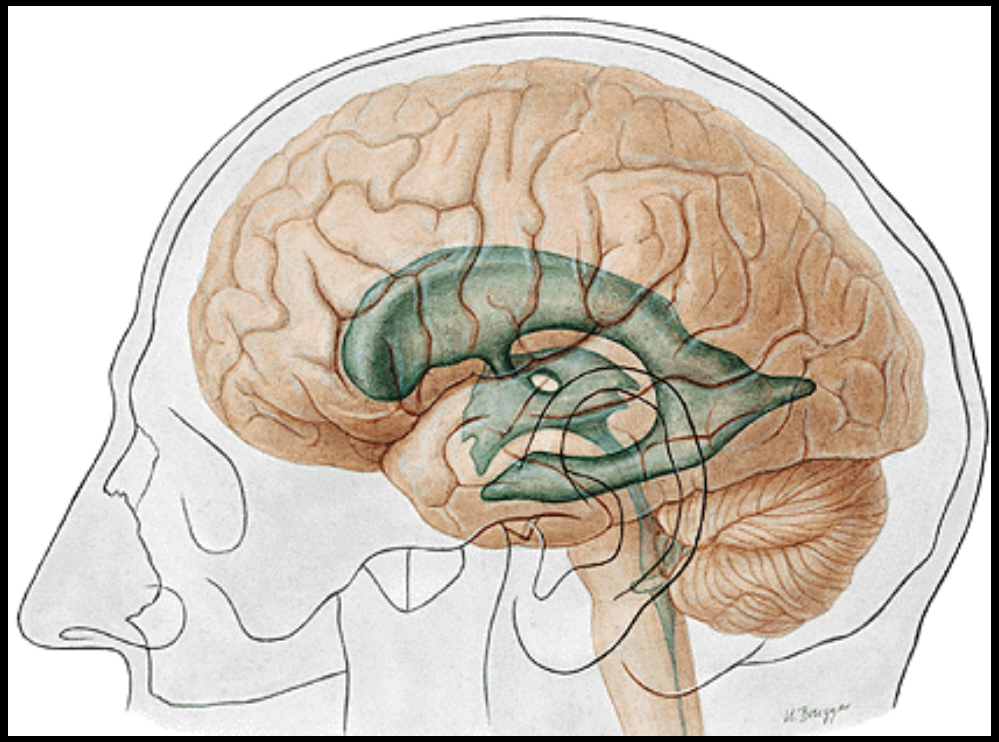
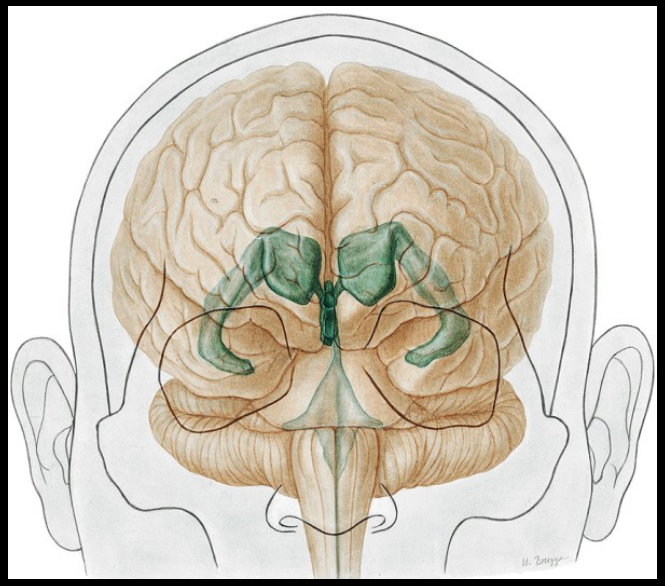
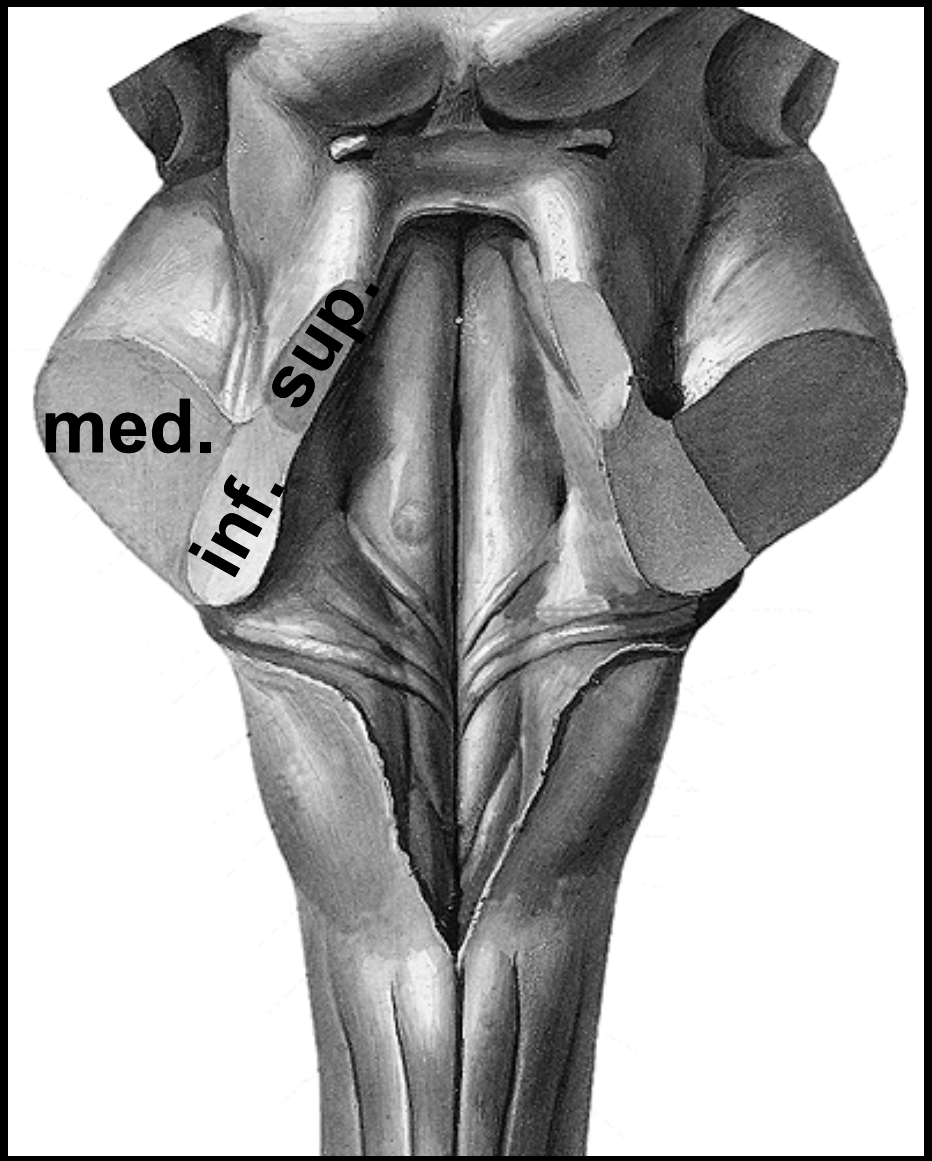




Lateral (1st and 2nd) ventricles
3rd ventricle
4th ventricle
Central canal

4th ventricle

Floor = rhomboid fossa



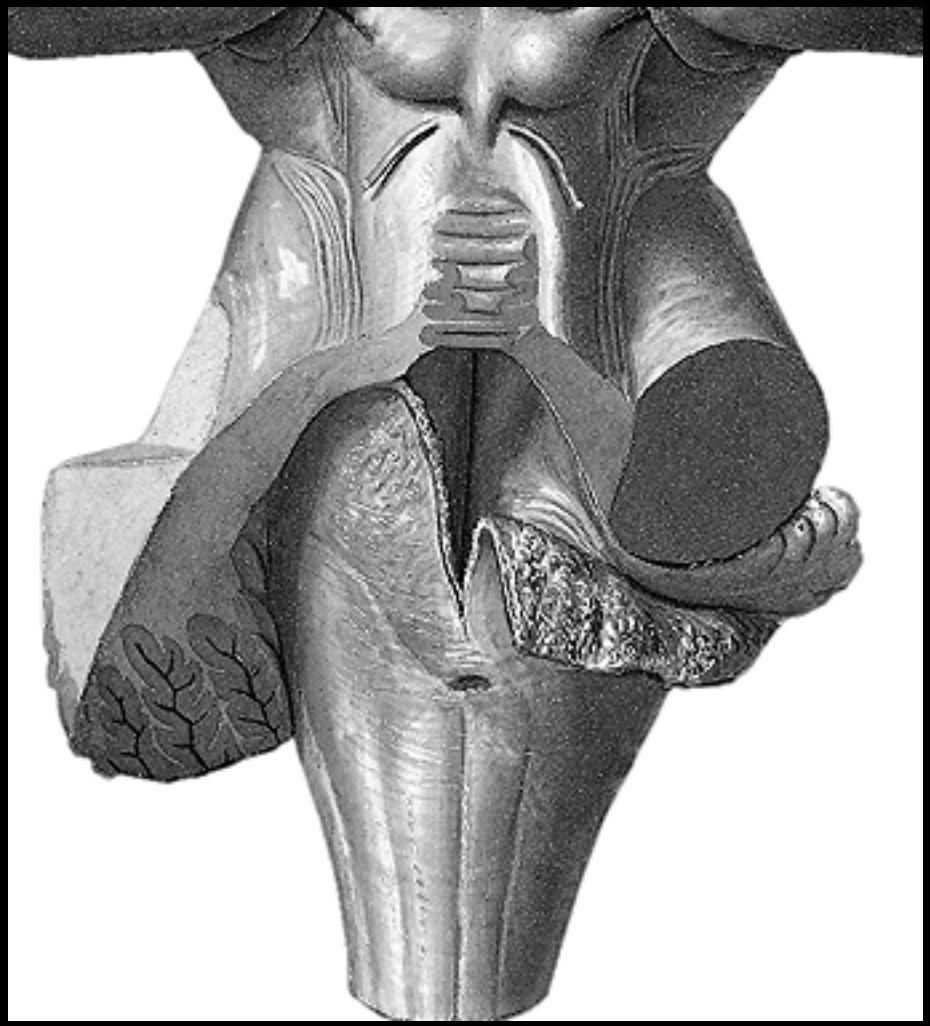
Sulcus medianus
Sulci limitantes
fovea sup. (V)
fovea inf. (IX, X)
Trigonum n. XII

Eminentia medialis
colliculus facialis (VI)

Striae medullares

Recessus lat. (area vestibularis)
Tuberculum acusticum

4th ventricle



Roof = tegmen

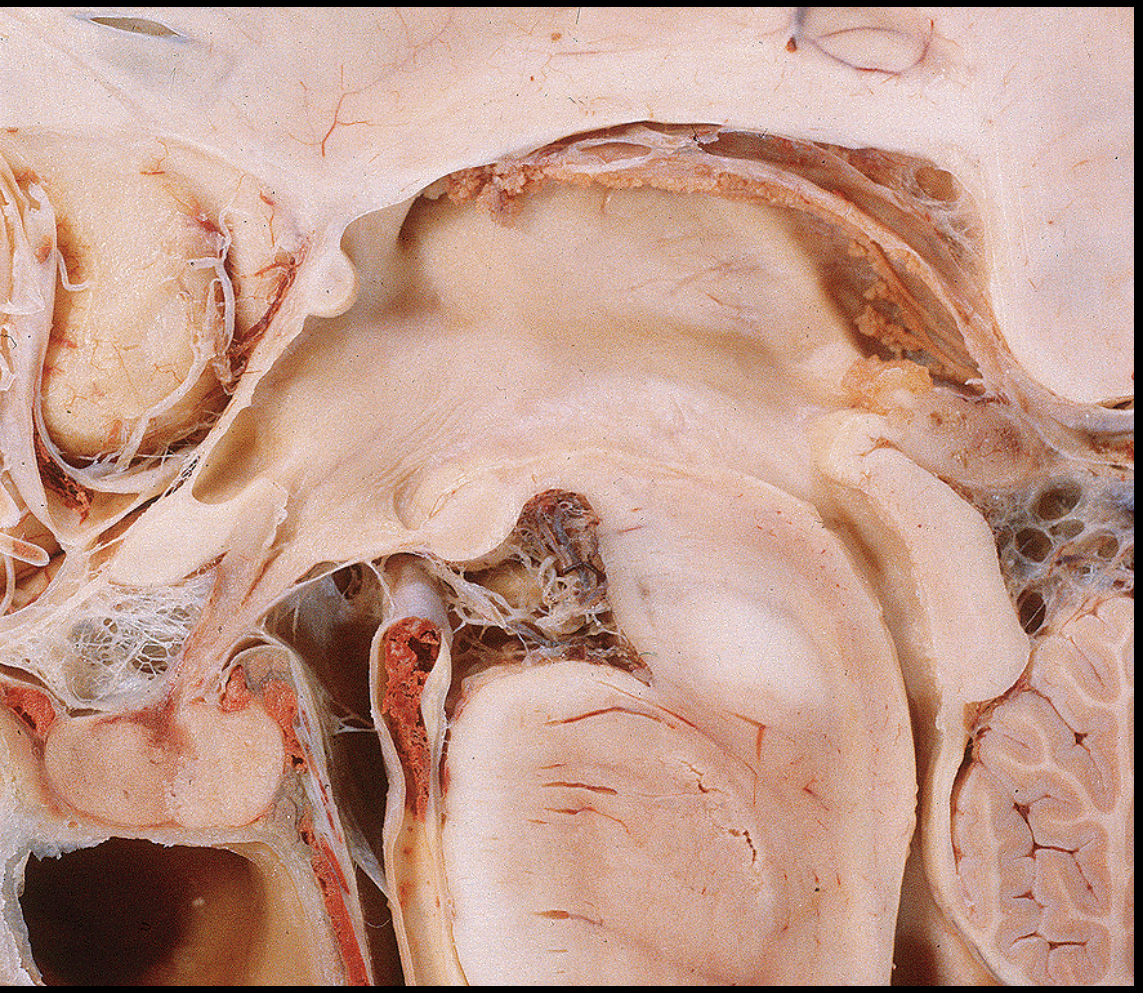
Velum medullare sup.

