–121, 124–125, 128–137, 140–141  
*see also commissure*  
 corpus striatum 14–15, 94–95  
 cortex, cerebral  
   striate 8–11, 56–63, 144–147  
   subcallosal 62–63  
 cranium 38–39  
 crista galli 36–37  
 cuneus 6–9, 52–59, 84–85, 88–89, 92–93,  
   100–101, 144–147
- D**
- diaphragm, sellar 124–125  
 disc  
   articular 76–77, 220–221, 232–235  
   intervertebral 210–211  
     C2/C3 84–85  
 dorsum sellae 16–19, 66–69, 86–87  
 duct  
   nasolacrimal 76–79  
   submandibular 112–115
- E**
- ear  
   incus 30–33  
   malleus 30–33  
   middle 30–31  
   stapes 32–33  
 eardrum 22–23  
 epiglottis 174–177, 202–205, 210–211,  
   230–231  
   cartilage 178–179  
   stalk of 204–205  
   vallecula 176–177  
 epiphysis, cerebral 84–85  
 esophagus 184–197, 206–211, 222–223,  
   232–237  
 eyeball 20–25, 66–77, 96–97, 100–101,  
   104–107, 112–113  
   anterior chamber 70–73
- F**
- falk cerebelli 74–79  
 falk cerebri 2–17, 44–65, 112–117,  
   134–135, 138–139, 142–147  
 interhemispheric fissure 84–85,  
   118–119, 122–123, 126–127, 130–131  
 fascia, cervical  
   carotid sheath 200–201  
   deep pretracheal 200–201  
   deep prevertebral 200–201  
   intercarotid 200–201  
   pharyngobasilar 130–133, 200–201  
   superficial 200–201  
 fat  
   retro-orbital 20–21  
   retrobulbar 74–75, 112–115  
 fauces, isthmus of 222–223  
 fissure  
   cerebral, longitudinal 4–5, 44–53,  
     114–117, 126–129, 144–147  
   horizontal 96–97, 100–101, 146–147  
   median 138–139  
   orbital  
     inferior 38–39  
     superior 2–3, 20–21, 38–39, 66–67,  
       73, 94–95, 120–121, 226–227  
   petro-occipital 24–25  
   ventral median 76–77  
 flocculus 22–25, 74–75, 138–141  
*see also cerebellum*  
 fold  
   aryepiglottic 178–181, 204–205,  
     228–229  
   glossoepiglottic 202–203  
   pharyngoepiglottic 202–203  
   vestibular 204–205, 224–225  
 foramen  
   infraorbital 36–37  
   interventricular 10–11, 130–133  
     of Monro 10–11, 54–57  
   jugular 98–99, 238–239  
   lacerum 24–25, 76–77  
   Luschka 74–77  
   magnum 210–211, 240–241  
   ovale 24–25, 128–129  
   rotundum 226–227  
   stylomastoid 134–135, 220–221,  
     238–239

