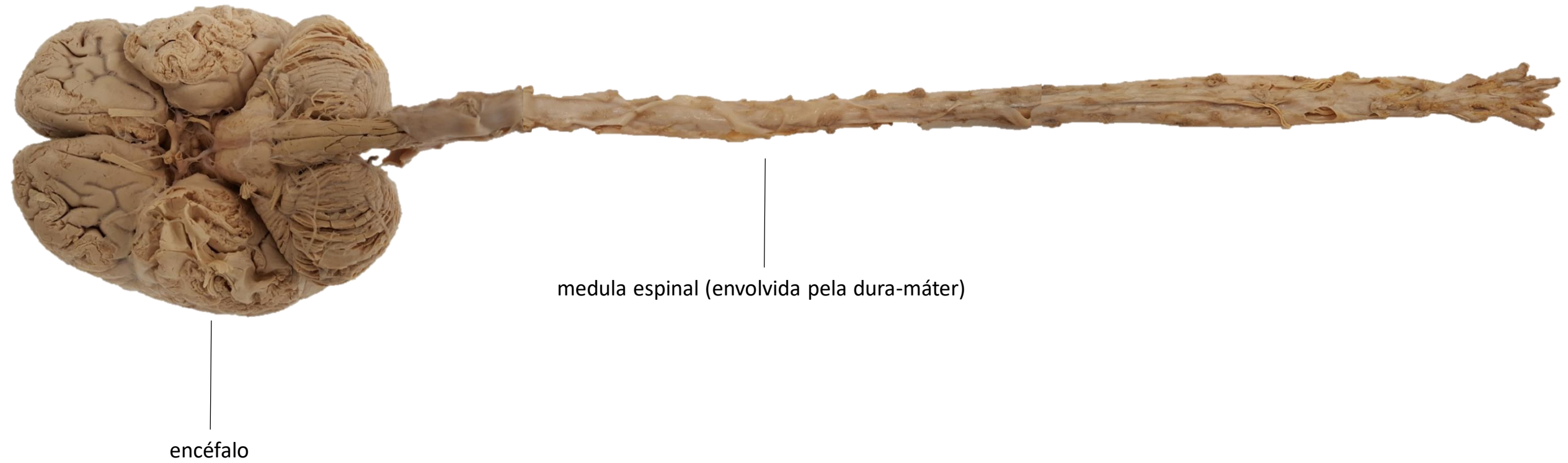


NEUROANATOMIA atlas

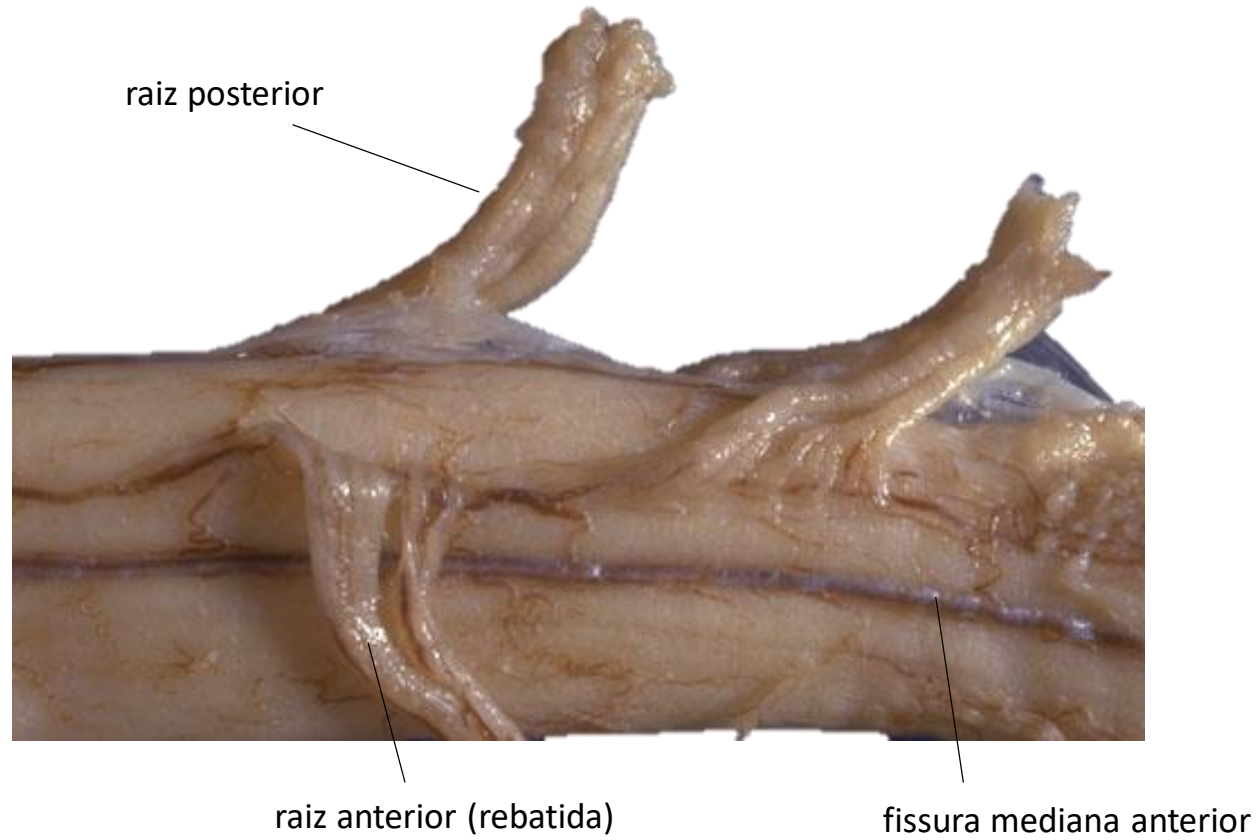
Profa. Dra. Luiza da Silva Lopes

Medula espinal

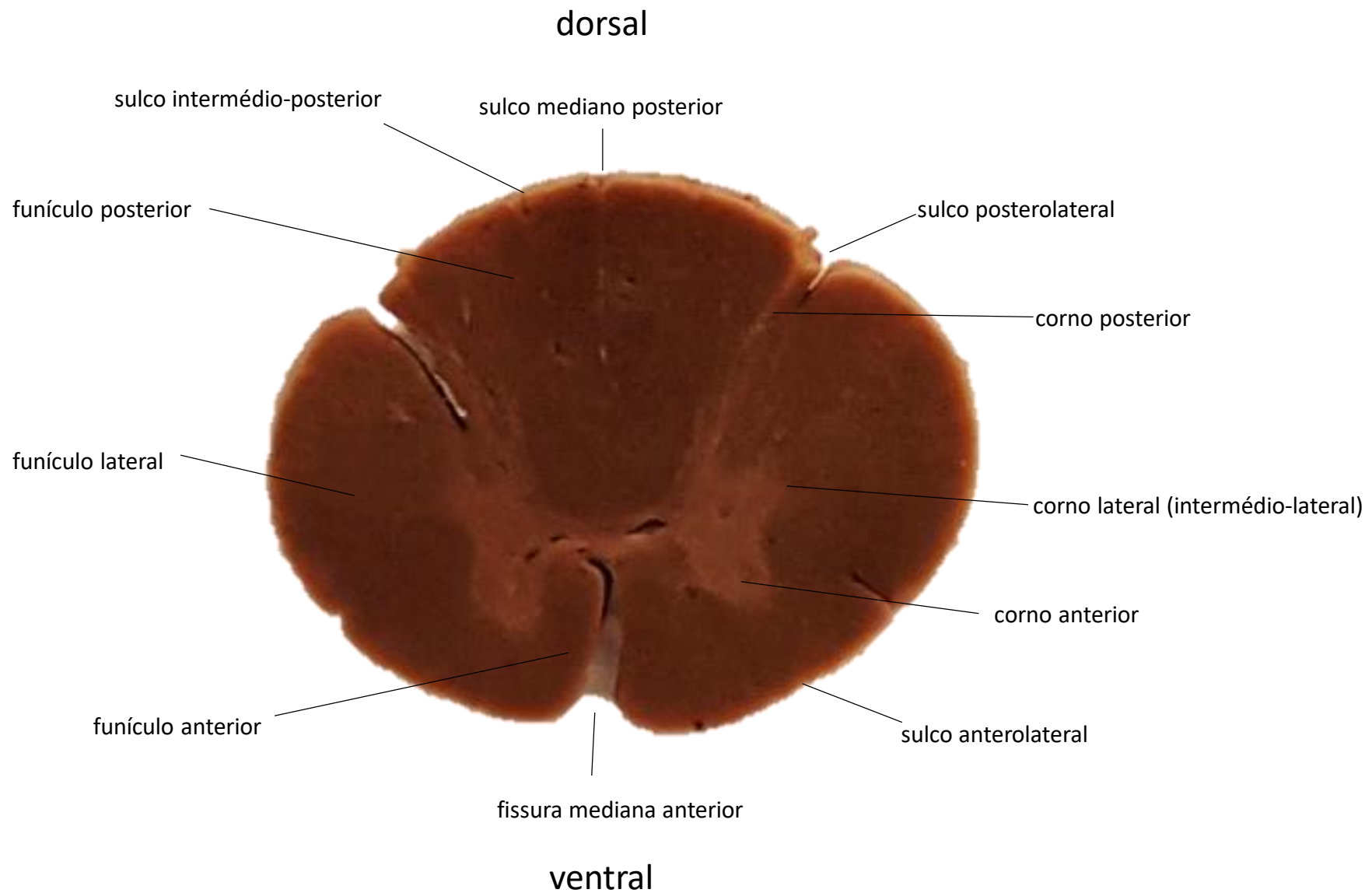




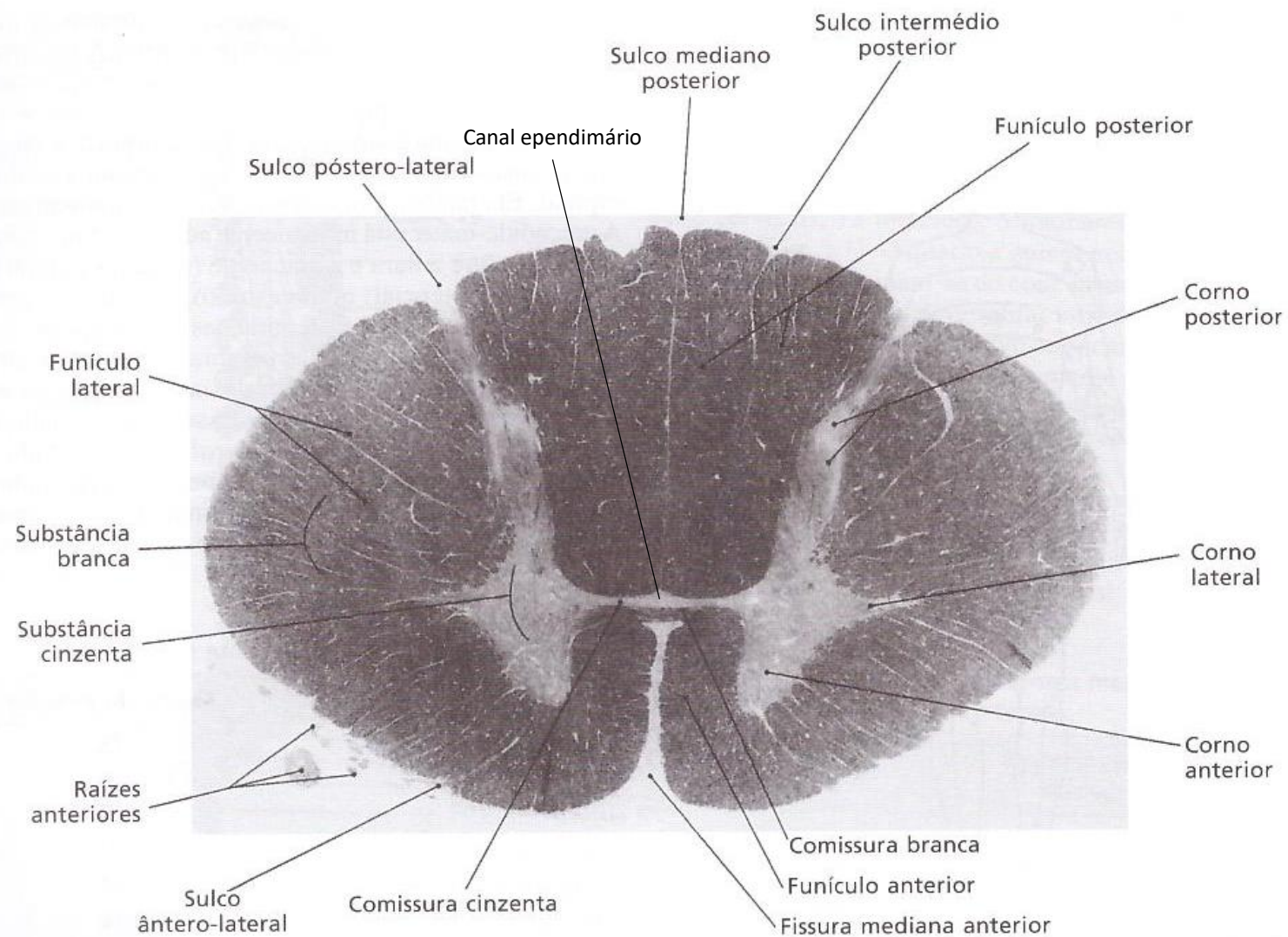
Medula espinal (vista anterior) e encéfalo (vista inferior)



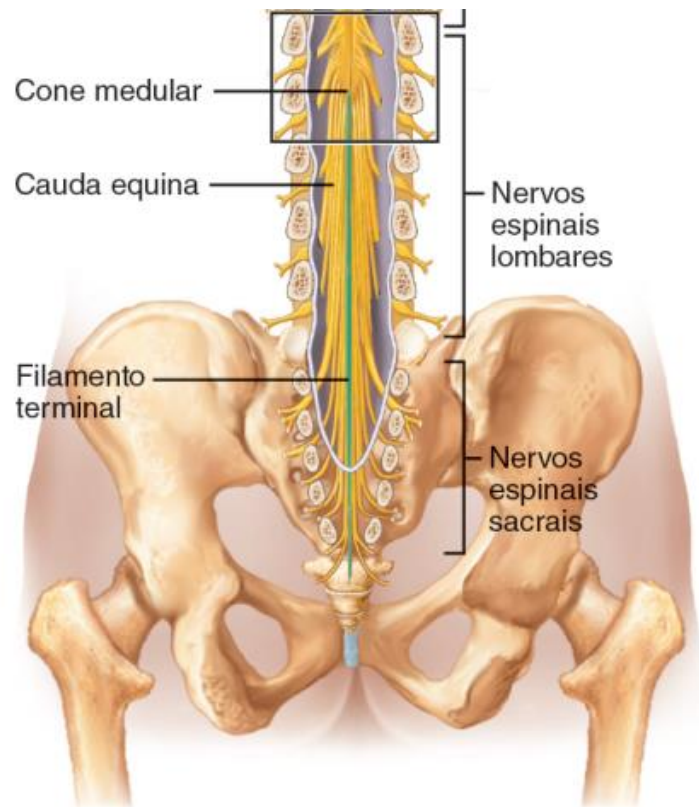
Medula espinal – vista anterior



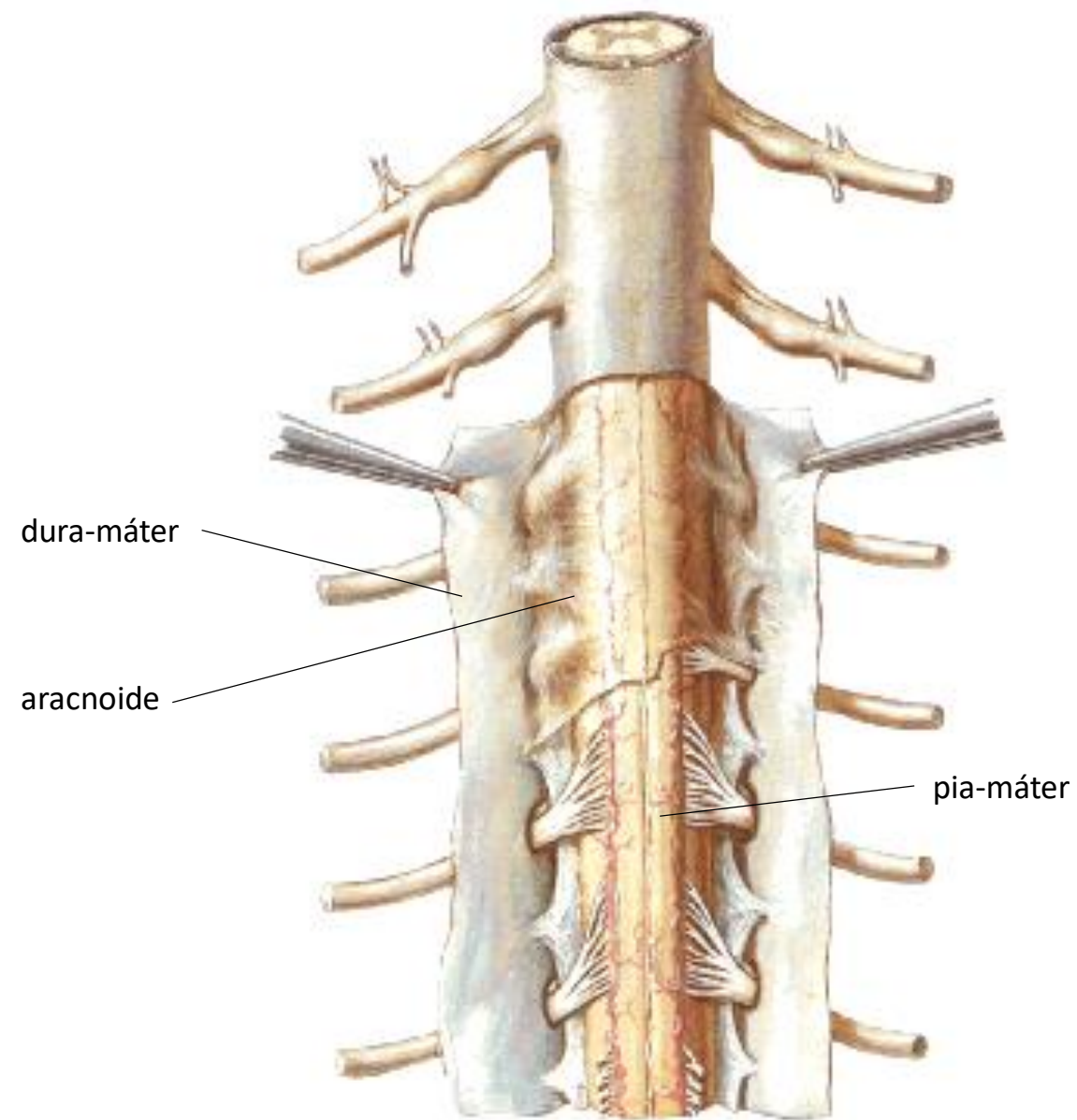
Medula espinal – corte transversal – segmento torácico



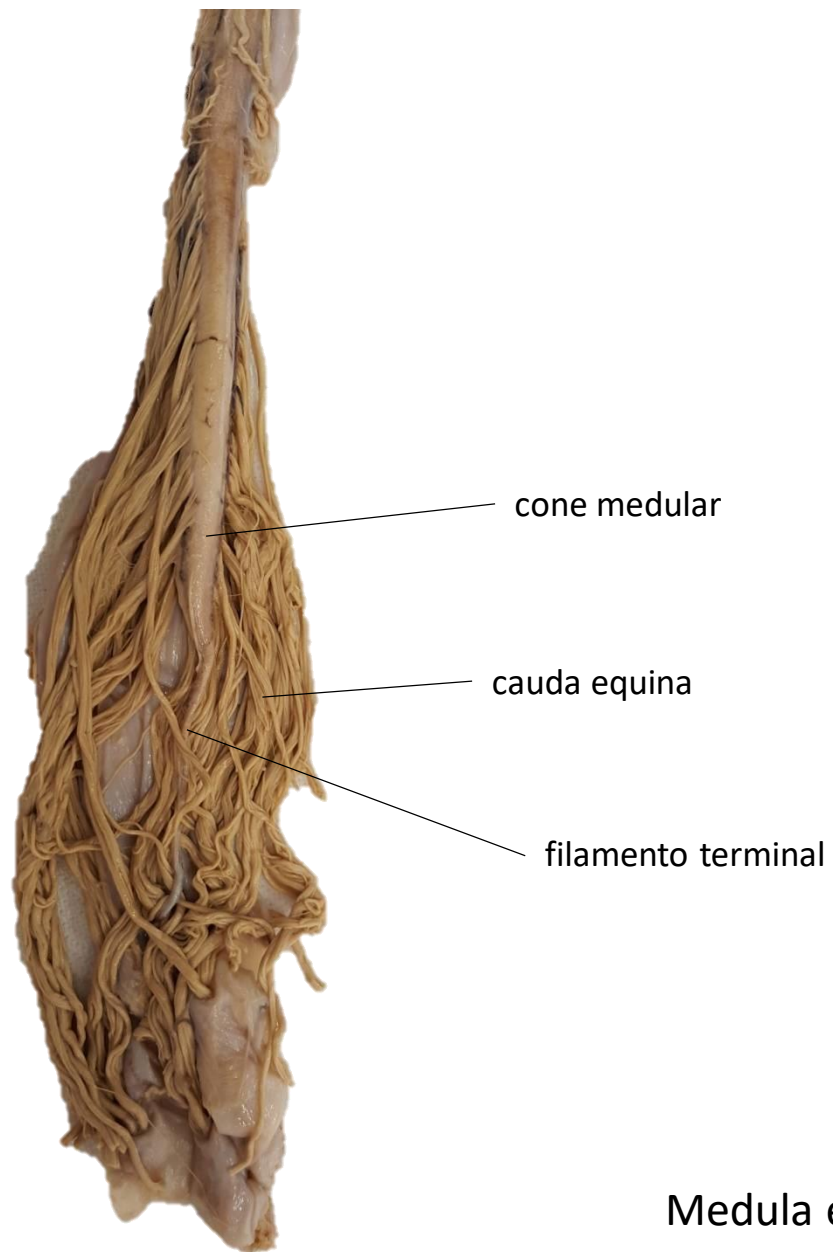
Fotomicrografia da medula espinal mostrando a divisão em substância cinzenta e branca, os sulcos e fissuras, os cornos (colunas cinzentas) e os funículos da substância branca.



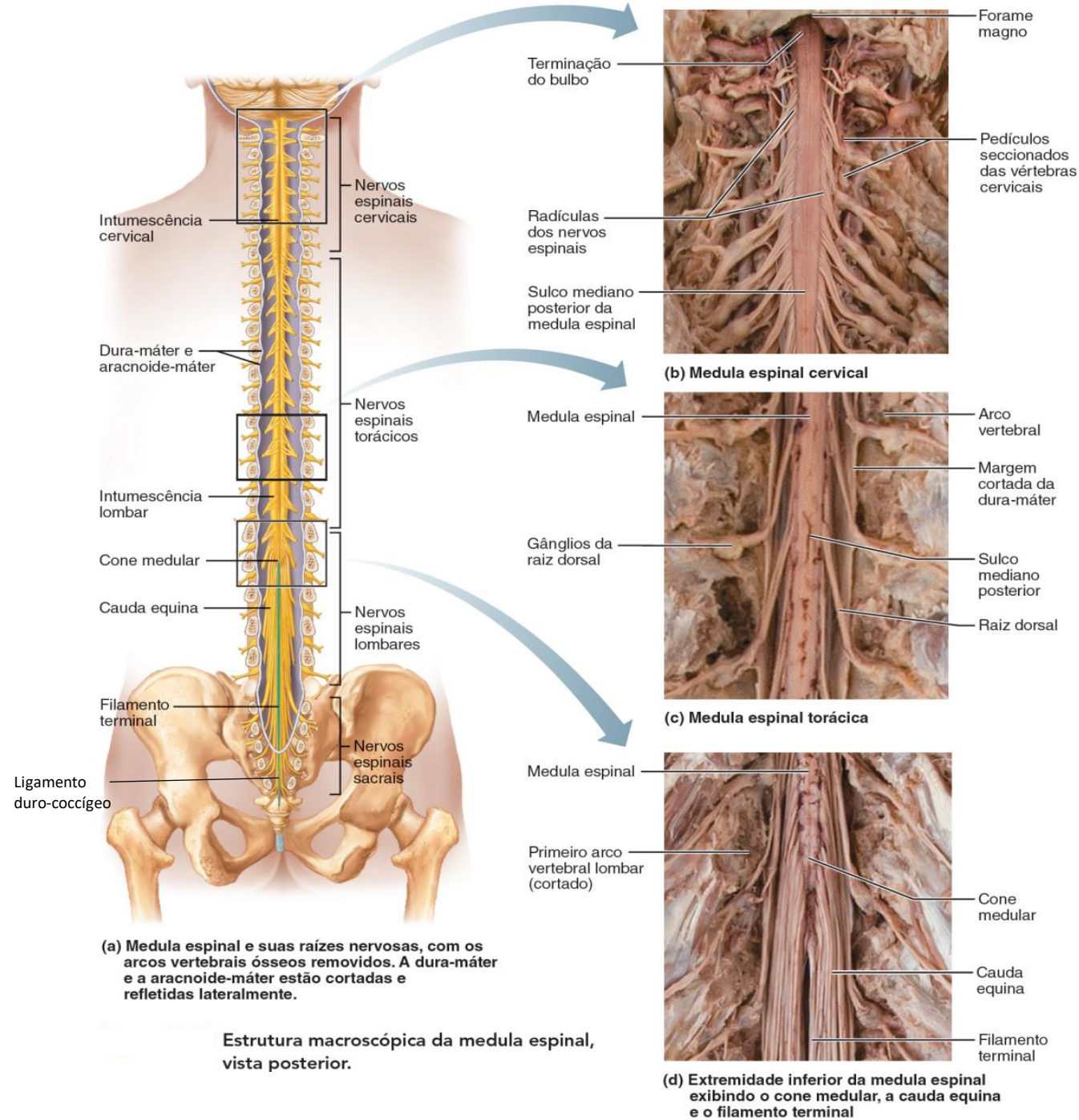
(a) Medula espinhal e suas raízes nervosas, com os arcos vertebrais ósseos removidos. A dura-máter e a aracnoide-máter estão cortadas e refletidas lateralmente.



Medula espinhal e seus envoltórios
Vista anterior



Medula espinal – extremidade caudal
Vista anterior



Estrutura macroscópica da medula espinal, vista posterior.

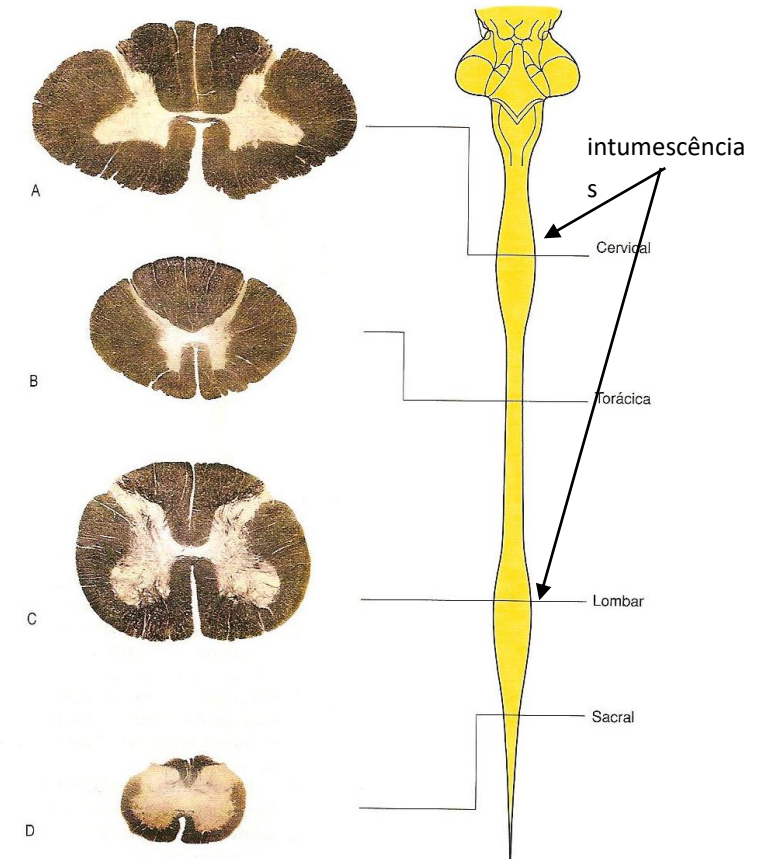
Medula espinal e seus segmentos

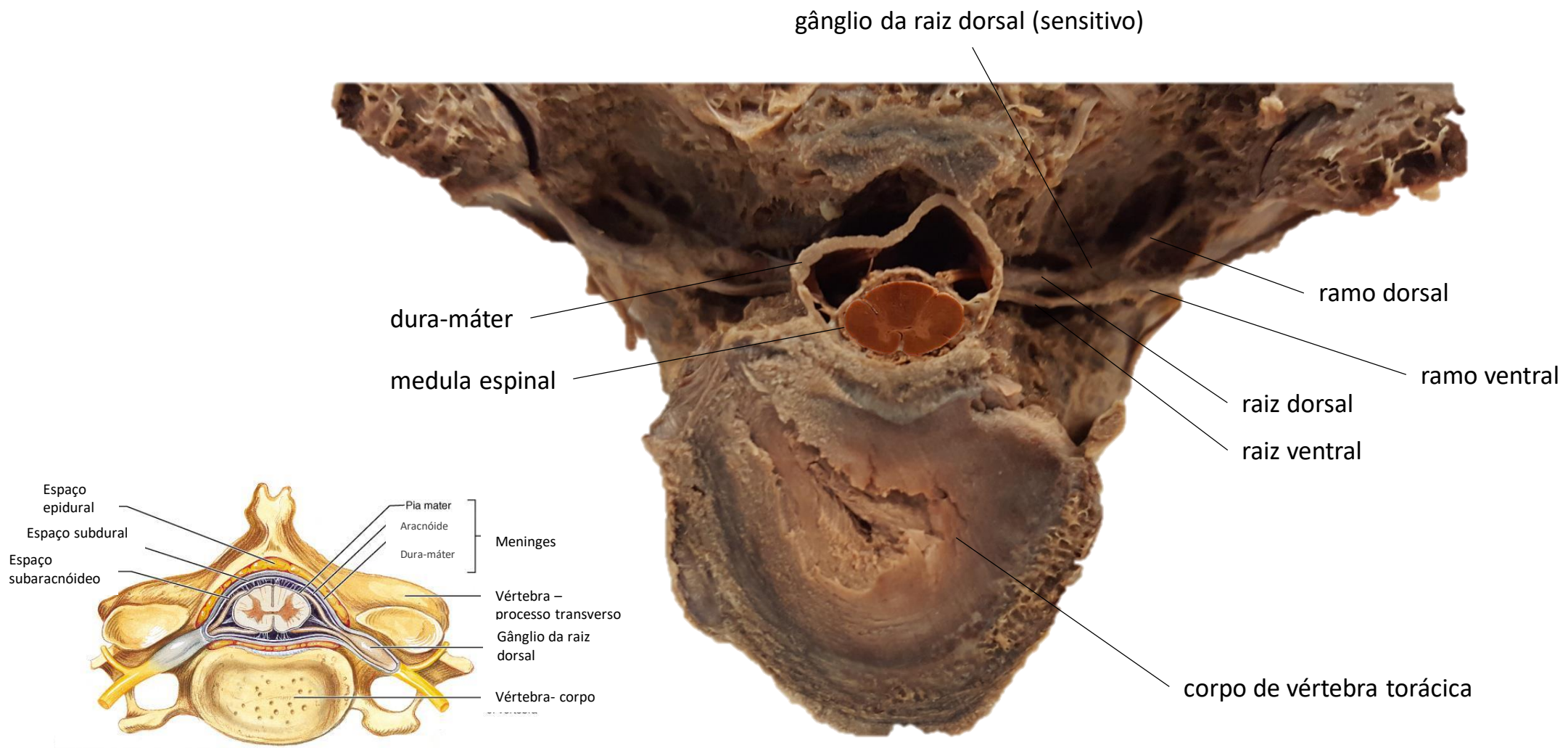
medula torácica

intumescência
lombar

Medula espinal – vista posterior

Dura-máter aberta longitudinalmente, rebatida com os dedos. Em sua porção cranial, a medula está recoberta pela aracnoide e vasos (*) podem ser vistos (no espaço subaracnóideo).