- Fastigium
- Velum medullare inf., tela choroidea (pia mater+ependyma)

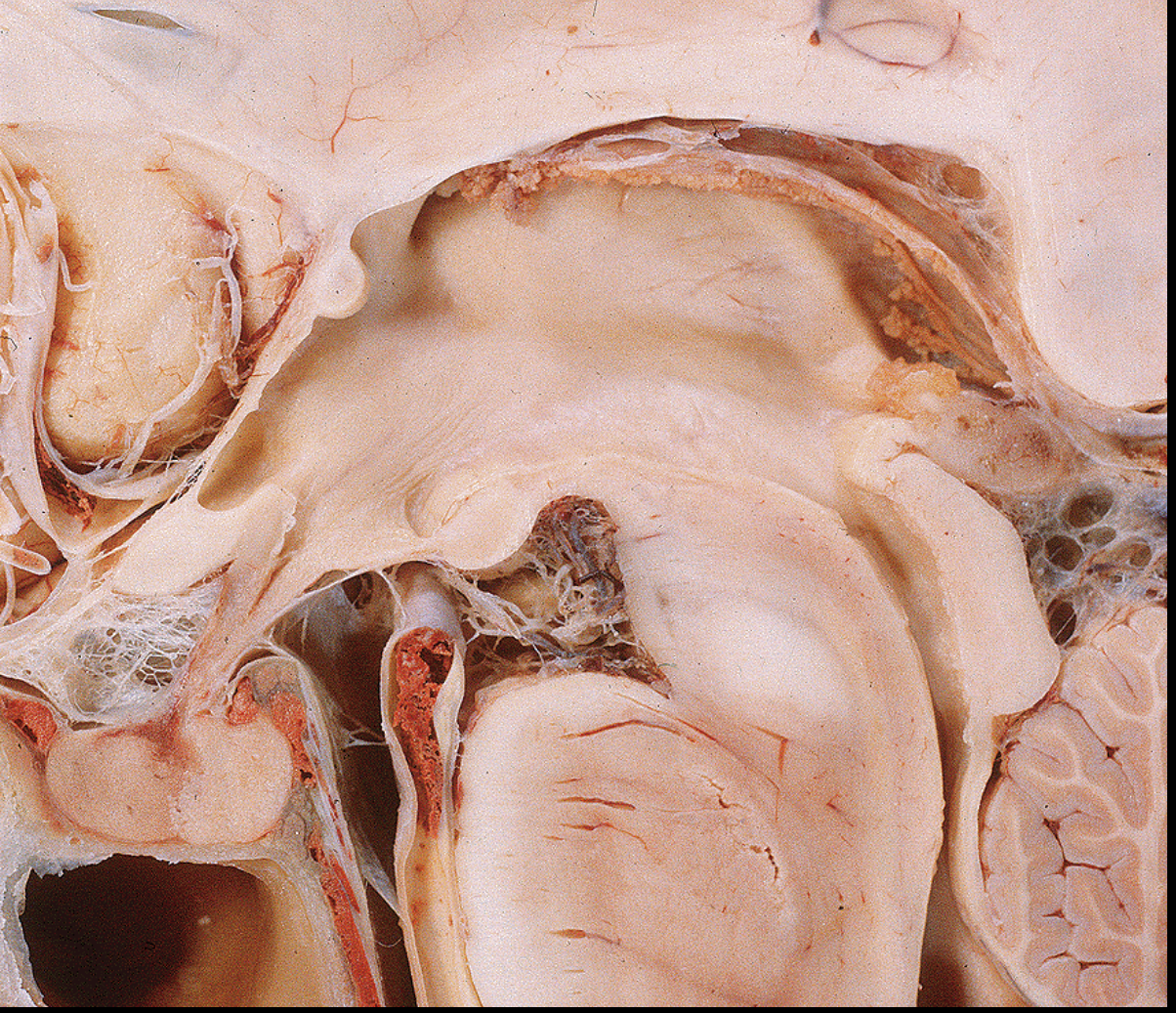
+ vessels = plexus choroideus

Apertura mediana
Aperturae lat.

Aqueductus mesencephali – 3rd ventricle



Walls:
Rostral – columnae fornicis, commissura ant., lamina terminalis
Superior - tela choroidea
Posterior - recessus suprapinealis, com. habenularum, rec. pinealis, com. post.

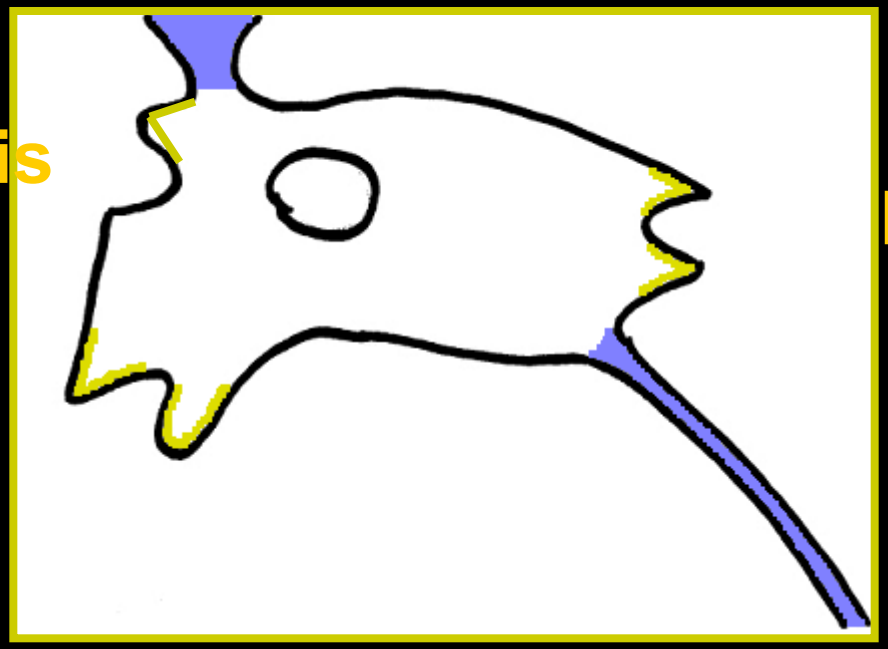


Inferior – optic chiasma, infundibulum

Lateral – thalamus, hypothalamus

Foramen interventriculare

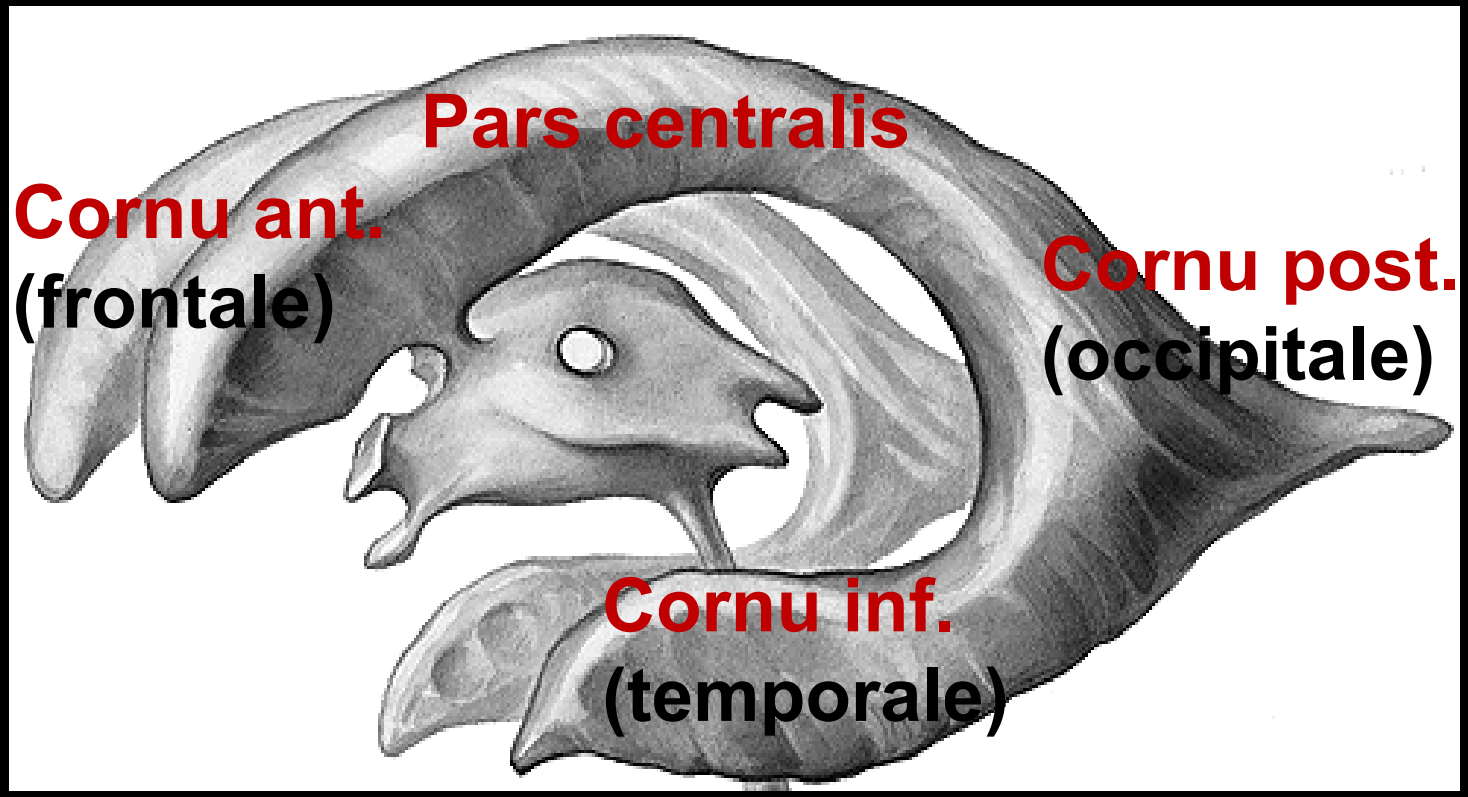
Rec. triangularis



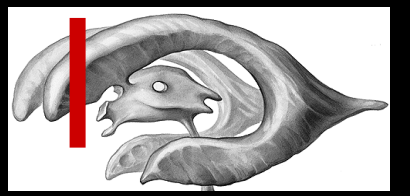
Rec.suprapinealis, pinealis

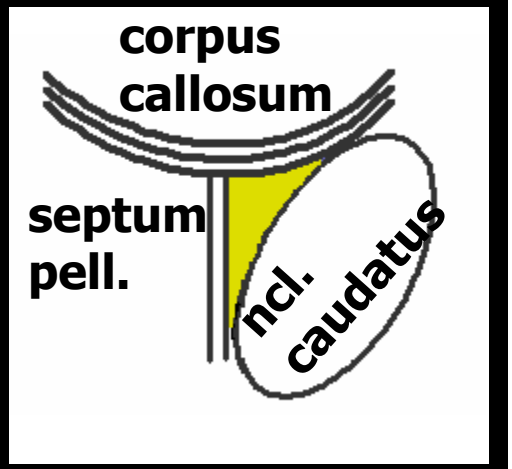
Rec. opticus, infundibuli

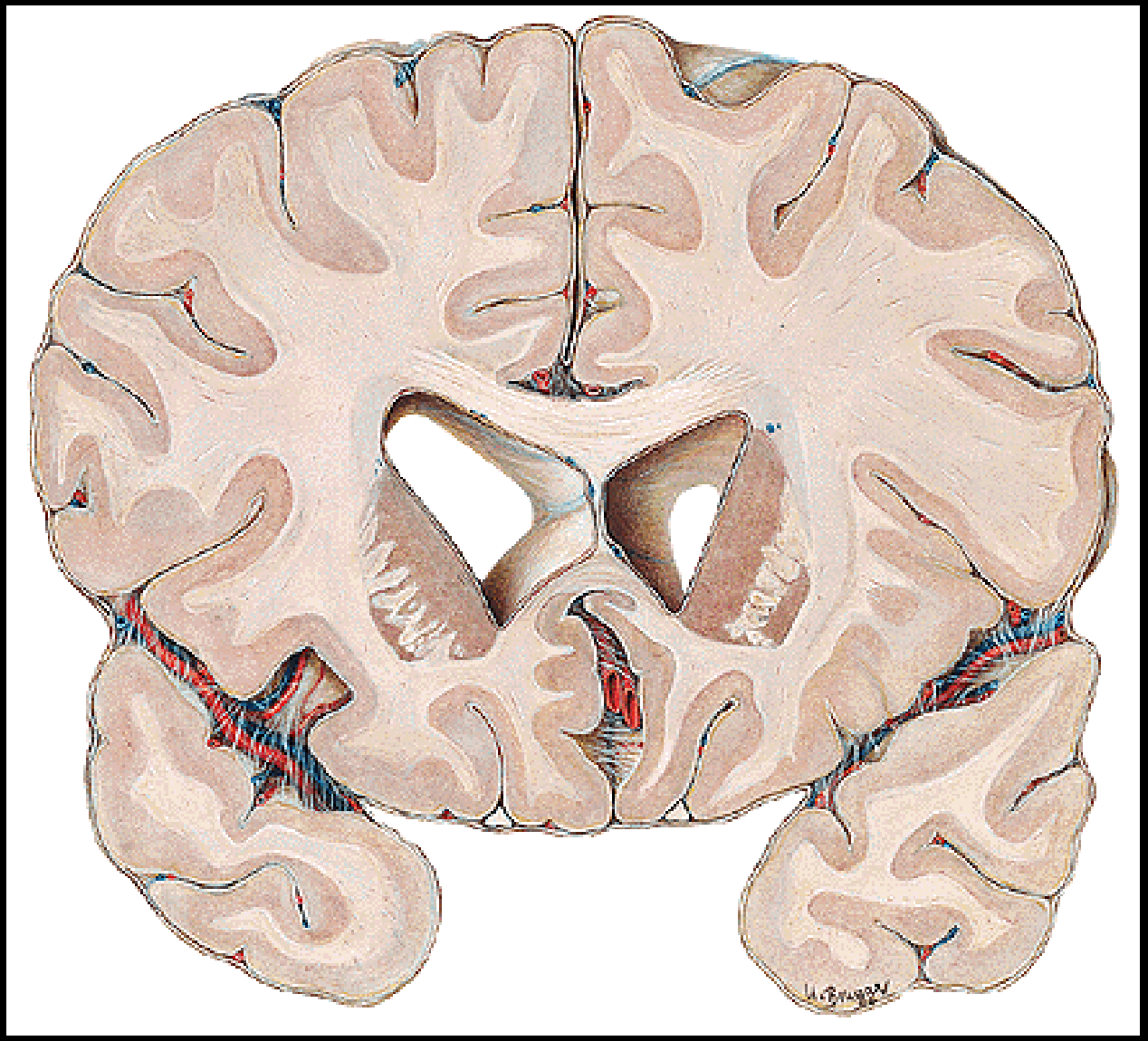
Aqueductus mesencephali

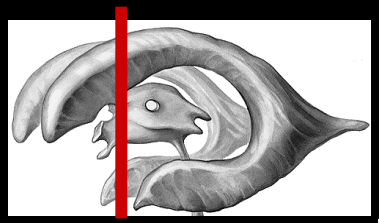

Pars centralis
Cornu ant.
(frontale)
Cornu post.
(occipitale)
Cornu inf.
(temporale)