- foramen  
  transversarium 168–169
- forceps, occipital 52–55
- fornix 8–11, 52–53, 58–61  
  body 86–87, 132–133  
  column 54–57, 132–133  
  crus 94–95, 98–99, 136–137, 140–141  
  precommissural 128–129
- fossa  
  cerebral, lateral cistern 12–13, 56–57, 106–107  
  cranial  
    anterior 40–42  
    middle 43, 102–103  
  infratemporal 43, 98–99
- interpeduncular 62–63
- pterygoid 40–41, 43, 226–227
- pterygopalatine 24–25, 38–39, 43, 116–117, 120–121, 226–227
- G**
- Galen, vein of 8–9
- ganglion  
  basal 100–101  
  geniculate 34–35  
  trigeminal (V) 70–71, 126–129
- gland  
  lacrimal 22–23, 66–71, 106–107, 112–113, 220–221  
  lymph *see* lymph node  
  parotid 108–109, 126–127, 130–131, 134–135, 162–173, 202–203, 216–217, 220–221, 230–239
- pineal 10–13
- pituitary 18–19, 66–67, 70–71, 84–85, 122–129  
  adenohypophysis 68–69, 86–87  
  infundibulum of 86–87  
  neurohypophysis 68–69, 86–87  
  stalk 16–17
- sublingual 88–89, 212–213
- submandibular 100–101, 104–109, 114–115, 118–119, 122–123, 172–179, 202–203, 214–221, 226–231
- thyroid 182–197, 206–215, 228–231
- globus pallidus 10–13, 56–59, 94–95, 128–129, 136–137
- lateral 60–61, 90–91, 98–99, 132–133
- medial 60–61, 90–91, 98–99, 132–133
- glottis 184–185, 224–225
- grey matter *see* claustrum; thalamus
- gyrus  
  angular 6–7, 46–55, 106–109, 146–147  
  artery of 154–155  
  cingulate 8–15, 46–63, 84–85, 88–89, 114–119, 122–123, 126–127, 130–131, 134–135, 138–139  
  dentate 98–99, 102–103  
  frontal  
    inferior 8–15, 46–61, 92–93, 104–109, 112–119, 122–123, 126–127, 130–131  
    middle 4–15, 44–63, 96–97, 100–108, 112–119, 122–123, 126–127, 130–131  
    superior 2–15, 44–63, 84–85, 88–89, 92–93, 96–97, 100–101, 112–119, 122–123, 126–127, 130–131, 142–143  
  insular 104–107  
  lingual 84–85, 94–95  
  occipital 6–15, 48–61, 64–67, 100–101, 104–107, 146–147  
  medial 92–93
- occipitotemporal  
  lateral 14–15, 64–65, 126–127, 130–131, 134–147  
  medial 64–65, 88–89, 96–99, 102–105, 142–147
- orbital 16–19, 64–65, 92–107, 112–121, 124–125
- parahippocampal 12–19, 66–67, 90–95, 98–99, 102–103, 126–127, 132–141  
  uncus of 58–67
- postcentral 4–11, 44–45, 48–57, 88–89, 92–93, 96–97, 100–101, 104–109, 134–135, 138–139, 142–145
- precentral 2–3, 8–11, 44–49, 52–57, 84–85, 88–89, 96–97, 100–101, 104–106, 108–109, 134–135, 138–139, 142–145
- straight 16–21, 64–67, 84–85, 88–89, 112–121, 124–125
- subcallosal 120–125

- supramarginal 4–7, 46–53, 108–109, 138–139, 142–145  
 temporal 130–131  
   inferior 14–21, 60–65, 68–69, 74–75, 106–109, 126–127, 134–135, 138–139, 142–145  
   middle 10–19, 56–67, 106–109, 118–119, 122–123, 126–127, 130–131, 134–135, 138–139, 142–145  
   superior 8–9, 12–19, 54–57, 60–67, 106–109, 118–119, 122–123, 126–127, 130–131, 134–135, 138–139, 142–145  
   transverse 54–55, 104–109, 138–139  
 terminal 86–87
- H**
- hiatus, maxillary 36–37, 78–79  
 hippocampus 10–13, 16–17, 58–67, 126–143, 154–155  
   subiculum of 98–99, 102–103  
 Huebner's recurrent, cerebral artery 80–81  
 hypopharynx 174–187, 202–203  
 hypothalamus 12–15, 62–65, 130–133
- I**
- incus  
   long limb 30–33  
   short limb 32–33  
 infundibulum 128–129  
 inlet, laryngeal 230–231  
 insula 8–11, 14–15, 54–63, 122–123, 126–127, 130–131  
   circular sulcus of 56–57  
 isthmus, oropharyngeal 222–223
- J**
- joint  
   atlanto-axial 234–237  
   atlanto-occipital 236–237  
   costotransverse 238–239  
   T3 244–245  
   T4 246–247
- costovertebral 196–197  
 cricothyroid 208–209  
 sternoclavicular 226–227  
 temporomandibular 22–23, 130–131  
   articular disc 30–31  
   glenoid roof 30–31  
   socket (temporal bone) 232–233  
 zygapophysial 176–177, 184–185, 236–237  
   C6/C7 190–191
- L**
- Labbé, inferior anastomotic vein of 160–161  
 labyrinth, ethmoidal 36–37  
 lamina terminalis 86–87  
   *see also* ventricle, third  
 larynx 182–183, 186–189, 204–205, 226–227  
   lamina 210–211  
   vestibule 206–207  
 lemniscus  
   lateral 90–91  
   medial 151  
 lens 70–73, 100–101, 104–105  
 ligament  
   alar 236–237  
   apical, of dens 210–211  
   interspinous 192–197, 240–241, 244–247  
   intraspinous 242–243  
   ligamentum flavum 174–177, 180–181, 186–187, 196–197, 210–211, 238–239  
   longitudinal  
    anterior 210–211  
    posterior 210–211  
   nuchal 84–85, 144–145, 168–179, 190–191, 210–211, 244–247  
   petroclinoid  
    anterior 68–69  
    posterior 68–69  
   supraspinous 242–243  
   transverse 238–239  
    atlas 210–211  
    vestibular 210–211  
    vocal 210–211  
 Liliequist's membrane 86–87