Corte transversal do tórax, com medula espinal *in situ*



cervical



torácico



lombar



sacral

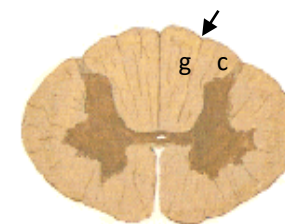
Cortes transversais de medula espinal em diferentes níveis de secção

Substância branca aumenta de caudal para rostral

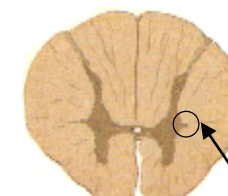
Coluna intermédio-lateral: T1-L2

Funículo posterior subdividido em fascículos grácil e cuneiforme (T6 para cima)

Substância cinzenta em maior volume nas regiões das intumescências



cervical



torácica



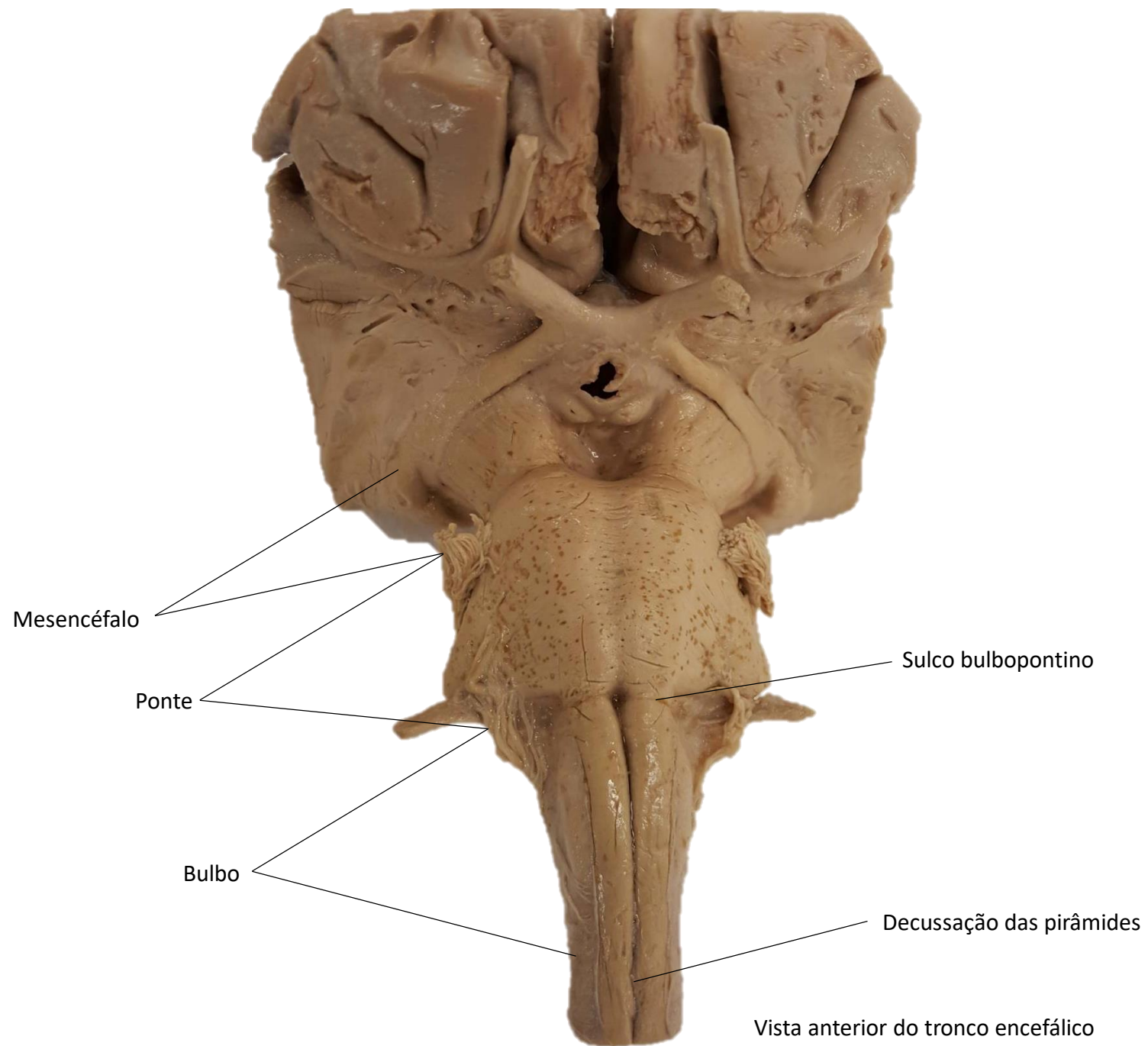
lombar

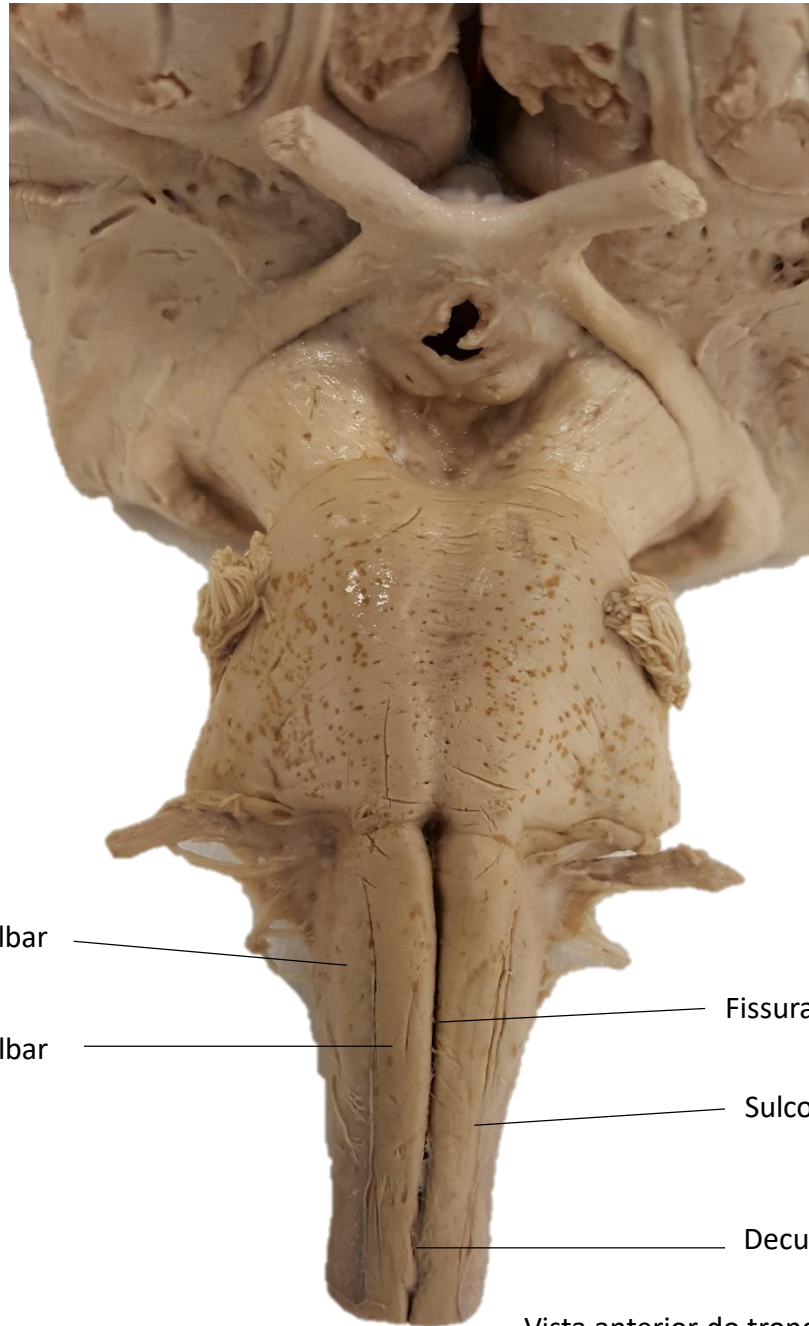


sacral

Tronco encefálico e Cerebelo







Oliva bulbar

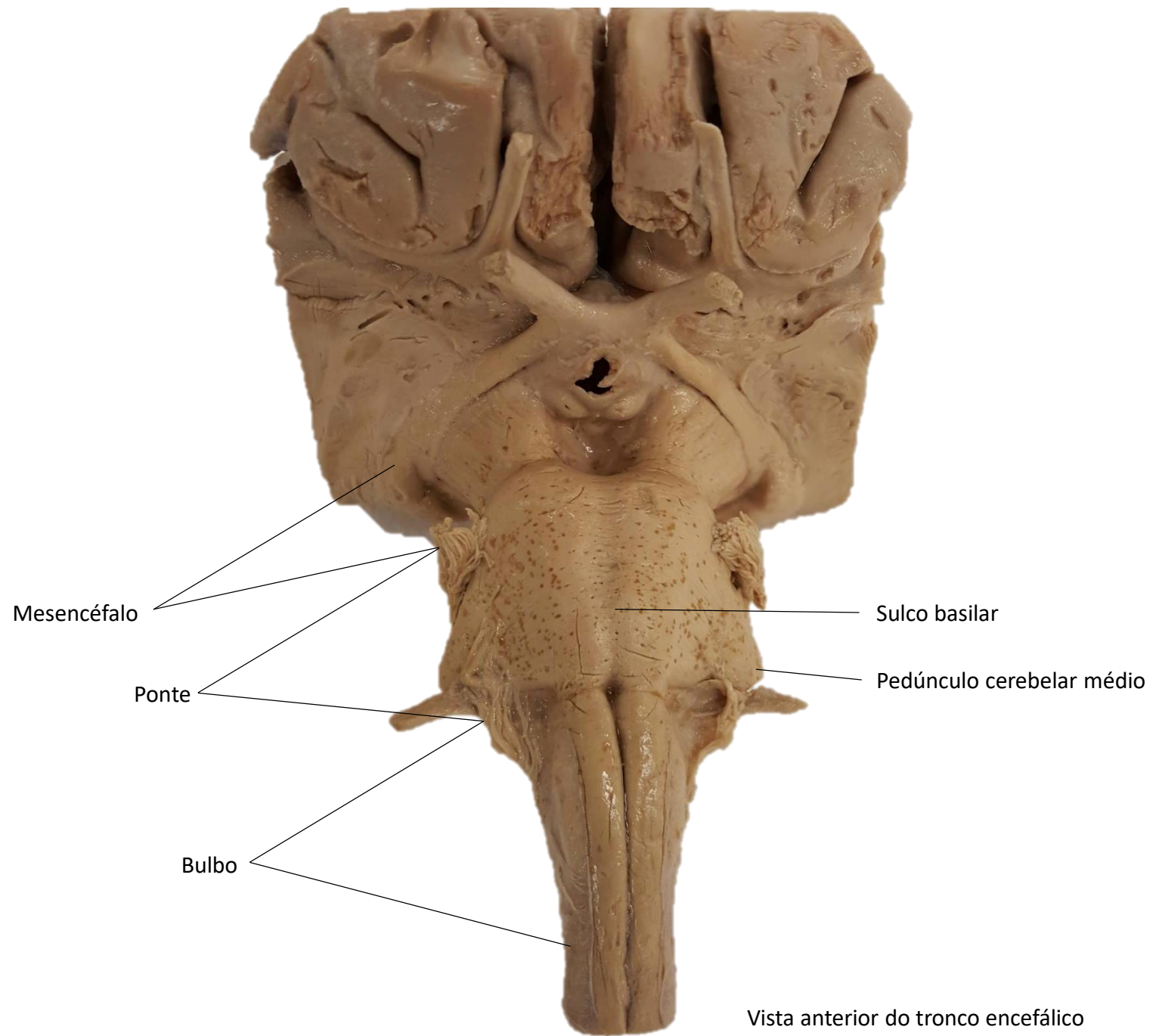
Pirâmide bulbar

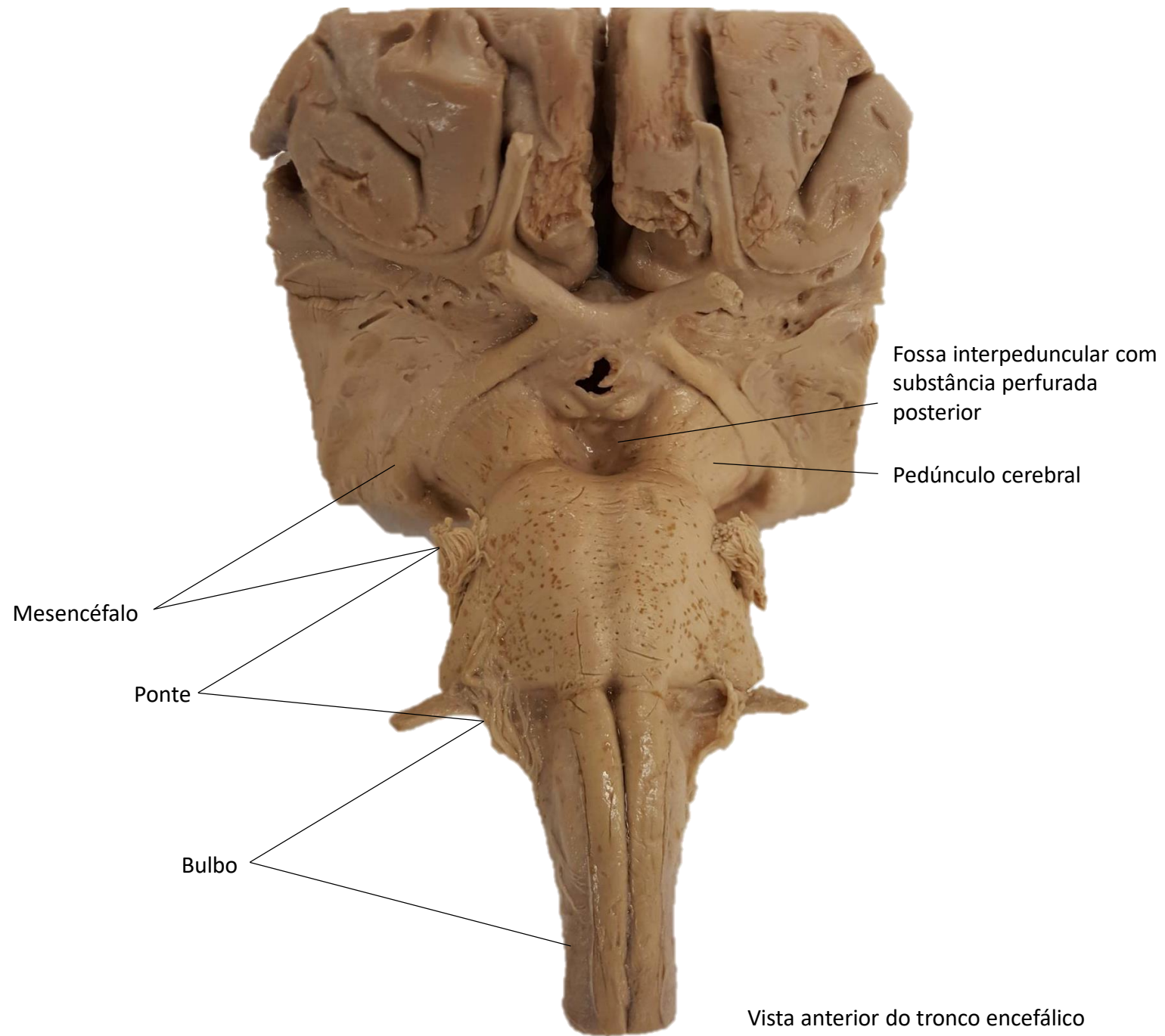
Fissura mediana anterior

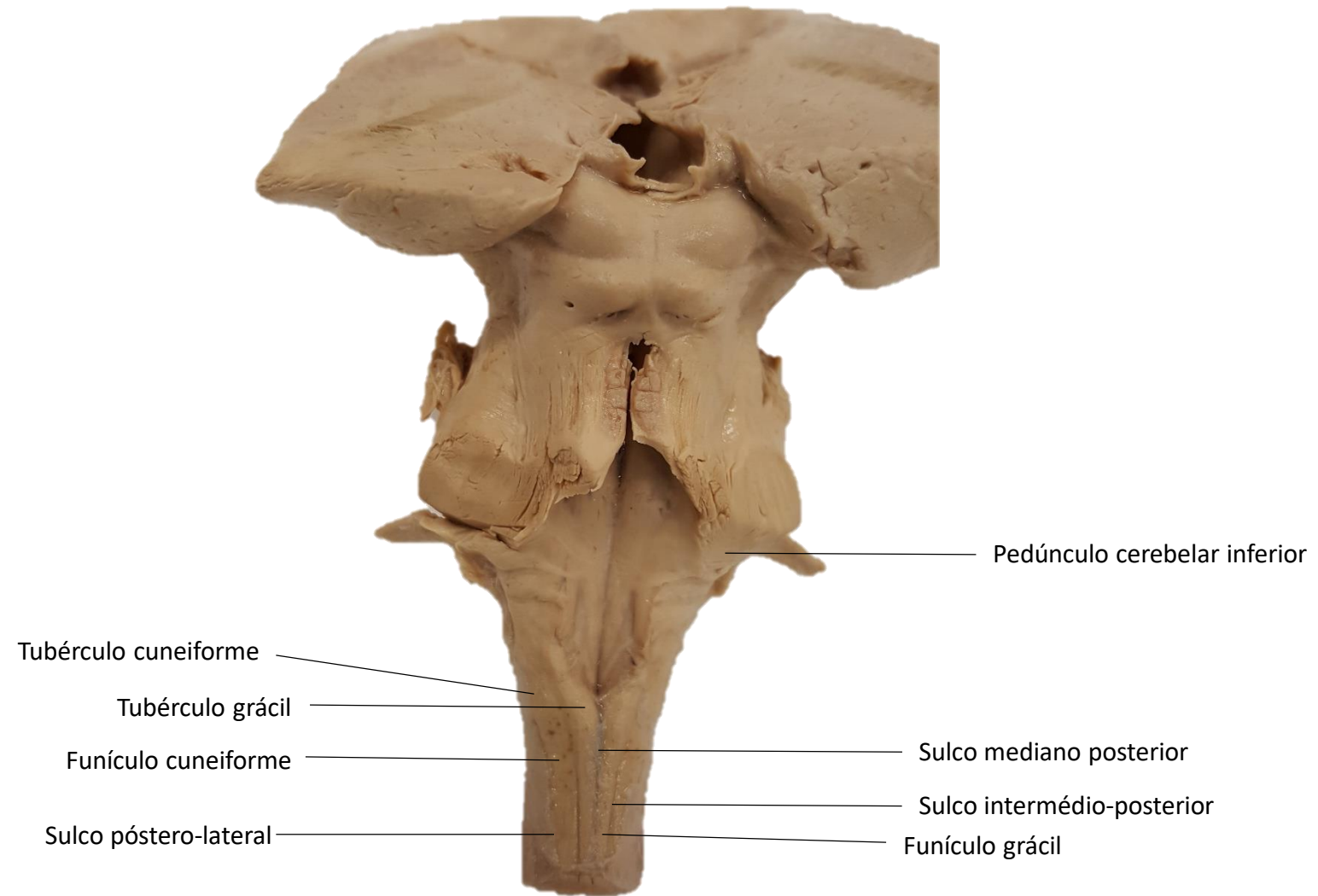
Sulco anterolateral

Decussação das pirâmides

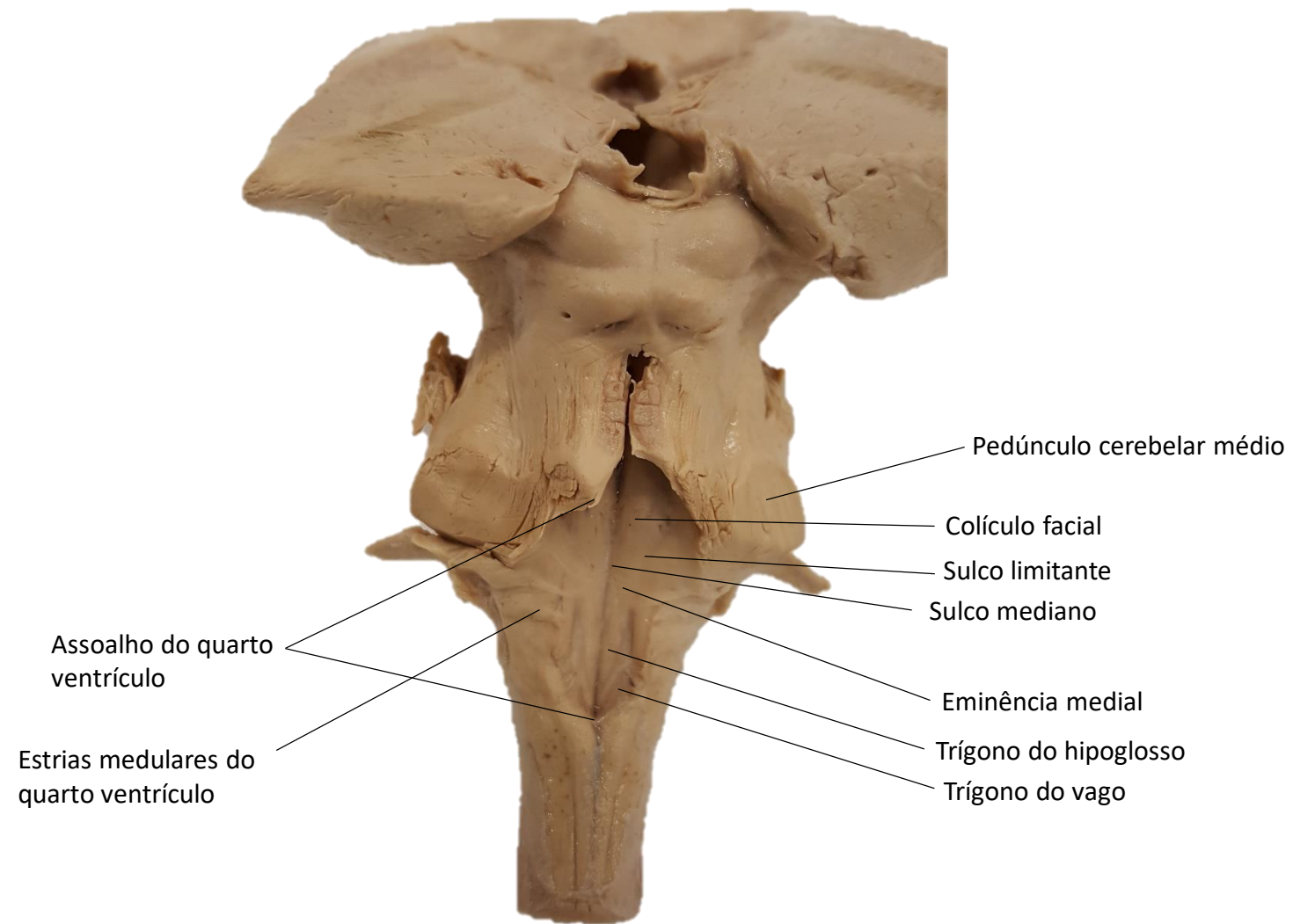
Vista anterior do tronco encefálico





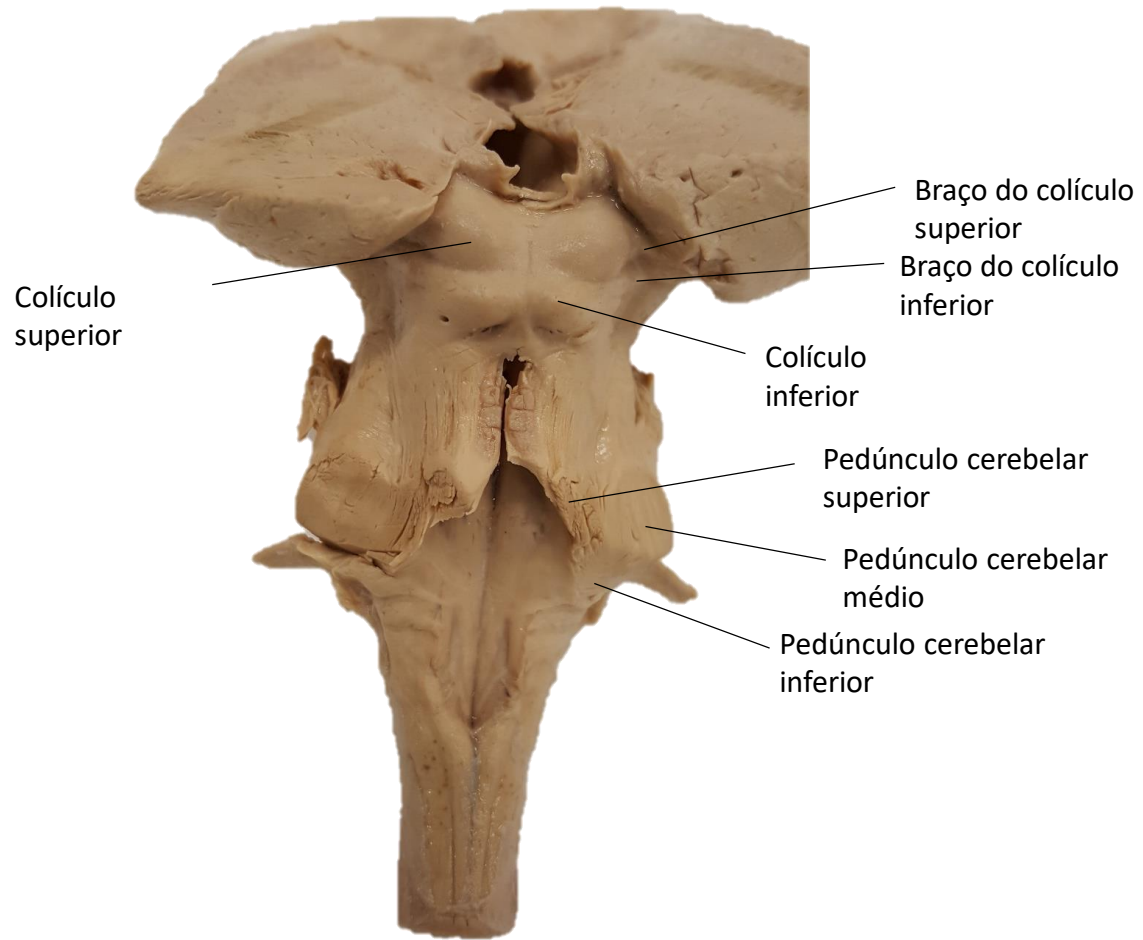


Vista posterior tronco encefálico

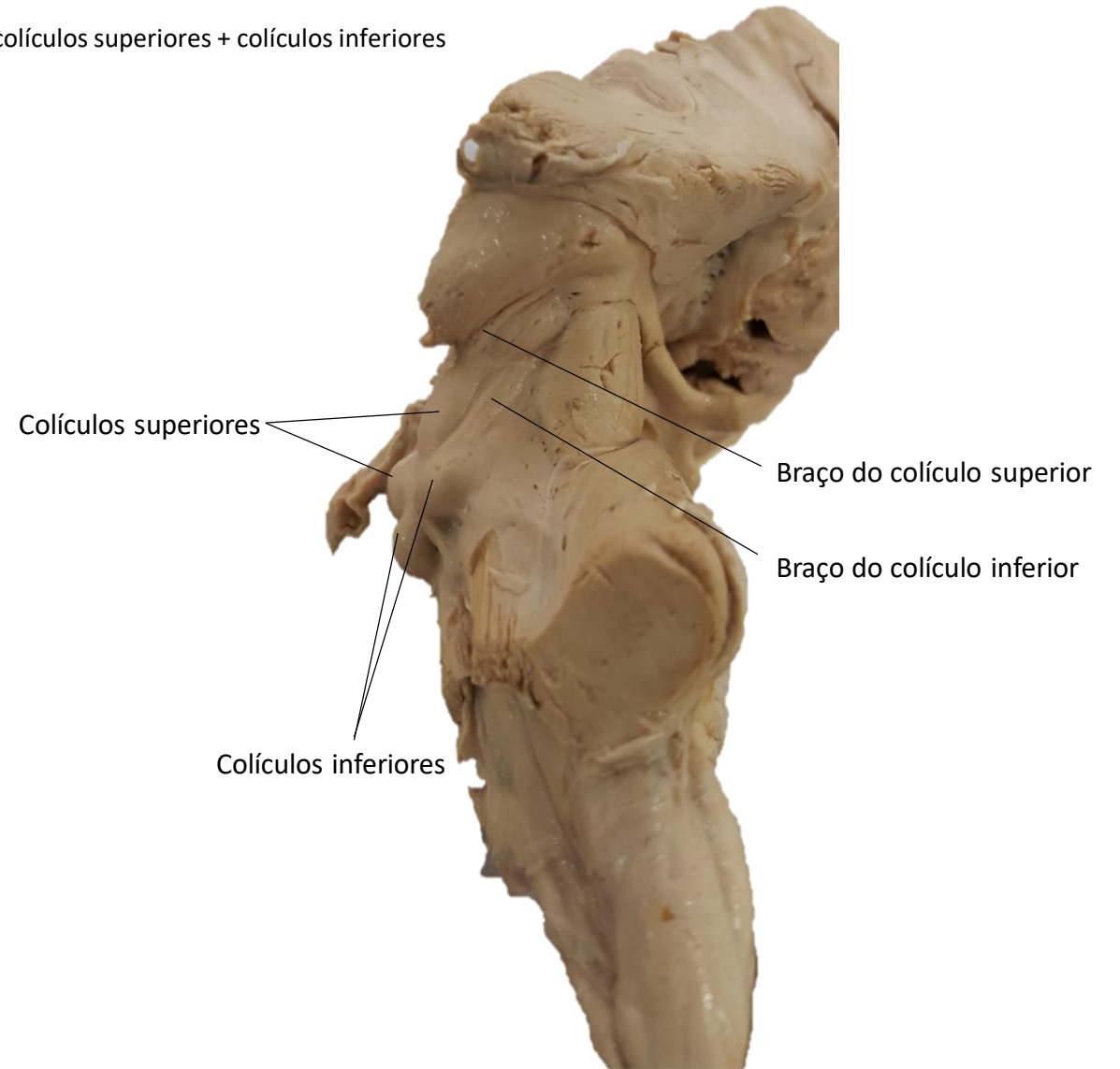


Vista posterior tronco encefálico

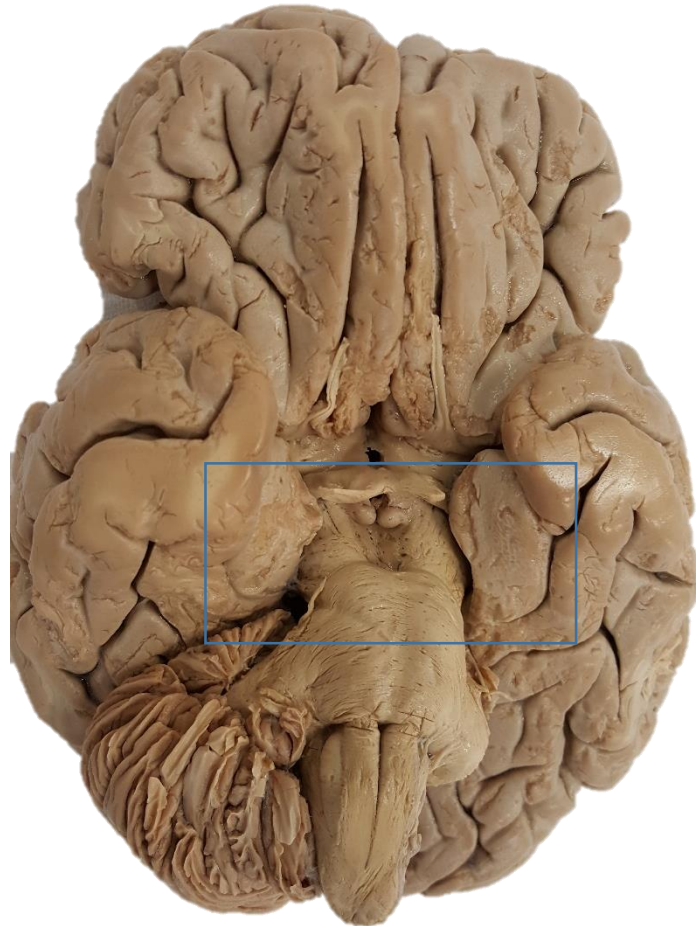
Lâmina tectal (quadrigênea) = colículos superiores + colículos inferiores



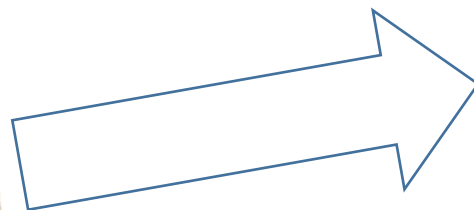
Vista posterior do tronco encefálico



Vista lateral do tronco encefálico



Vista inferior do encéfalo
(anterior do tronco encefálico)