Cornu anterius

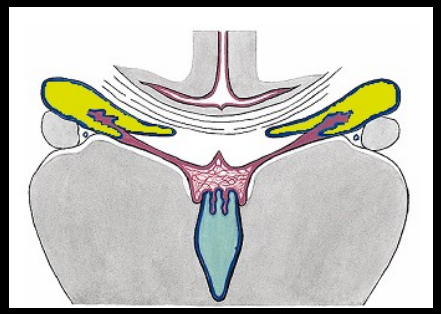


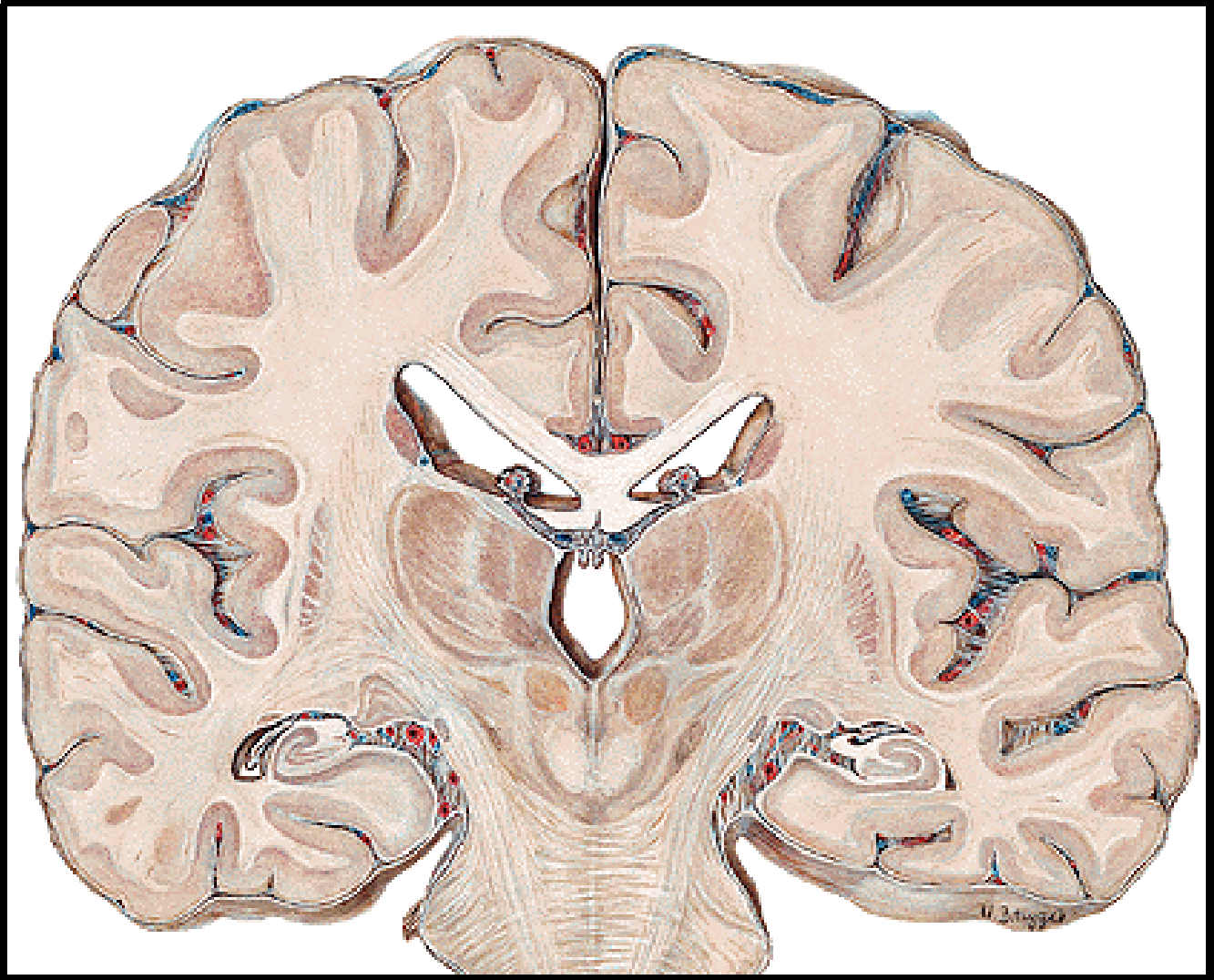




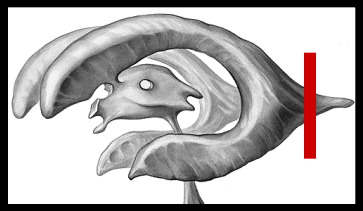


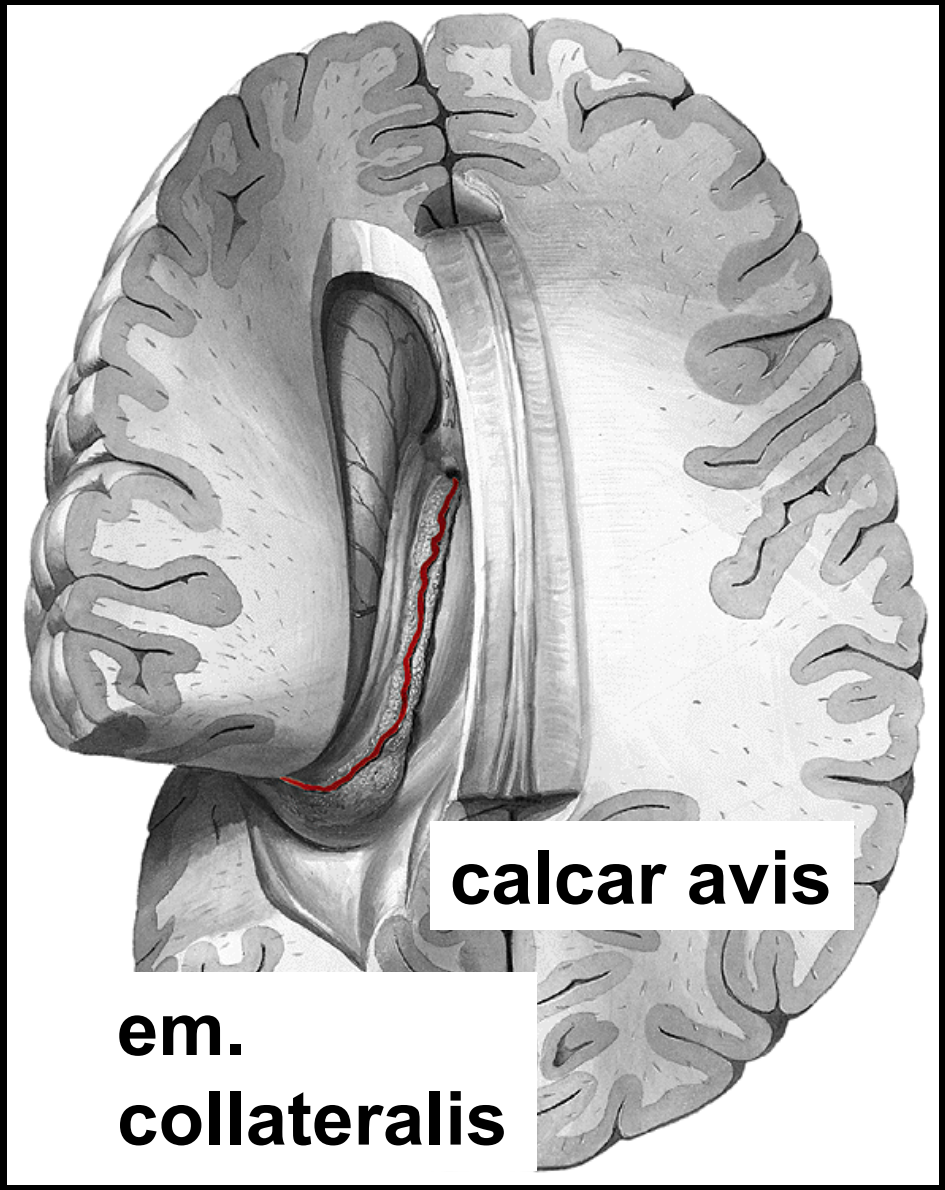
Pars centralis





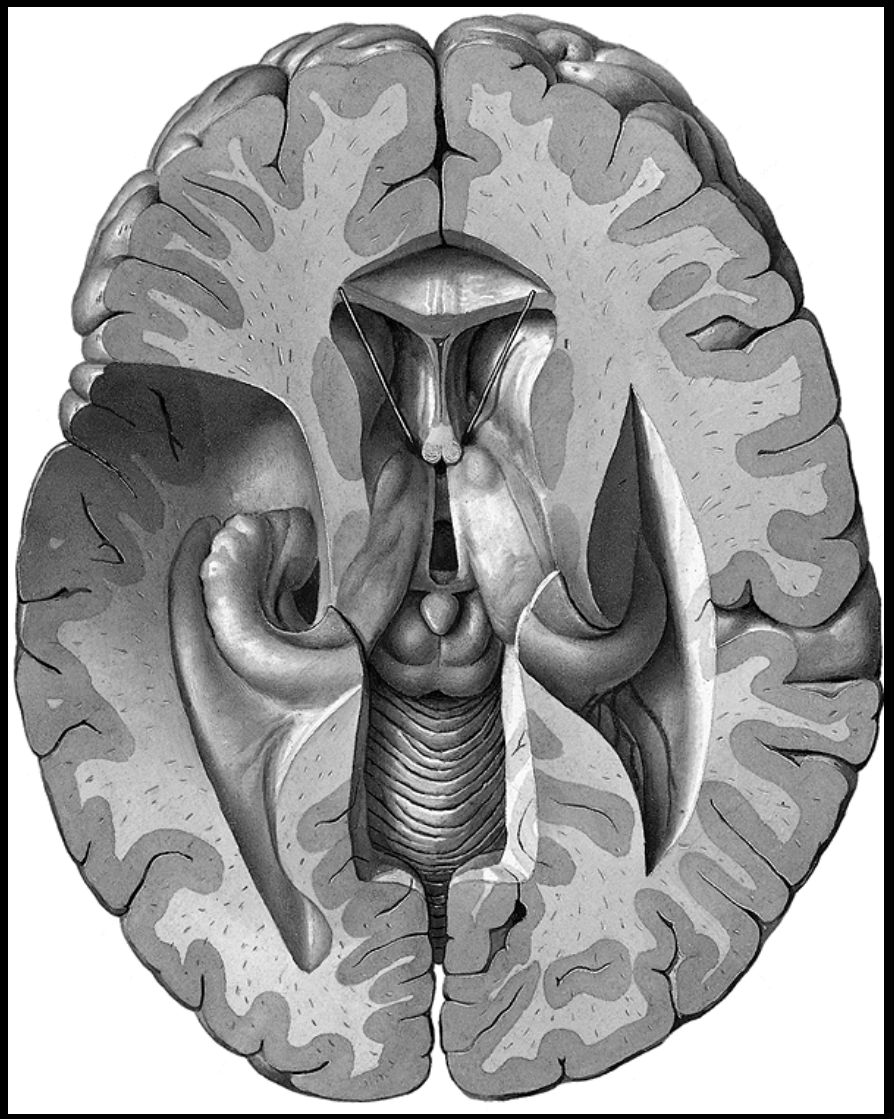
Cornu posterius

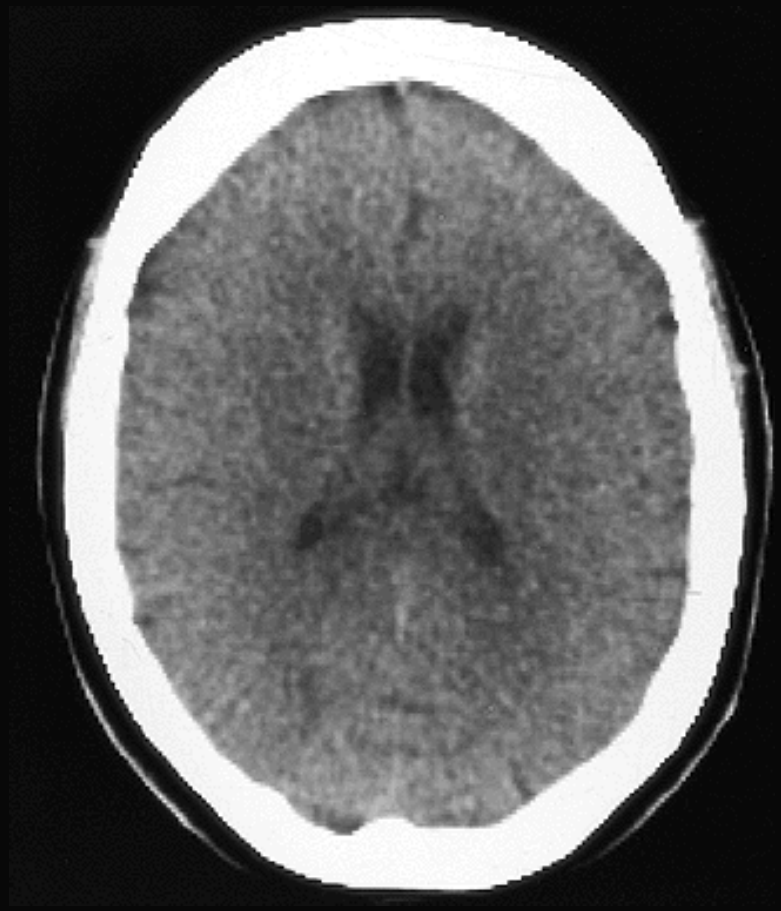




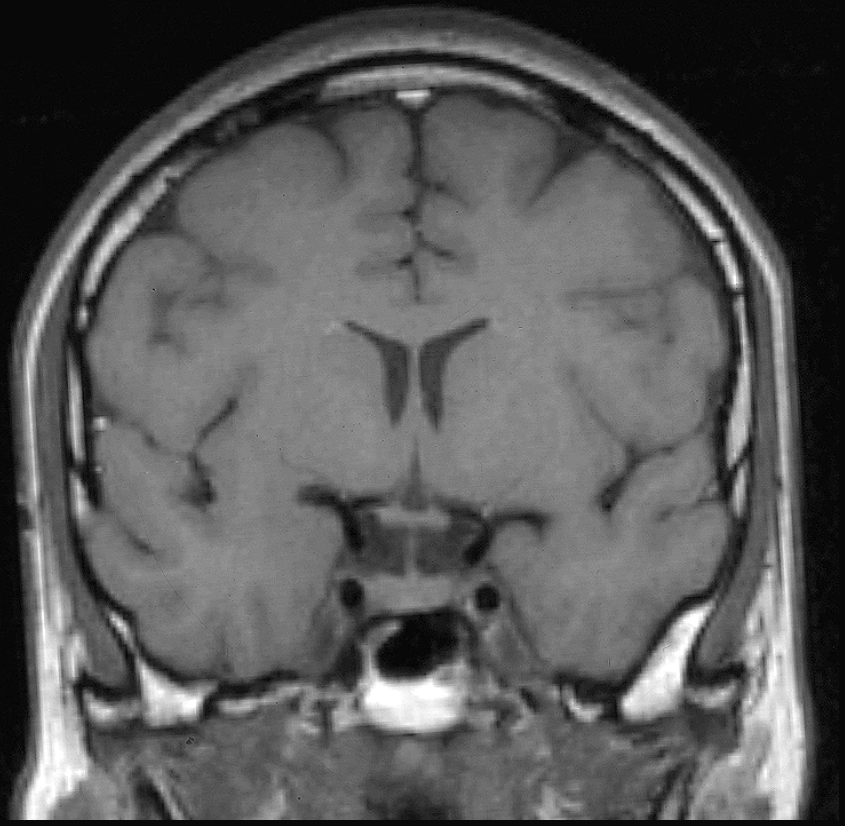
Cornu inferius:

hippocampus
eminentia collateralis
corpus callosum
tela choroidea





CT



MRI

Meninges

Calvaria

Epidural space

Ektomeninx - dura mater: periosteal, meningeal layers (pachymeninx)