- lip, upper 168–169
- lobe
- cerebellar 140–141
  - anterior 62–69, 86–87, 90–91, 96–107, 138–143
  - caudal 72–73
  - posterior 70–71, 76–79, 86–87, 96–97, 100–101, 104–109, 142–147, 162–165
  - superior 60–61, 92–93
  - see also* cerebellum
- cerebral, inferior 92–93
- frontal 2–23, 44–53, 56–64, 84–108, 112–123, 126–127, 130–131, 134–139, 142–145
- occipital 6–15, 46–53, 56–63, 66–69, 84–107, 146–147
- paracentral 2–5, 44–45, 138–139, 142–143
- parietal 2–10, 44–53, 56–59, 84–109, 130–131, 134–139, 142–147
- inferior 4–5
  - superior 44–45
- precentral 88–89
- temporal 8–23, 56–73, 92–109, 116–145
- lobule *see* lobe
- lung 218–219
- left 212–217, 220–221, 236–237
  - right 230–235, 238–245
- Luschka, foramen of 74–77
- lymph node 198–199, 220–221, 234–235
- cervical
    - anterior 199
    - deep 198–199
    - jugular 198–199
    - nuchal 198–199
    - paratracheal 199
    - preauricular 199
    - prelaryngeal 199
    - pretracheal 199
    - retropharyngeal 198–199
    - submandibular 198
    - submental 198
    - superficial 198
    - suprACLAVICULAR 199
    - suprafacial 199
    - thyroid 199
- M
- malleus
- handle 30–33
  - head 32–33
- mandible 96–97, 100–101, 104–105, 170–177, 210–221, 224–225, 228–229
- body 38–39, 112–117
  - head 22–25, 74–79, 106–109, 126–127, 130–131, 220–221, 232–235
  - ramus 38–39, 108–109, 116–119, 122–123, 162–169, 218–219, 226–227, 230–231
- mastoid 32–33
- antrum 32–33
- maxilla 92–93, 96–97, 212–213
- alveolar process 36–39, 112–117, 164–167
  - infra-orbital canal 78–79
  - palatine process 162–163
- meatus
- acoustic
    - external 30–31, 76–77, 108–109, 218–219, 236–237
    - internal 32–35, 72–75, 98–99, 134–137, 238–239
- auditory
- external 22–25
  - internal 20–21, 102–103
- nasal
- inferior 36–39
  - middle 36–37
- medulla oblongata 22–25, 74–79, 84–91, 136–141, 162–167
- membrane
- atlanto-occipital
    - anterior 234–235
    - posterior 210–211
  - cricovocal 208–209
  - tectorial 210–211
  - thyrohyoid 204–205
  - tympanic 22–23, 76–77
- mesencephalon (midbrain) 12–15, 60–67, 84–91, 134–141
- aqueduct of 62–65, 140–141
  - tegmentum of 62–65
- Monro, foramen 10–11, 54–57
- motor system 28–29