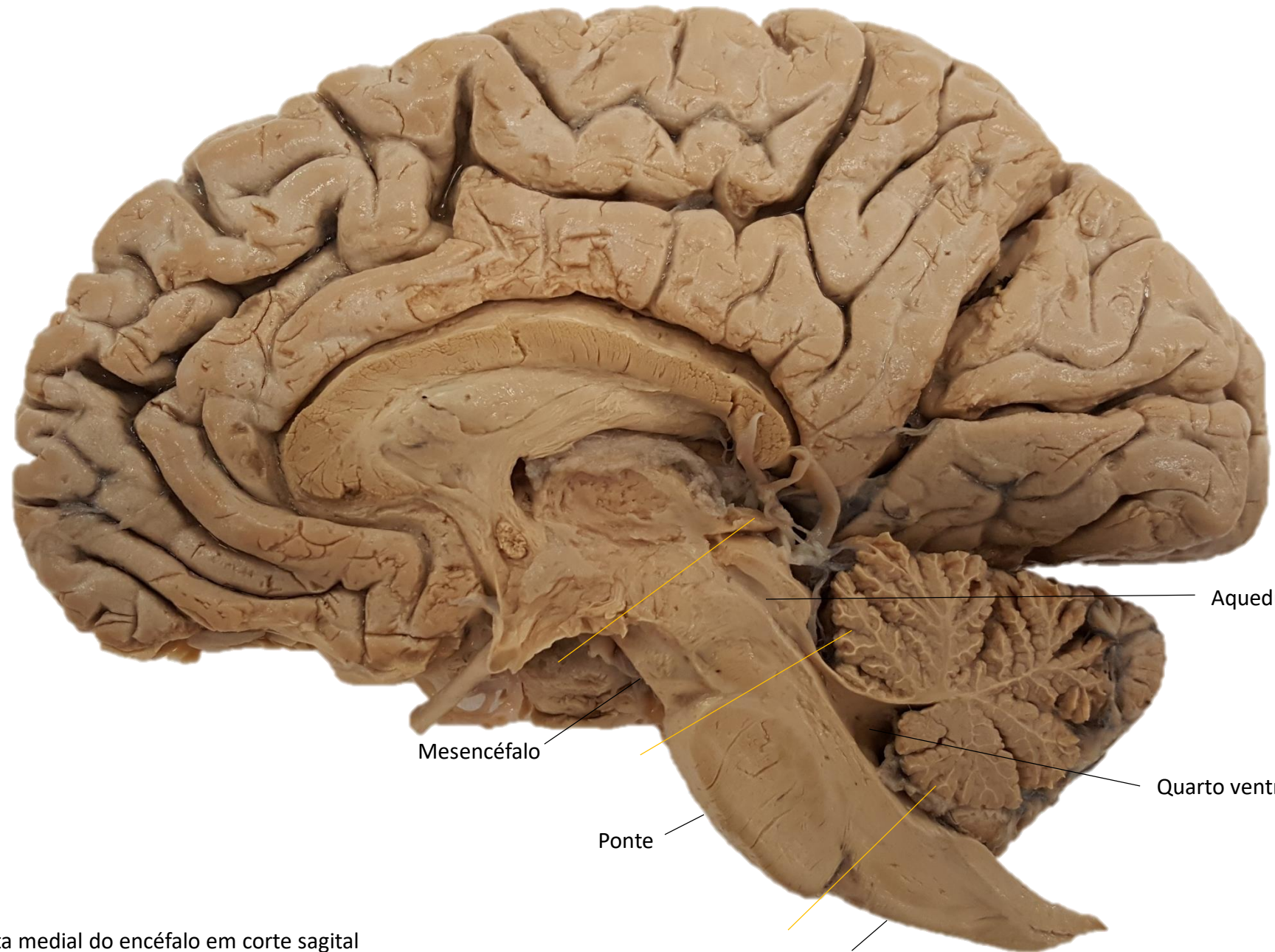


Corpo mamilar
(diencéfalo)

Fossa interpeduncular
com substância
perfurada posterior

Ponte

Pedúnculo cerebral
(mesencéfalo)



Aqueduto do mesencéfalo

Mesencéfalo

Ponte

Bulbo

Quarto ventrículo

Vista medial do encéfalo em corte sagital



Nervo troclear

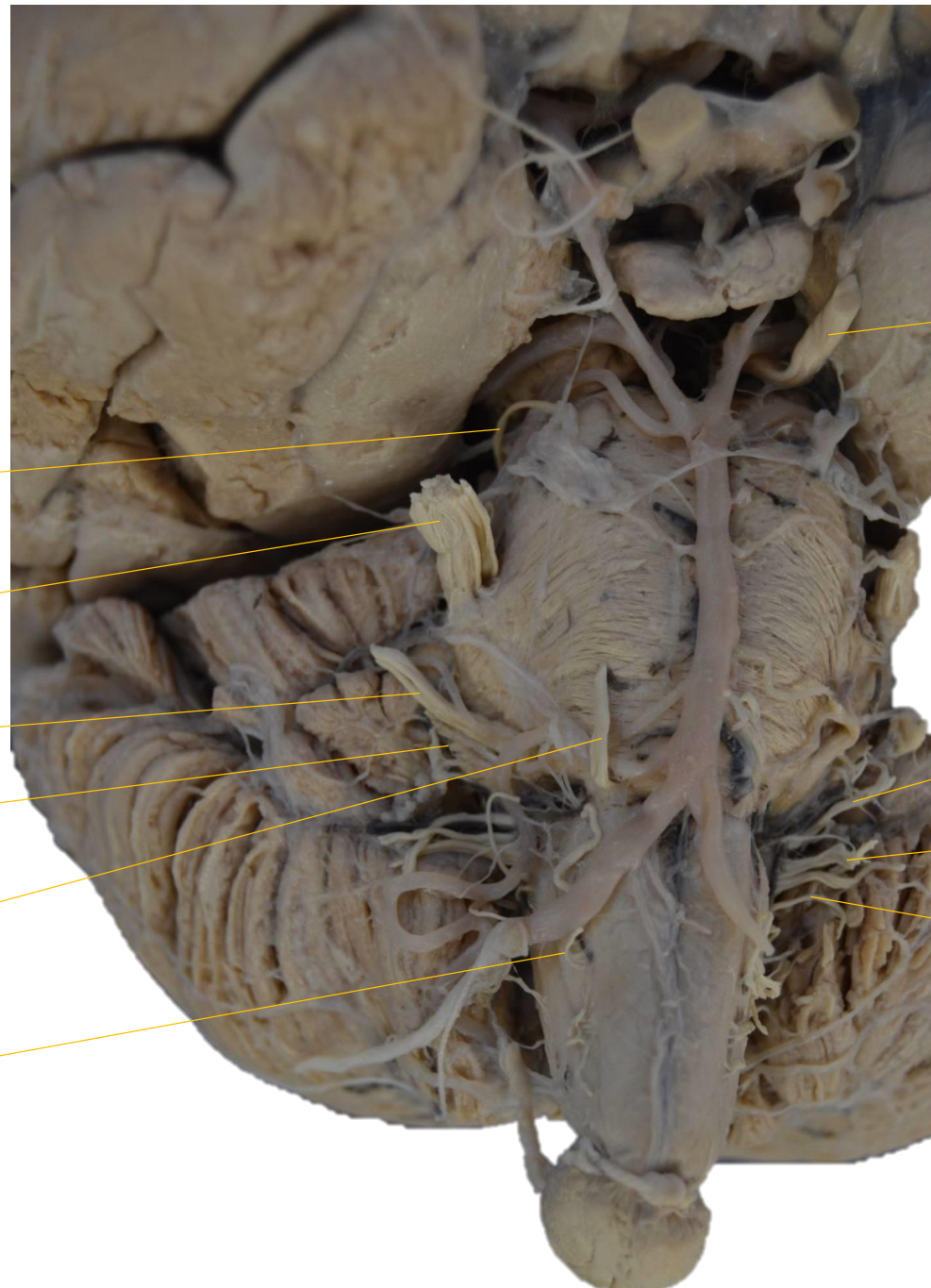
Nervo trigêmeo

Nervo facial

Nervo vestibulococlear

Nervo abducente

Nervo hipoglosso



Nervo oculomotor

Nervo glossofaríngeo

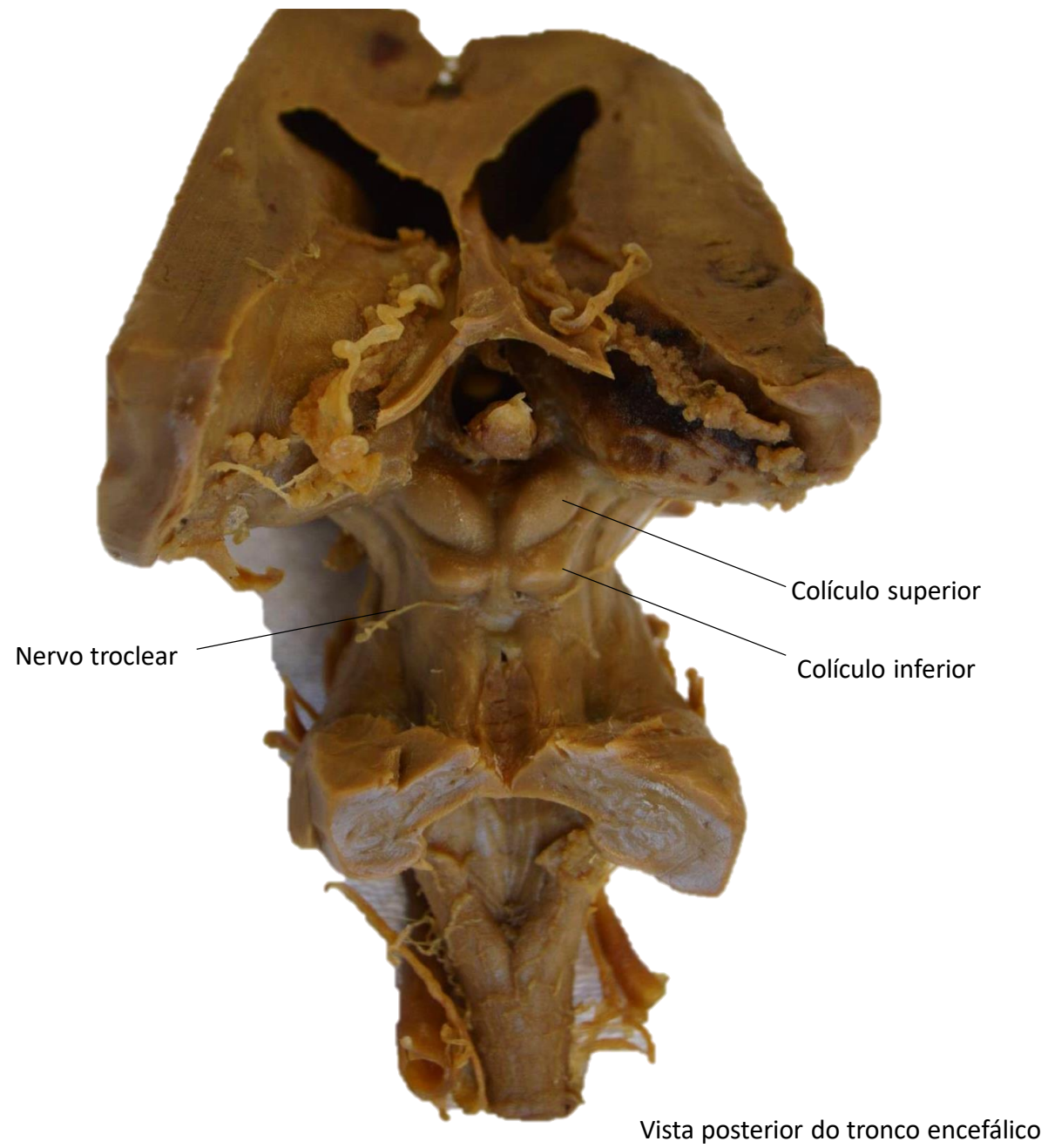
Nervo vago

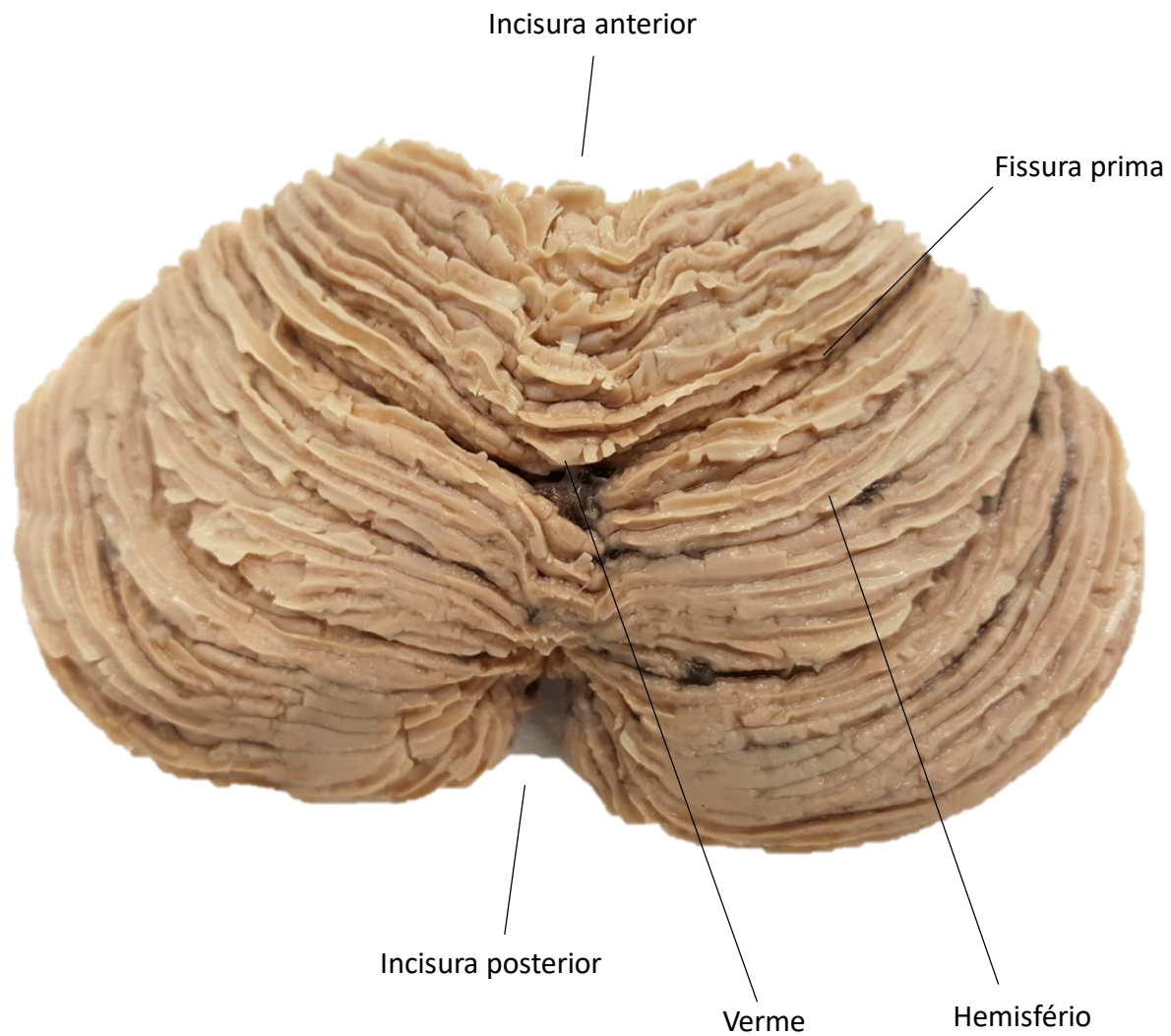
Nervo acessório

- Nervo oculomotor (III)
- Nervo troclear (IV)
- Nervo trigêmeo (V)
- Nervo abducente (VI)
- Nervo facial (VII)
- Nervo vestibulococlear (VIII)
- Nervo glossofaríngeo (IX)
- Nervo vago (X)
- Nervo acessório (XI)
- Nervo hipoglosso (XII)

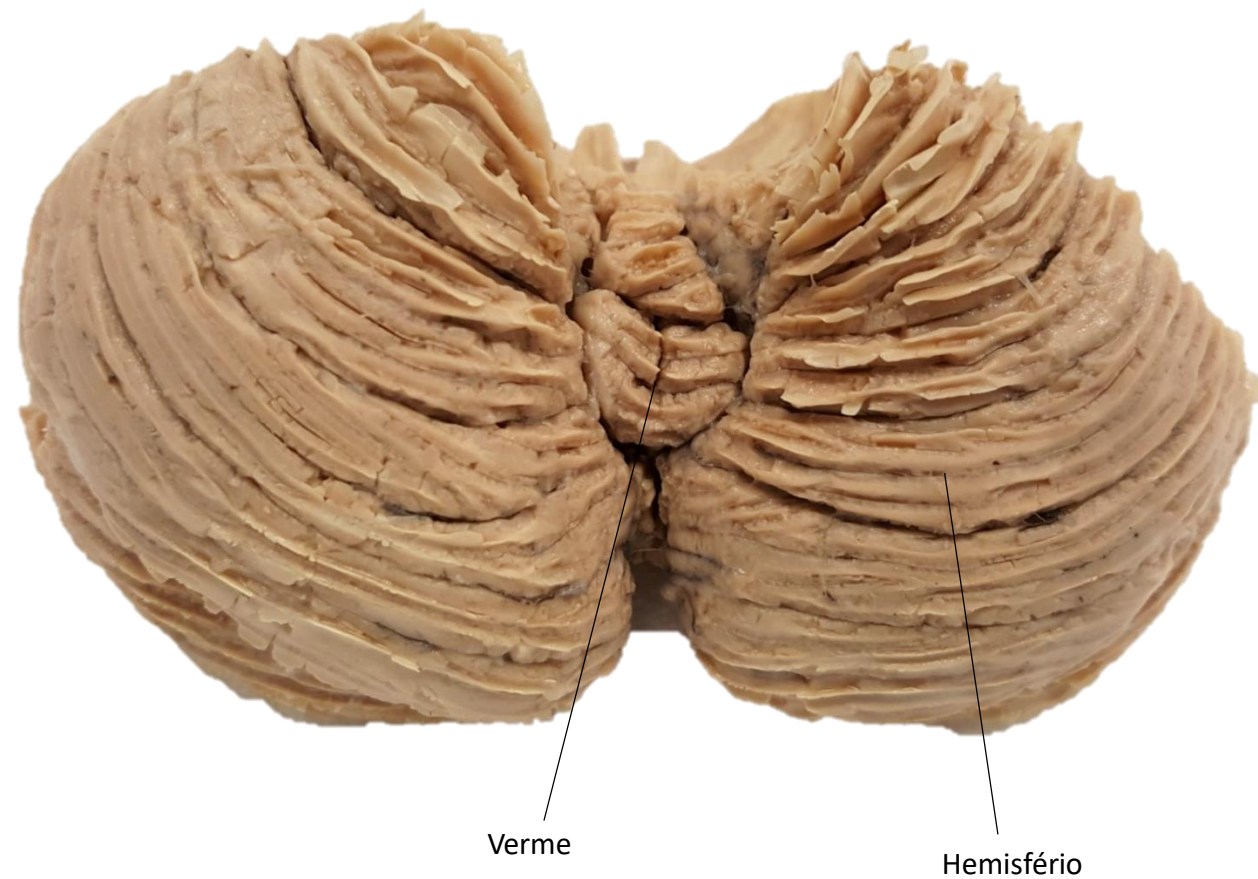


Vista inferior do encéfalo
(face anterior do tronco encefálico)

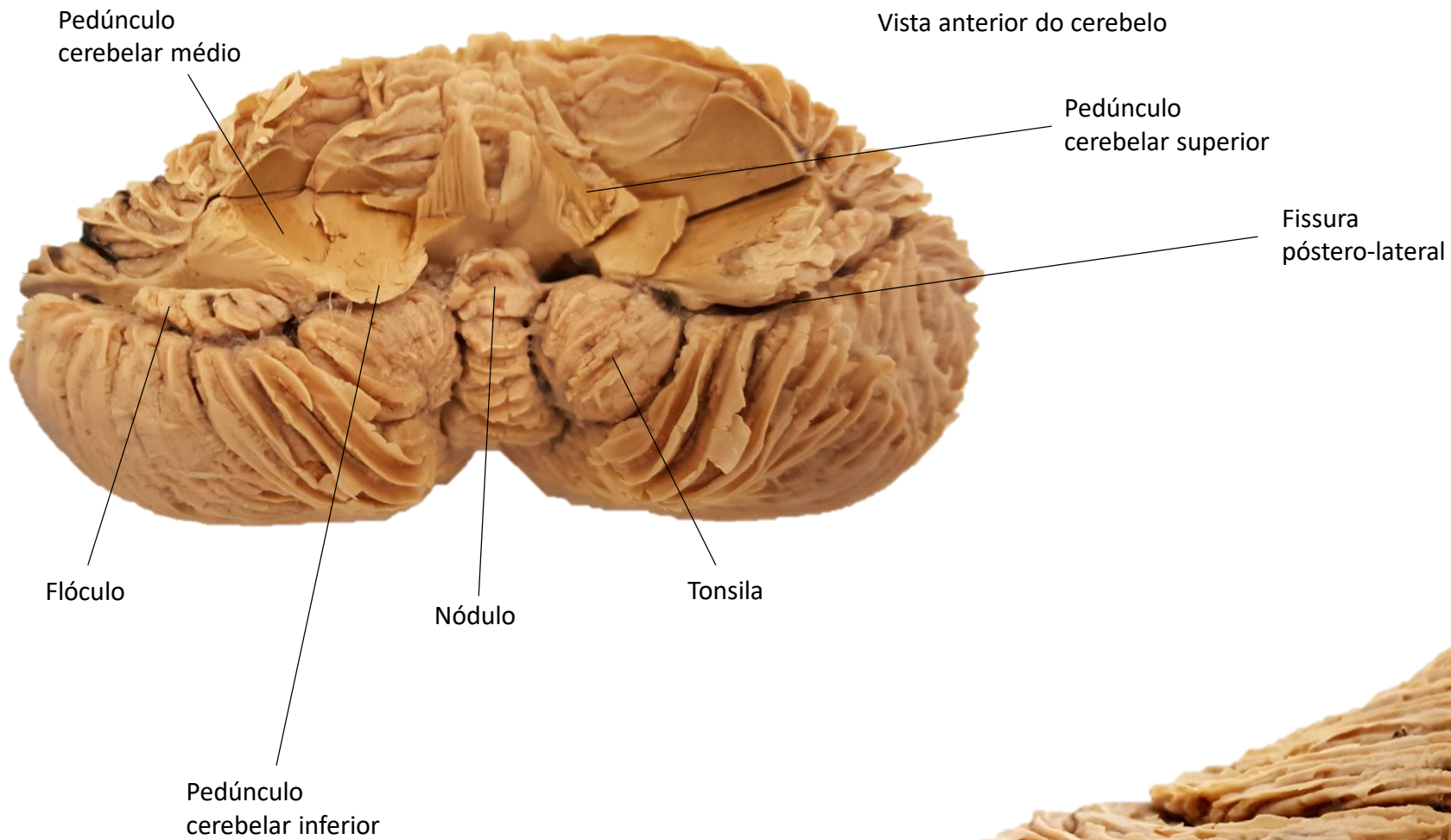




Vista superior do cerebello



Vista inferior do cerebello



Cerebello

Lobos – divisão anatômica

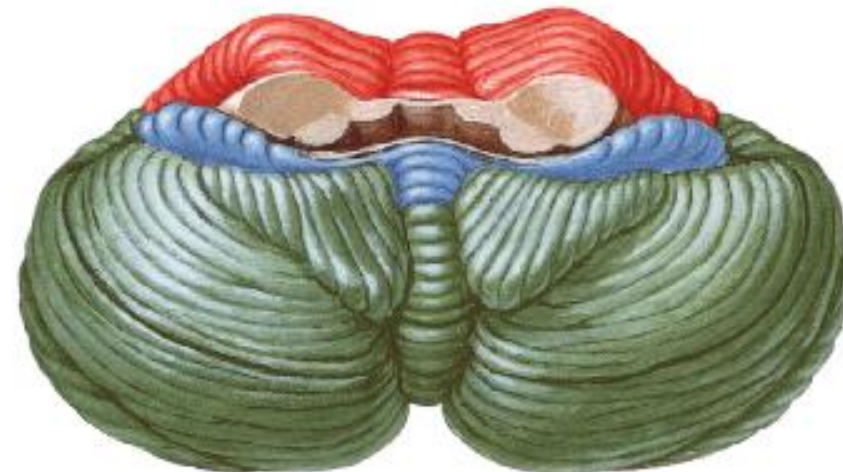
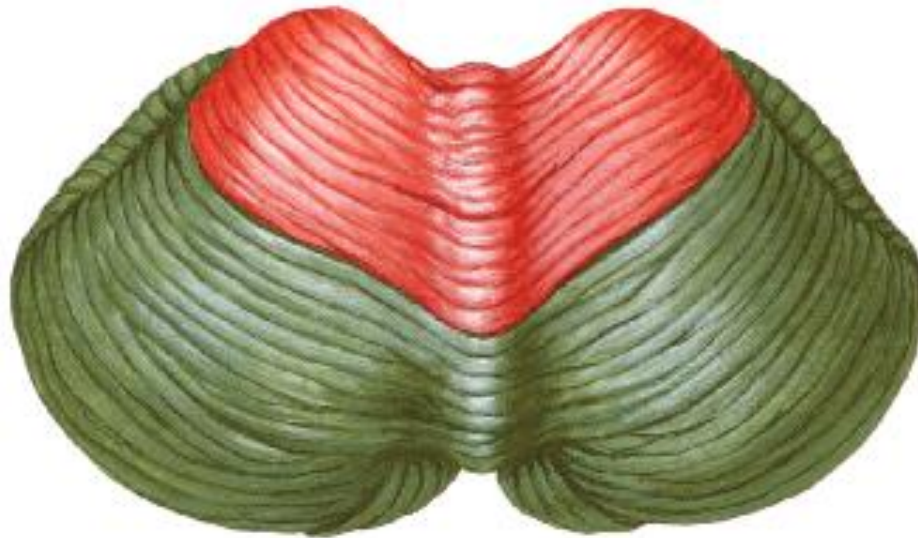
anterior

posterior

flóculo-nodular

fissura prima

fissura póstero-lateral





Quarto ventrículo

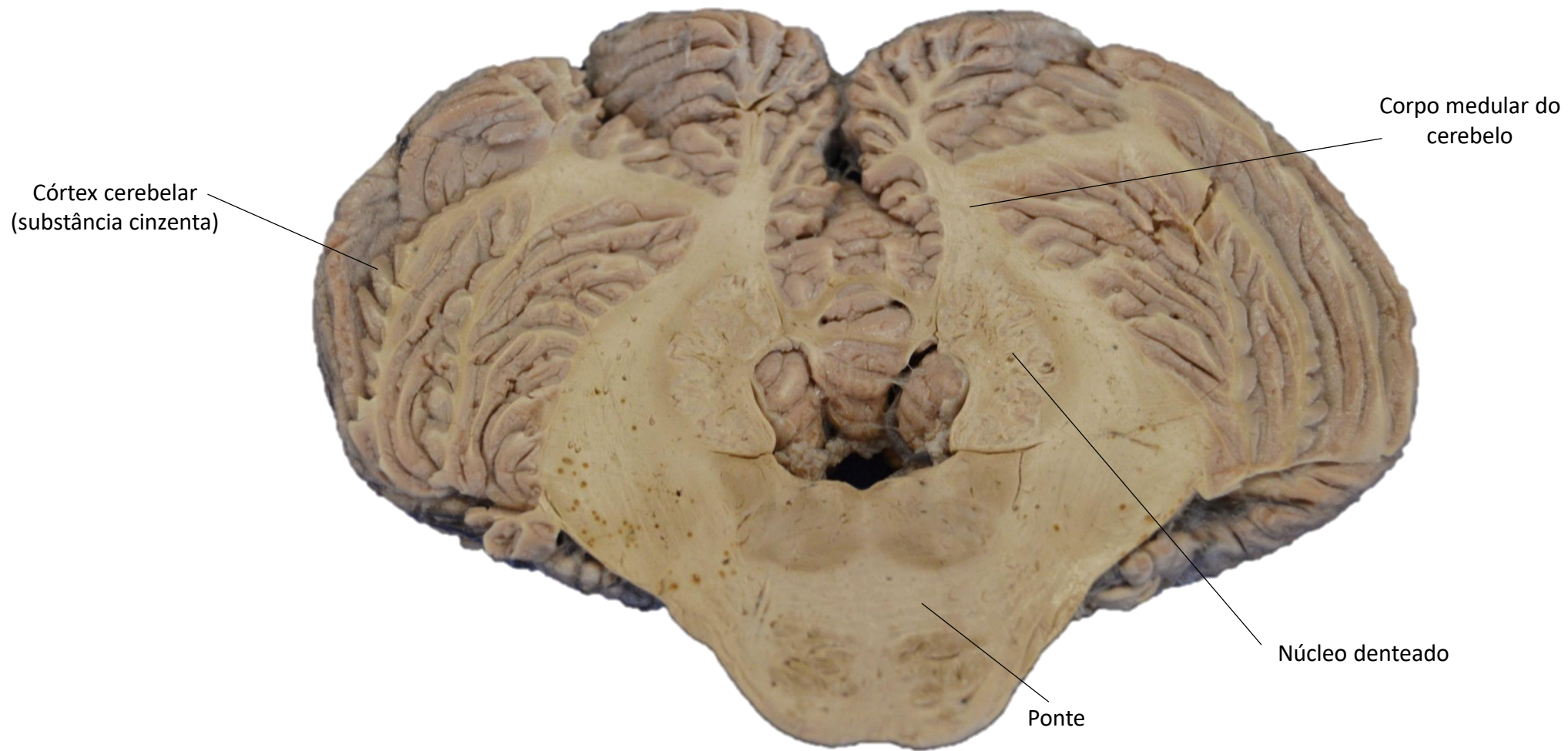
Aqueduto do mesencéfalo

Véu medular superior

Cerebelo (verme)

Tela e plexo coroides

Vista medial do encéfalo em corte sagital



Corte transversal do cerebelo



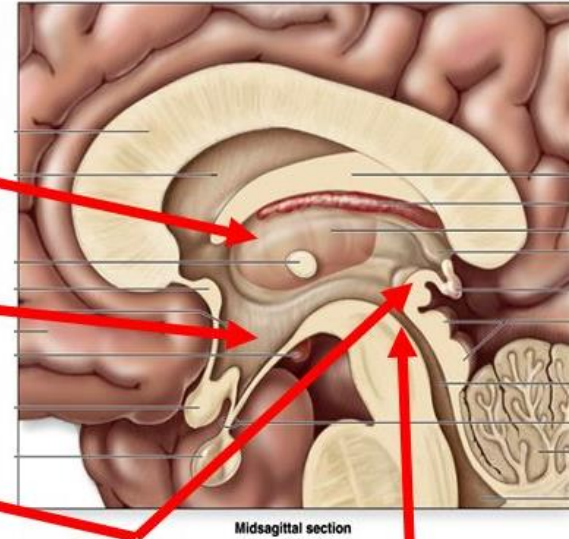
Diencéfalo e Telencéfalo

TÁLAMO

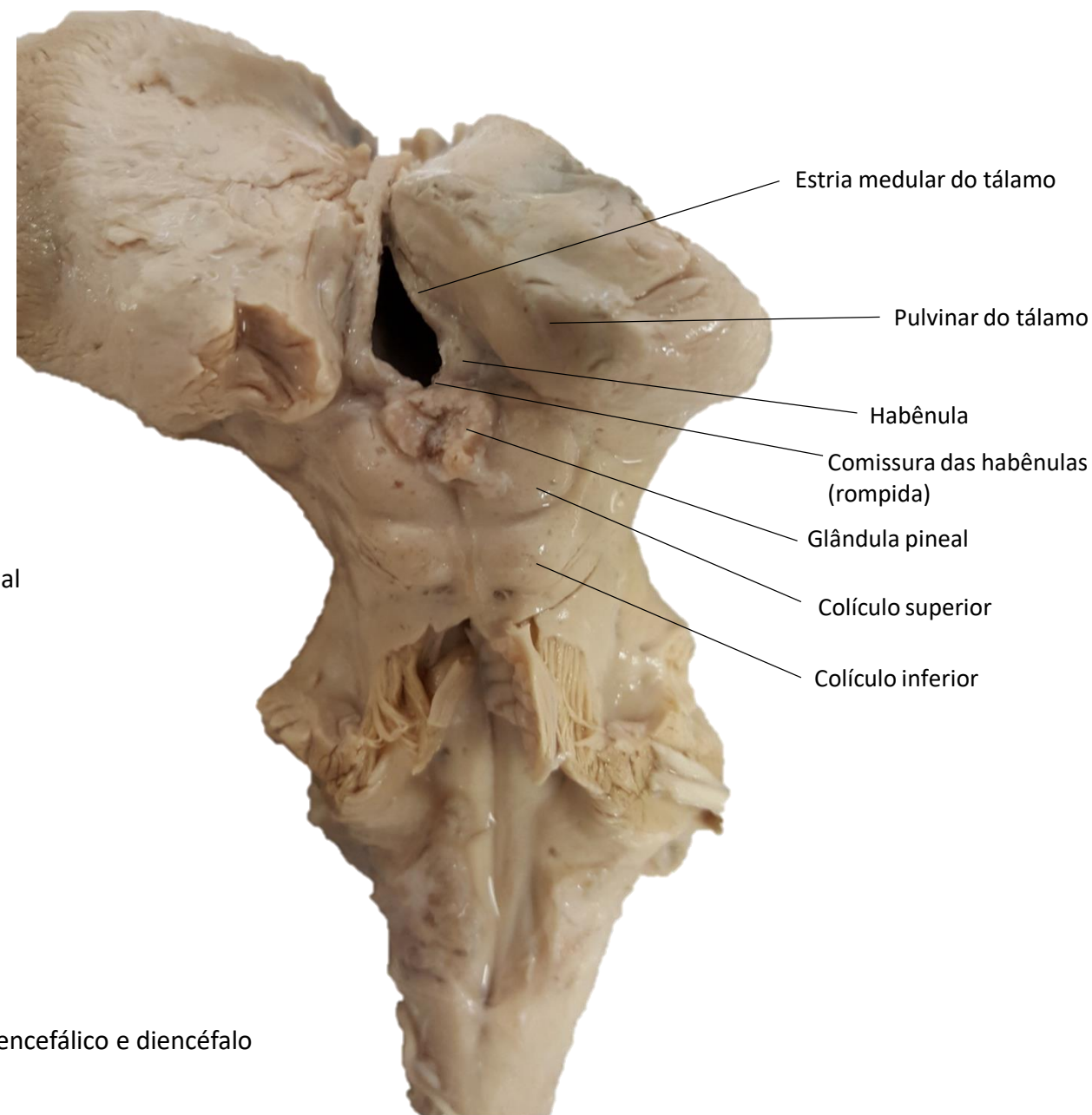
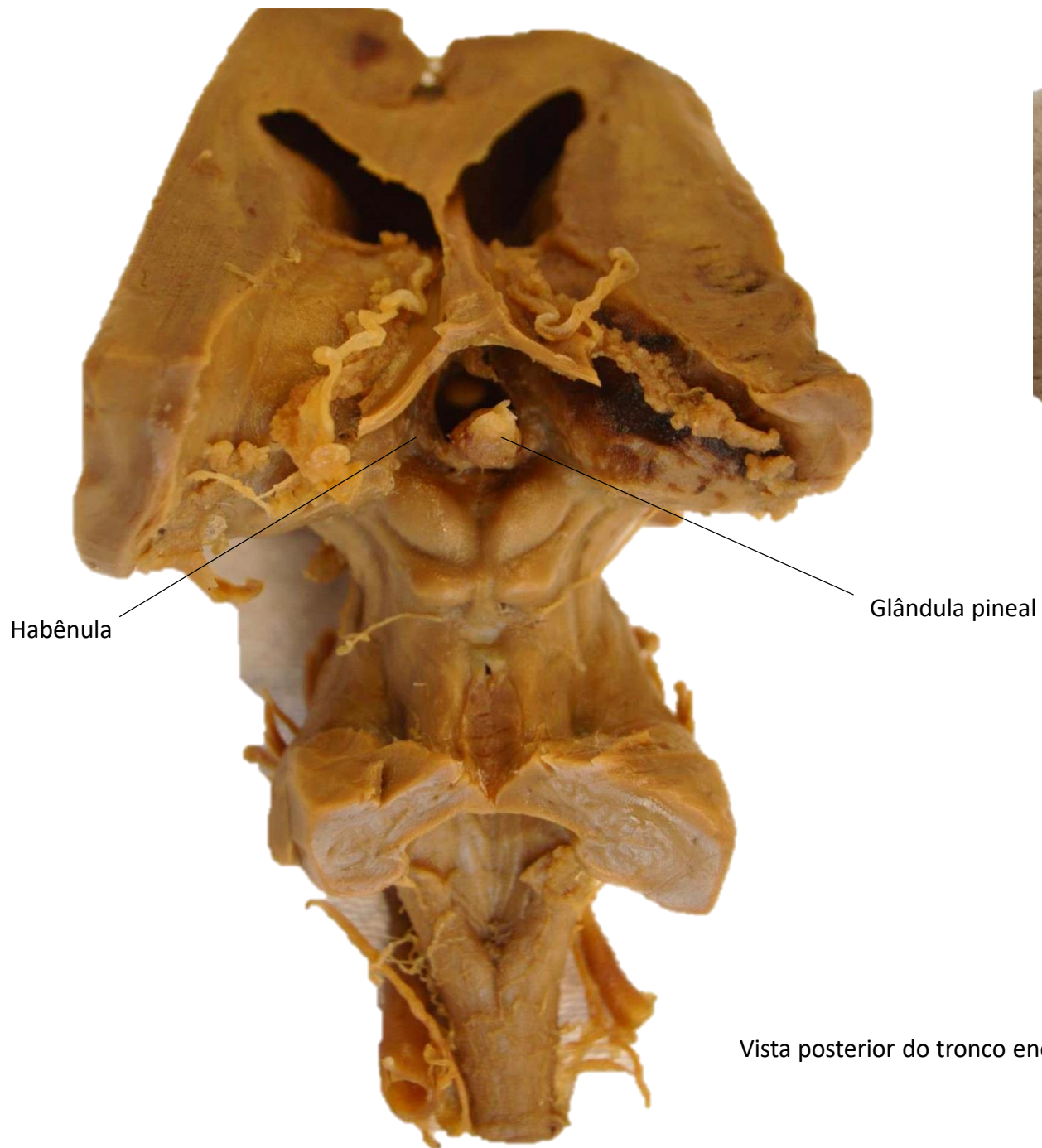
HIPOTÁLAMO