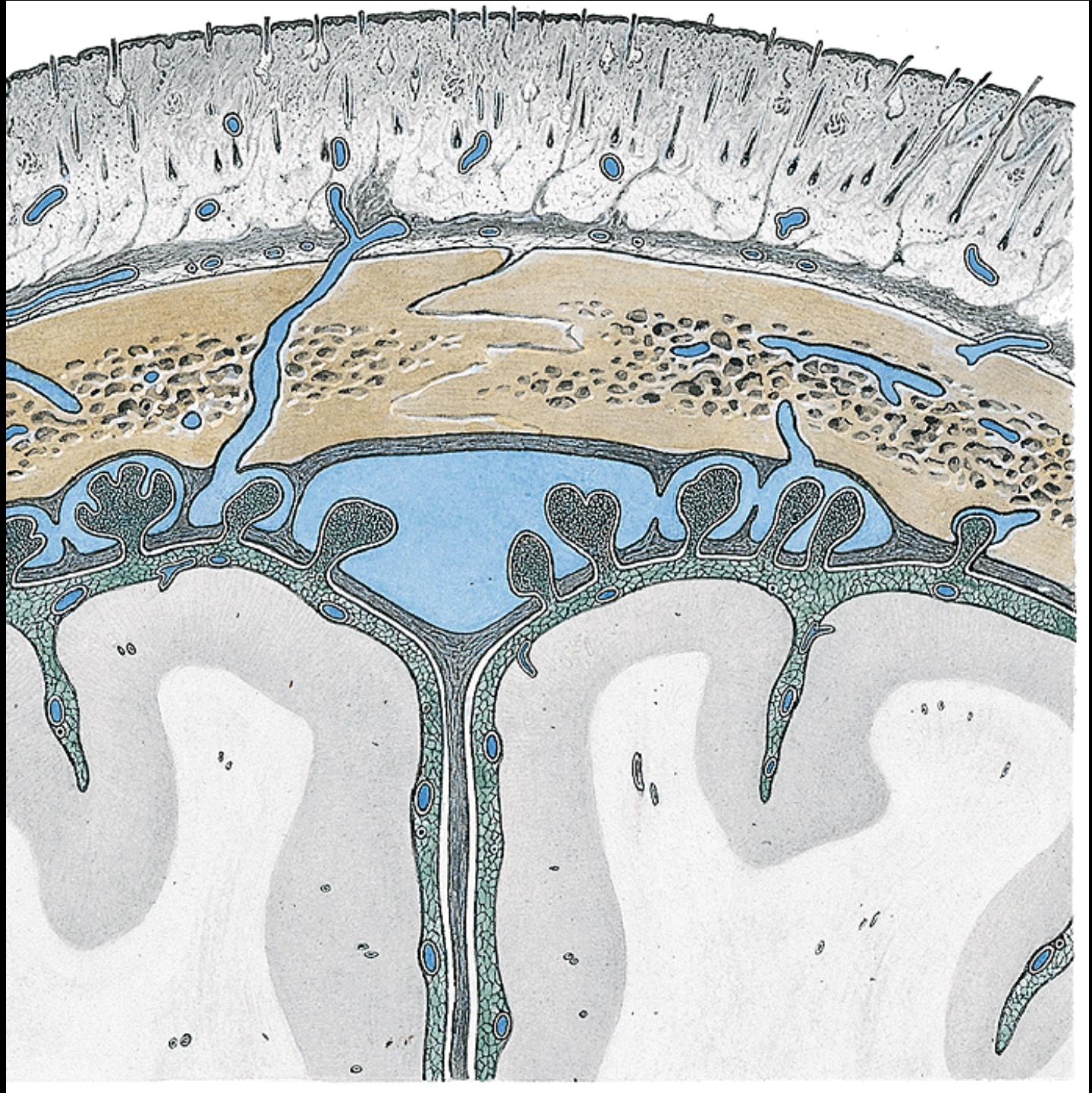
Subdural space

Endomeninx (leptomeninx)

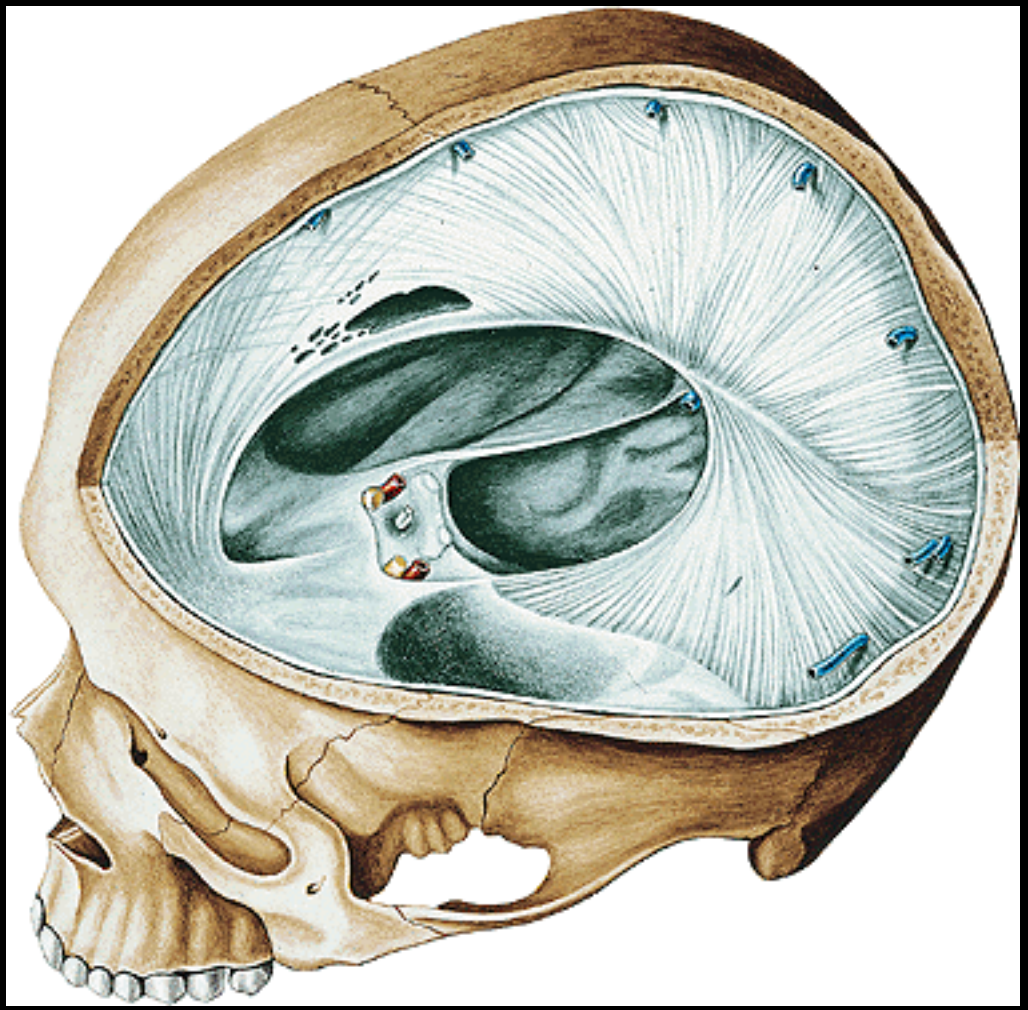
arachnoid mater

Subarachnoid space (CSF)

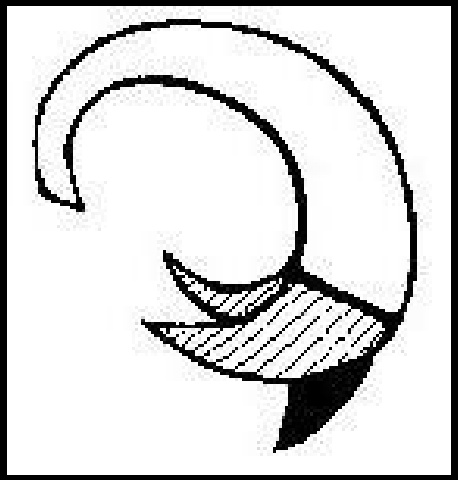
pia mater



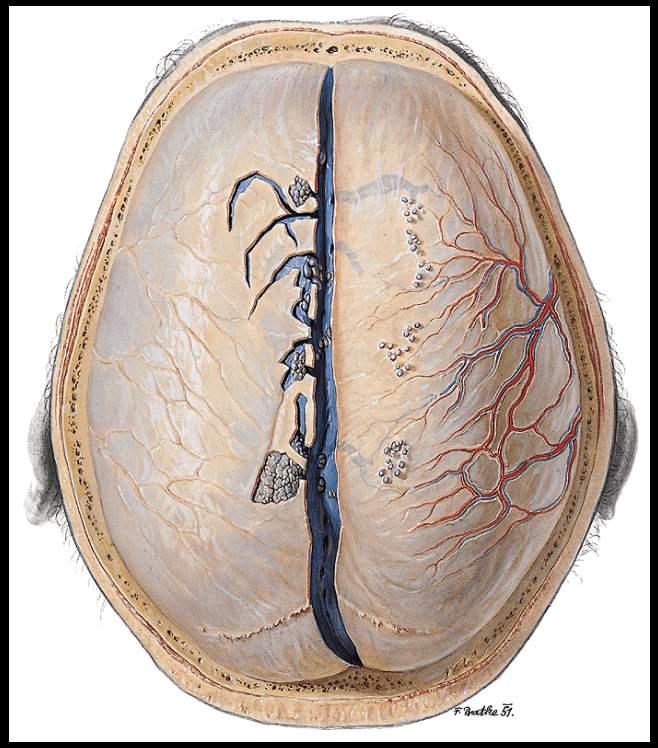
Dural infoldings:



Falx cerebri
Falx cerebelli
Tentorium cereb.
Diaphragma sellae
Cavum trigeminale
Vagina n. optici

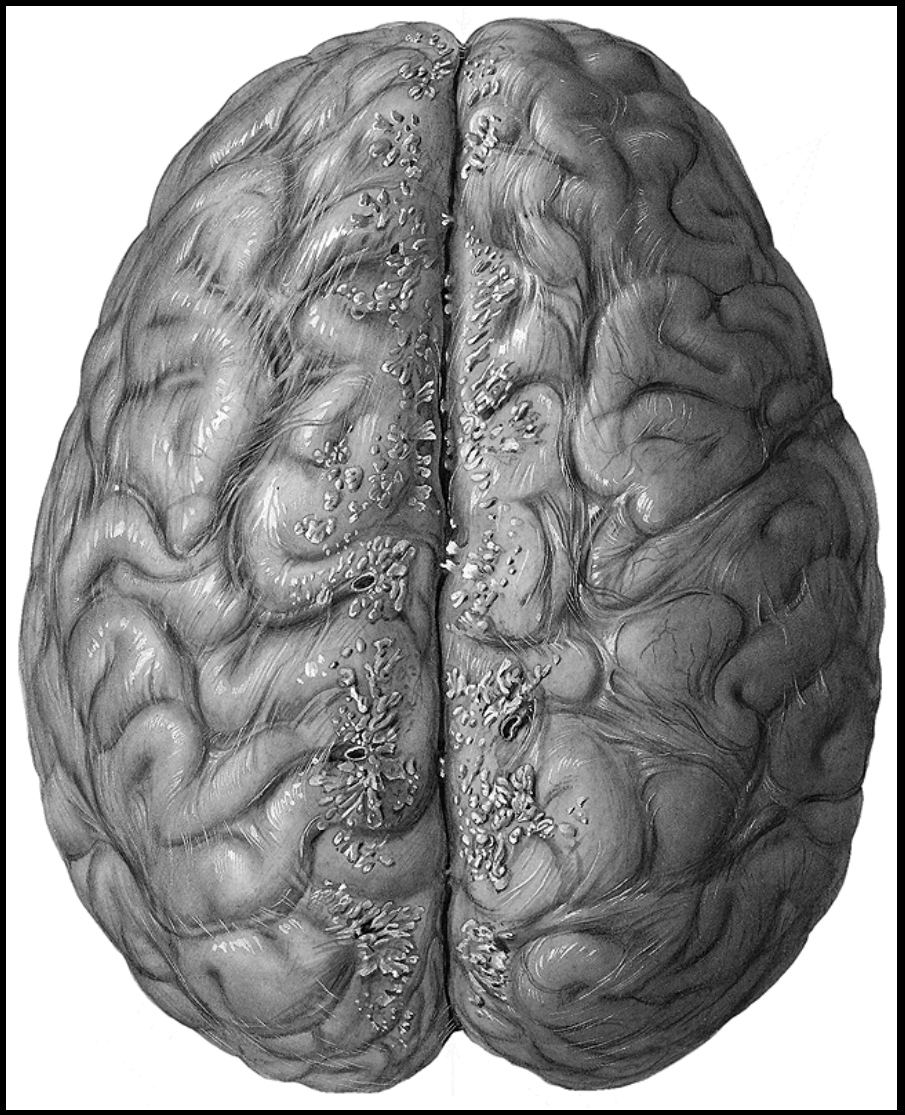


Supply of the dura mater:



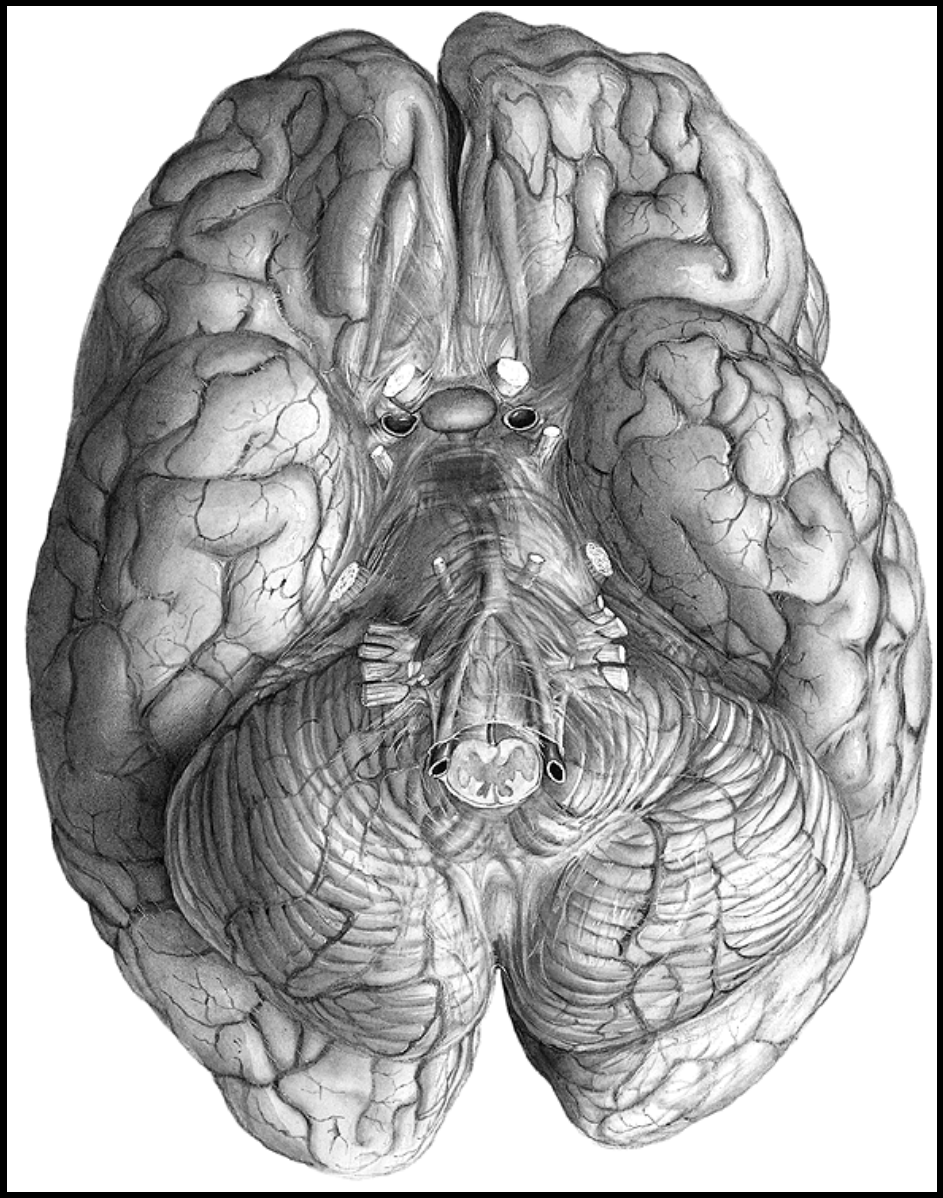
Aa. meningeae
Branches from:
a. ethm. ant. – anterior cranial fossa
a. maxillaris – middle cranial fossa
a. phar. asc. – posterior cranial fossa

CN V: supratentorial compartment
C2, C3, CN X, XII: infratentorial compartment



Granulationes arachnoideales – protrude through the meningeal layer of the dura into the venous sinuses – transfer of CSF to the venous system

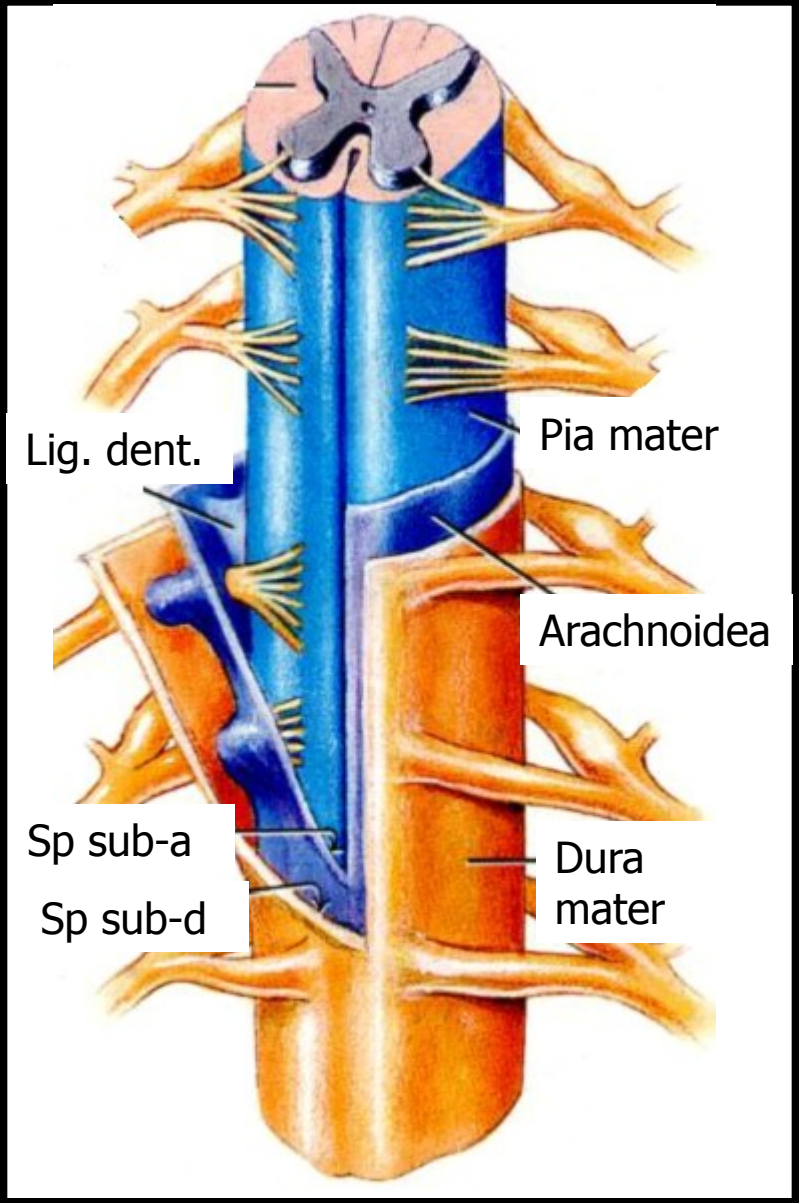
Pia mater



Subarachnoid cisterns :

- chiasmatic
- fossae lat. cerebri
- interpeduncular
- ambient
- quadrigeminal
- pontocerebellar
- cerebellomedullary

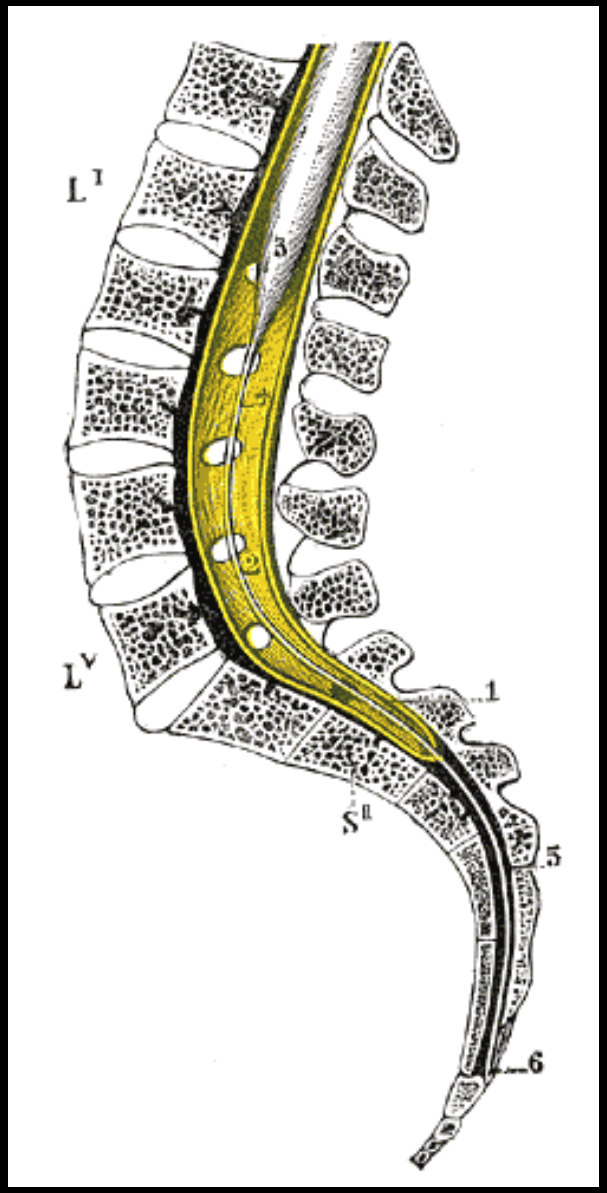
Meninges of the spinal cord



Epidural space
Dura mater spinalis

Subdural space
Arachnoidea spinalis

Subarachnoid space
Pia mater spinalis:
lig. denticulatum



Cisterna lumbalis

Medullary cone: L1-2

Dural sac: S2-3

Lumbar puncture (spinal tap)

Liquor cerebrospinalis (CSF)

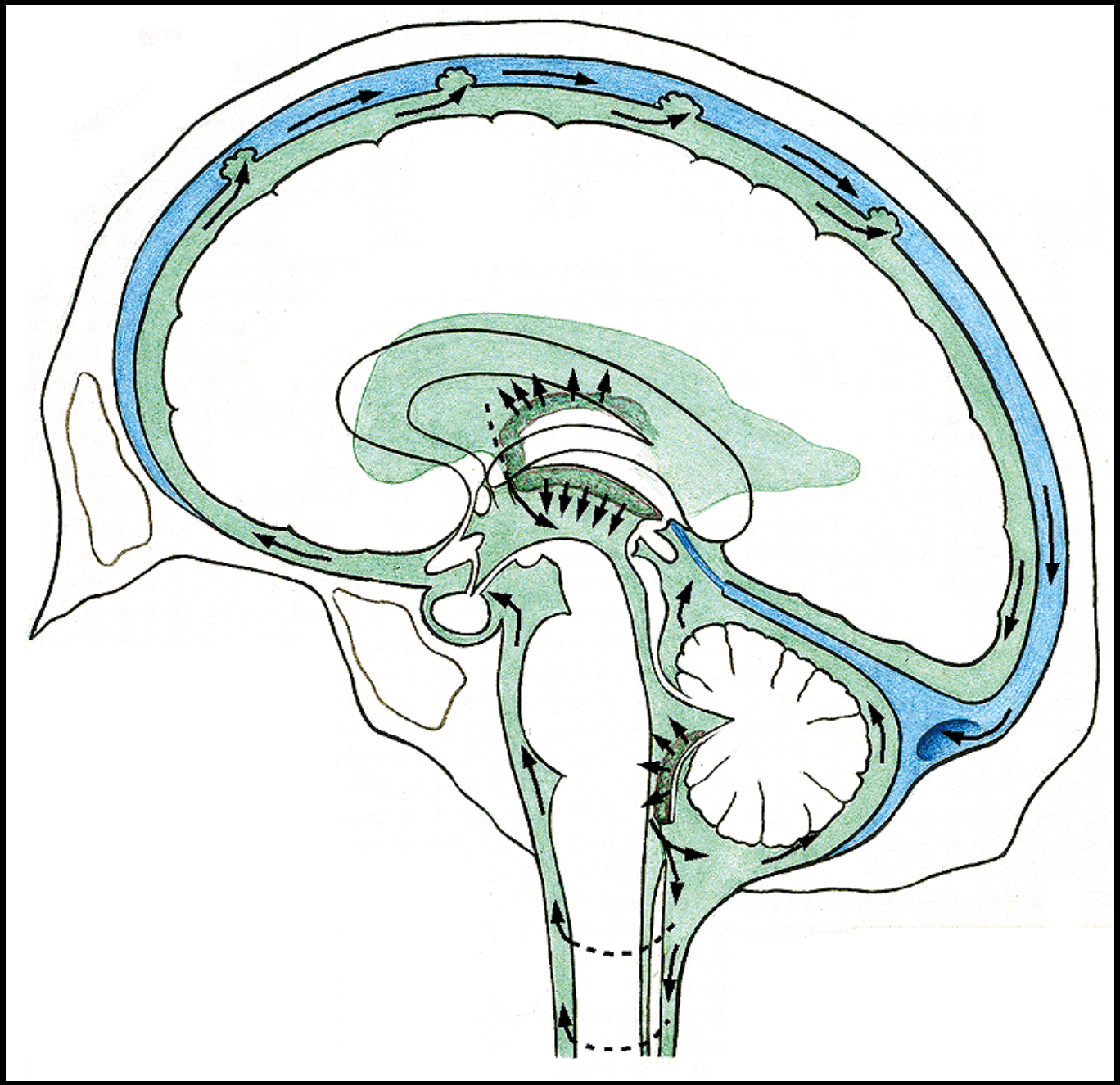
Clear, colorless fluid,150 mL, secreted at the rate of 400-500 mL daily

Produced by the choroid plexuses of ventricles

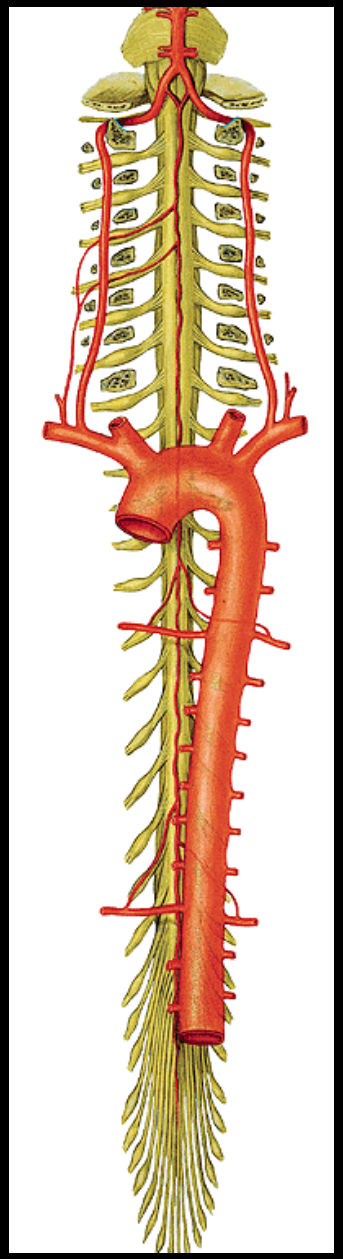
Protects the brain, prevents the weight of the brain from compressing the nerves and vessels against the cranium.