- muscle
- acoustic, internal 104–105
  - aryepiglottic 228–229
  - arytenoid
    - oblique 206–207, 210–211
    - transverse 186–189, 206–207, 210–211
  - buccinator 104–107, 116–117, 164–169, 216–219, 224–225
  - cricoarytenoid, posterior 184–185, 230–231
  - cricothyroid 190–191, 226–227
  - depressor anguli oris 112–115, 172–177
  - digastric 24–25, 96–97, 100–101, 104–105, 214–217, 228–237
  - anterior belly 176–177, 212–213, 224–225
  - posterior belly 106–109, 134–135, 138–139, 166–171, 174–175, 220–221, 238–239
  - elevator, soft palate 98–99
  - genioglossus 112–117, 170–175, 210–211, 224–225, 228–229
  - geniohyoid 176–177, 202–203, 210–211, 224–227
  - hyperglossus 96–97
  - hypoglossus 170–175, 224–229
  - iliocostalis cervicis 192–197
  - infrahyoid 202–209
  - intercostal 194–197, 244–247
  - interspinalis 210–211, 214–221
  - levator
    - anguli oris 162–171
    - labii superioris 78–79, 96–97, 162–163, 214–215
  - palpebrae superioris 72–73, 104–105, 112–115, 224–225
  - scapulae 100–101, 104–107, 170–197, 216–221, 238–247
  - veli palatini 78–79, 96–97, 124–125, 130–133, 162–165, 212–213, 228–233
  - longissimus capitis 168–173, 178–179, 184–191, 238–241, 244–245
  - longissimus cervicis 170–173, 178–193, 240–241
  - longitudinal
    - superior 210–211
  - of tongue 224–227
  - longus capitis 10, 78–79, 88–89, 92–93, 96–97, 142–143, 162–189, 212–213, 232–233
  - longus colli 170–189, 192–197, 202–215, 232–235
  - masseter 24–25, 40–41, 74–79, 108–109, 114–119, 122–123, 126–127, 162–173, 220–221, 224–231
  - mentalis 174–175
  - multifidus 172–173, 180–197, 212–213, 216–217, 240–241, 244–247
  - mylohyoid 96–97, 100–101, 172–177, 202–203, 210–215, 224–227
  - oblique
    - inferior 104–105, 112–113, 212–213
    - superior 22–23, 112–115
  - obliquus capitis 216–217
    - inferior 92–93, 96–97, 100–101, 104–105, 138–139, 142–143, 166–171, 214–215, 236–241
    - posterior major 218–219
    - posterior minor 218–219
    - superior 106–107, 138–139, 142–143, 166–167, 214–215, 218–221, 238–241, 244–245
  - occipitofrontal 68–69
  - omohyoid 182–185, 190–191, 204–209, 228–229
  - orbicularis oculi 104–105, 112–113
  - orbicularis oris 68–69, 74–79, 96–97, 100–101, 162–173, 210–215, 218–219
  - palatopharyngeus 170–175, 212–213, 230–231
  - pectoralis major 218–221
  - pharyngeal constrictor 84–85, 126–127
    - inferior 131–132, 176–189, 202–205, 208–213, 232–233
    - middle 92–93, 96–97, 130–131, 172–175, 230–231
    - superior 130–133, 166–173, 182–183, 212–213
  - phrenic 186–187
  - pterygoid 78–79
    - lateral 24–25, 40–41, 78–79, 100–101, 104–107, 118–127, 130–131, 162–167, 216–221, 228–233

- muscle**
- pterygoid
    - medial 40–41, 96–101, 104–107, 118–127, 162–173, 212–219, 226–233
  - rectus
    - inferior 24–25, 74–75, 92–93, 96–97, 100–101, 112–115, 224–225
    - lateral 20–23, 70–73, 100–101, 104–107, 112–115
    - medial 22–25, 68–73, 92–95, 112–115, 224–225
    - superior 20–23, 66–67, 72–73, 92–93, 96–97, 100–101, 112–115, 224–225
  - rectus capitis
    - anterior 234–235
    - lateralis 104–107, 164–167, 214–215, 218–219, 238–239
    - posterior major 24–25, 92–93, 96–97, 100–101, 104–105, 144–145, 212–215, 240–241, 244–247
    - posterior minor 22–25, 84–85, 92–93, 144–145, 166–167, 212–213, 216–217, 244–247
  - rhomboid 244–247
    - major 212–221
    - minor 190–197, 212–221
  - scalene (scalenus)
    - anterior 182–197, 214–215, 218–221, 232–235, 238–239
    - medius 218–221, 238–239
    - middle 178–197, 236–237
    - posterior 106–107, 180–197, 214–217, 220–221, 236–237
  - semispinalis
    - capitis 18–25, 78–79, 84–85, 88–89, 96–97, 100–101, 104–109, 144–147, 162–197, 212–221, 242–247
    - cervicis 172–173, 176–197, 212–219, 240–241, 244–247
  - serratus
    - anterior 214–215, 220–221
    - posterior superior 190–197, 212–213, 246–247
  - spinalis
    - capitis 172–173
    - cervicis 174–197, 238–239
  - splenius
    - capitis 22–25, 92–93, 96–97, 105–109, 144–145, 164–181, 184–197, 212–221, 238–241, 244–247
    - cervicis 106–107, 178–197, 212–213, 240–243, 246–247
  - sternocleidomastoid 2, 108–109, 134–135, 138–139, 142–143, 168–197, 208–209, 214–221, 228–241, 244–245
  - sternohyoid 178–193, 196–197, 202–203, 208–209, 212–213, 224–227
  - sternothyroid 188–193, 202–211
  - styloglossus 100–101, 122–123, 126–127, 168–175, 230–231
  - stylohyoid 170–175, 216–217, 236–237
  - styloid 106–107
  - stylopharyngeus 104–105, 130–131, 166–169, 232–233, 236–237
  - subclavian 218–221
  - suprahyoid 202–203
  - supraspinatus 242–243
  - temporal 2, 18–21, 23–25, 40–41, 64–79, 100–101, 104–109, 114–119, 122–123, 126–127, 130–131, 162–165, 216–221, 226–233, 236–239
  - temporoparietal 66–73
  - tensor
    - tympani, canal 30–31
    - veli palatini 78–79, 118–125, 162–169, 214–215, 230–231
  - thyroarytenoid 188–189, 206–207, 228–229
  - thyrohyoid 178–189, 204–207, 224–227
  - transverse 210–211
    - of tongue 224–229
  - trapezius 24–25, 92–93, 100–101, 168–197, 212–221, 240–245
    - descending 212–213
    - descending (superior) 246–247
    - transverse (middle) 246–247