EPITÁLAMO

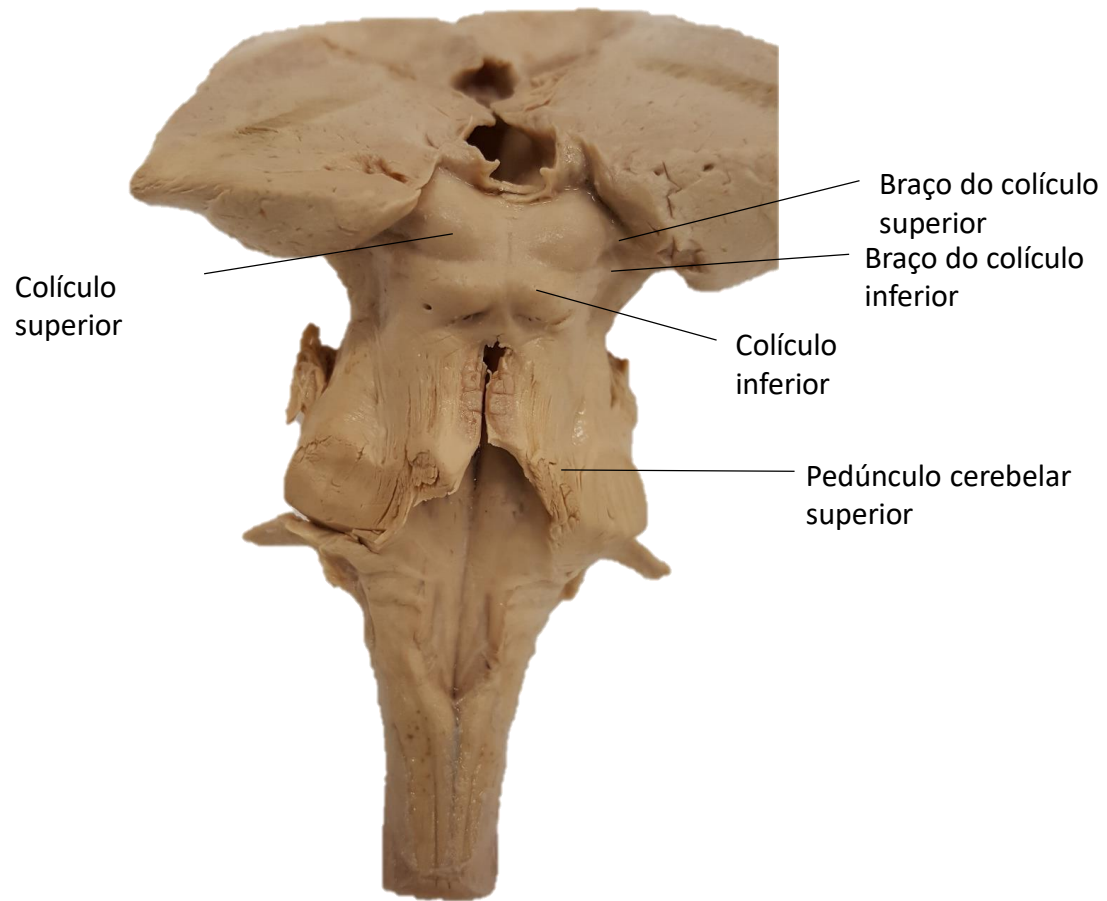
SUBTÁLAMO



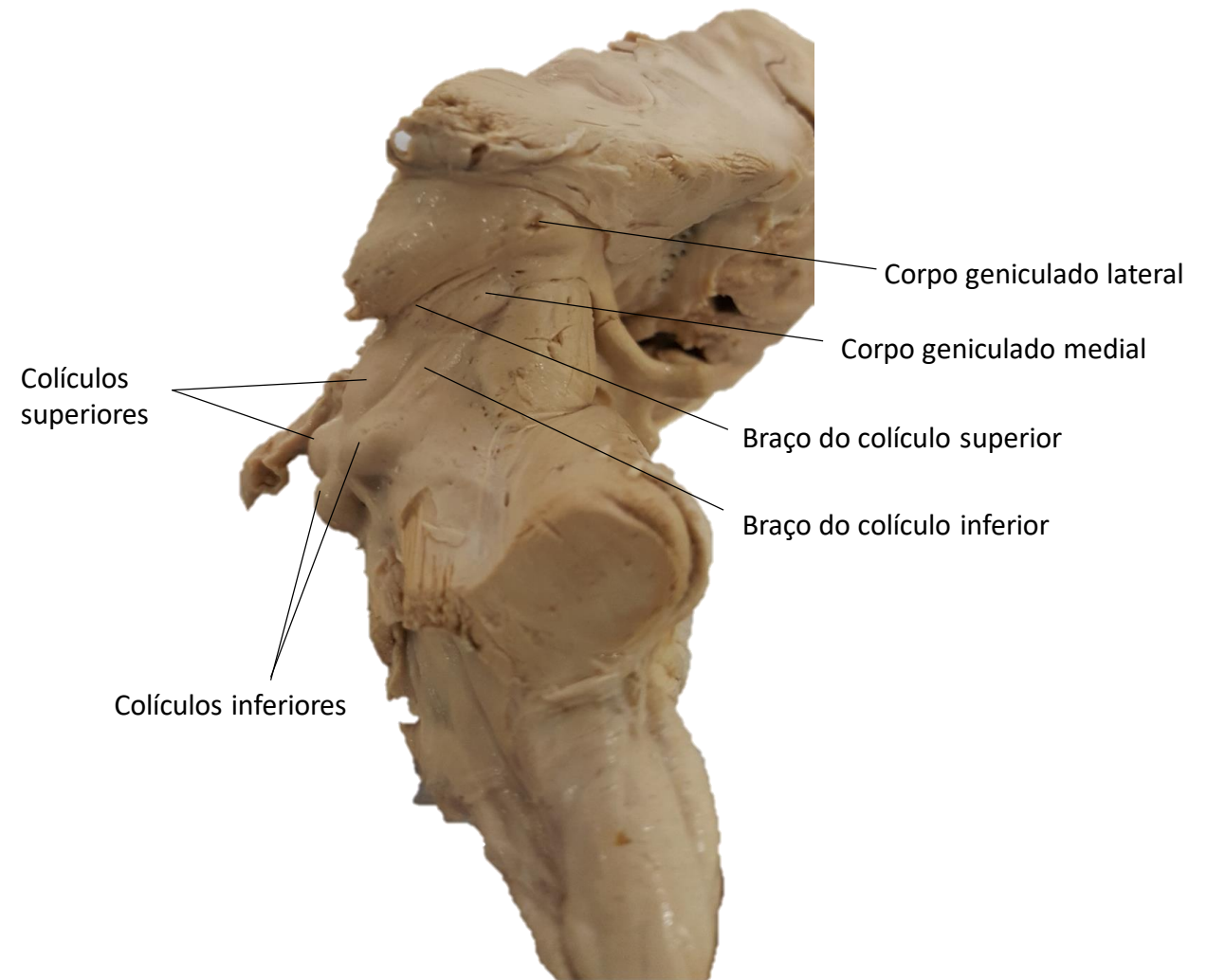
Diencéfalo



Vista posterior do tronco encefálico e diencefalo



Vista posterior do tronco encefálico



Vista lateral do tronco encefálico

Forame interventricular

Tubérculo anterior
do tálamo

Coluna do fórnice

Comissura anterior

Lâmina terminal

Recesso óptico

Tela e plexo
coroide(deslocados
inferiormente)

Glândula pineal

Comissura posterior

Quiasma óptico

Infundíbulo e
haste hipofisária

Túber cinéreo

Sulco
hipotalâmico

Corpo
mamilar

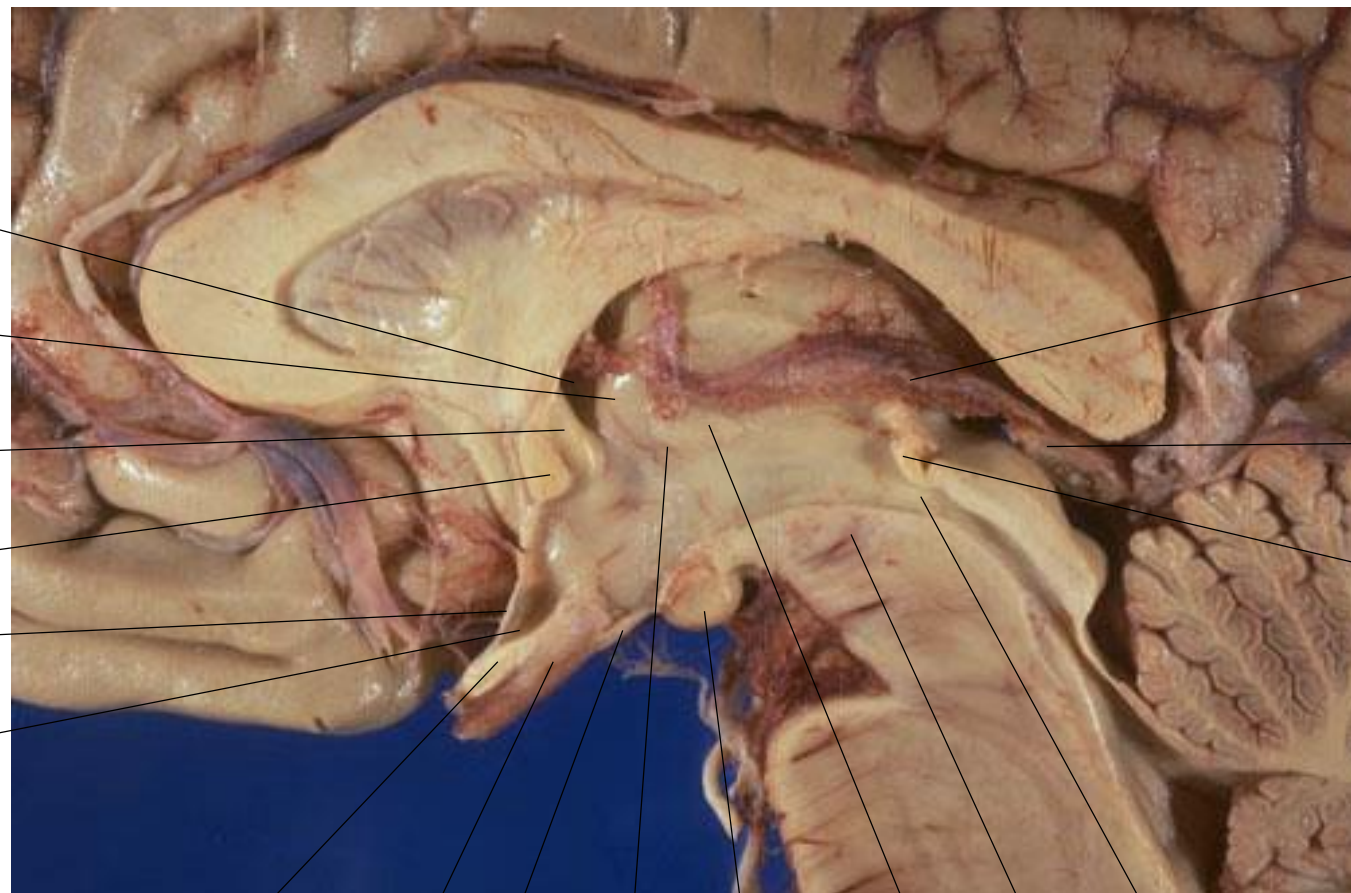
Aderência
intertalâmica

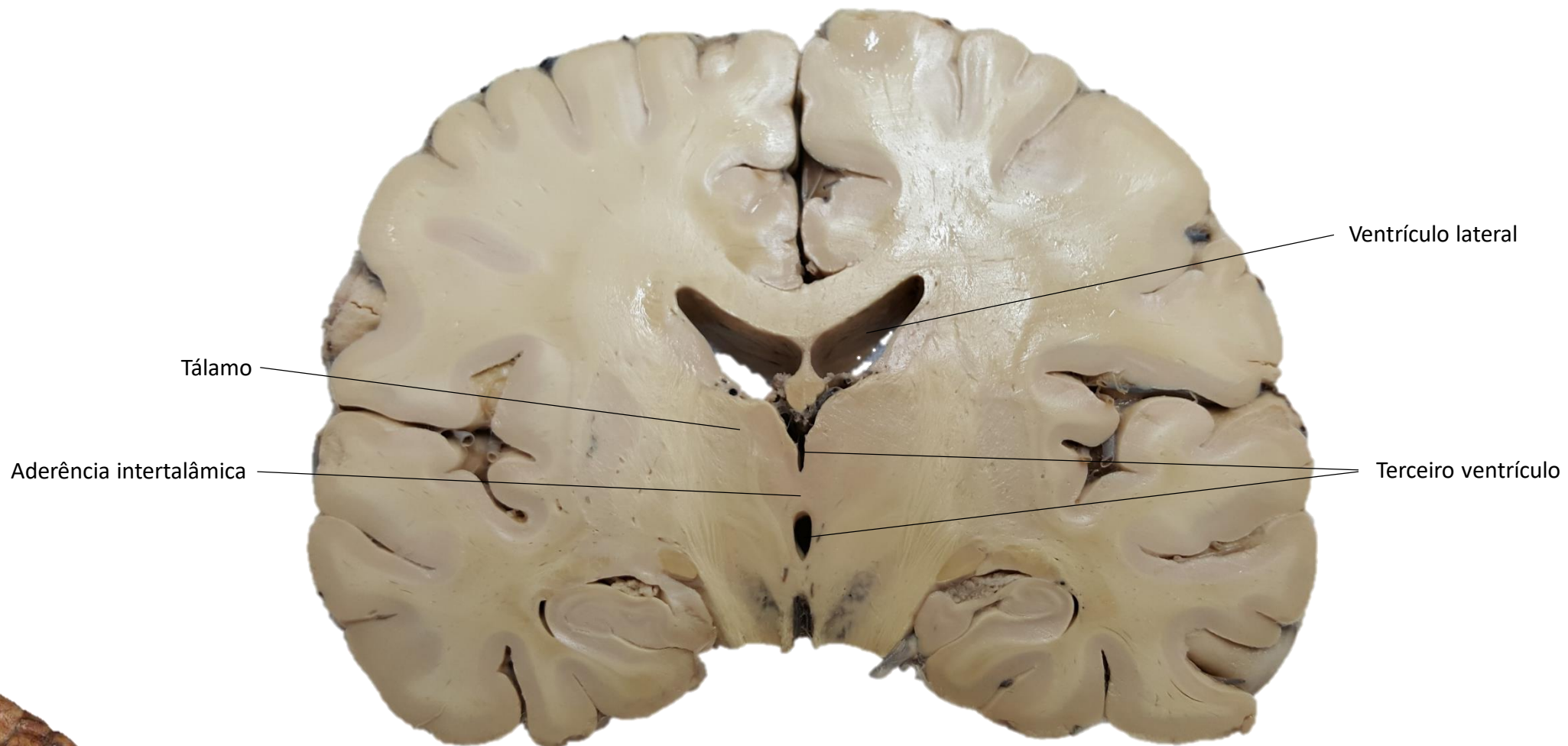
Tegmento
mesencefálico

Abertura superior do
aqueduto do mesencéfalo

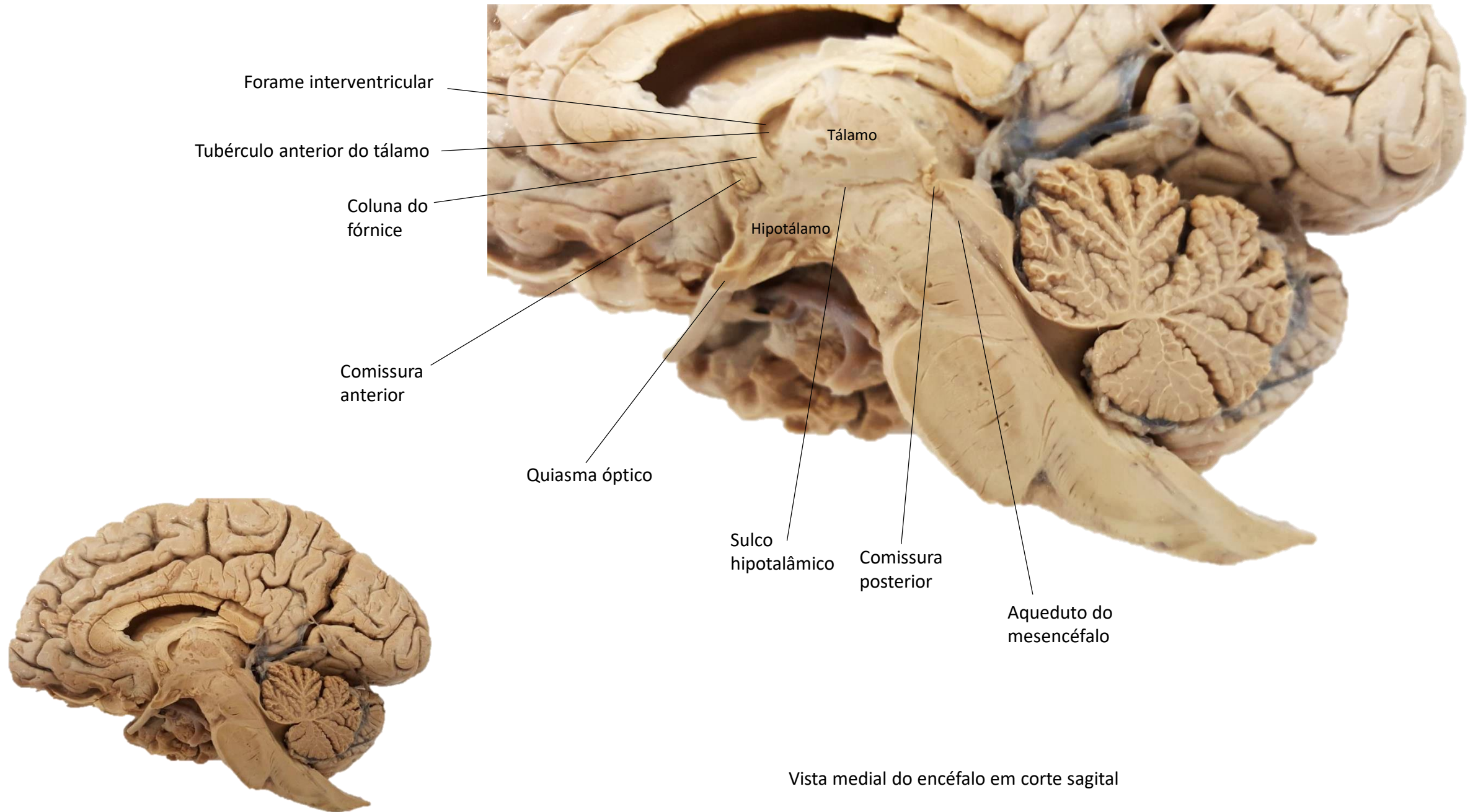


Vista medial do encéfalo em corte sagital

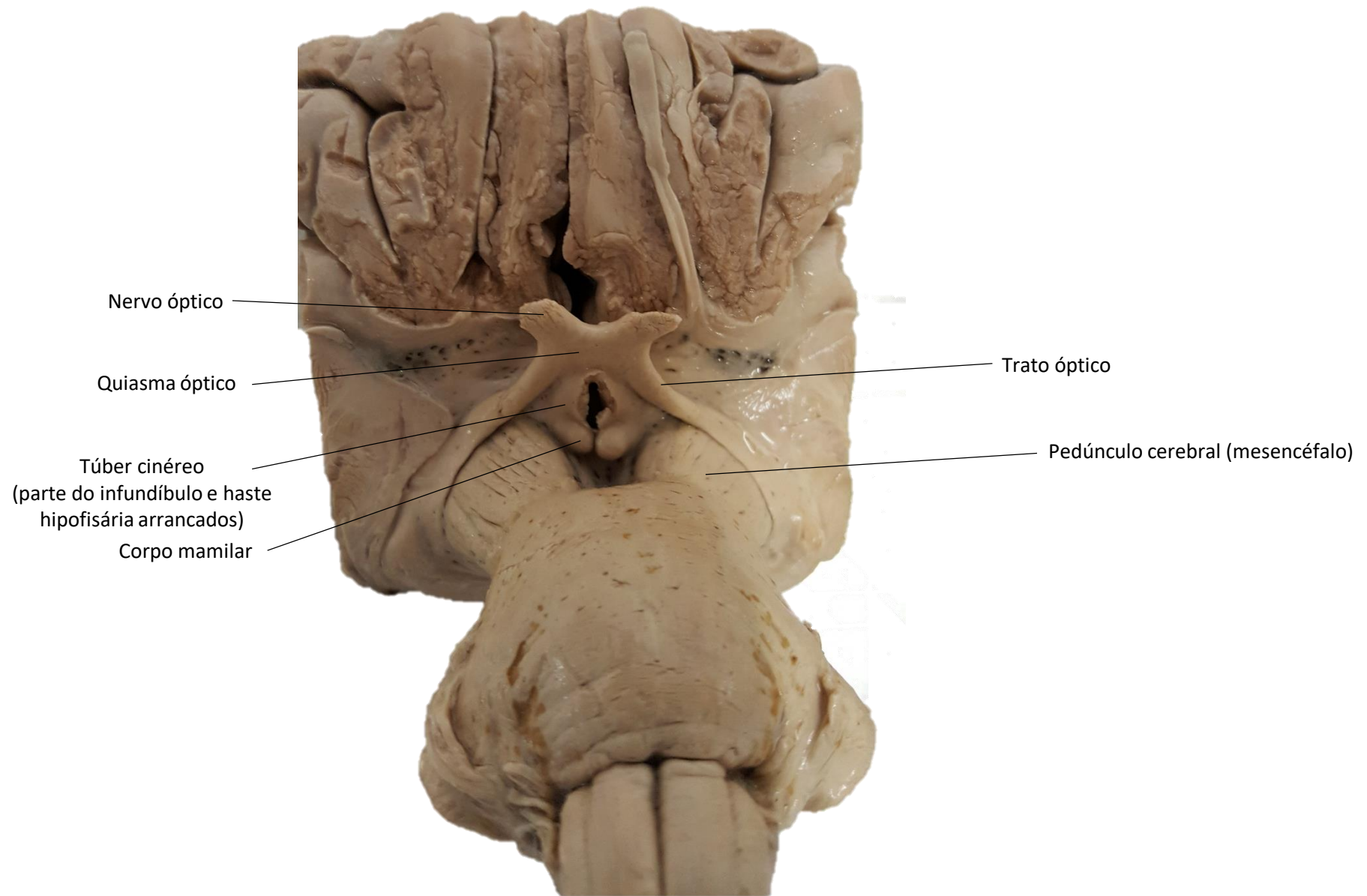




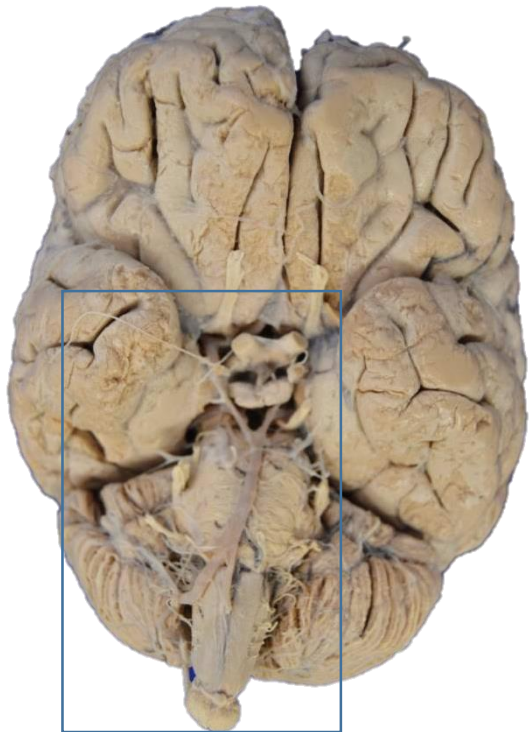
Encéfalo em corte coronal
(passando pelos pedúnculos cerebrais)



Vista medial do encéfalo em corte sagital



Vista inferior do encéfalo (anterior do tronco encefálico)



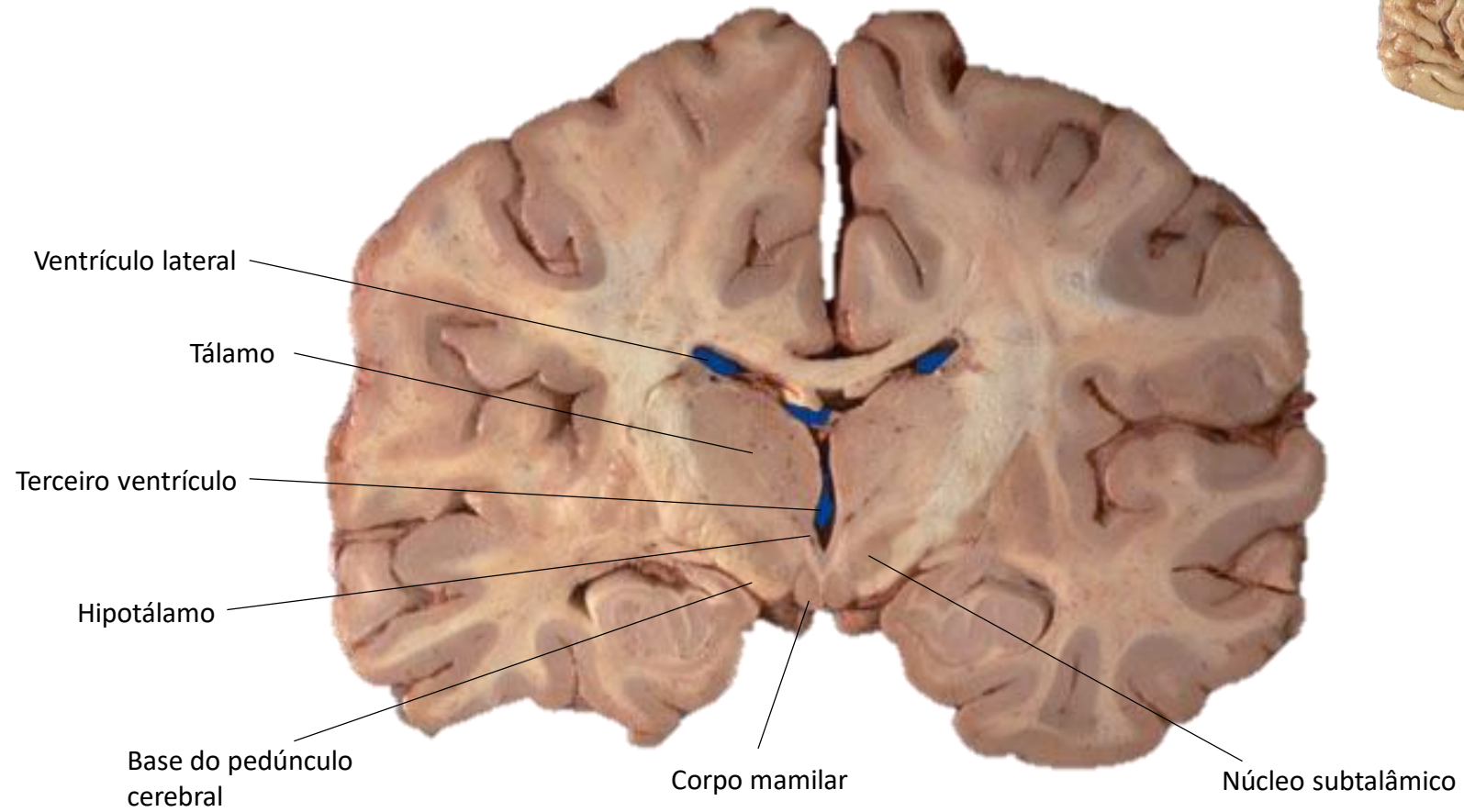
Quiasma óptico

Infundíbulo e haste hipofisária

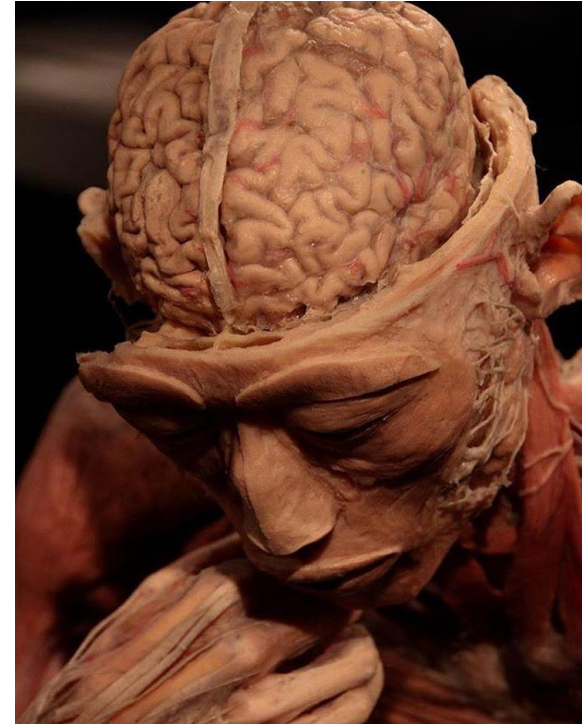
Hipófise



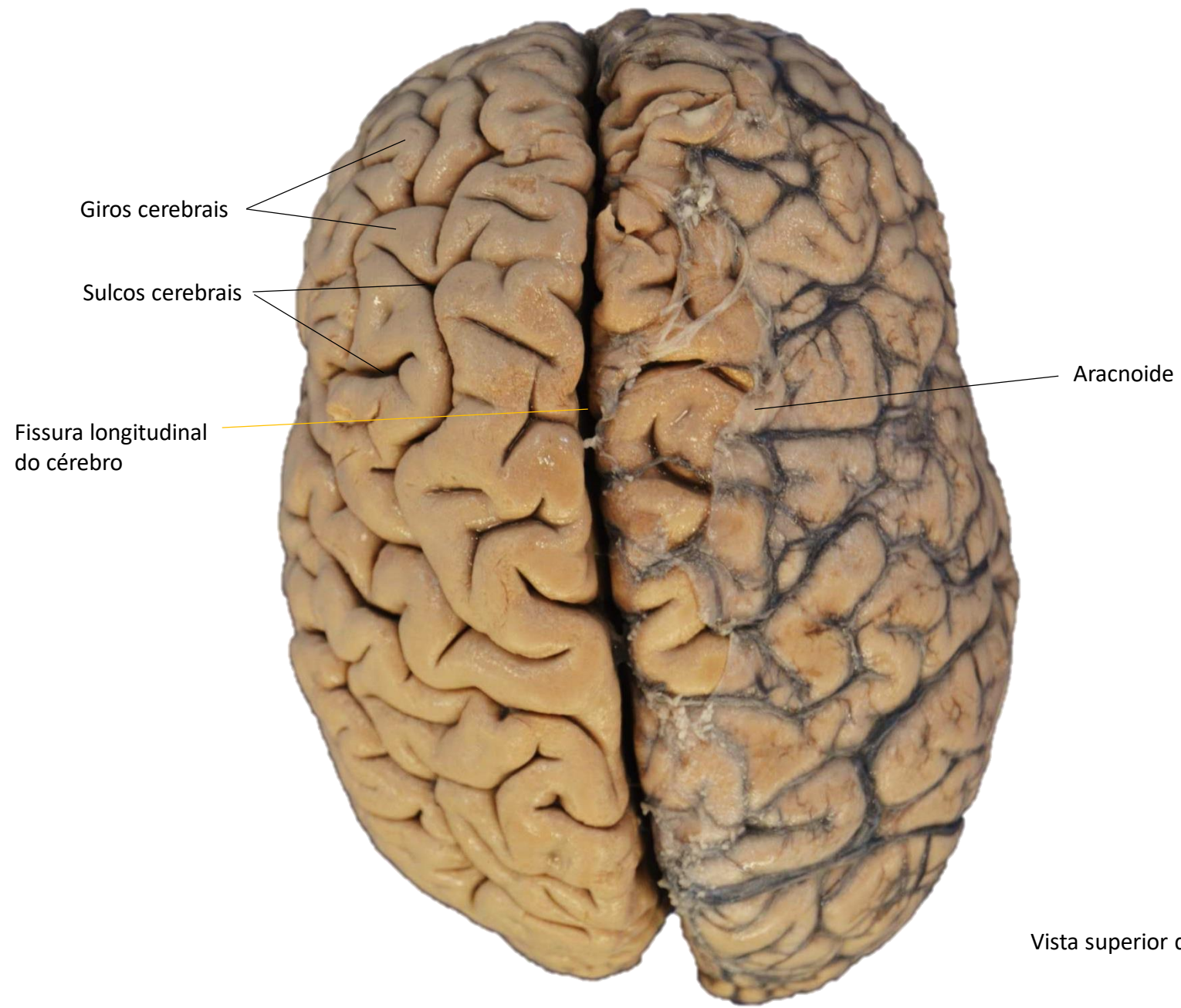
Vista inferior do encéfalo



Corte frontal do cérebro (passando pelos corpos mamilares)