Circulation:

Lateral ventricles – for. interventriculare – 3rd ventricle – aquaqeductus cerebri – 4th ventricle – median and lat. apertures – subarachnoid space – sinus durae matris



Hydrocephalus



Arteries of the CNS

Spinal cord

Rr. spinales

a. cervicalis asc.

a. vertebralis

a. cervicalis prof.

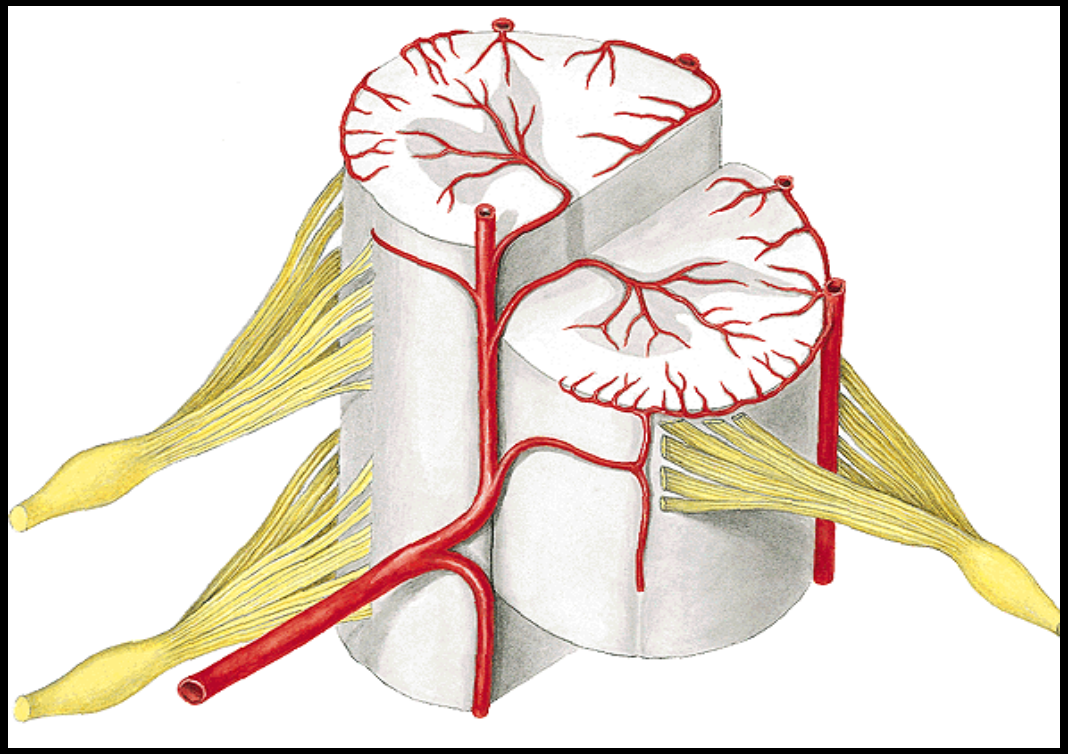
aa. intercostales post.

aa. lumbales

a. iliolumbalis

a. sacralis lat.

a. sacralis mediana



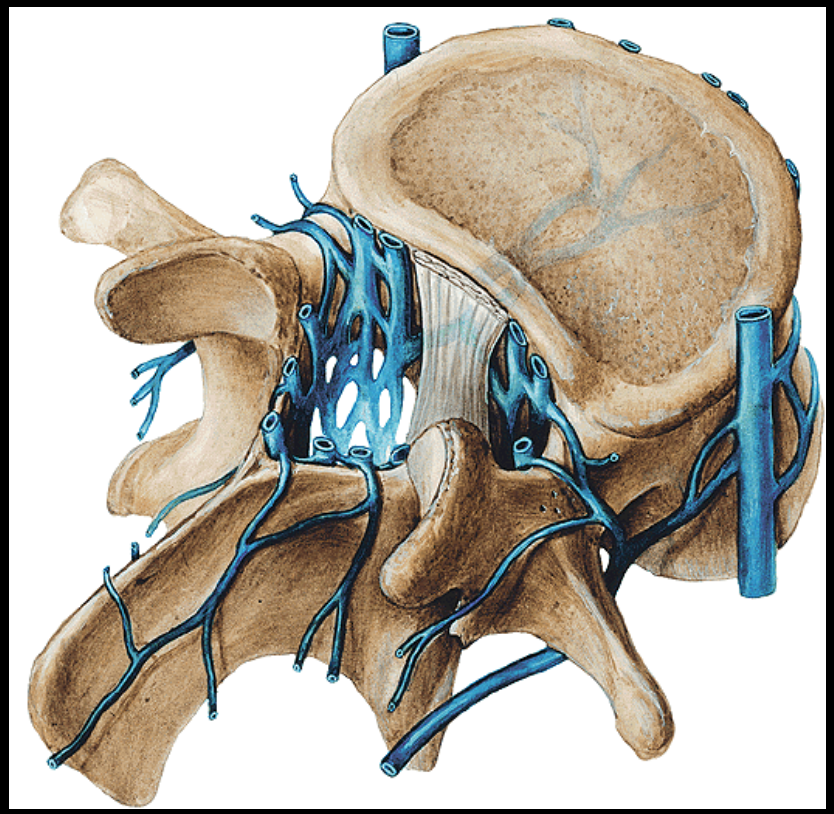
Rr. spinales:

aa. radiculares ant. et post.:

a. spinalis ant. (fissura med. ant.)

aa. spinales post. (sulcus lat. post.)

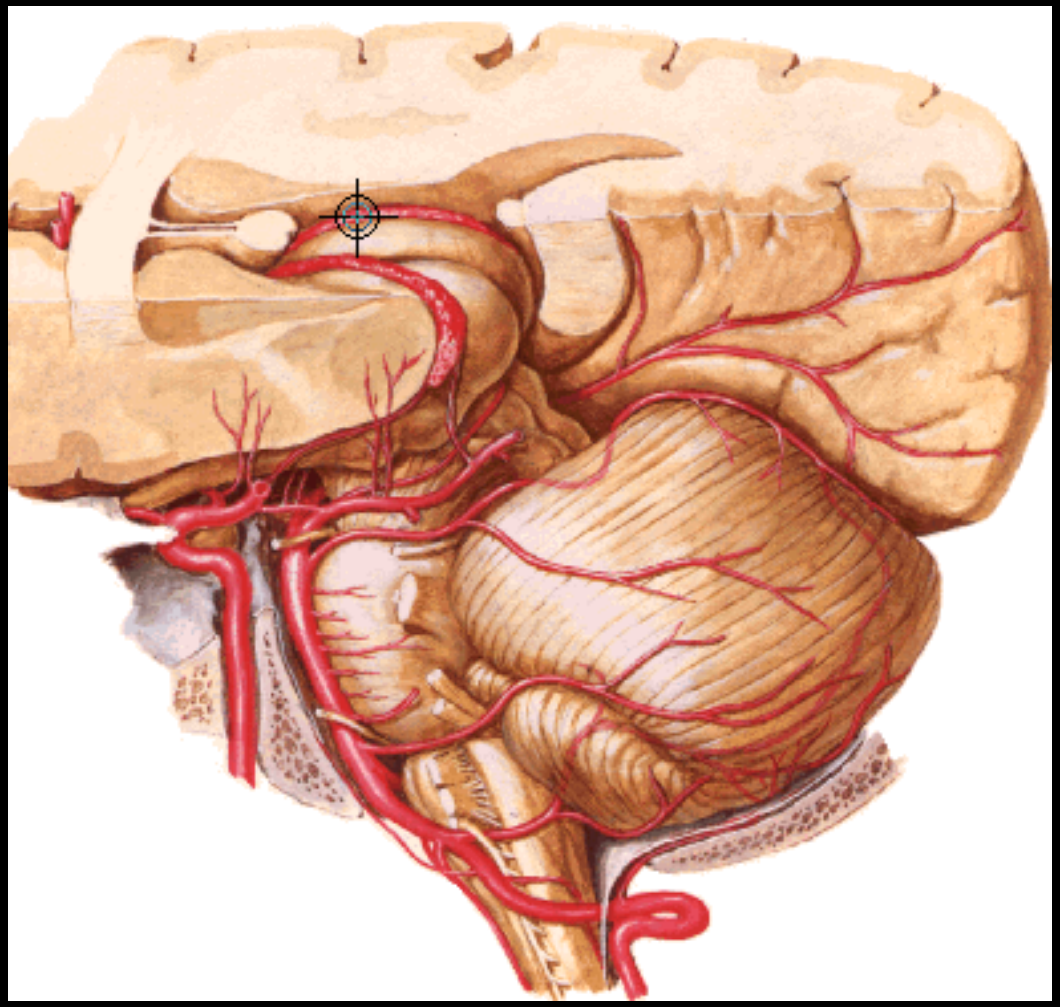
Vv. spinales



Plx. venosi vertebr. int.
> vv. intervertebrales
> plx. venosi verteb. ext.
> plx. suboccipitalis
> vv. vertebrales

vv. cervicales prof.
vv. intercostales
vv. lumbales
vv. sacrales lat.

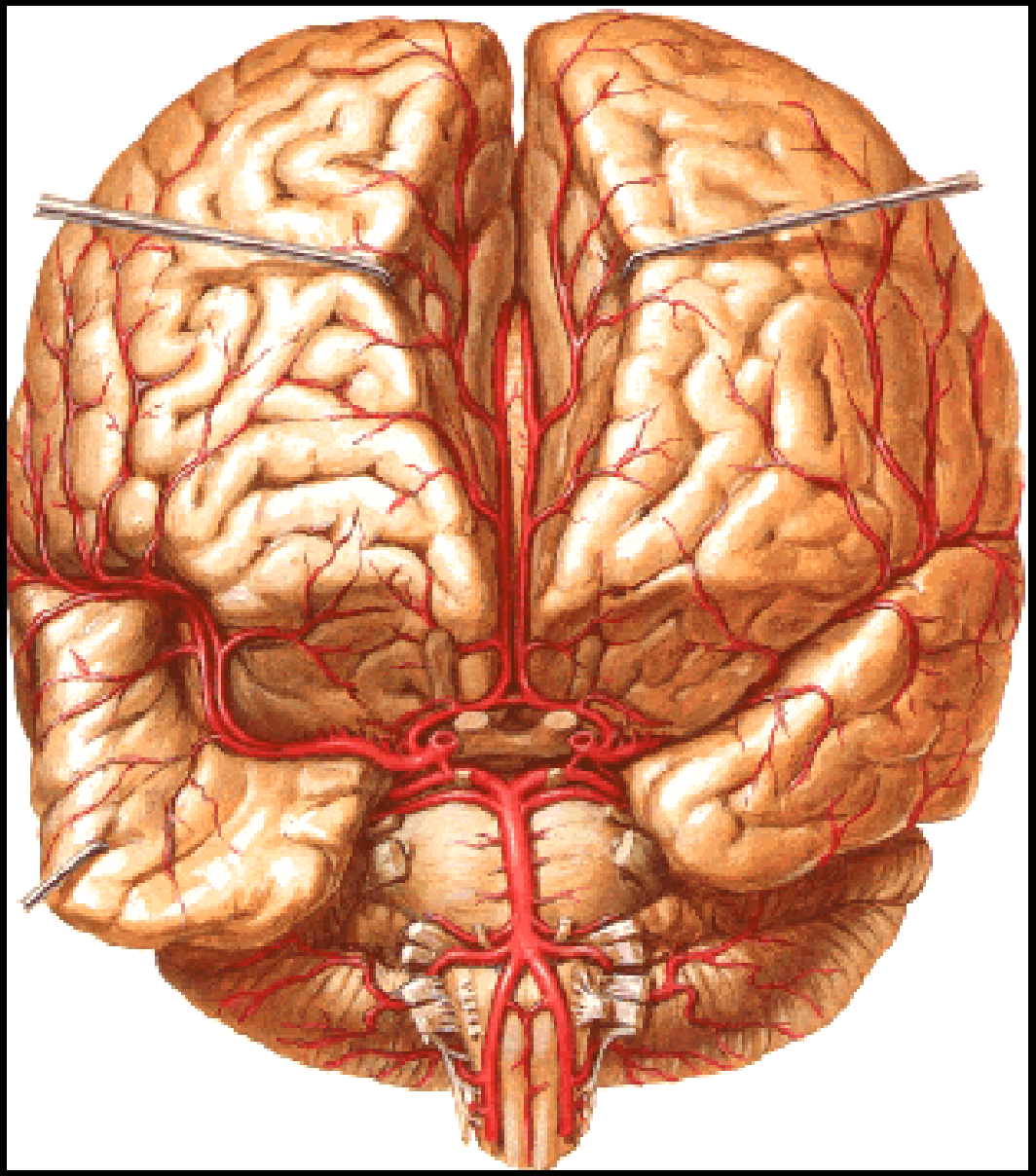
Brainstem, cerebellum



Aa. cerebri post.
Aa. cerebelli sup.
Aa. pontis
Aa. cerebelli inf. ant.
A. basilaris

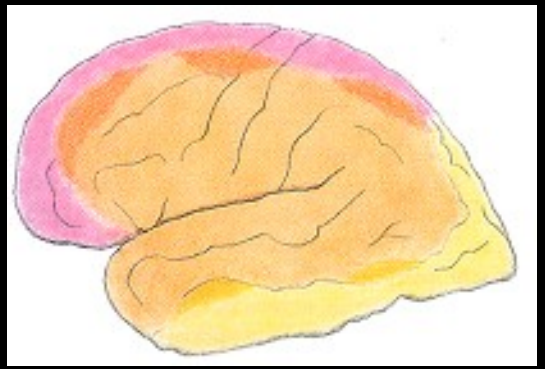
Aa. cerebelli inf. post.
Rr. ad med. oblong.
Aa. spin. ant. et post.
Aa. vertebrales