## muscle

- vocalis 184–187, 206–209, 224–225
- zygomaticus 78–79, 108–109, 164–165  
    major 162–163
- myelencephalon 22–23

**N**

- nasopharynx 40–41, 84–85, 88–89,  
    122–125, 128–129, 162–165, 210–211,  
    222–223, 228–229, 232–233
- nerve
  - alveolar, inferior 104–105, 118–119,  
        220–221, 230–231
  - auric temporal 78–79
  - cranial
    - abducent (VI) 22–23, 66–69, 72–73,  
          90–91, 116–129, 132–133, 136–137
    - accessory (XI) 78–79, 136–137,  
          140–141, 164–175, 236–237
    - acoustic (VIII) 20–21, 98–99,  
          102–103
    - facial (VII) 20–21, 34–35, 72–73,  
          98–99, 102–103, 134–139,  
          170–171, 220–221, 226–227
    - glossopharyngeal (IX) 22–23, 76–79,  
          136–141, 162–163, 166–169
    - hypoglossal (XII) 78–79, 98–99,  
          112–115, 136–137, 162–173,  
          236–237
    - oculomotor (III) 64–65, 68–71,  
          94–95, 112–113, 116–129, 132–133
    - optic (II) 18–19, 22–23, 66–72,  
          84–87, 92–95, 114–121, 224–227
    - trigeminal (V) 18–21, 28–29, 68–69,  
          74–77, 90–91, 132–133, 136–137,  
          150–151
    - trochlear (IV) 18–19, 94–95, 116–119,  
          122–129, 132–133, 136–137,  
          140–141, 226–227
    - vagus (X) 22–23, 76–79, 136–137,  
          140–141, 162–177, 180–197,  
          232–233, 236–237
    - vestibulocochlear (VIII) (auditory)  
          20–21, 72–73, 98–99, 102–103,  
          134–139
    - frontal 120–121, 226–227
    - infraorbital 112–115

## intermediate 72–73

- lacrimal 120–121
- laryngeal, superior 174–175
- lingual 112–115, 118–119, 232–233
- mandibular 24–25, 72–73, 78–79,  
    126–131, 162–163, 214–215
- maxillary 72–73, 116–121, 124–125,  
    226–227
- nasociliary 114–115, 120–121
- ophthalmic 116–125
- phrenic 182–185, 188–189, 192–197
- root *see* root, nerve
- spinal
  - C2 176–177
  - C3 176–179
  - C4 178–191
  - C5 180–195
  - C6 184–185, 188–195
  - C7 192–195
- splenius capitis 182–183
- supraorbital 112–115
- thoracic (T1) 238–239
- nose, base of 40–42
- notch
  - ethmoidal 36–37
  - interarytenoid 230–231
  - superior thyroid 204–205
  - supraorbital 36–37
- nucleus
  - accumbens 124–125
  - amygdaloid 98–99, 102–103
  - basal 92–93, 96–97  
        lentiform 130–131, 134–135
  - caudate 8–13, 130–131, 138–139
  - body 92–93, 96–99, 130–133,  
        136–137, 140–141
  - head 52–61, 88–91, 94–95, 118–129
  - tail 54–57, 102–105, 136–137,  
        140–141
- dentate 16–19, 70–73, 90–91, 94–95,  
    142–145
- mesencephalic 29, 151
- oculomotor 29, 151
- red 62–63, 90–91, 134–137
- subthalamic 136–137

**O**

- operculum  
 frontal 104–105, 118–119, 130–131  
 parietal 134–135  
 temporal 8–9  
 orbit 112–115  
 infundibulum 38–39  
 roof 18–19, 36–37, 92–93, 96–97,  
 100–101, 104–105, 112–115  
 oropharynx 84–85, 88–89, 92–93,  
 122–123, 168–175, 210–211,  
 228–233  
 isthmus of fauces 40–41