Telencéfalo e núcleos da base

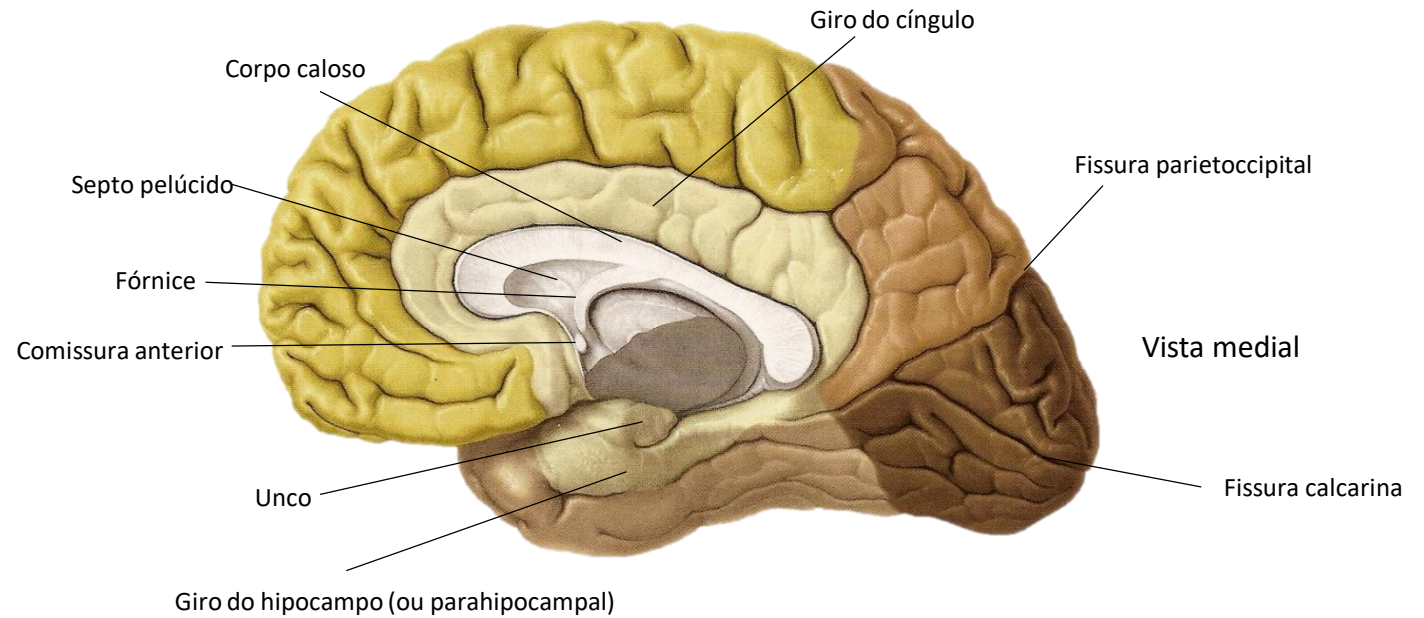
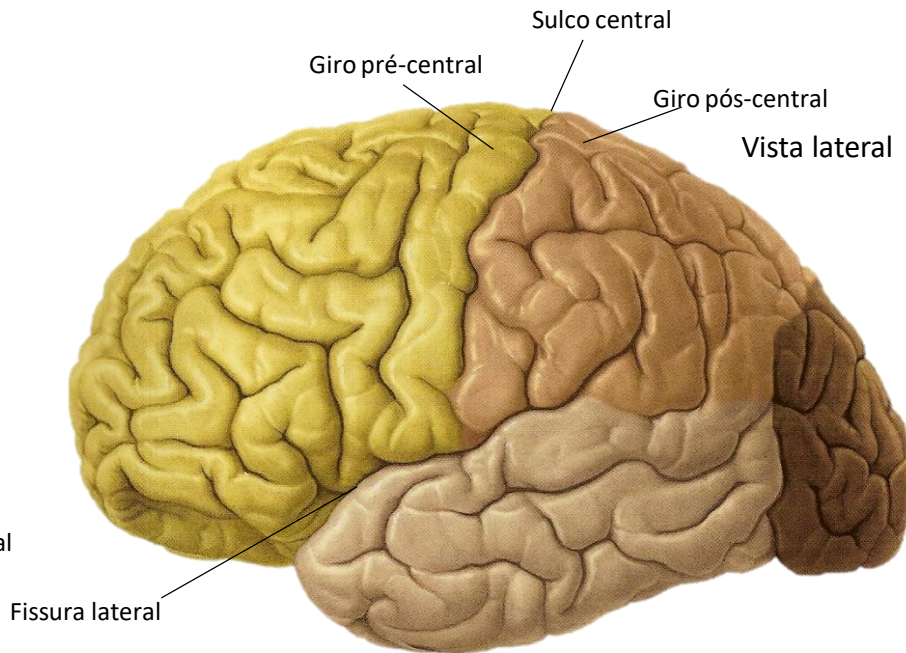
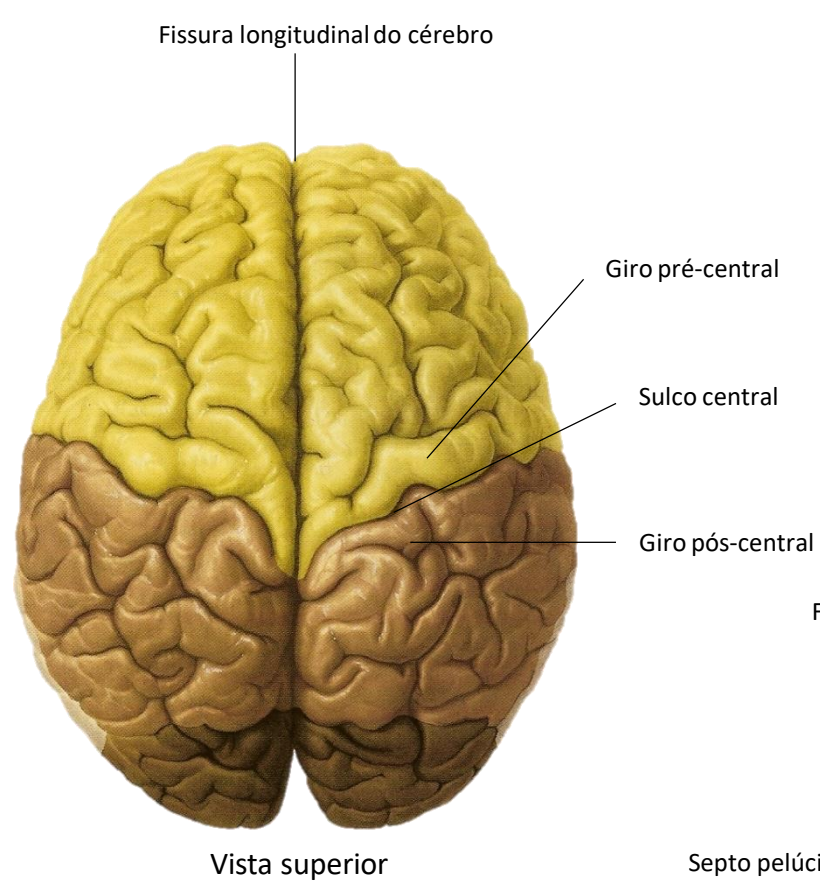


Vista superior dos hemisférios cerebrais

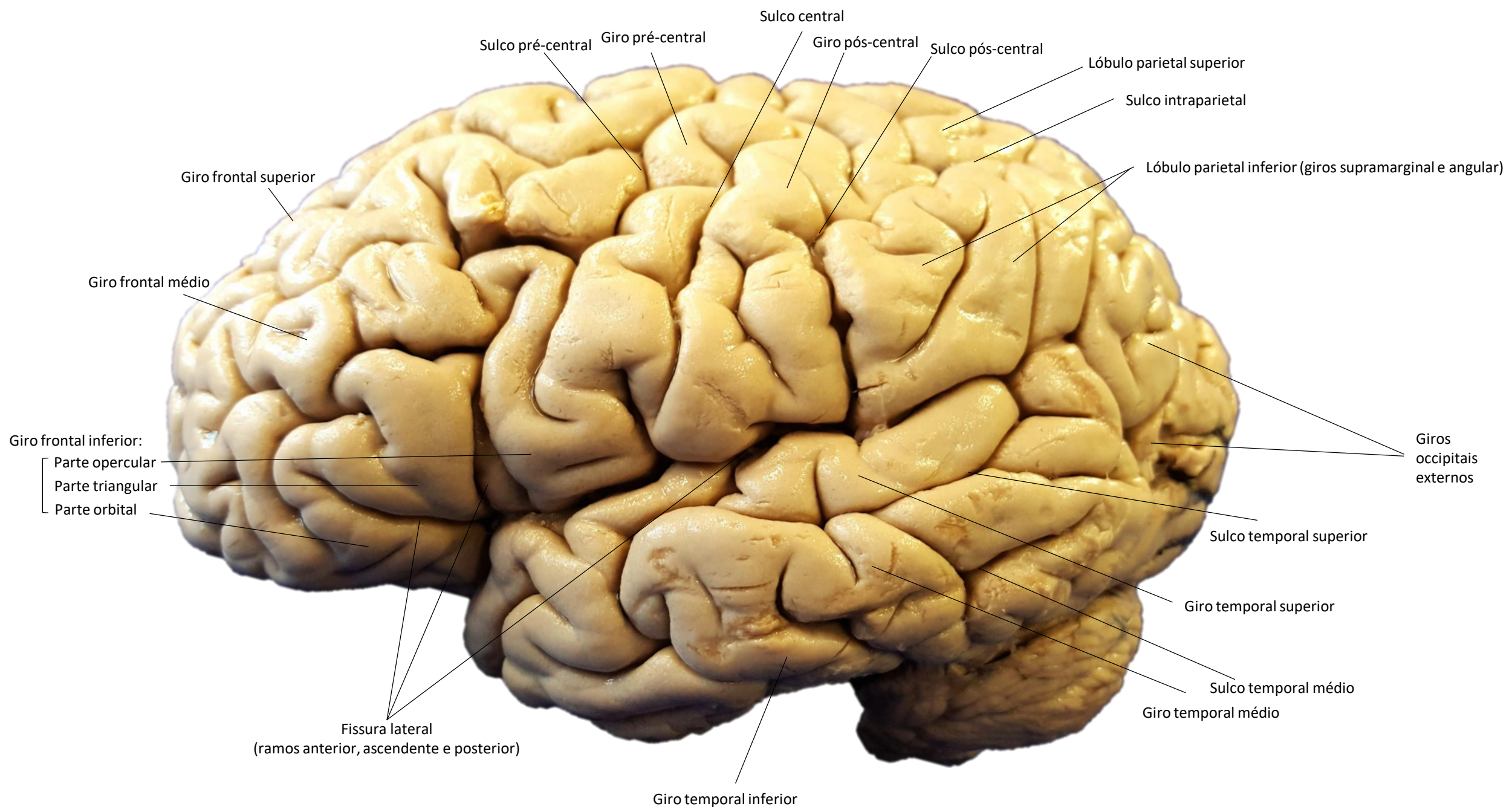


Vista lateral do encéfalo

- Lobo frontal
- Lobo parietal
- Lobo temporal
- Lobo occipital



Lobos cerebrais





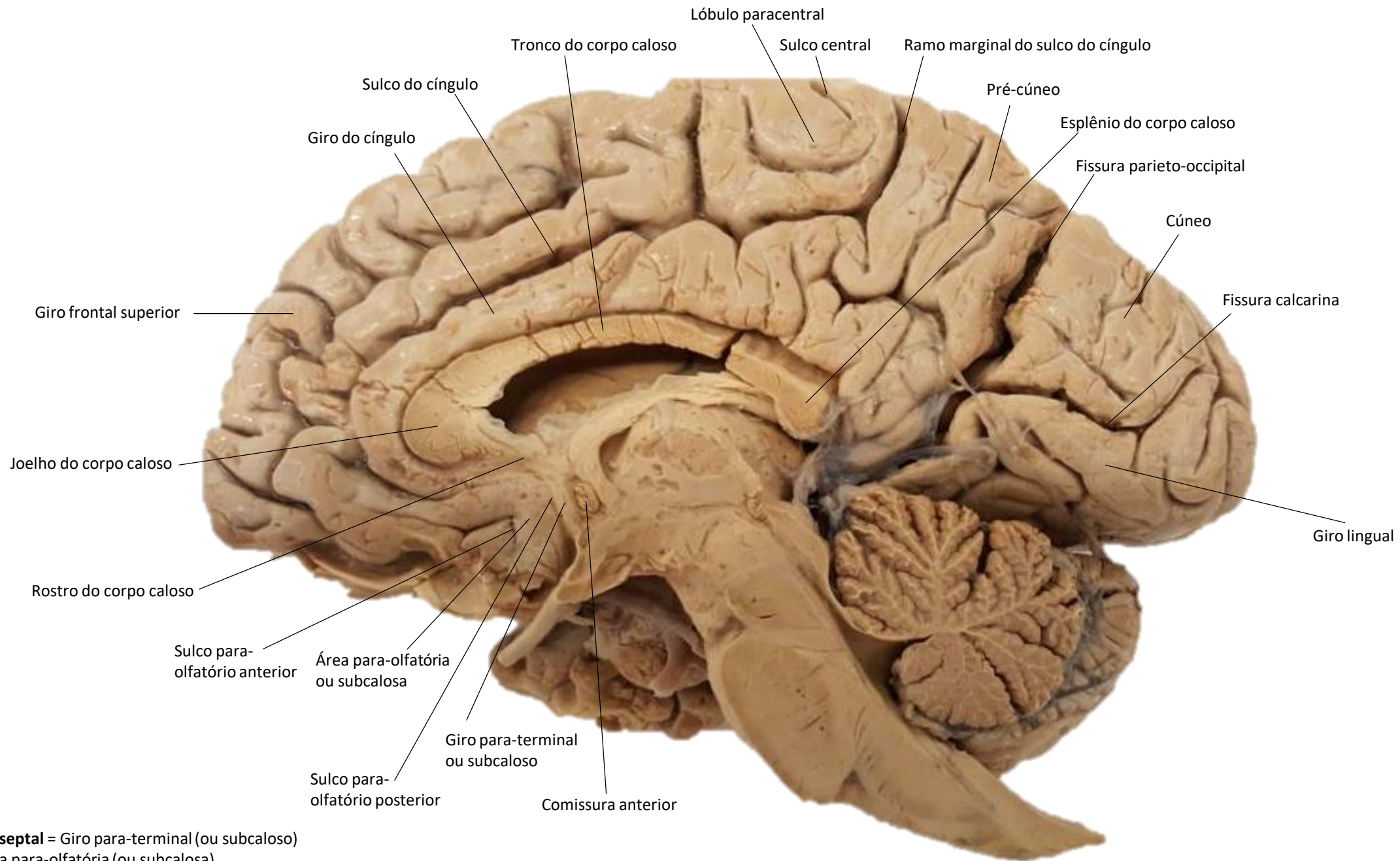
Giros da ínsula
(afastamento das bordas
da fissura lateral)

Vista lateral do
encéfalo

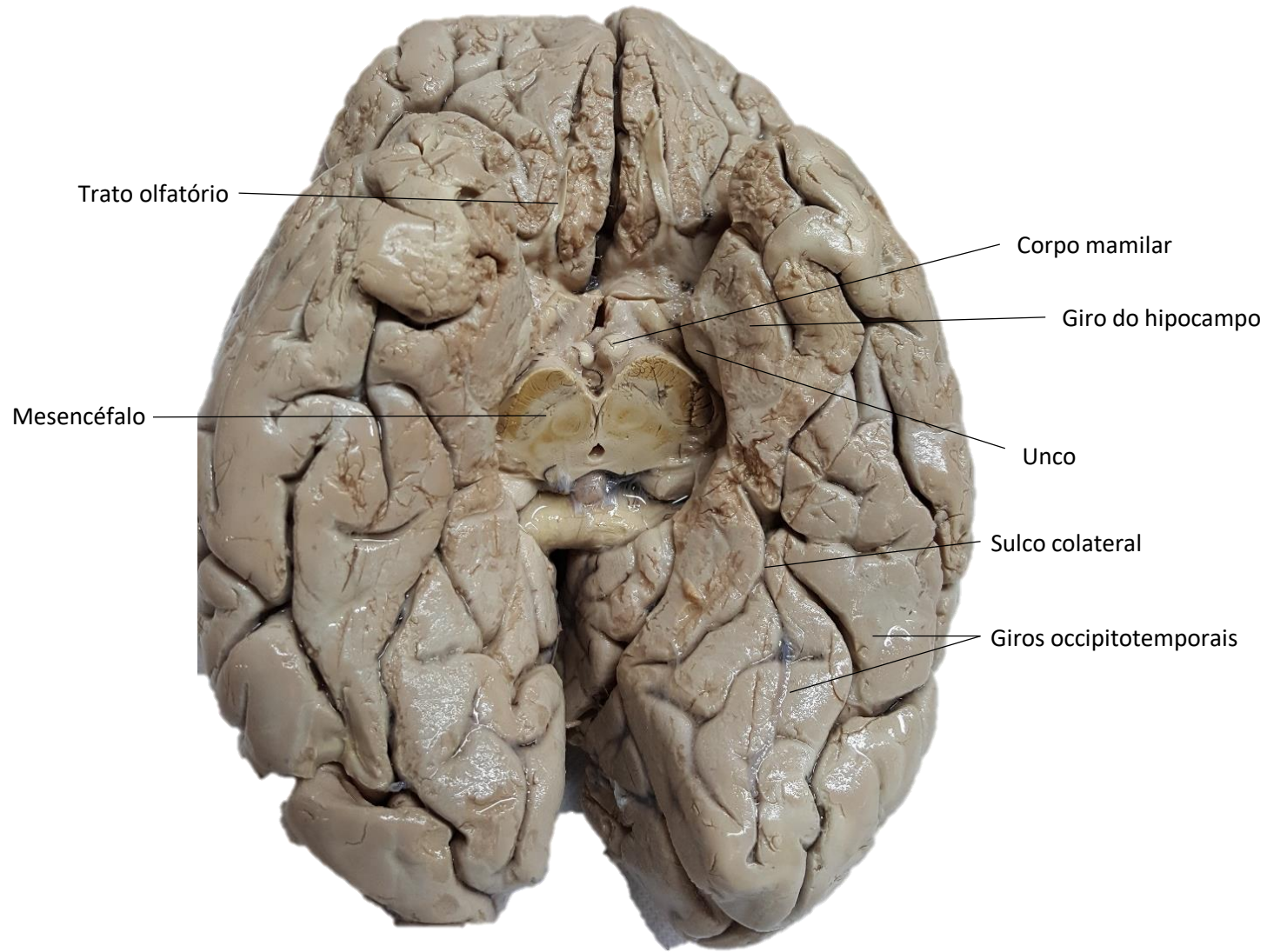


Giros da ínsula (retirada
das bordas da fissura
lateral – lobos frontal,
parietal e temporal)

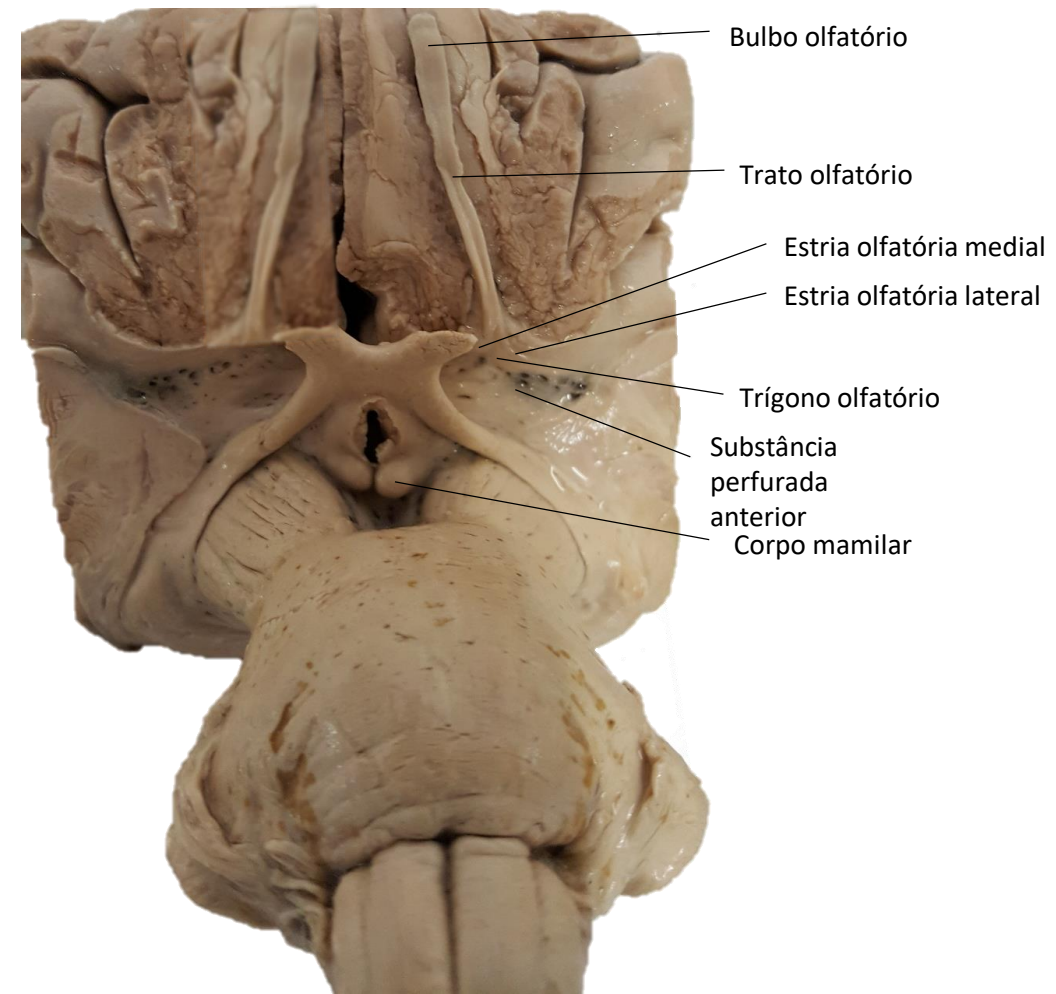
Vista lateral do
encéfalo



Área septal = Giro para-terminal (ou subcaloso)
+ Área para-olfatória (ou subcalosa)



Vista inferior do cérebro (tronco encefálico seccionado e retirado)



Vista inferior do cérebro (anterior do tronco encefálico)

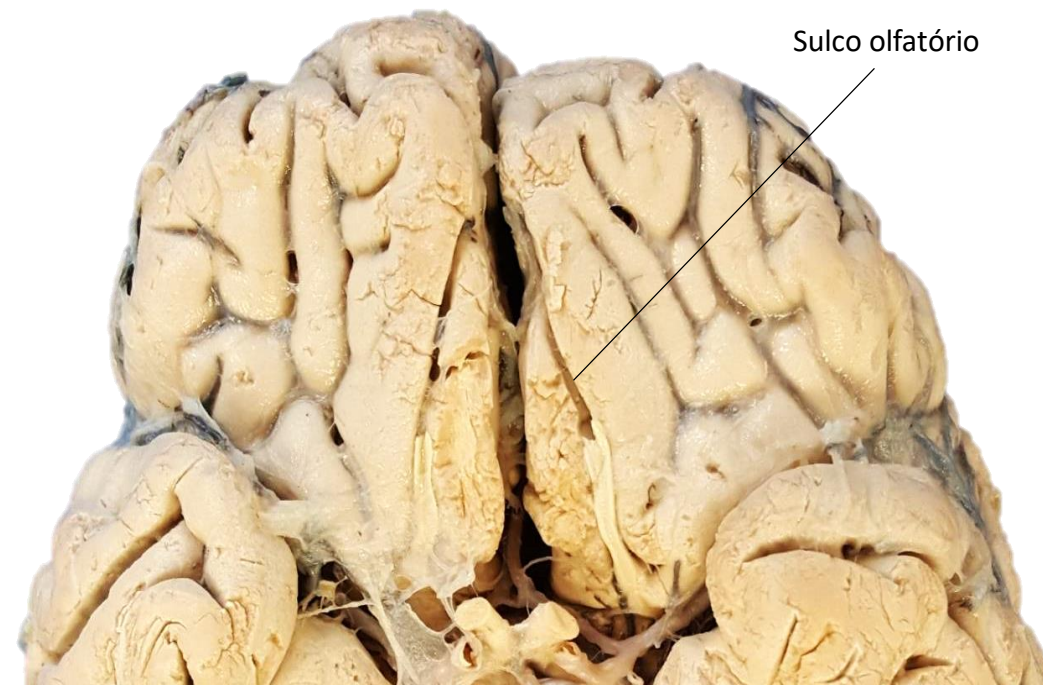
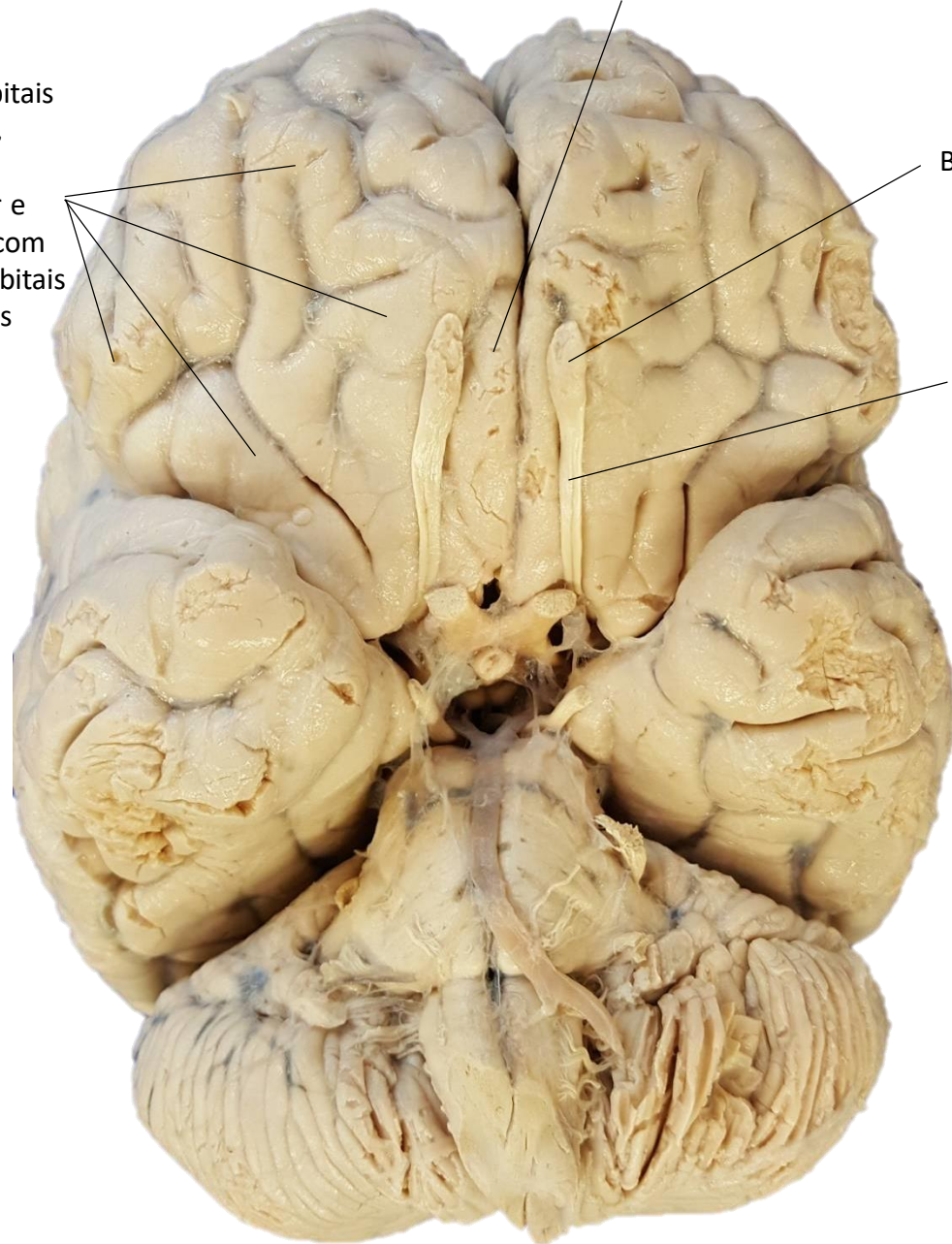
Giros orbitais
(anterior,
medial,
posterior e
lateral), com
sulcos orbitais
entre eles