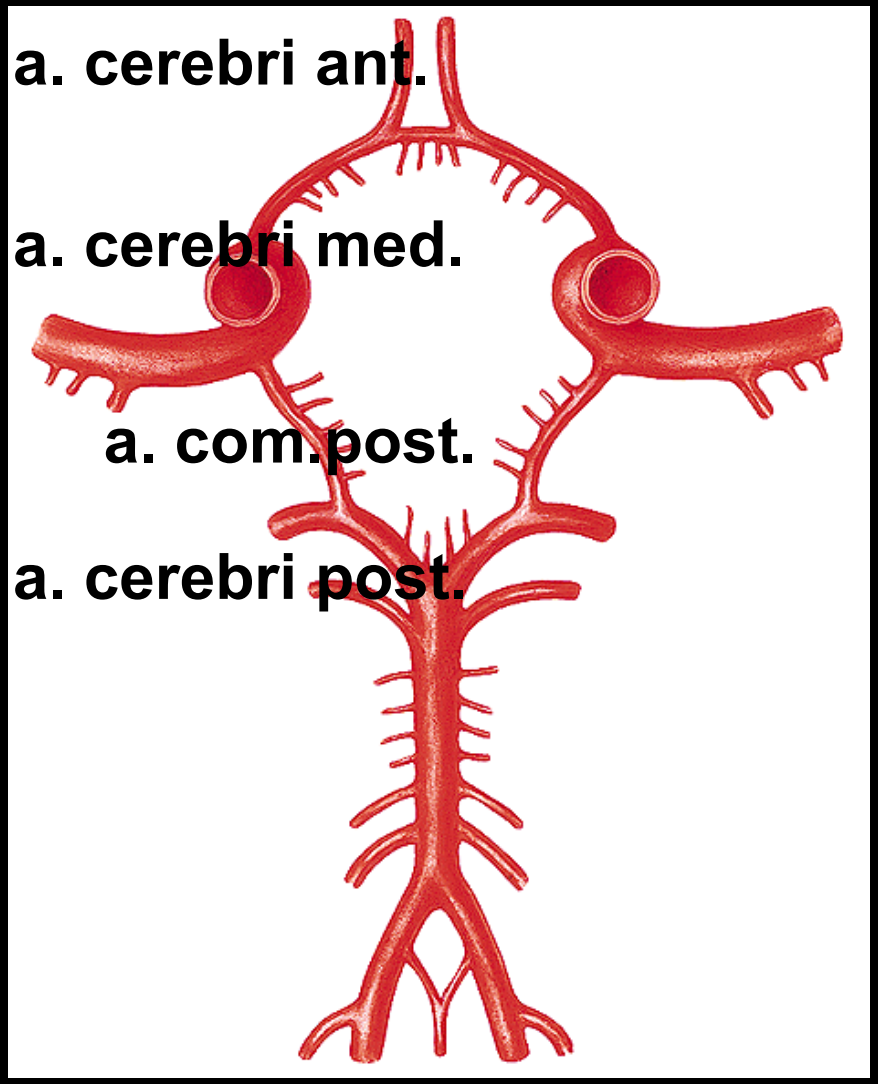
Brain

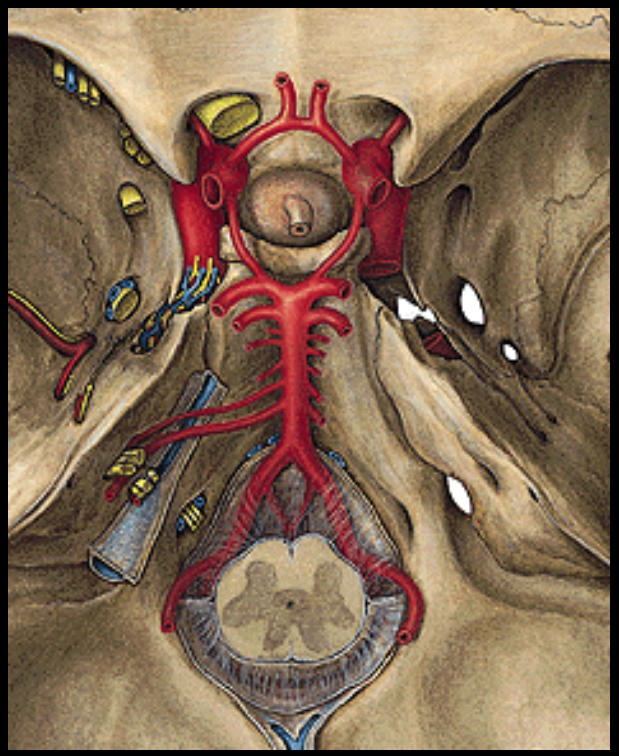


Aa. cerebri:

anterior (A. car. int.)
media (A. car. int.)
posterior (A. basil.)

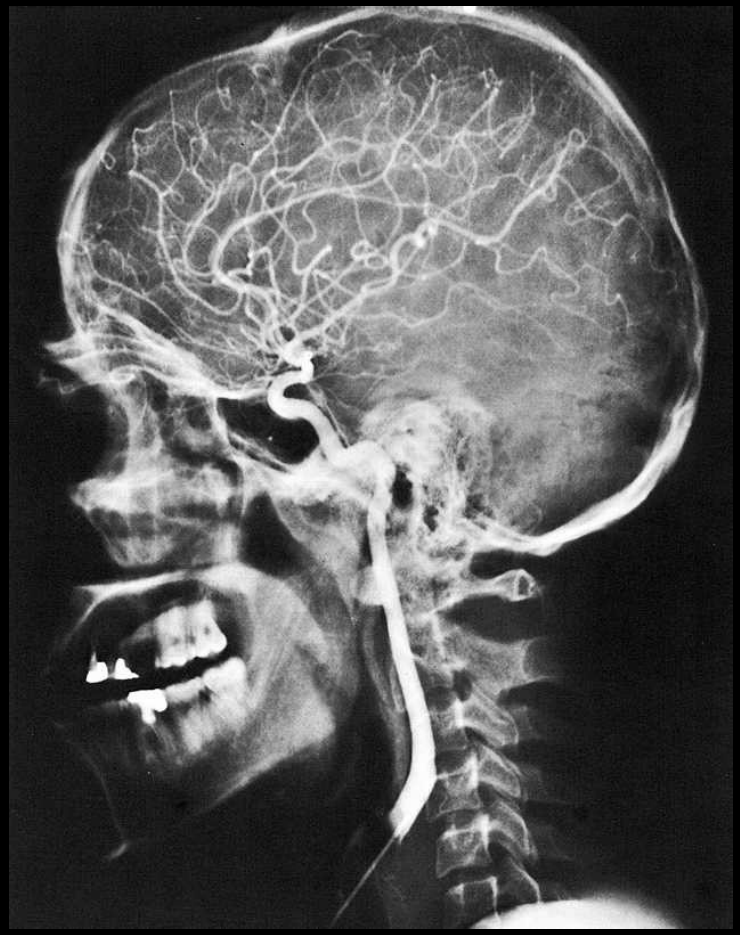


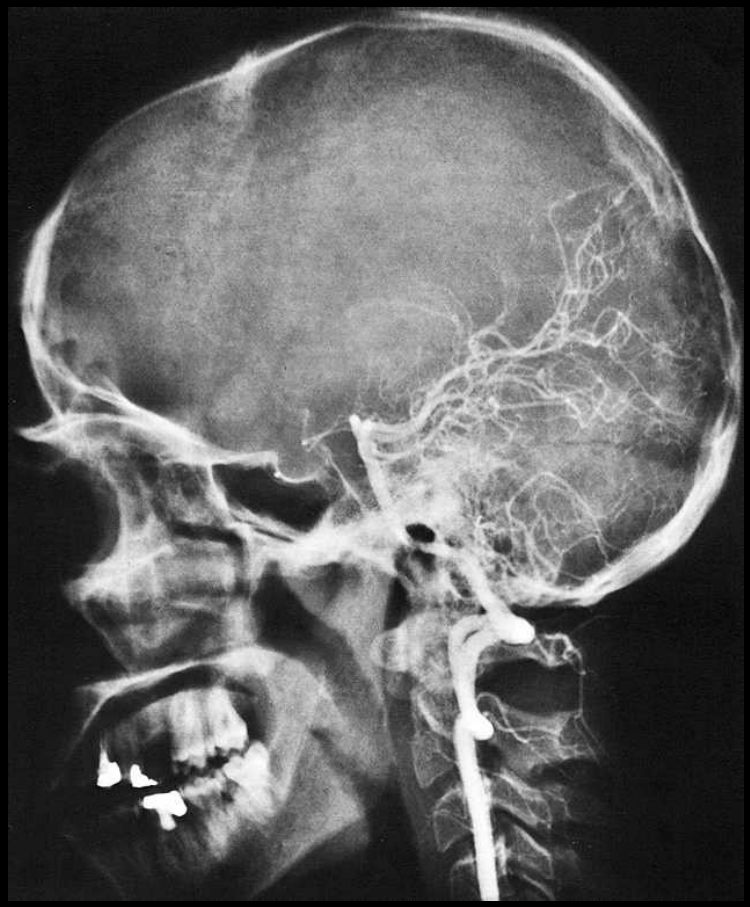


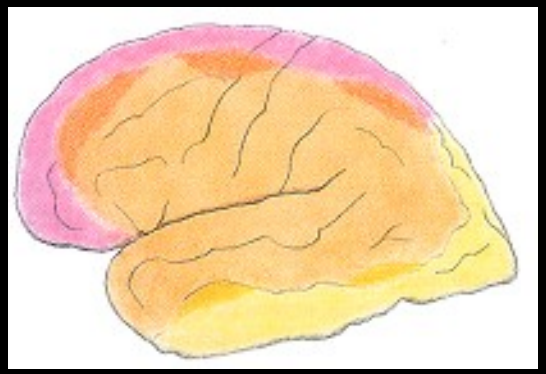


Circulus arteriosus

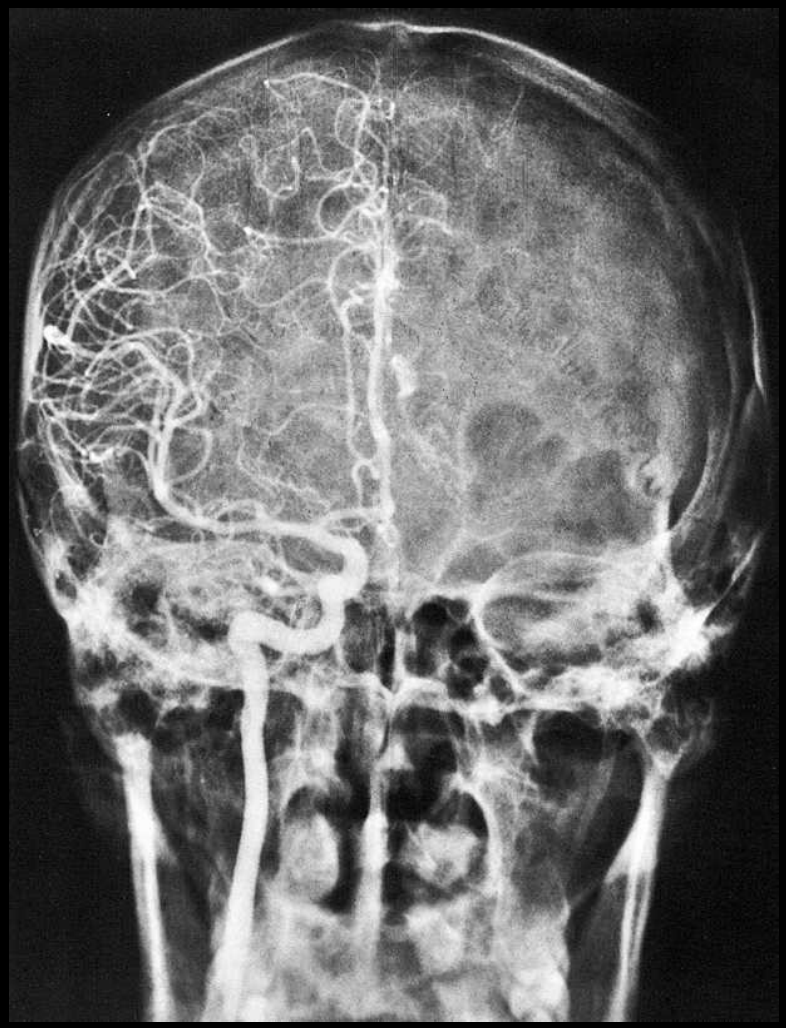
- Aa. corticales
- Aa. centrales
- Aa. choroideae