**P**

- palate  
 hard 36–37, 84–85, 88–89, 112–115,  
 164–167, 210–211, 224–225  
 soft 38–41, 116–119, 162–167, 210–211,  
 226–231  
*see also uvula*  
 pathway, oculomotor 29, 151  
 peduncle  
 cerebellar 16–19, 90–91  
 inferior 20–21  
 middle 20–21, 68–73, 94–95,  
 136–141  
 superior 66–67  
 cerebral 14–15, 62–65, 88–89, 92–93  
 middle 92–93  
 pharynx 126–127, 166–167, 212–213  
 laryngeal part 222–223  
 plane, sphenoid 120–121  
 plate  
 cribriform 36–37  
 orbital 36–37, 112–115  
 quadrigeminal 12–13, 84–85  
 anterior colliculus 90–91  
 posterior colliculus 86–87  
 superior colliculus 86–87, 90–91  
 tectal  
 anterior colliculus 90–91  
 posterior colliculus 86–87  
 superior colliculus 86–87, 90–91  
 platysma 106–109, 174–197, 204–205,  
 212–221, 224–229

**plexus**

- brachial 216–221, 240–241  
 cervical  
 C5 196–197  
 C6 196–197  
 C7 196–197  
 C8 196–197

choroid 6–7, 52–59, 86–87, 94–95,  
 102–103, 142–143

- venous  
 pharyngeal 168–169  
 suboccipital 238–239

**pole**

- frontal 84–85  
 occipital 10–11, 60–63  
 temporal 72–73, 98–101, 104–107,  
 120–121

pons 16–23, 66–75, 84–95, 134–141  
 precuneus 2–7, 44–55, 88–89, 92–93,  
 100–101, 104–105, 142–147

**process**

- articular 212–213  
 C2 238–239  
 C3 238–239  
 C4–C6 236–237

**clinoid**

- anterior 40–41, 120–121  
 posterior 128–129

**coronoid**

- costal 234–235, 240–241, 246–247  
 mastoid 20–25, 30–31, 108–109,  
 134–135, 138–139, 142–143,  
 164–165, 238–243

**pterygoid**

- 38–39, 120–121  
 lateral plate 40–41, 78–79, 100–101,  
 118–121, 226–229  
 medial plate 40–41, 78–79, 118–121,  
 226–229

**spinous**

- 174–175, 210–211, 244–247  
 C2 240–241  
 C7 240–243  
 T3 246–247

styloid 106–107, 134–135, 216–217,  
 220–221, 234–237

transverse 168–169, 214–215

- C7 238–239

- T2 242–243

- T4 242–243

uncinate 36–37  
 zygomatic 36–37, 232–233  
 prominence, laryngeal 206–207  
 protuberance, occipital  
   external 84–85  
   internal 66–67, 70–71  
 putamen 10–13, 54–61, 94–95, 98–99,  
   102–103, 118–129, 132–133, 136–137  
 pyramid, petrous 98–99

**R**

radiation, optic 62–63, 142–145  
 raphe, pharyngeal 130–133  
 recess  
   epitympanic 32–33  
   infundibular 64–65  
   pharyngeal 78–79  
   piriform 176–177, 182–183, 204–207,  
     228–229  
   supraoptic 128–129  
   suprapineal 140–141

rib  
   first 192–197, 214–215, 218–219,  
     236–241  
   second 236–237, 242–245  
     head 238–239  
   third 246–247  
   fourth 220–221  
 rima glottidis 206–207  
 roof, orbital 64–65  
 root  
   nerve 88–89  
   anterior 182–183  
     plexus 100–101, 232–233  
     posterior 182–183  
     spinal 92–93, 214–215, 238–239  
       C3 96–97, 212–213, 234–235  
       C3–C6 236–237  
       C4 174–177, 234–235  
       C5 16–17, 234–235  
       C6 180–183, 186–187, 234–235  
       C7 188–191, 234–235  
       C8 188–189, 192–195, 234–237  
       T1 196–197, 212–213