Giro reto

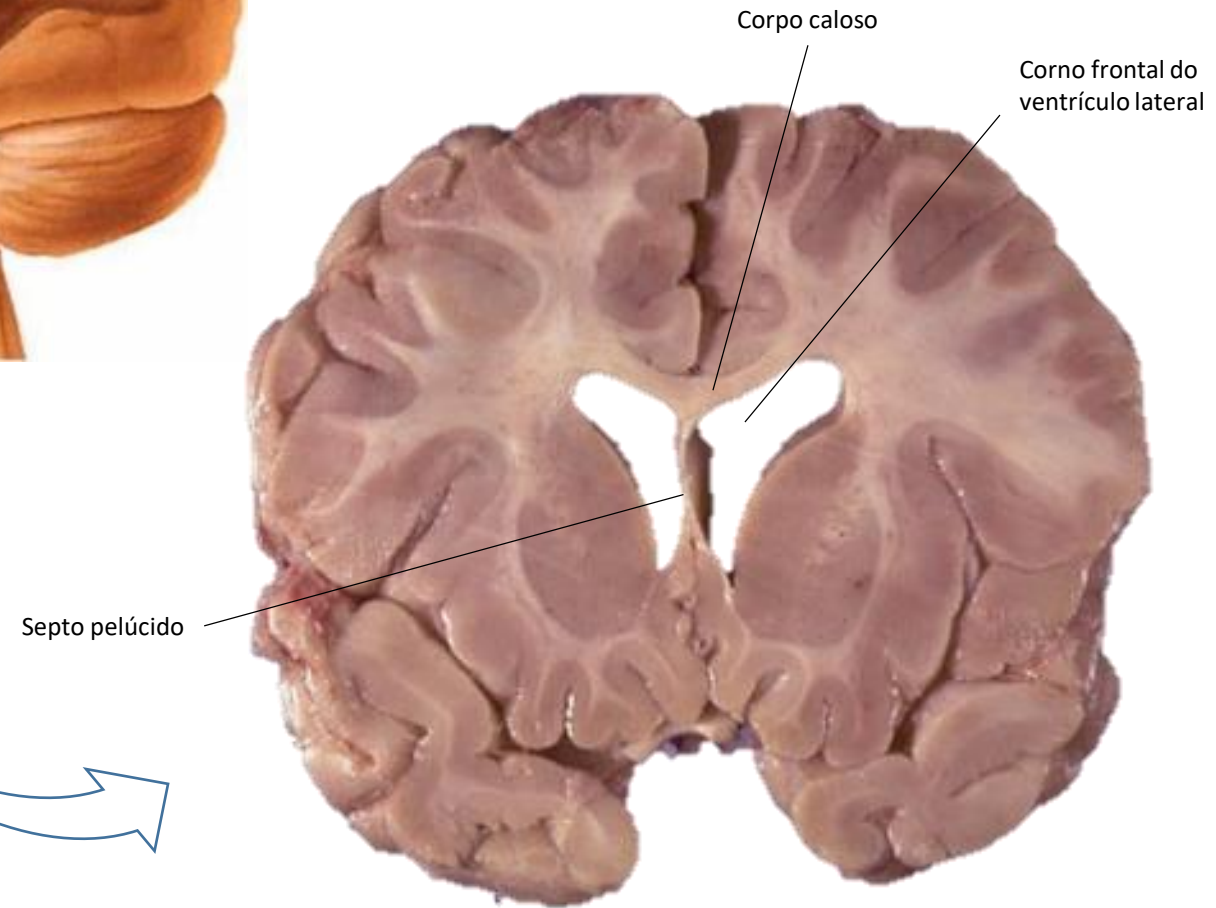
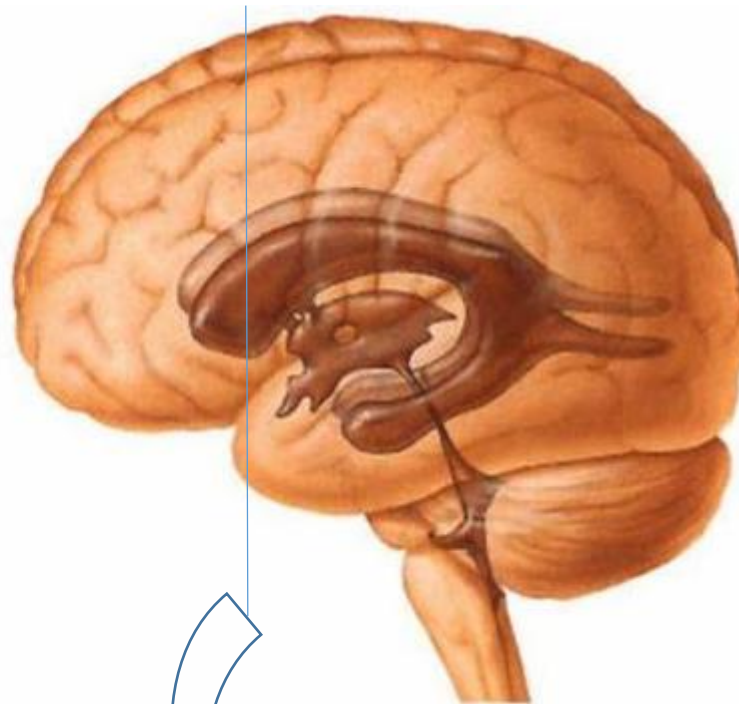
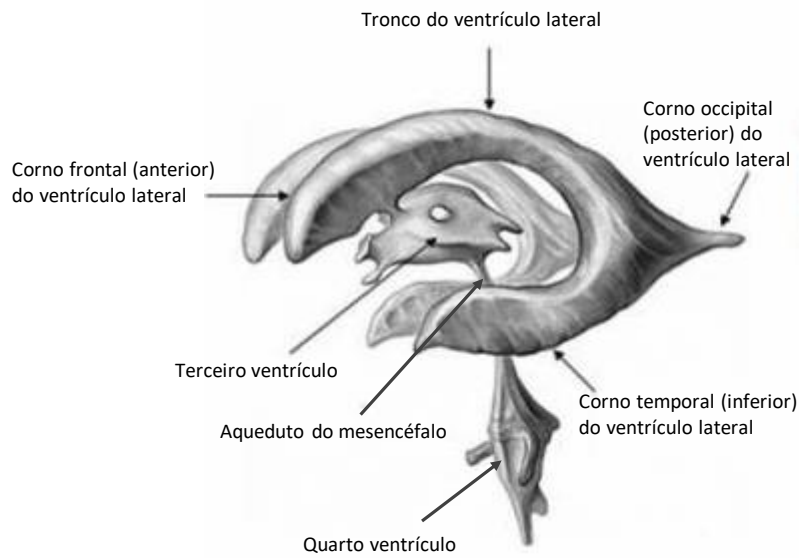
Bulbo olfatório

Trato olfatório

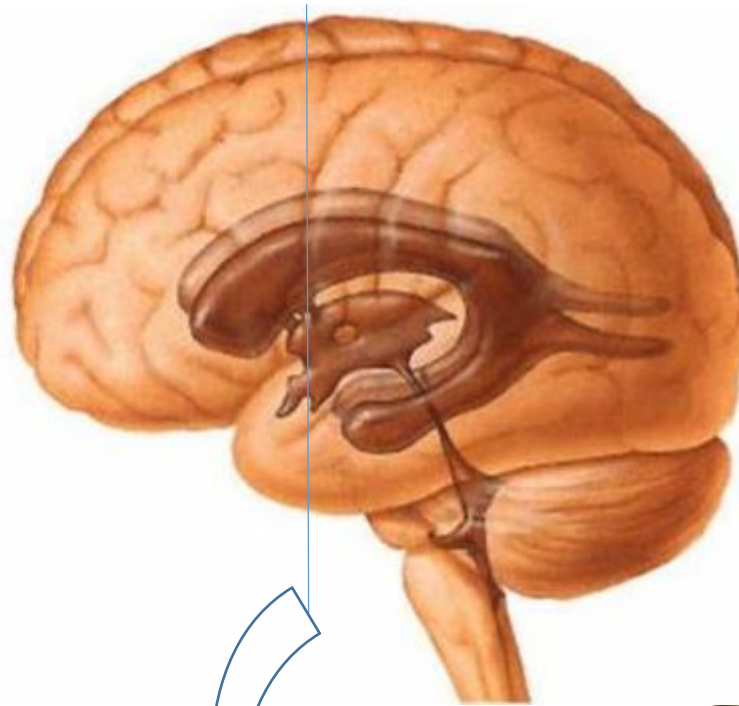
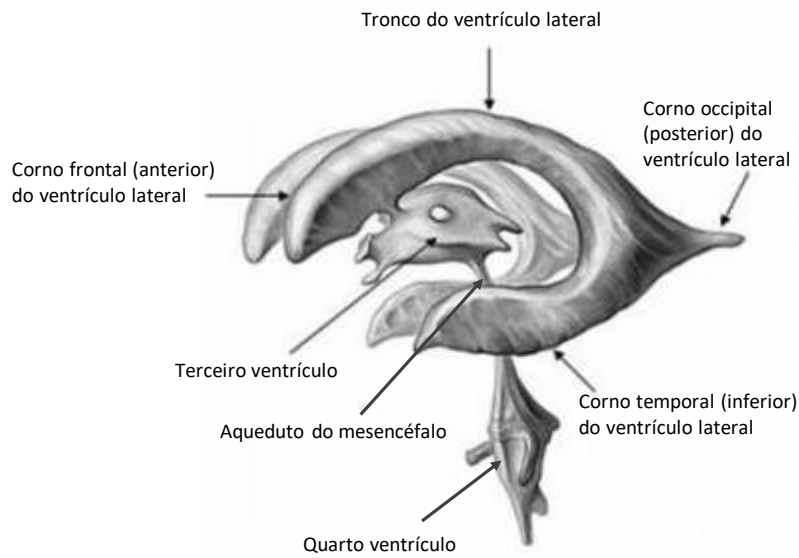
Sulco olfatório



Vista inferior do
encéfalo

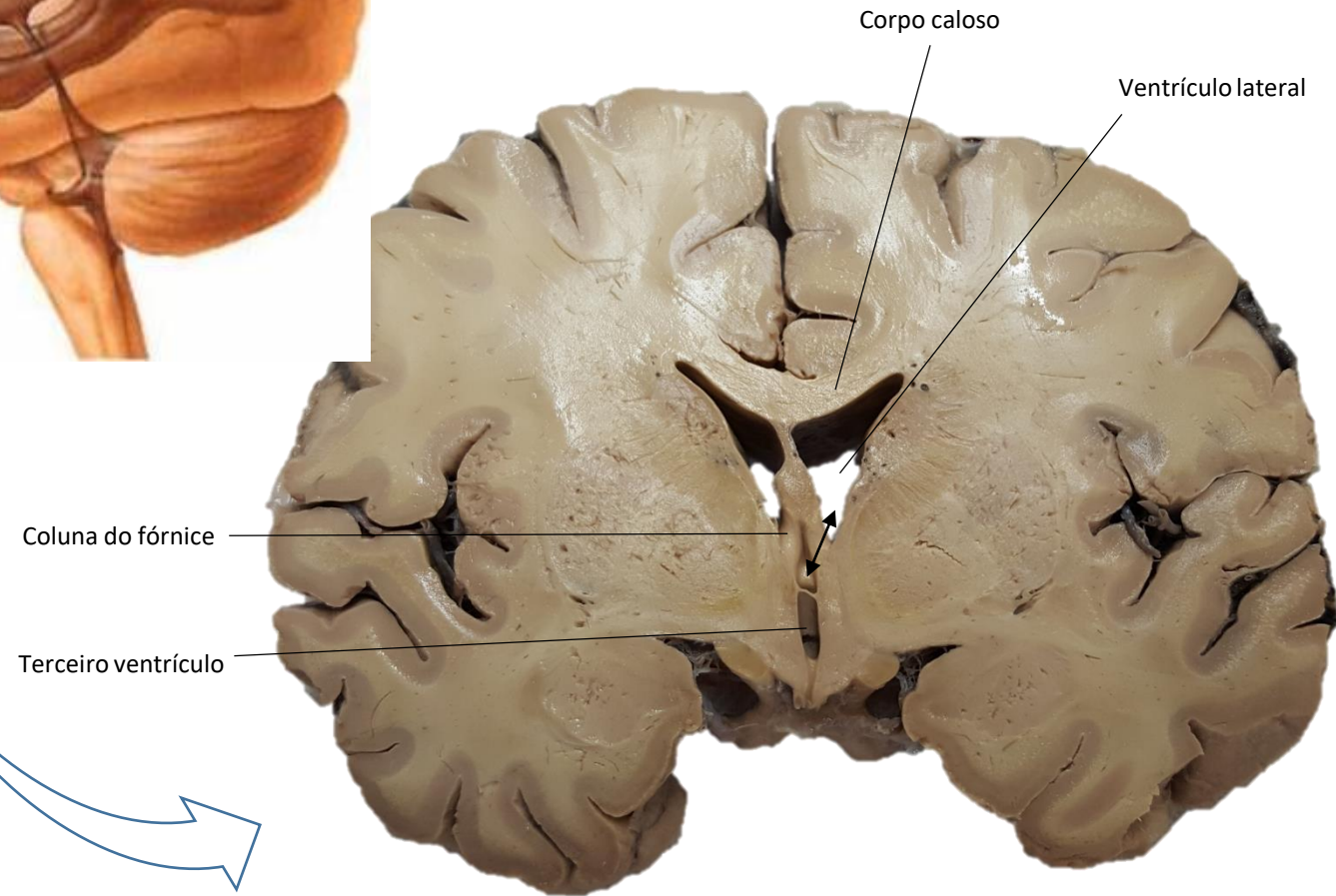


Corte frontal do cérebro



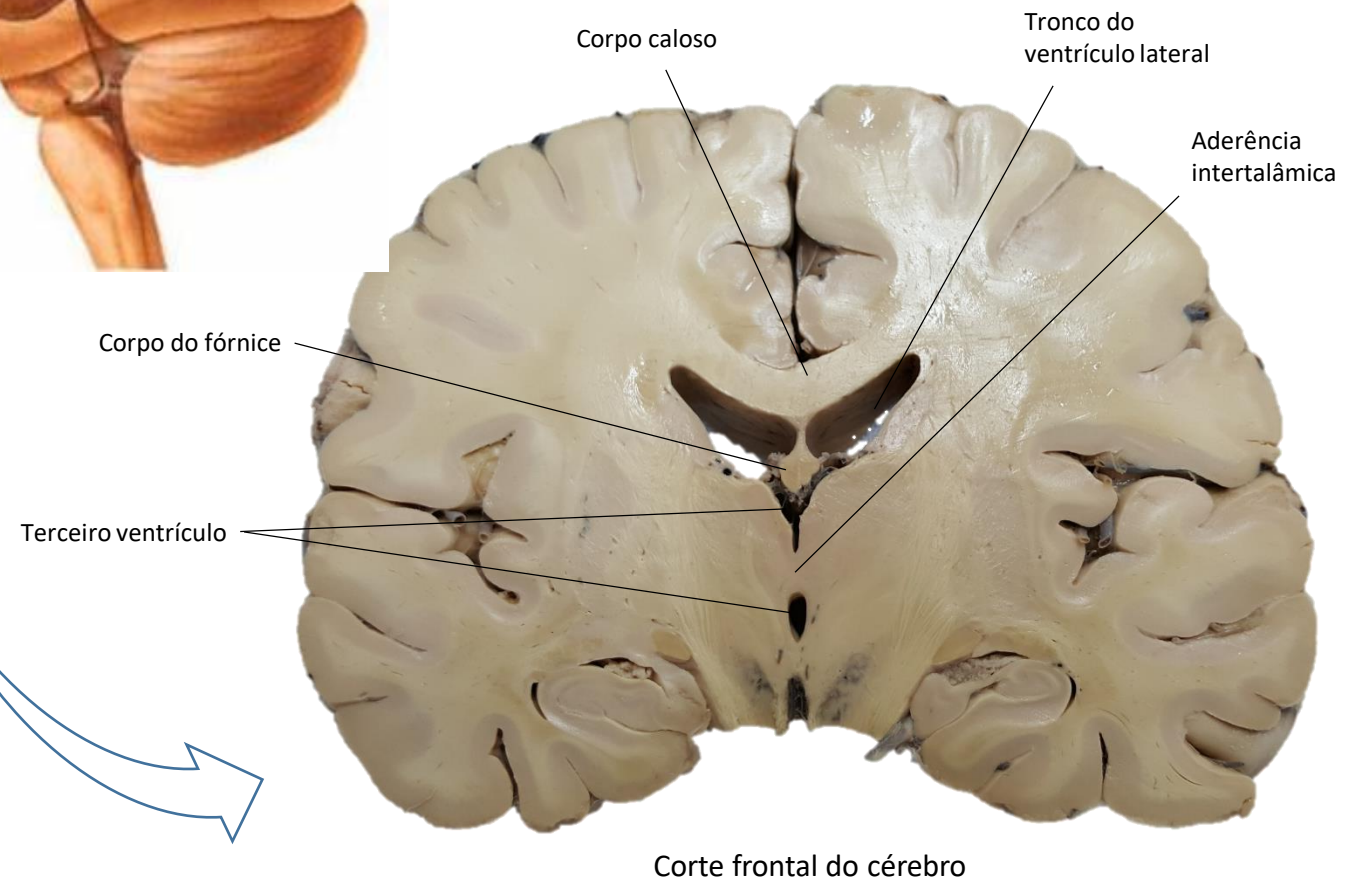
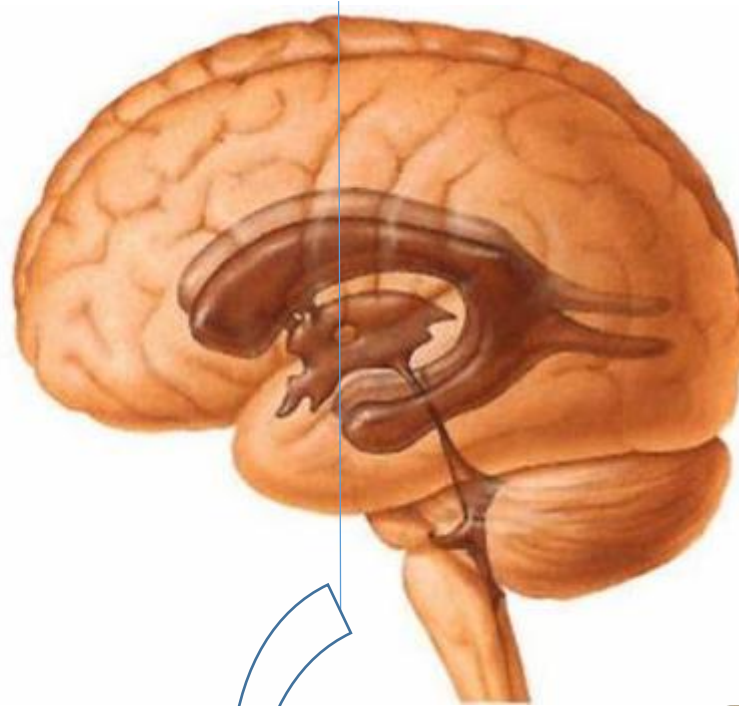
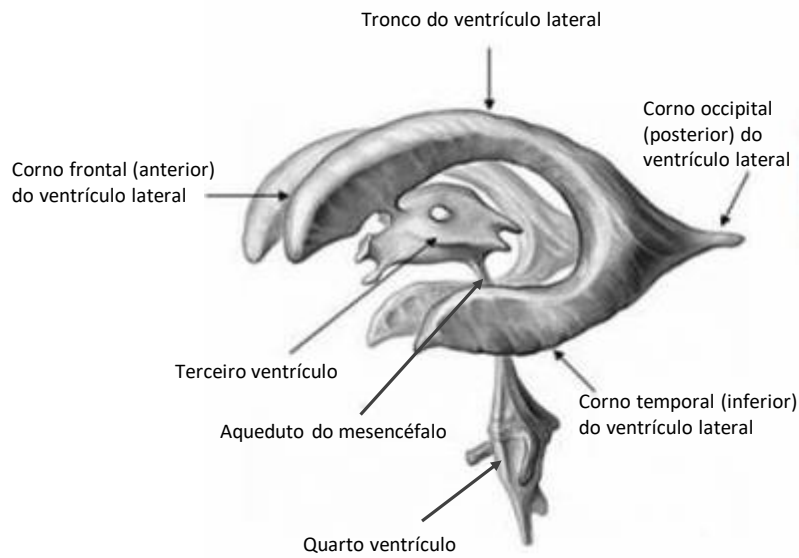
Forame interventricular

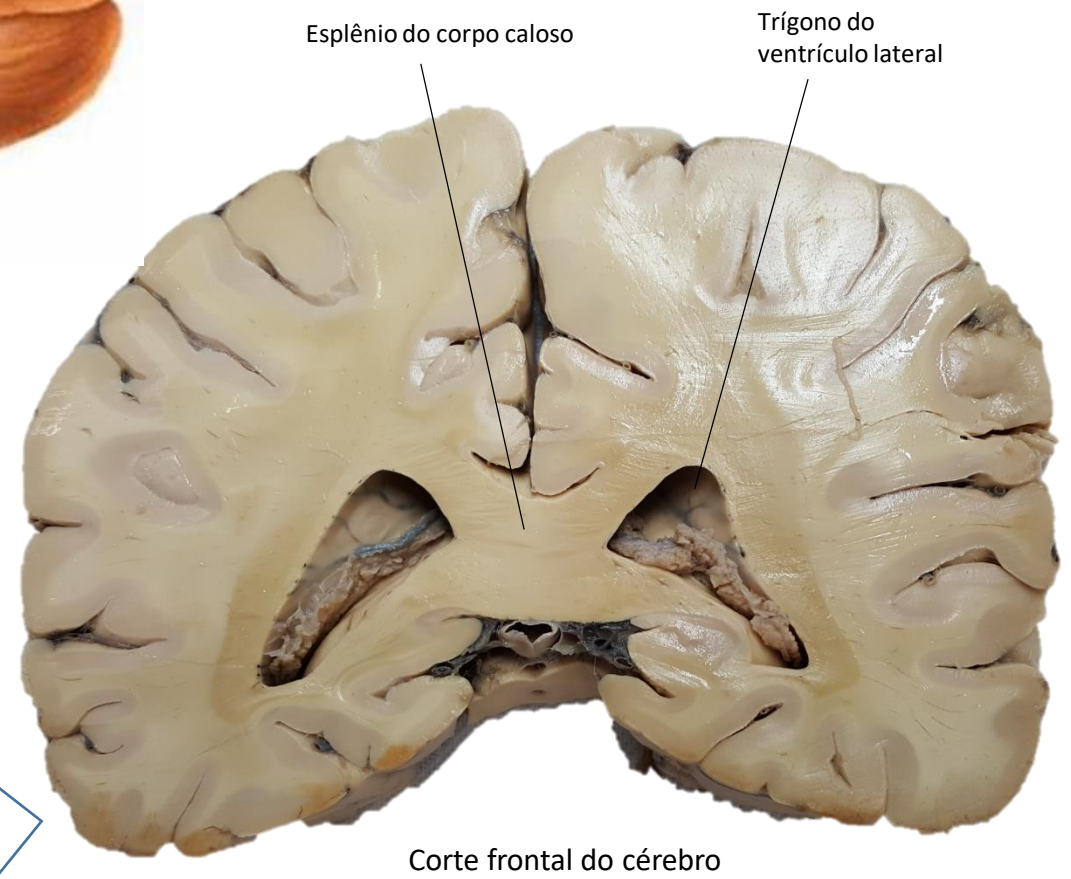
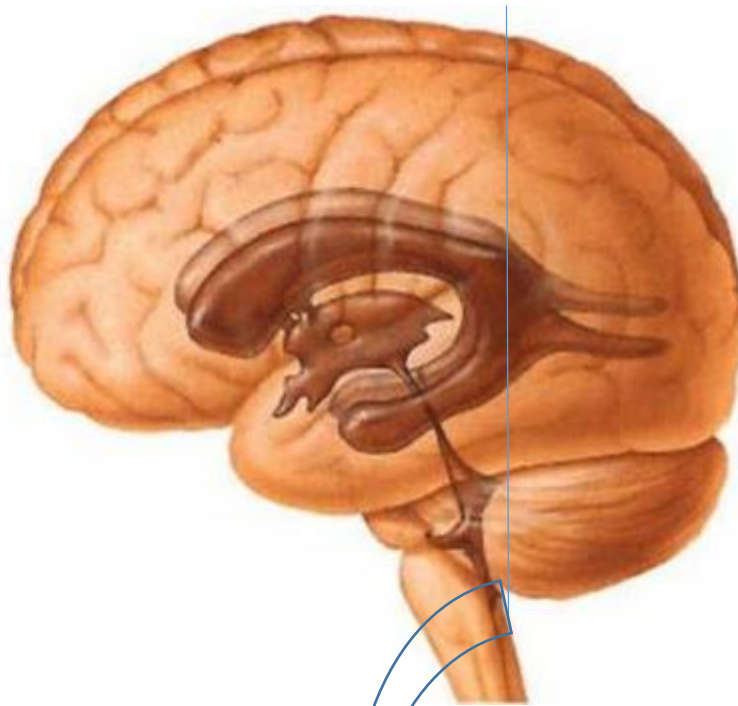
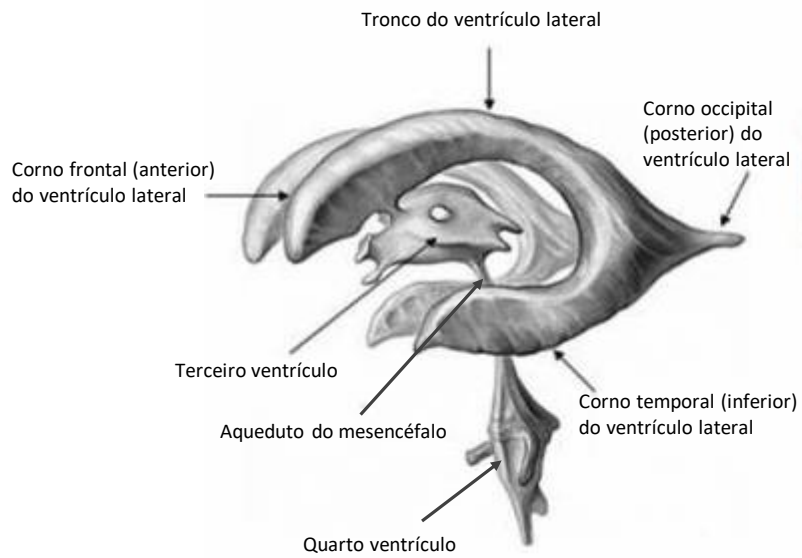
This label points to the 'Foramen interventriculare' (foramen of Monro), the opening that connects the lateral ventricle to the third ventricle. It is indicated by a double-headed arrow.

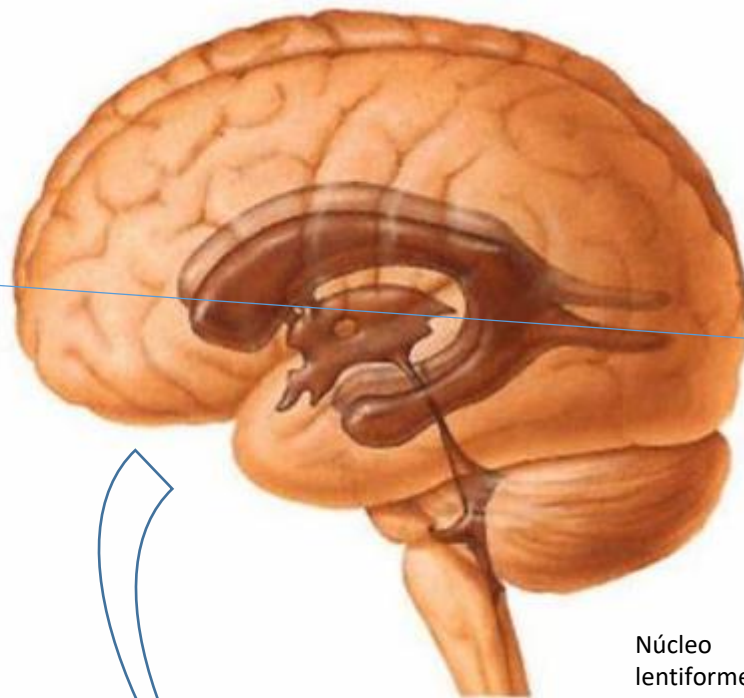
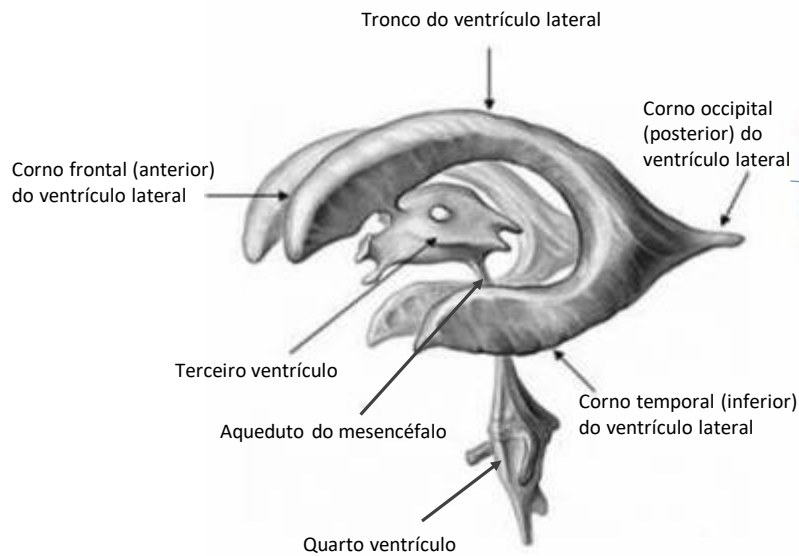


Corte frontal do cérebro

This label identifies the image as a 'Frontal section of the brain'.