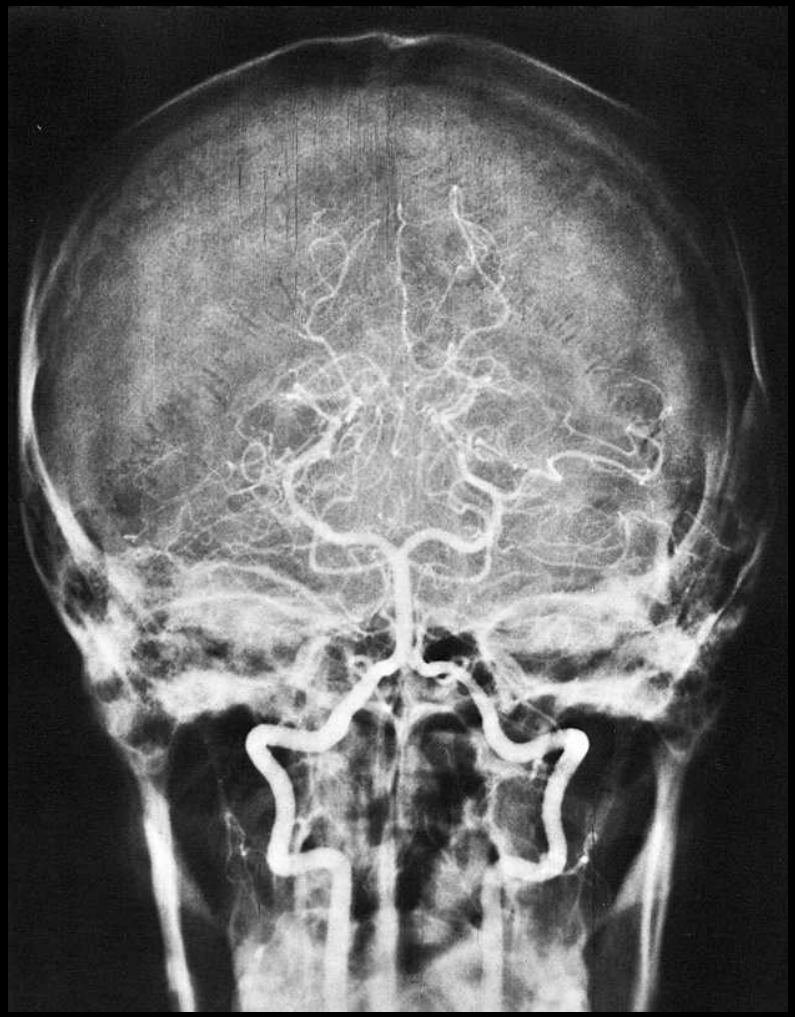






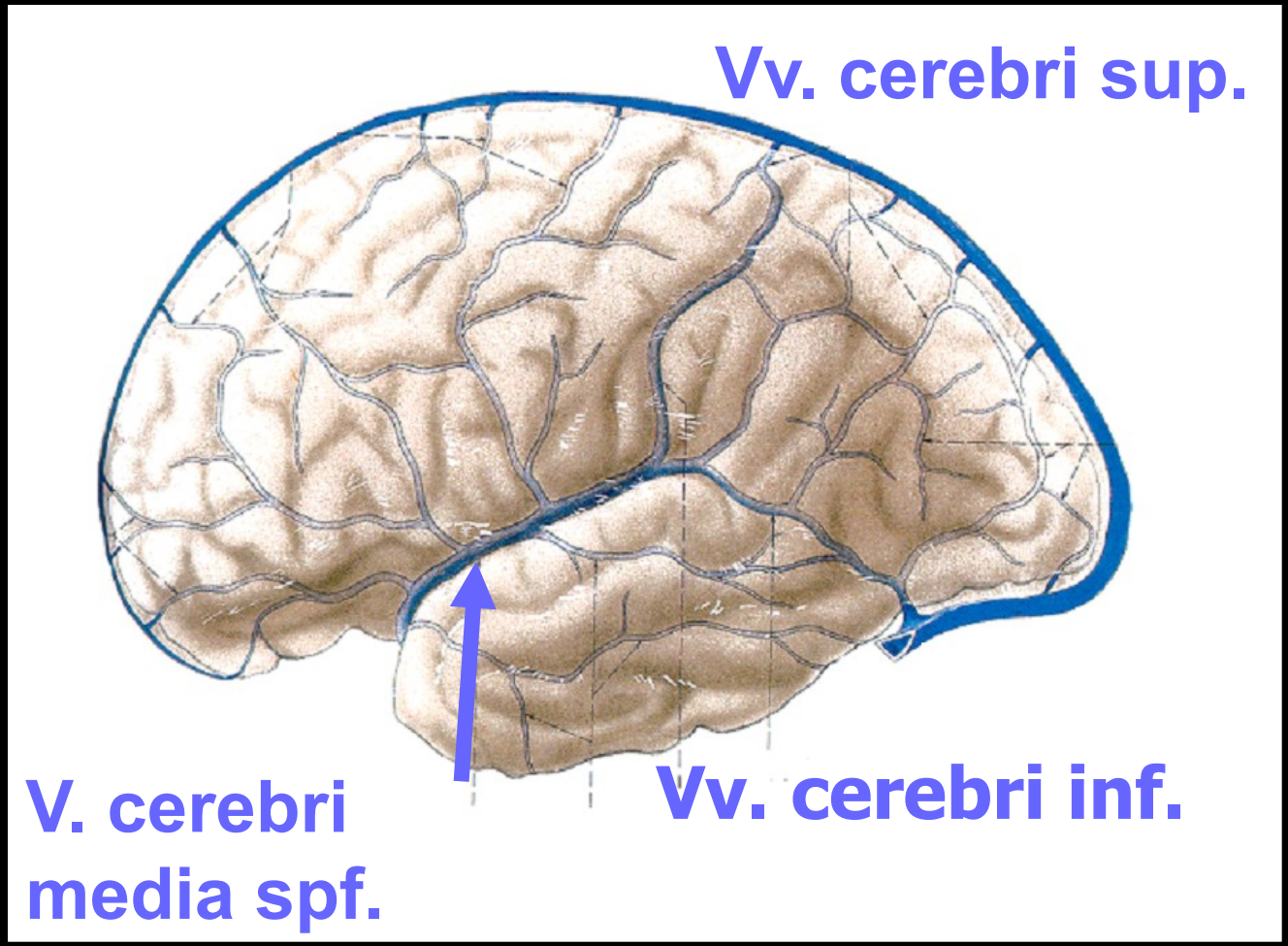
anterior
media
posterior

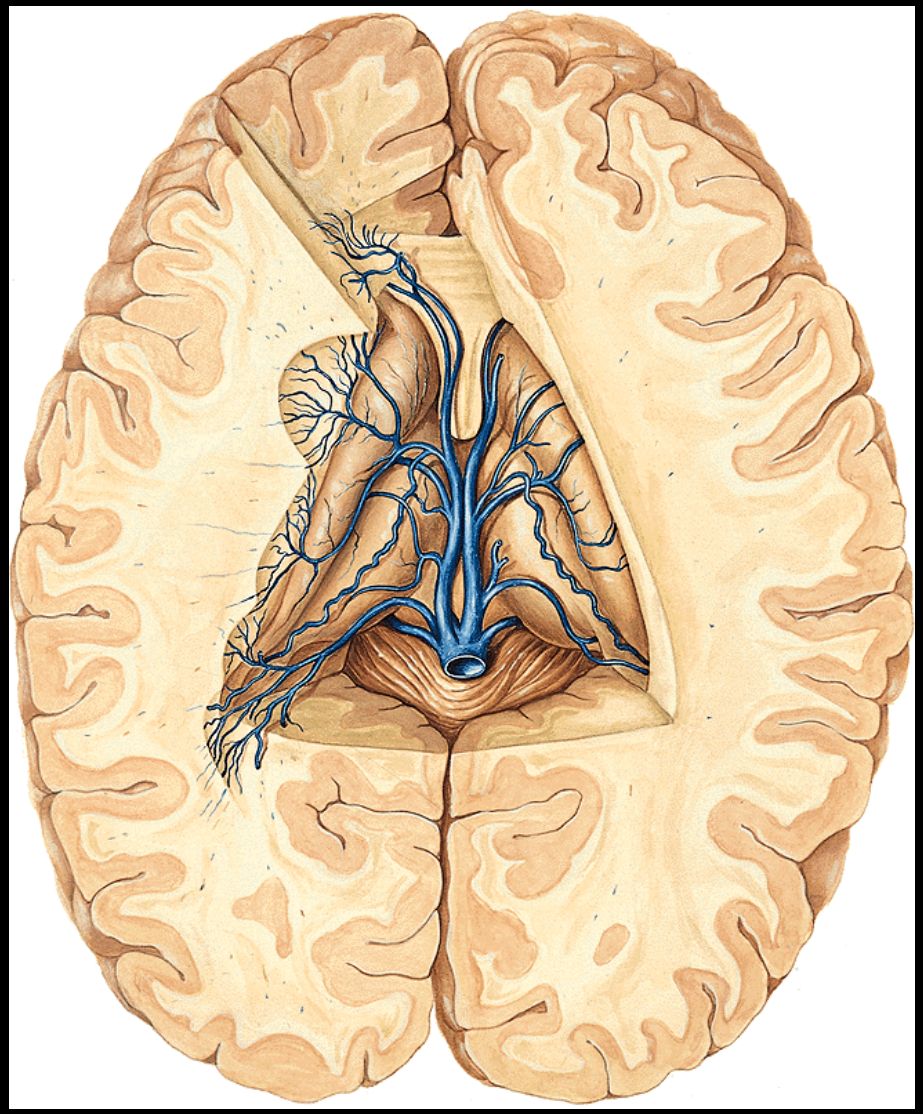




Veins of the brain

- superficial





deep veins

1. vv. septi pellucidi
2. vv. thalamostr. sup.
3. vv. choroideae sup.

↓

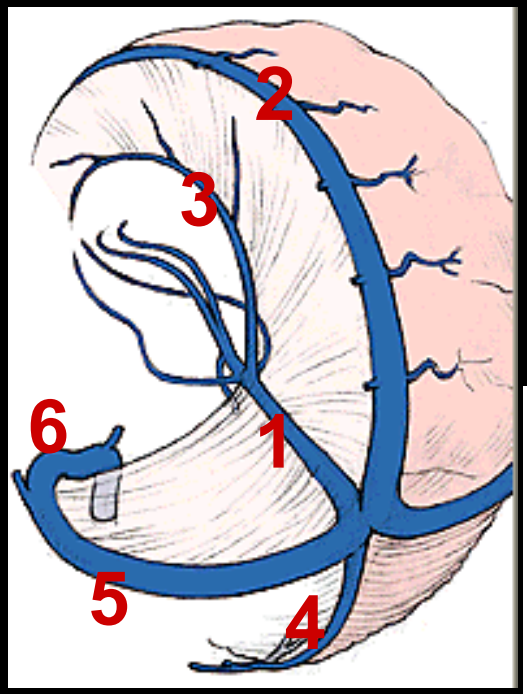
= Vv. cerebri int.
+ Vv. cer. med. prof.
+ Vv. basales

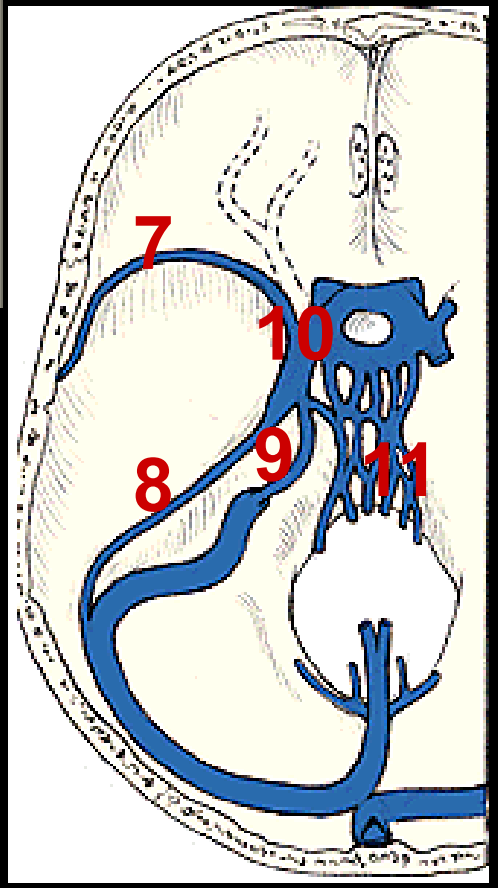
V. magna cerebri

↓

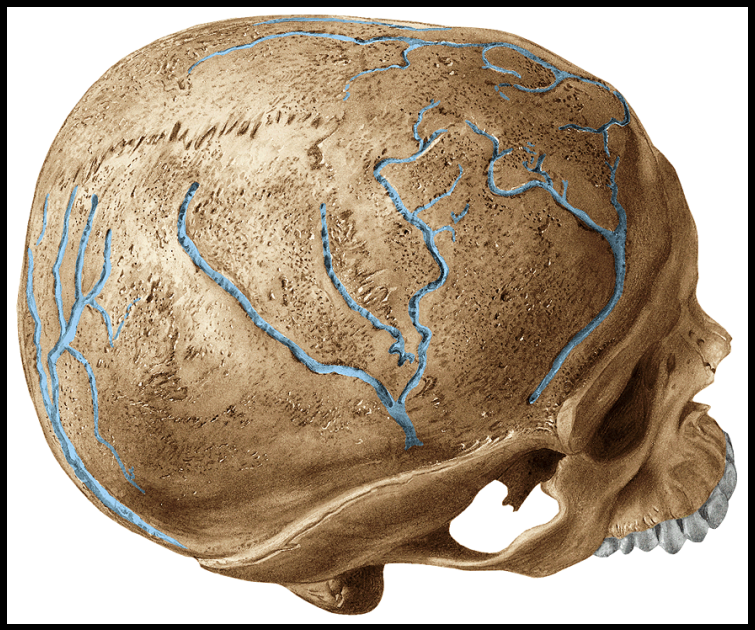
Sinus rectus

Sinus durae matris



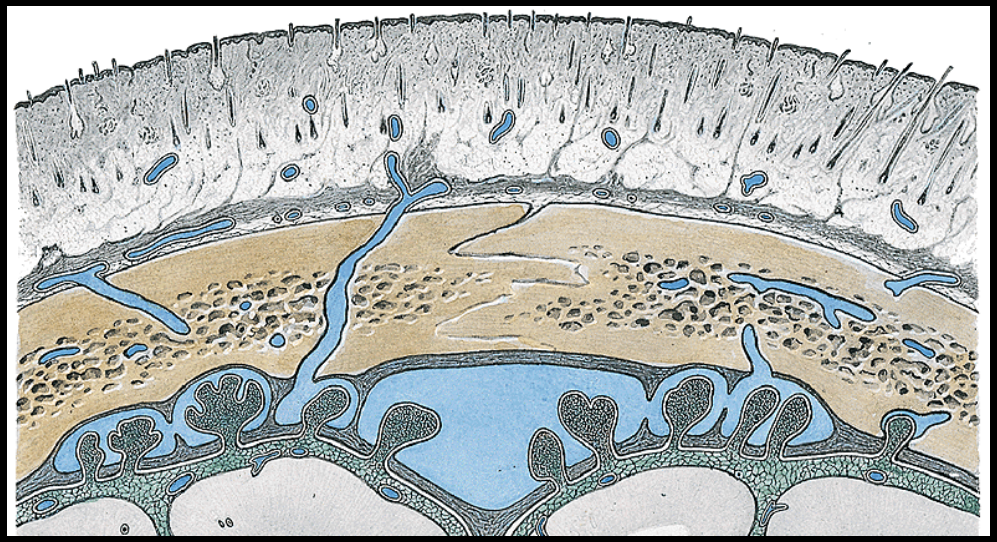


1 rectus
2 sagittalis sup.
3 sagittalis inf.
4 occipitalis
5 transversus
6 sigmoideus
7 sphenoparietalis
8 petrosus sup.
9 petrosus inf.
10 cavernosus
11 plx. basilaris



Tributaries of sinuses

Vv. ophtalmicae
Vv. labyrinthi
Vv. meningeae
Vv. diploicae



Vv. emissariae