**S**

sella turcica 40–41  
   floor 124–125, 128–129  
 septum 70–71  
   lingual 210–211, 224–227  
   nasal 24–25, 36–37, 72–79, 112–119,  
     224–227  
     perpendicular plate 38–39  
   pellucidum 84–85, 120–121, 124–129,  
     132–133  
     cave of 54–59  
   precommissural 12–13  
   verum 12–13

sinus  
   cavernous 20–21, 68–71, 122–125,  
     128–129, 158–161  
   confluence 16–17, 66–67, 84–85,  
     88–89, 158–161  
   falcotentorial 160–161  
   ethmoidal 84–85, 88–89  
   frontal 10–21, 28–29, 36–37, 62–67,  
     84–85, 88–89  
     superior 134–135, 138–139  
   intercavernous, inferior 124–125,  
     128–129  
   maxillary 36–42, 74–79, 92–93, 96–97,  
     100–101, 104–107, 112–117, 162–163,  
     214–219, 224–225  
     medial wall 78–79  
   nasal 74–75, 112–113, 116–121  
   occipital 18–23, 68–69, 78–79, 146–147  
   petrosal 160–161  
   sagittal  
     inferior 52–53  
     superior 4–15, 44–65, 88–89,  
       112–119, 122–123, 126–127,  
       130–131, 134–135, 138–139,  
       142–147, 158–161  
   sigmoid 16–25, 30–31, 34–35, 68–73,  
     76–79, 104–105, 138–139, 158–163,  
     218–219  
   sphenoidal 20–25, 38–41, 66–67,  
     70–75, 84–93, 118–129, 226–233  
   sphenoparietal 158–159  
   straight 9, 11, 13, 15, 57, 59, 61, 63, 65,  
     85, 87, 145, 147, 161

- sinus  
 transverse 16–17, 68–69, 74–75, 92–93, 96–97, 100–101, 104–109, 142–147, 158–161  
 tympani 32–33
- space  
 buccal 42–43  
 cervical  
   carotid 200–201  
   masticatory 43, 200–201  
   parapharyngeal 200–201  
   parotid 200–201  
   perivertebral paraspinal 200–201  
   perivertebral prevertebral 200–201  
   prevertebral 200–201  
   retropharyngeal 200–201  
   superficial mucosal 200–201  
   visceral 200–201
- intervertebral  
 C3/C4 176–177  
 C5 186–187  
 C6 186–187  
 C6/C7 190–191  
 C7/T1 194–195
- masticatory 42–43  
 peripharyngeal 228–229  
 pharyngeal 206–209  
 pre-epiglottic 202–205  
 suprasternal 226–227
- stapes 32–33  
 substantia nigra 64–65, 90–91, 136–137  
 sulcus 84–85  
 basal 16–17  
 calcarine 62–63, 88–89, 92–93, 144–147  
 central 2–5, 8–11, 44–45, 48–57, 88–89, 92–93, 96–97, 100–101, 104–109, 134–135, 138–139, 142–143  
 artery 154–155  
 fissure of Rolando 46–47  
 cingulate 6–7, 46–47, 52–55, 118–119  
 circular 62–63  
 collateral 102–103, 140–141  
 frontal  
   inferior 104–109  
   superior 44–45  
 lateral 8–11, 14–15, 52–63, 108–109, 122–123, 126–127, 130–131, 134–135, 142–143
- olfactory 64–65, 120–121  
 parieto-occipital 4–11, 14–15, 46–57, 84–85, 96–99, 144–147  
 postcentral 6–7, 46–51, 88–89, 92–93, 106–109  
 precentral 2–5, 44–47, 50–51, 154–155
- suture  
 coronal 2–7, 44–59, 84–85, 88–89, 92–93, 96–97, 100–101, 104–109  
 frontozygomatic 36–37  
 lambdoid 49–73, 84–85, 88–89, 92–93, 96–97, 100–101, 104–109  
 sagittal 2–3, 44–47, 144–147  
 sphenosquamous 38–41  
 squamous 38–41  
 syphon, carotid 214–215
- system  
 motor 29, 151  
 sensory 29, 151
- T**
- tentorium cerebelli 12–19, 58–67, 88–109, 136–147
- thalamus 8–13, 54–61, 88–89, 92–93, 96–97, 134–135, 138–139  
 complex  
   lateral posterior 90–91, 94–95  
   lateral ventral 90–91, 94–95, 136–137
- nucleus  
 anterior ventral 132–133  
 lateral dorsal 136–137  
 medial 136–137  
 pulvinar 90–91, 94–95, 98–99, 140–141
- tissue, fatty  
 retro-orbital 68–73  
 suboccipital 210–211, 246–247
- tongue 84–85, 88–89, 92–93, 112–119, 168–171, 210–213
- muscle 224–229  
 root 174–175
- tonsil  
 cerebellar 24–25  
 palatine 170–171, 210–213, 230–231  
 pharyngeal 40–41, 230–231
- tooth  
 canine 168–169  
 incisor 168–169