Cabeça do núcleo caudado

Corno frontal do ventrículo lateral

Terceiro ventrículo

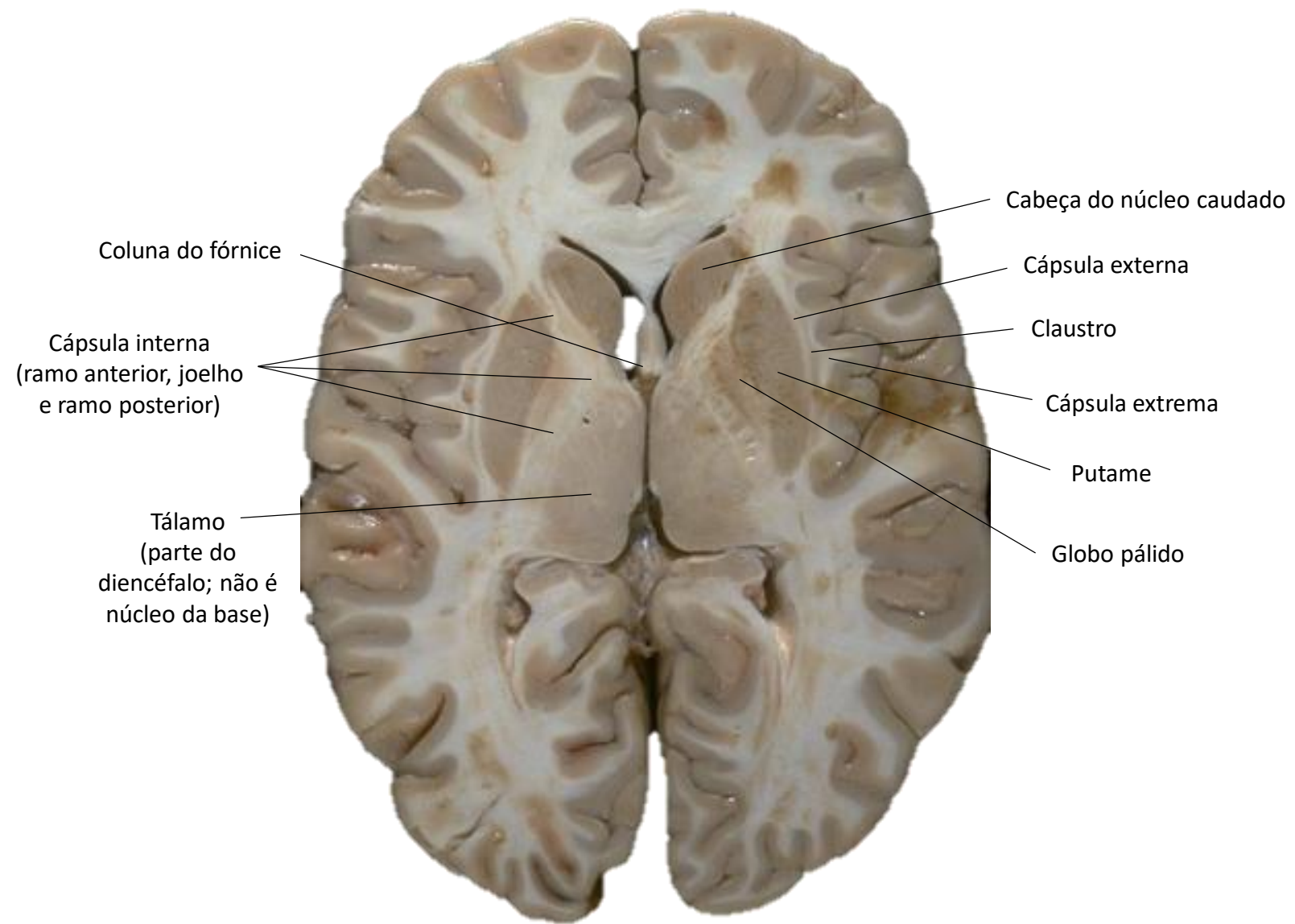
Núcleo lentiforme

Tálamo

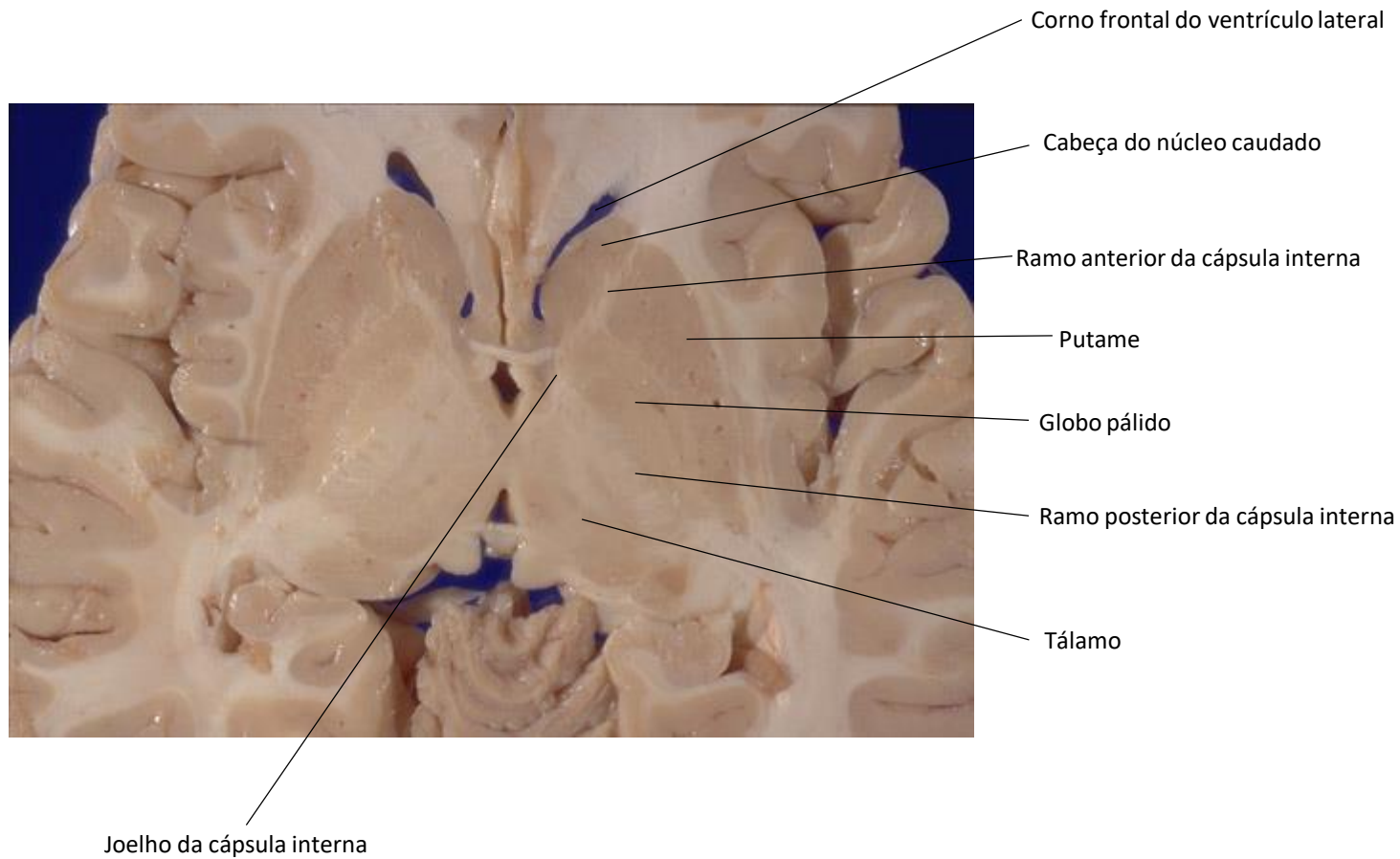
Corno occipital do ventrículo lateral

Corte horizontal do cérebro

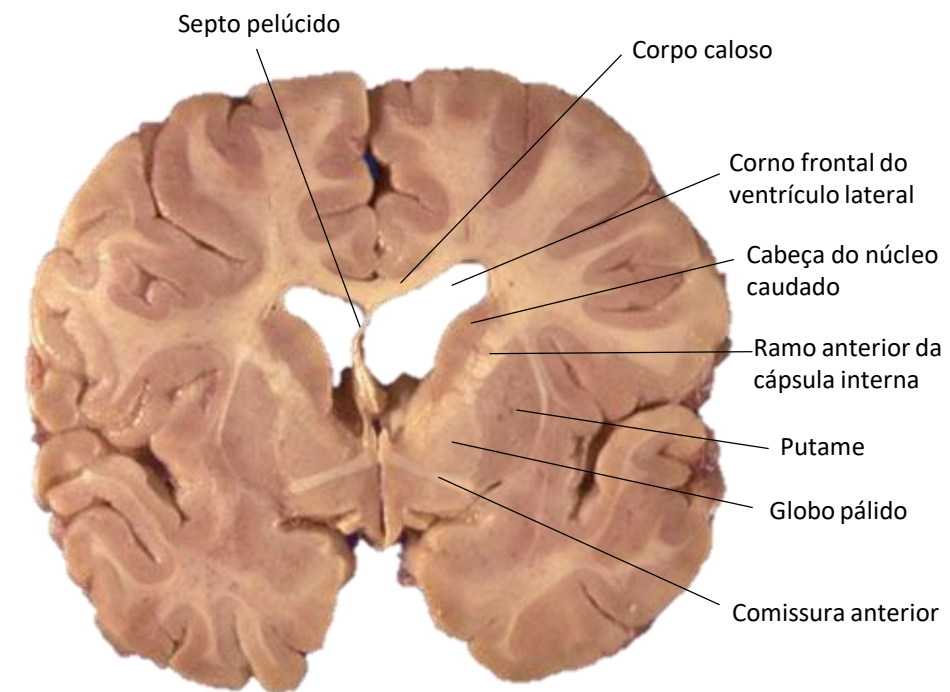
A = ramo anterior da cápsula interna
J = joelho da cápsula interna
P = ramo posterior da cápsula interna
↗ = forame interventricular



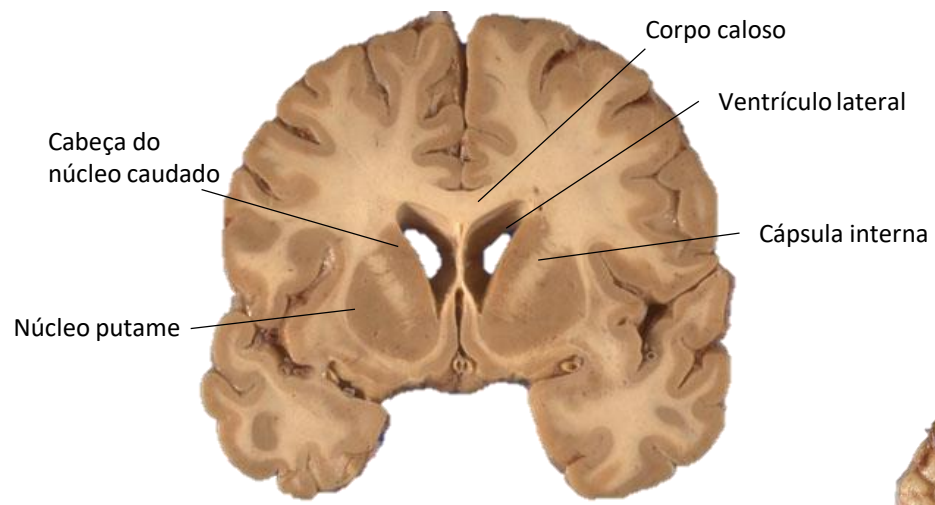
Corte horizontal do cérebro



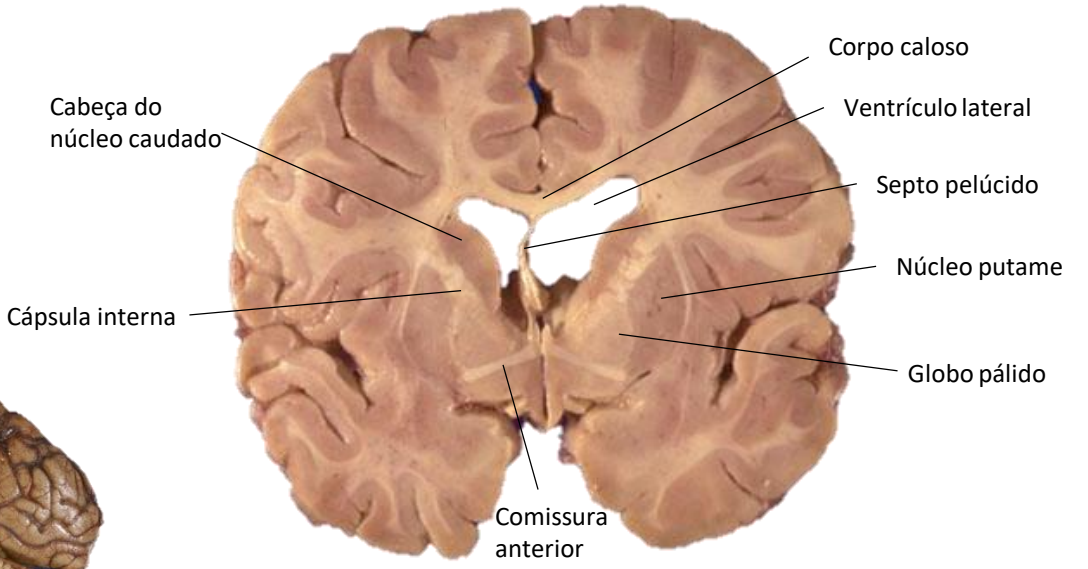
Corte horizontal do cérebro



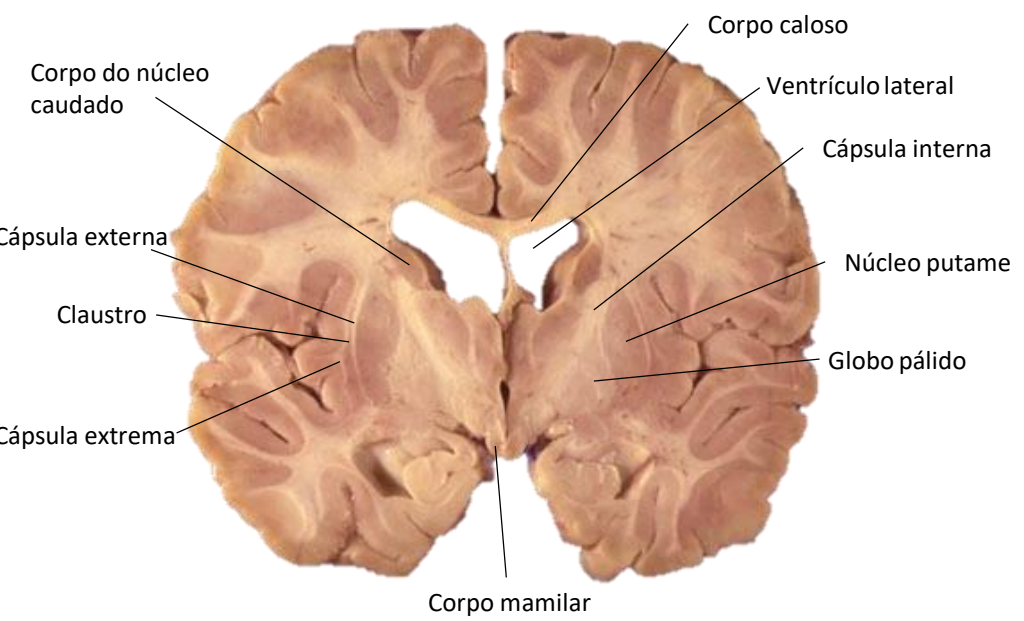
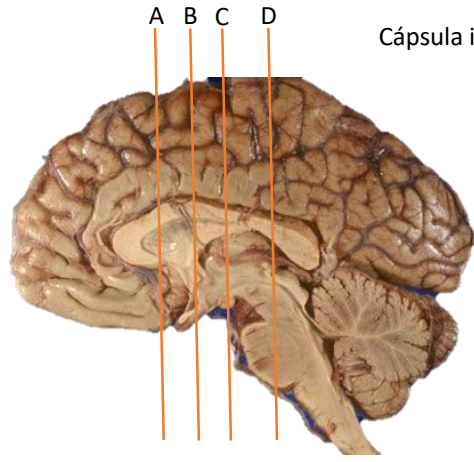
Corte frontal do cérebro



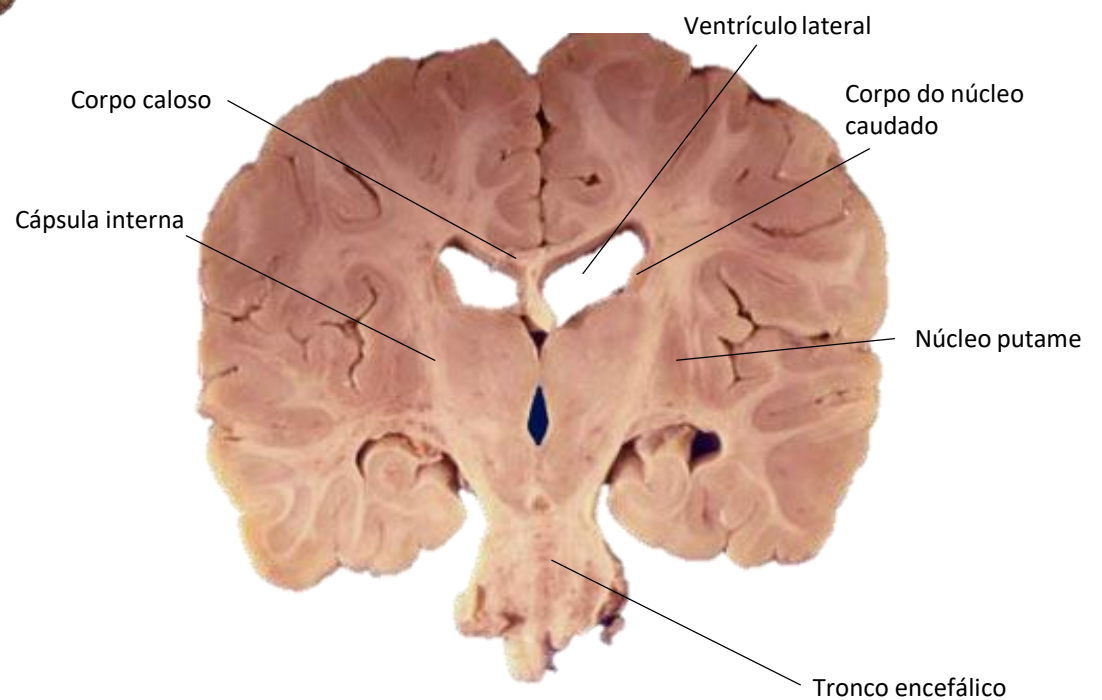
Corte frontal – nível do corte A



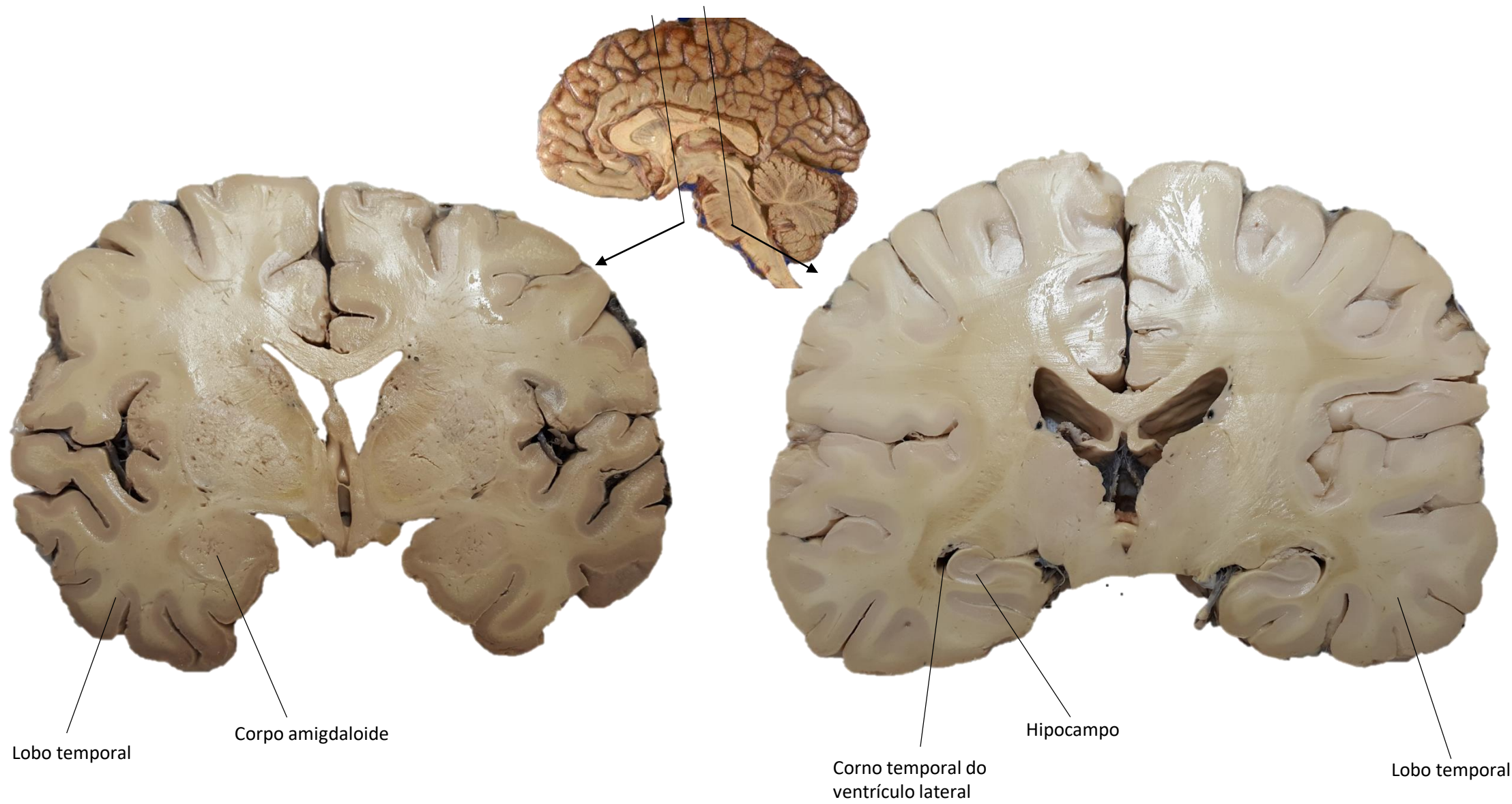
Corte frontal – nível do corte B



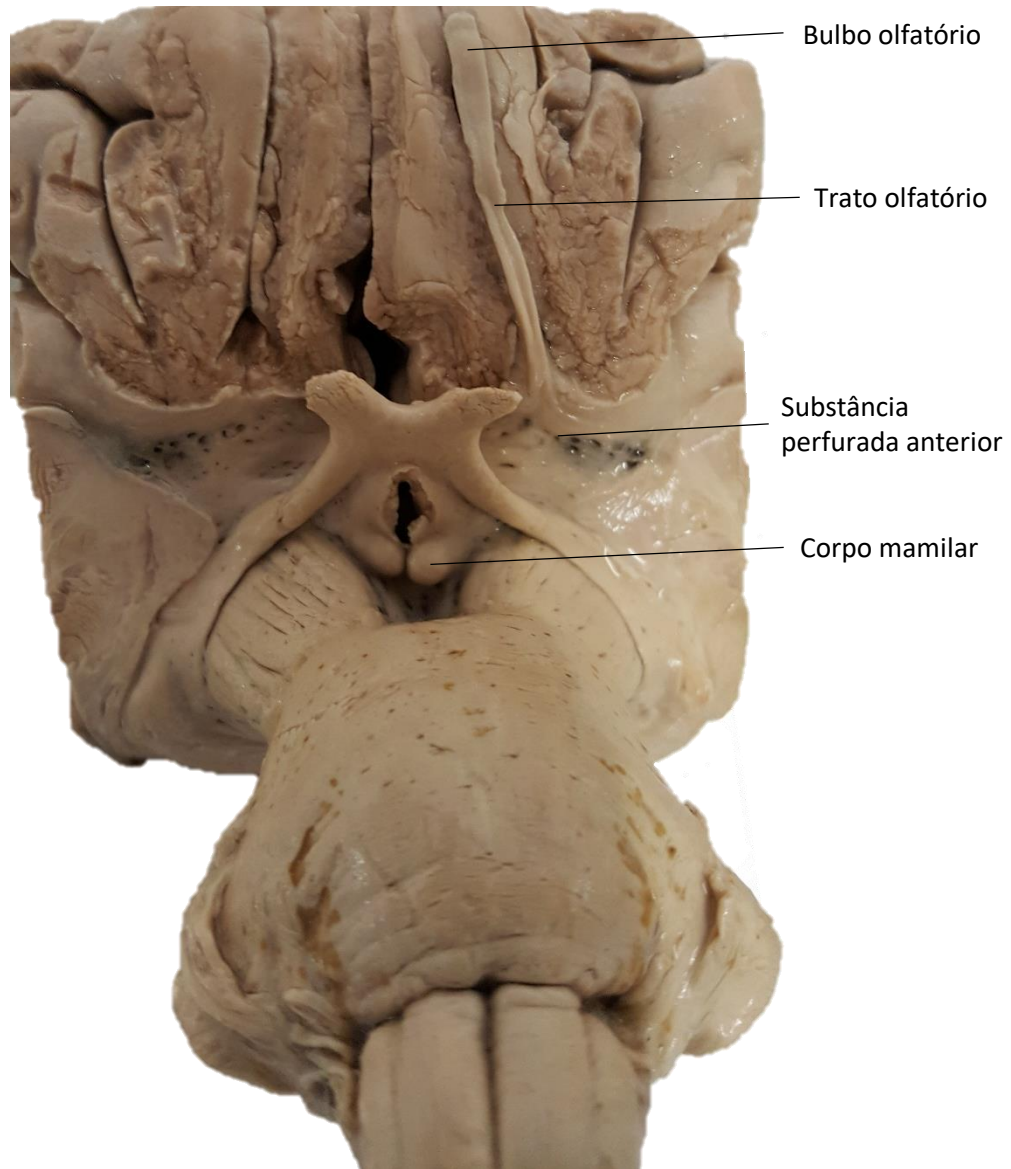
Corte frontal – nível do corte C



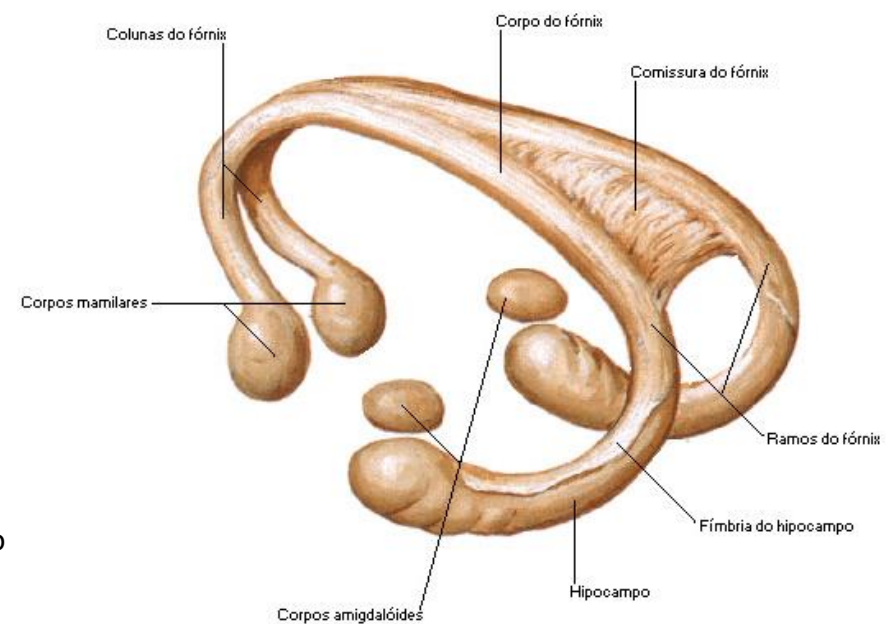
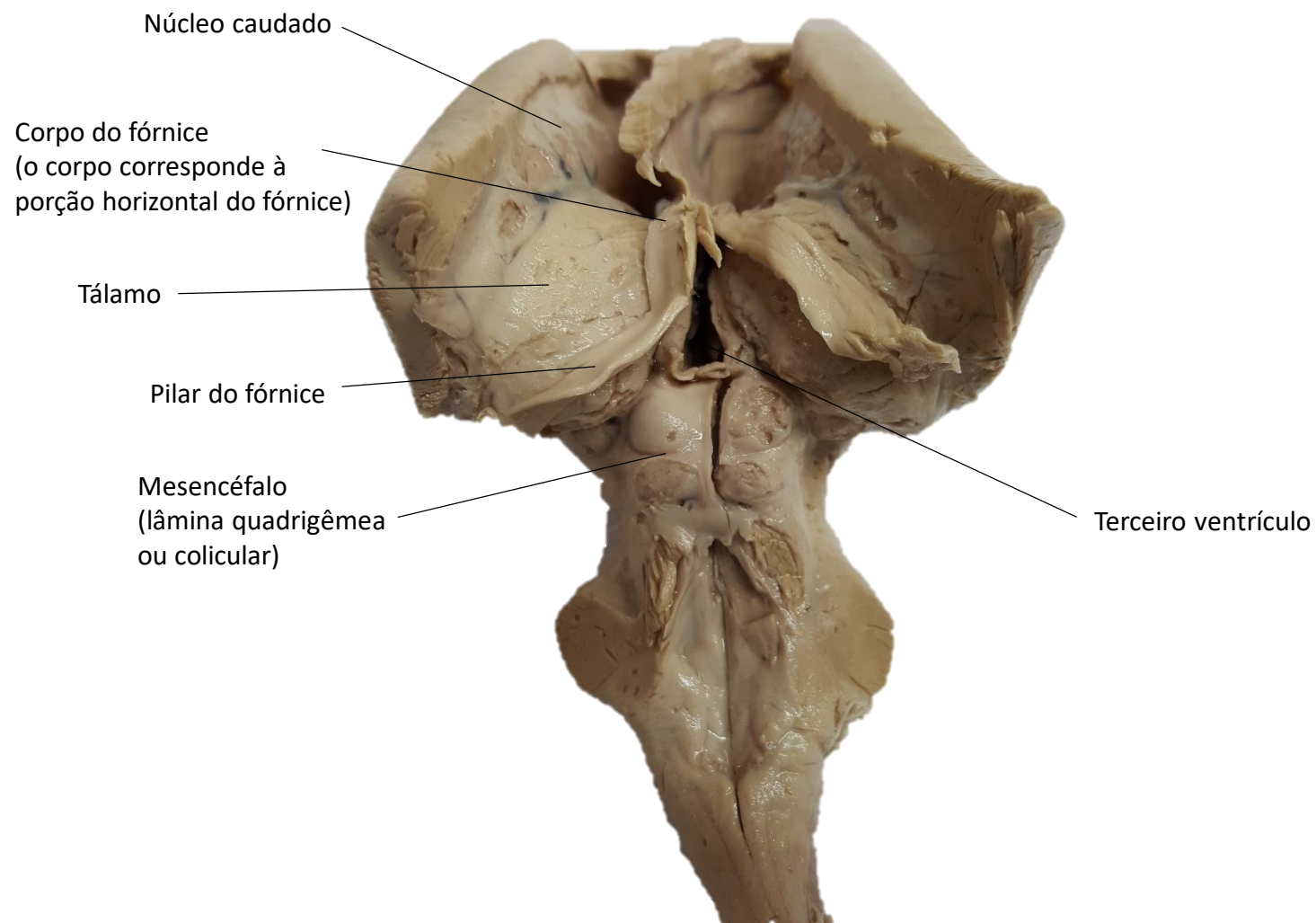
Corte frontal – nível do corte D



Cortes frontais do encéfalo



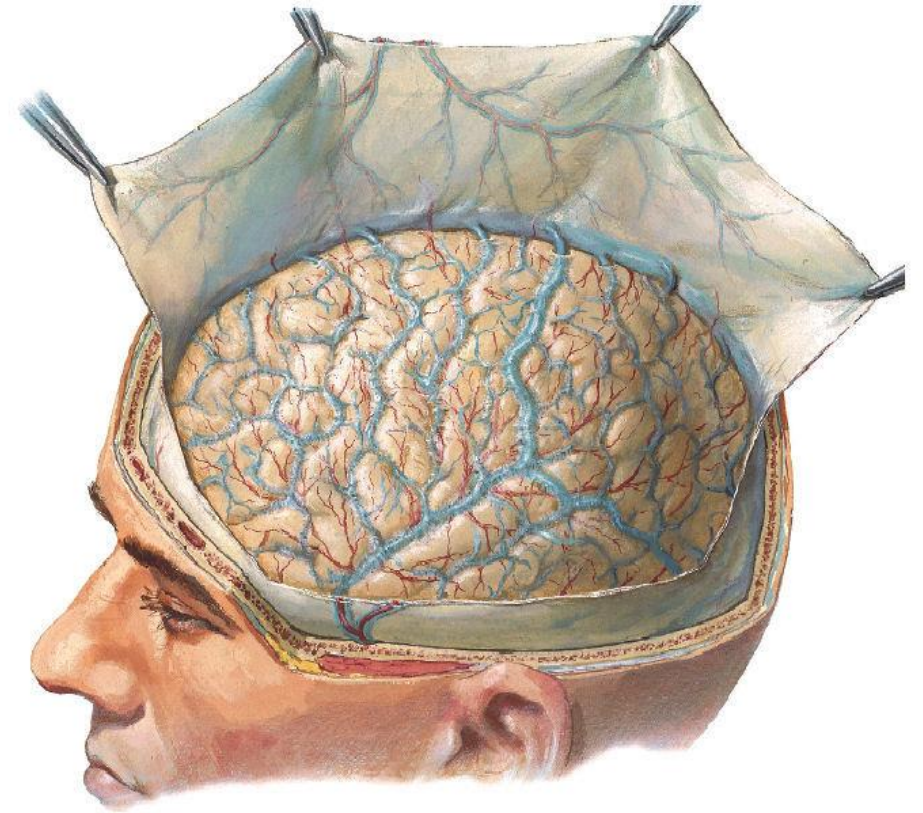
Vista inferior do cérebro (anterior do tronco encefálico)



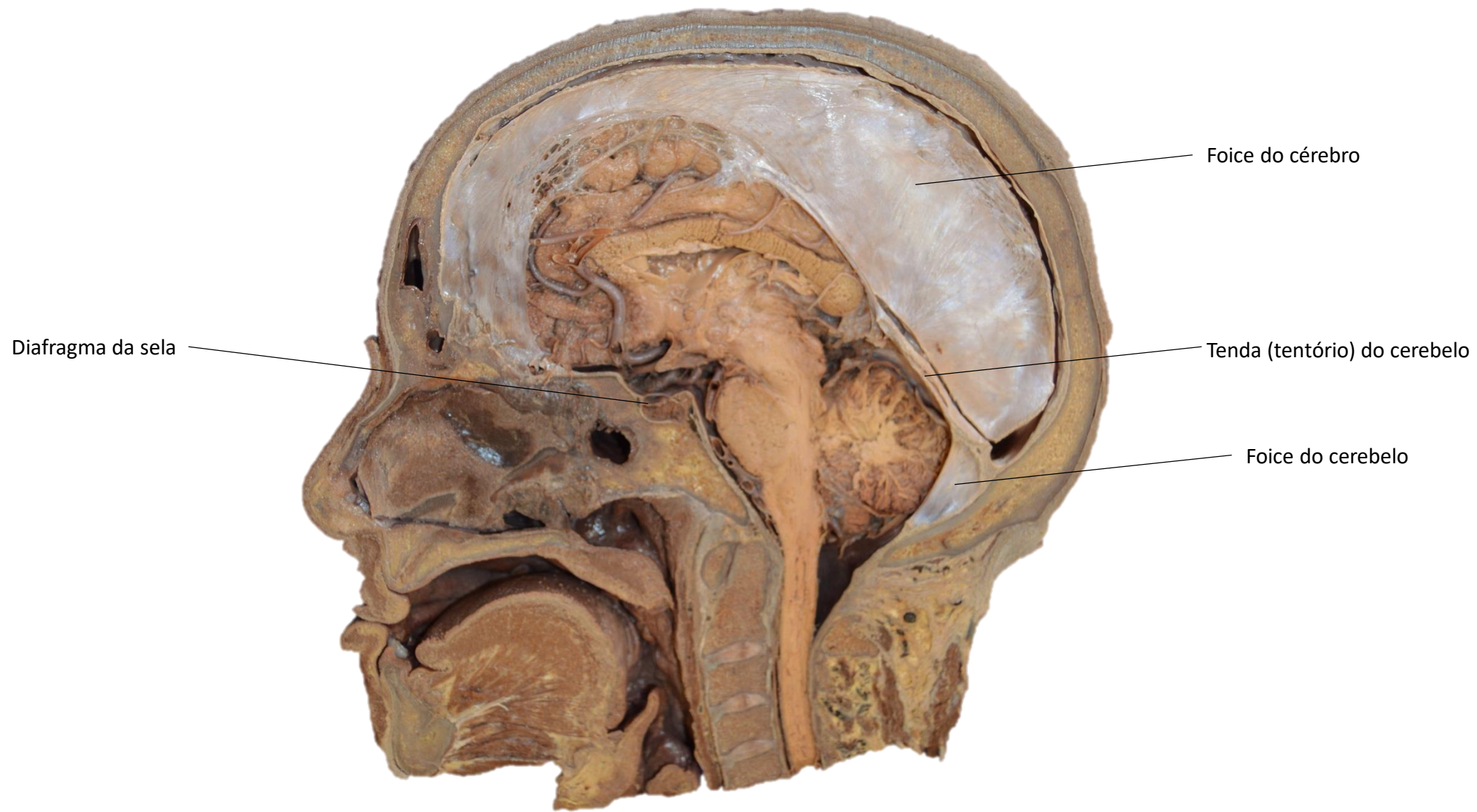
Vista posterior do tronco encefálico, de parte do diencefalo e parte do telencefalo (corpo caloso aberto, expondo a cavidade dos ventriculos laterais)