- molar 168–169  
 premolar 168–169
- torus**  
 levatorius 162–163  
 tubaris 230–231
- trachea 190–197, 210–211, 222–225,  
 228–235
- tract**  
 corticospinal 136–137  
 lemniscal medial 29  
 olfactory 116–125  
 optic 14–15, 29, 62–63, 90–91, 98–99,  
 132–133, 136–137, 151  
 spinothalamic 29, 151
- Troland, superior anastomotic vein of  
 158–159
- trunk, brachiocephalic 230–233
- tube, auditory 24–25, 30–31, 76–79,  
 98–99, 128–129, 214–217, 232–233
- cartilage 228–231
- pharyngeal opening 230–231
- pharyngotympanic 30–31, 76–79,  
 98–99, 124–133, 162–163, 214–217,  
 228–233
- torus levatorius 162–163
- tubercle, articular 220–221
- U**
- uvula 84–85, 88–89, 123, 168–171,  
 230–231
- vermis 70–73, 144–145  
*see also* palate, soft
- V**
- vallecula, epiglottic 176–177, 202–203,  
 210–213, 228–231
- vein**  
 alveolar, inferior, mandibular canal  
 118–119  
 anastomotic  
 inferior (Labbé) 160–161  
 superior (Troland) 158–159  
 basal 60–61, 86–87, 136–137, 140–143,  
 158–161  
 brachiocephalic 212–215  
 cerebellar 86–87
- inferior 158–161  
 precentral 160–161  
 superior 158–161
- cerebral**  
 great 8–9, 54–59, 86–87, 90–91,  
 160–161  
 internal 10–11, 54–59, 86–87,  
 136–143, 160–161  
 middle 158–159  
 posterior 160–161  
 superior 48–51, 158–161
- cervical** 218–219  
 deep 168–179, 216–217, 240–245
- emissary** 164–165
- facial** 214–217  
 common 218–219  
 frontal 158–161  
 infraorbital 112–115
- jugular** 24–25  
 anterior 180–197, 202–209, 226–229  
 external 174–197, 216–217, 232–235  
 internal 30–33, 76–79, 98–99,  
 104–107, 134–137, 158–165,  
 170–183, 186–197, 202–209,  
 214–219, 230–237
- mandibular** 126–127
- maxillary** 166–167
- occipital**, internal 160–161
- ophthalmic** 20–21, 66–67  
 superior 68–69, 112–117, 226–227
- parietal** 158–161
- retromandibular** 108–109, 162–173,  
 176–177, 234–235
- subclavian** 230–233  
 left 214–217
- thyroid**, inferior 194–195, 228–229
- vertebral** 136–139, 142–143, 232–233
- ventricle** 12–13  
 fourth 16–21, 66–79, 84–87, 90–91,  
 142–143
- laryngeal** 210–211, 222–227
- lateral** 90–91, 94–95, 134–139  
 anterior horn 8–13  
 aperture 74–79, 90–91  
 central part 50–51, 88–89, 98–99,  
 102–103
- choroid plexus** 6–7
- collateral trigone** 142–143

- ventricle  
 lateral  
   frontal horn 52–59, 92–95, 116–133  
   occipital horn 96–97, 100–101,  
     104–105, 144–147  
   temporal horn 14–19, 60–67, 94–95,  
     98–99, 102–105, 126–141  
 of Morgagni 210–211  
 third 10–11, 14–15, 54–63, 84–87,  
     130–137  
   *see also* lamina terminalis
- vermis 162–163  
 uvula of 70–73, 144–145
- vertebra  
 cervical  
   C1 *see* atlas (C1)  
   C2 *see* axis (C2)  
   C3 142–143, 202–203  
     body 174–175  
     posterior arch 176–177  
     spinous process 172–173  
   C4, body 178–179, 204–207  
   C5 184–185  
     body 180–183, 206–207  
     inferior articular process 180–183  
     transverse process 180–181  
   C6 188–189, 210–211  
     arch of 238–239  
     body of 208–209  
     posterior arch 180–183  
     spinous process 182–183
- C7 192–193  
 articular process 188–189  
 posterior arch 188–189  
 spinous process of 188–191,  
     210–211  
 transverse process 192–193
- thoracic  
 T1 194–197  
 T2 242–243  
 T3 244–245  
 T4 242–243
- vestibule 32–35, 74–75, 238–239  
 laryngeal 178–181, 222–223, 228–229  
 nasal 222–223
- vomer 36–37, 78–79, 120–121, 210–211,  
 228–229
- W**
- white matter  
 central 134–135  
 cerebellum 4–5, 102–103  
 cerebral 44–49, 100–101, 130–131  
   *see also* capsule, external
- window  
 oval 32–33  
 round 30–31
- Z**
- zone, temporal 30–33