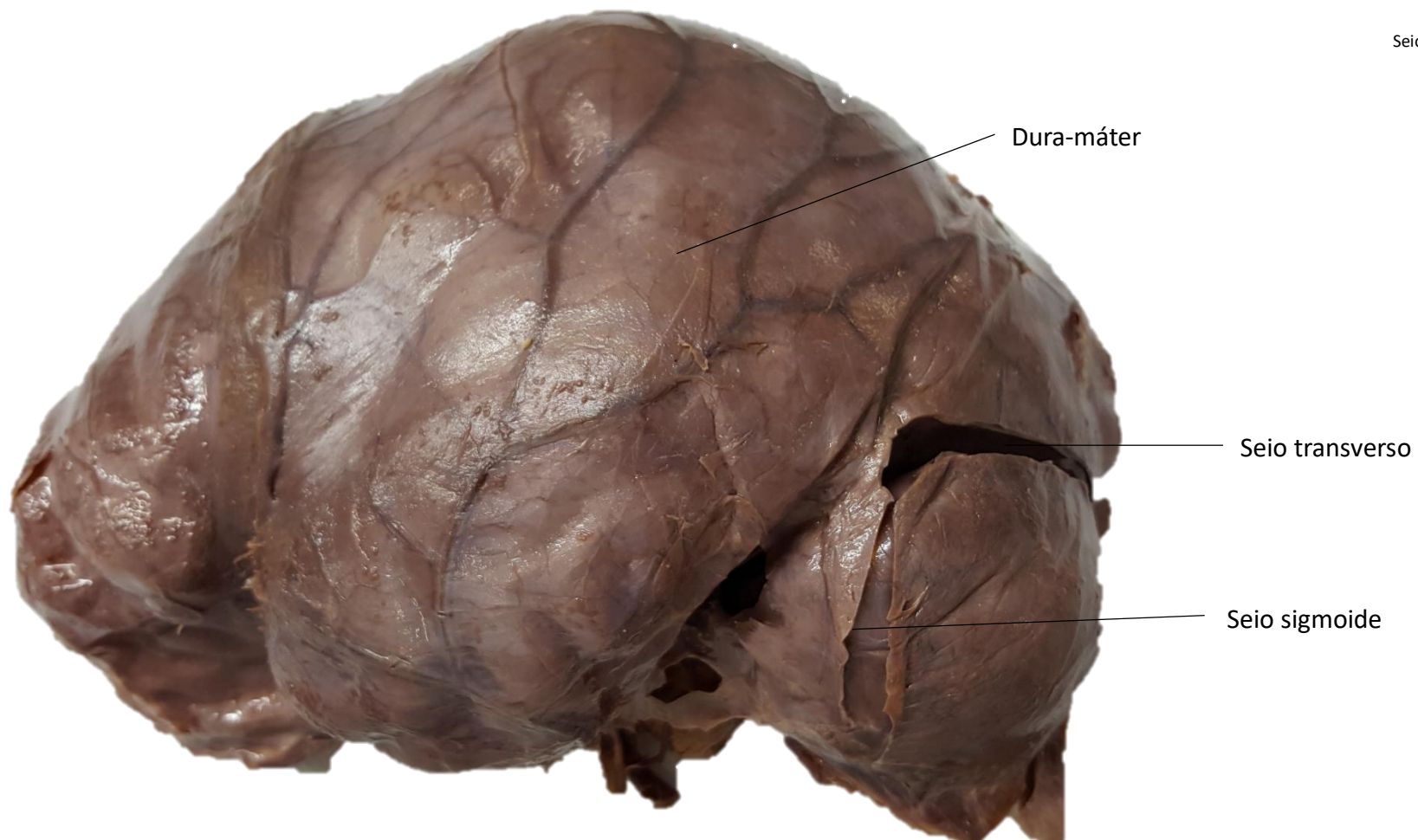
Envoltórios e Vascularização do Sistema Nervoso



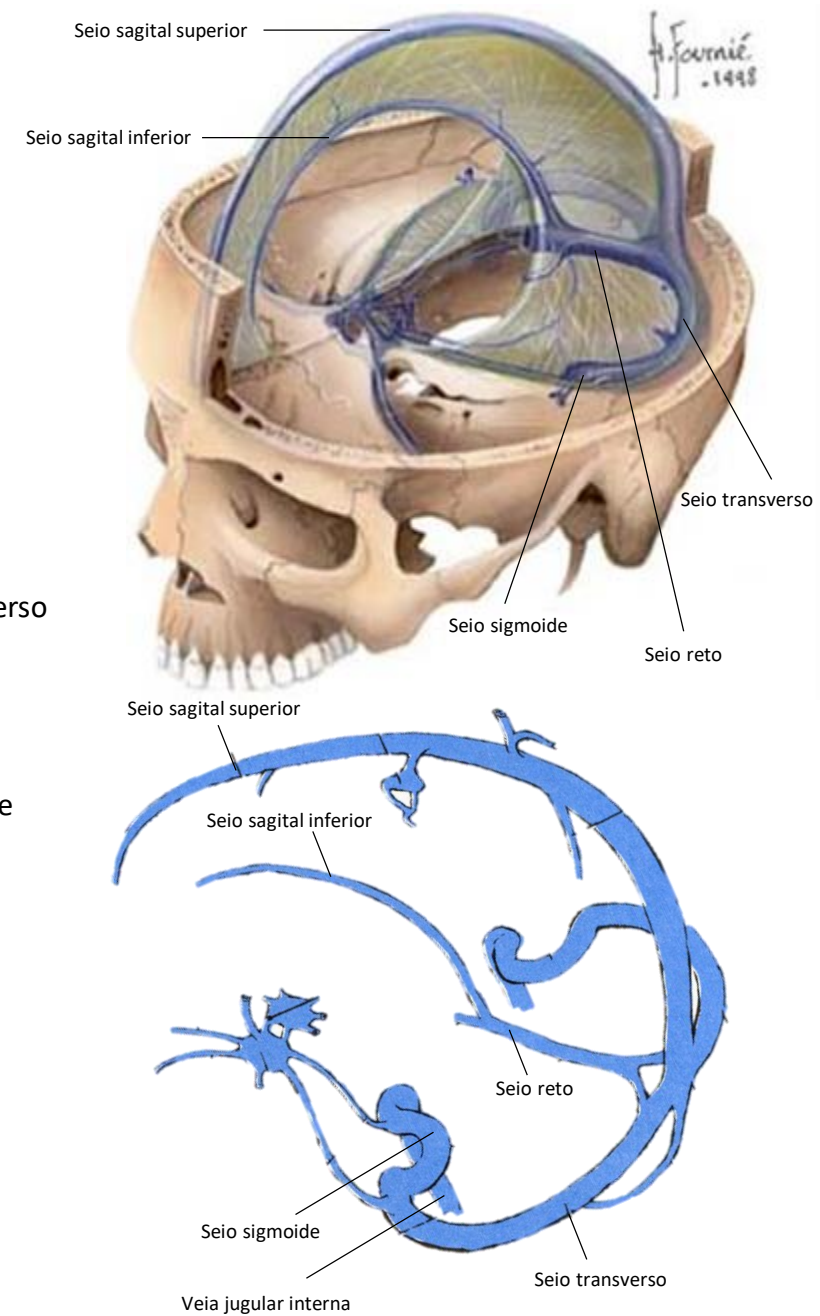
Envoltórios do Sistema Nervoso e estruturas associadas



Corte sagital da cabeça – vista medial

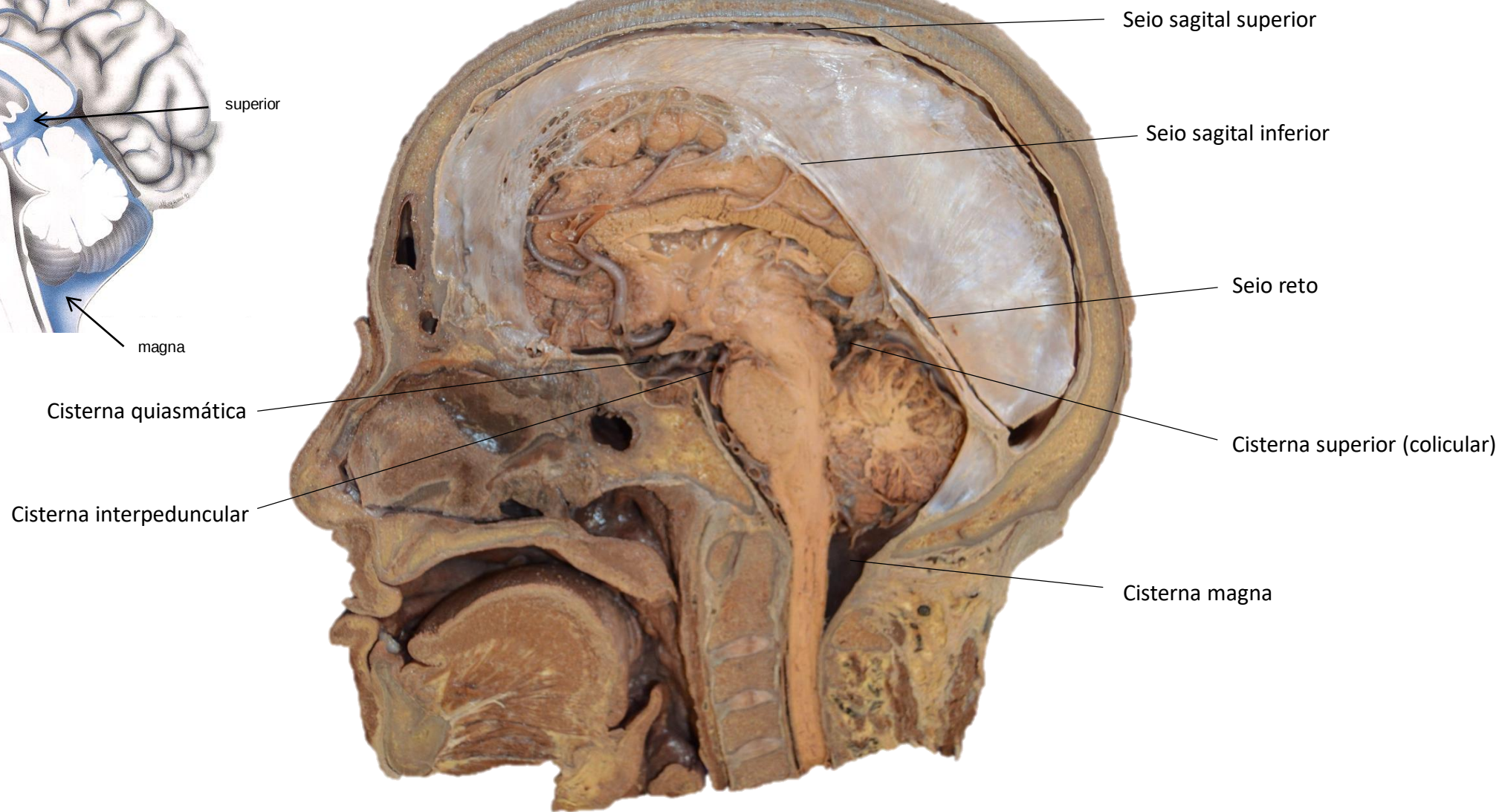
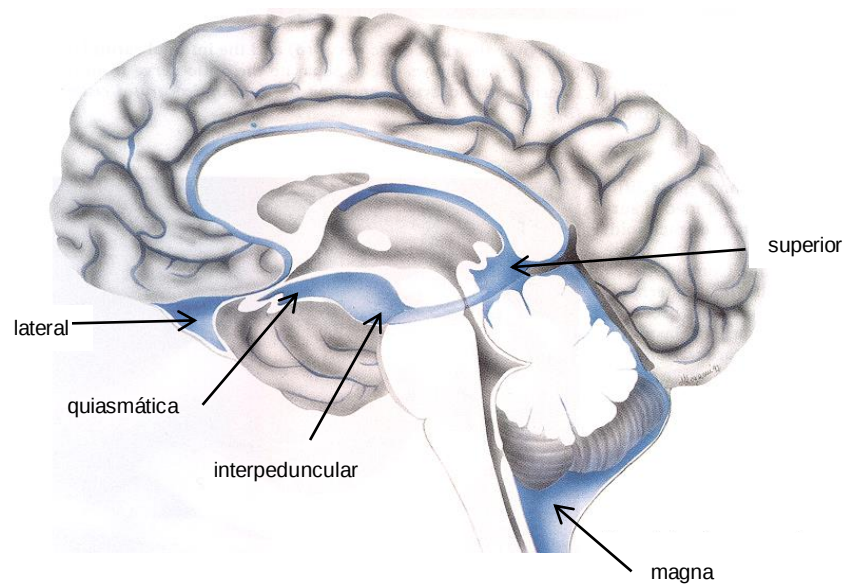


Vista lateral esquerda do encéfalo recoberto pela dura-máter – sobre os seios sigmoide e transverso, a dura-máter está aberta

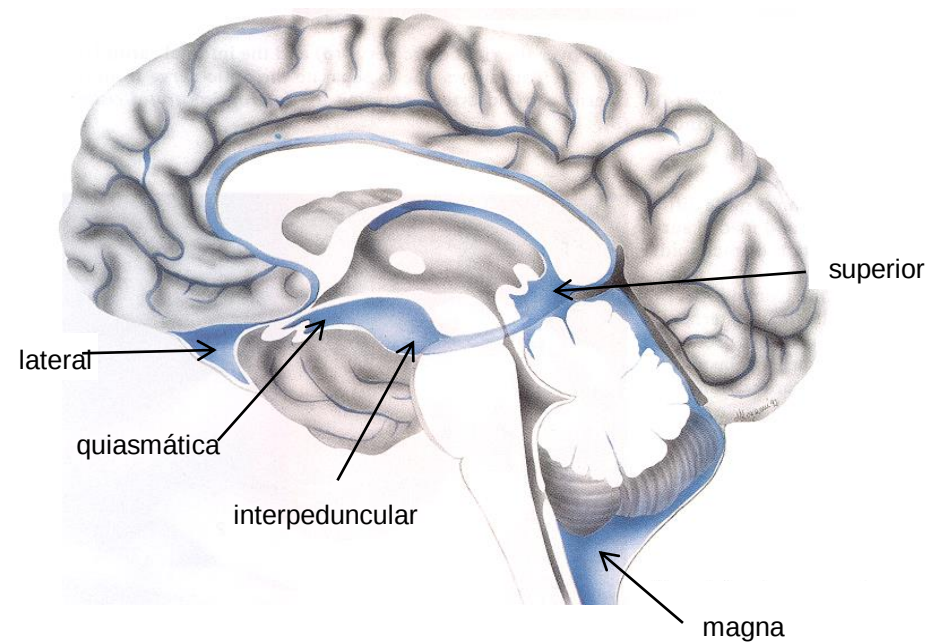
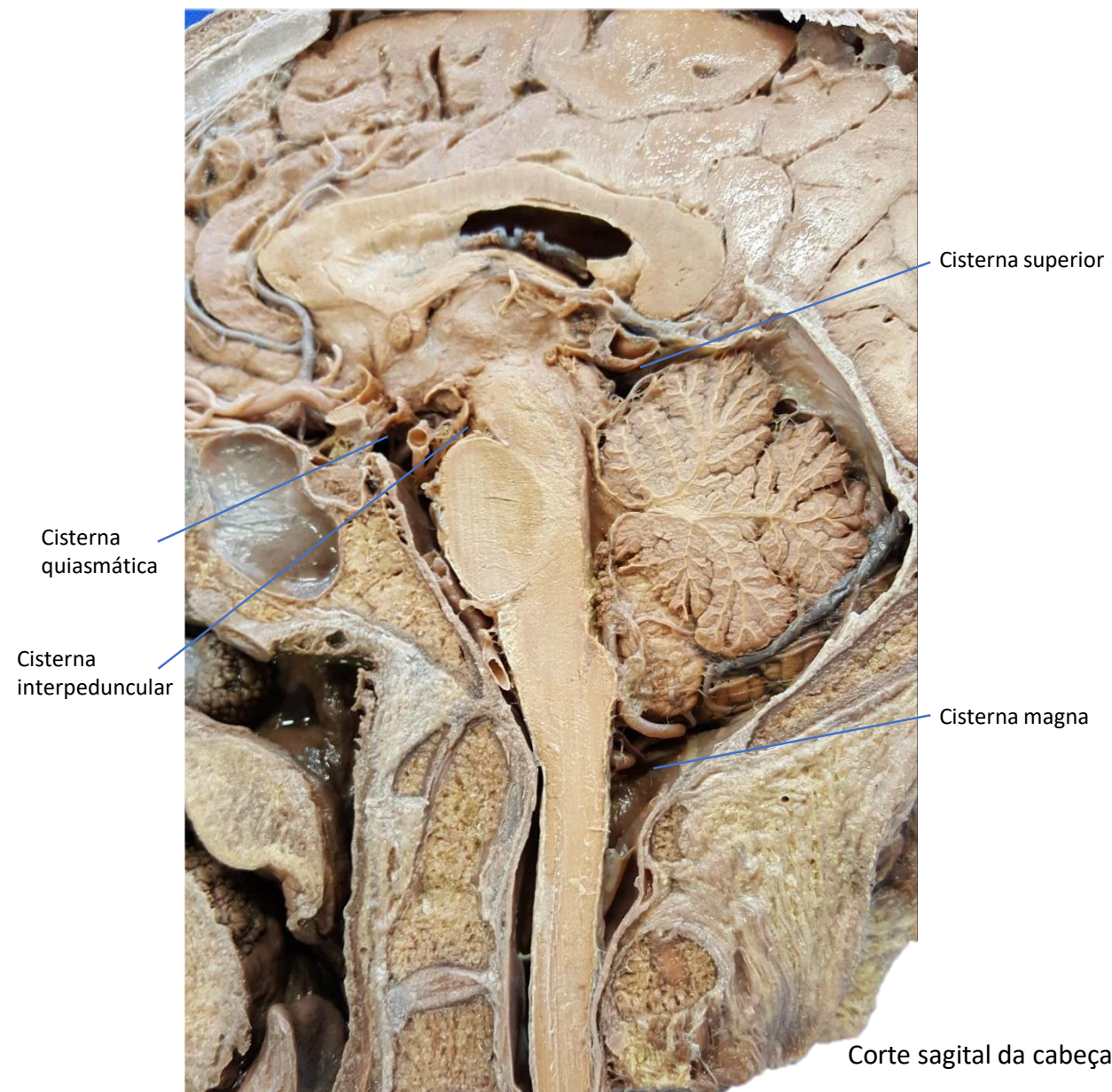




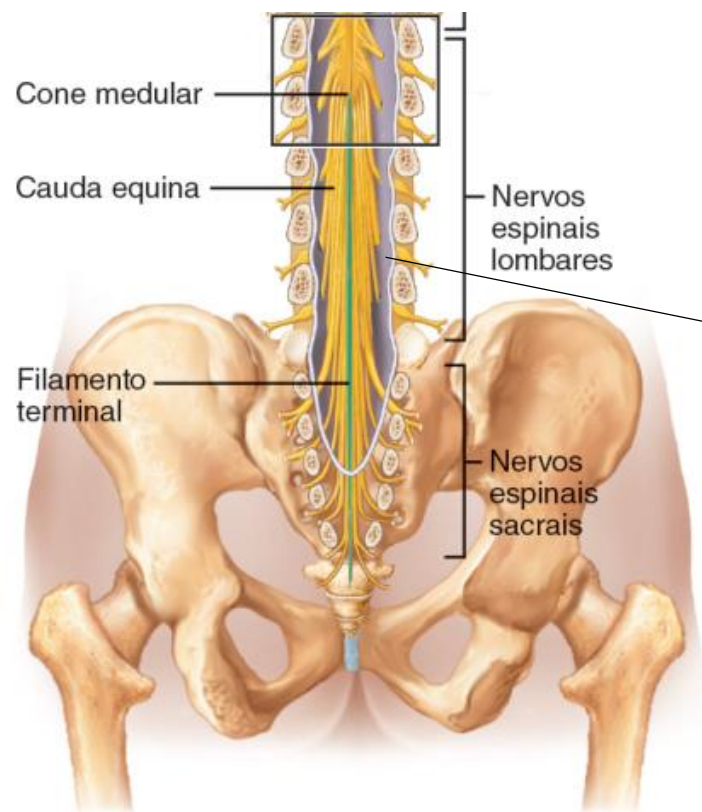
Vista superior dos hemisférios cerebrais
(dura-máter retirada)



Corte sagital da cabeça – vista medial

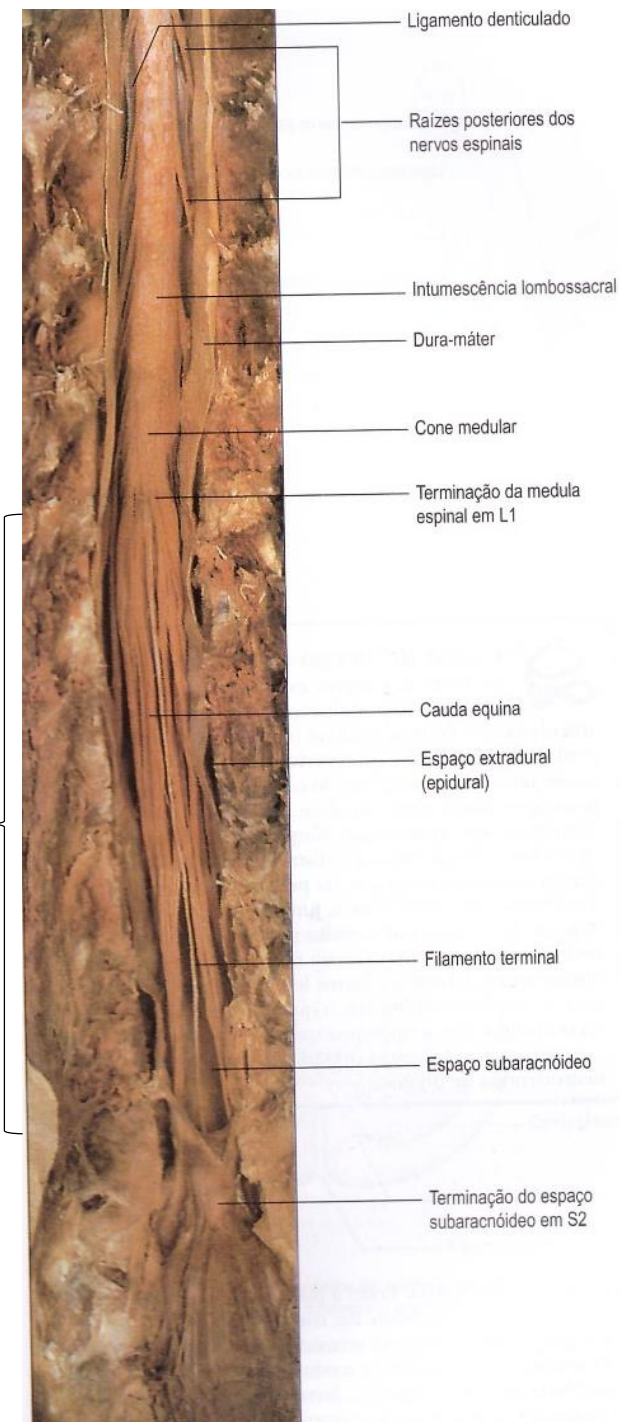


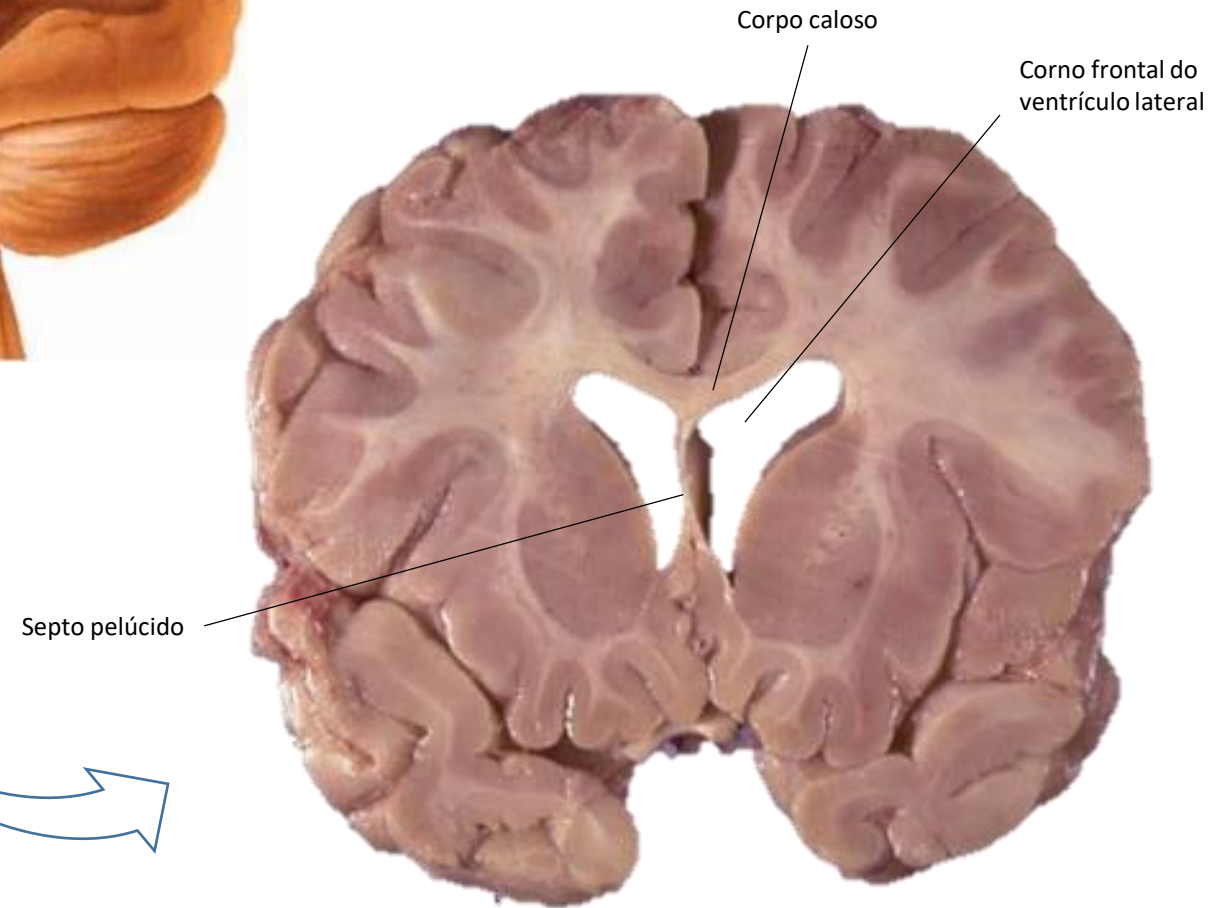
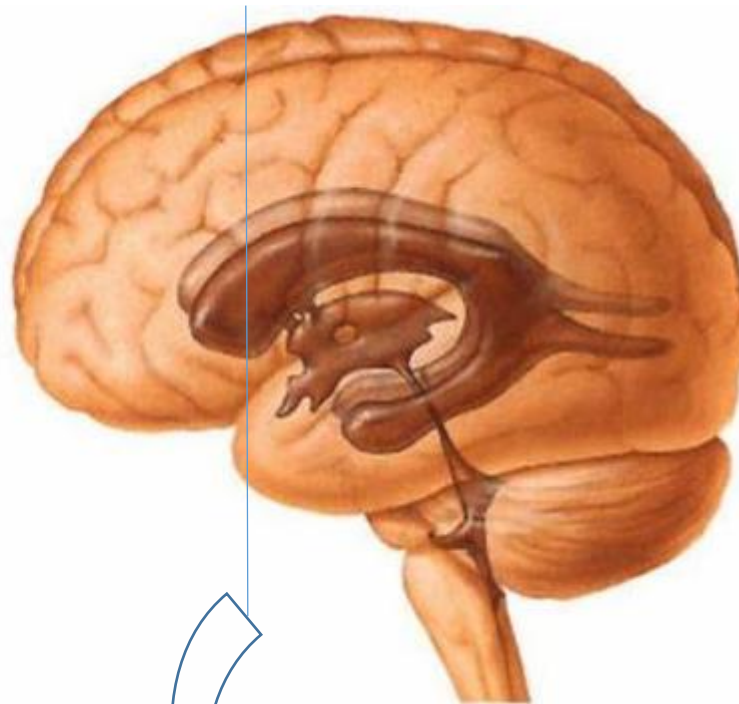
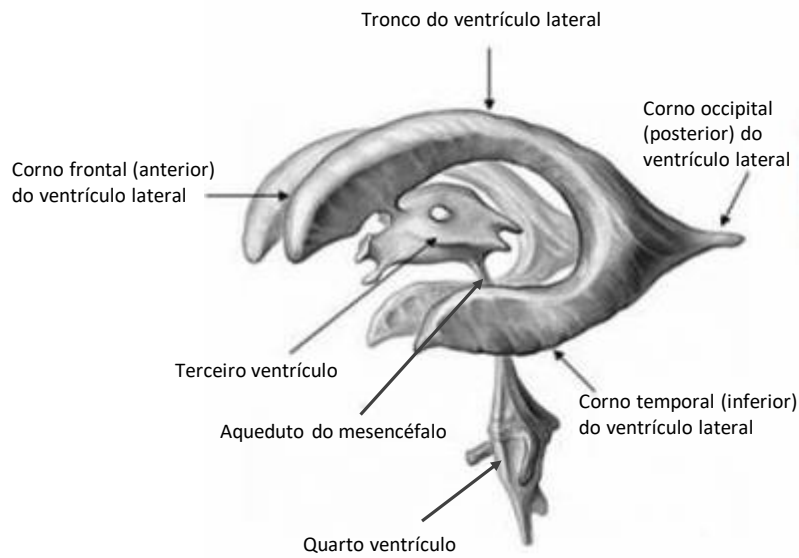
Corte sagital da cabeça – vista medial



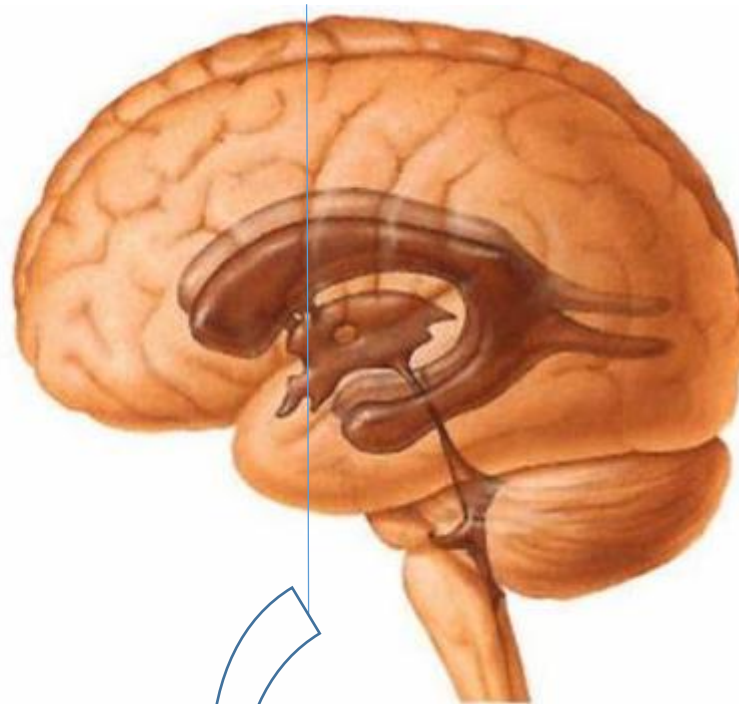
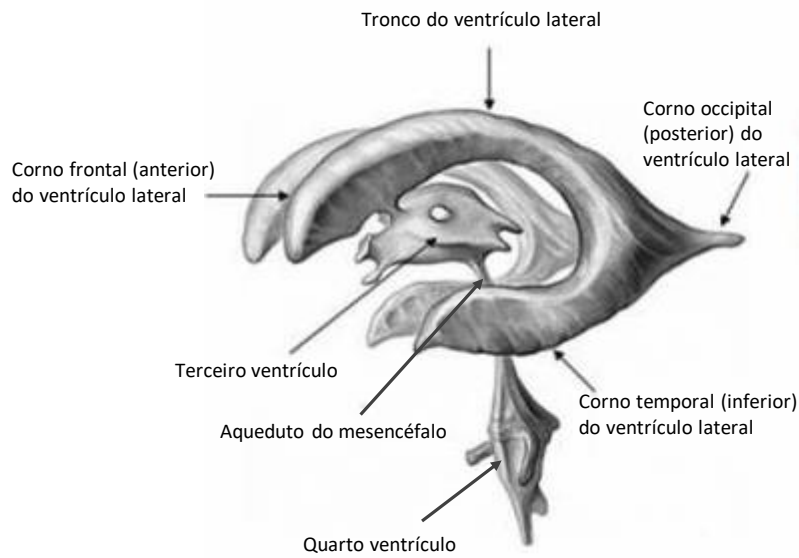
Cisterna lombar

Vista posterior do dorso na região lombossacral
Arcos costais retirados. Dura-máter e aracnoide abertas



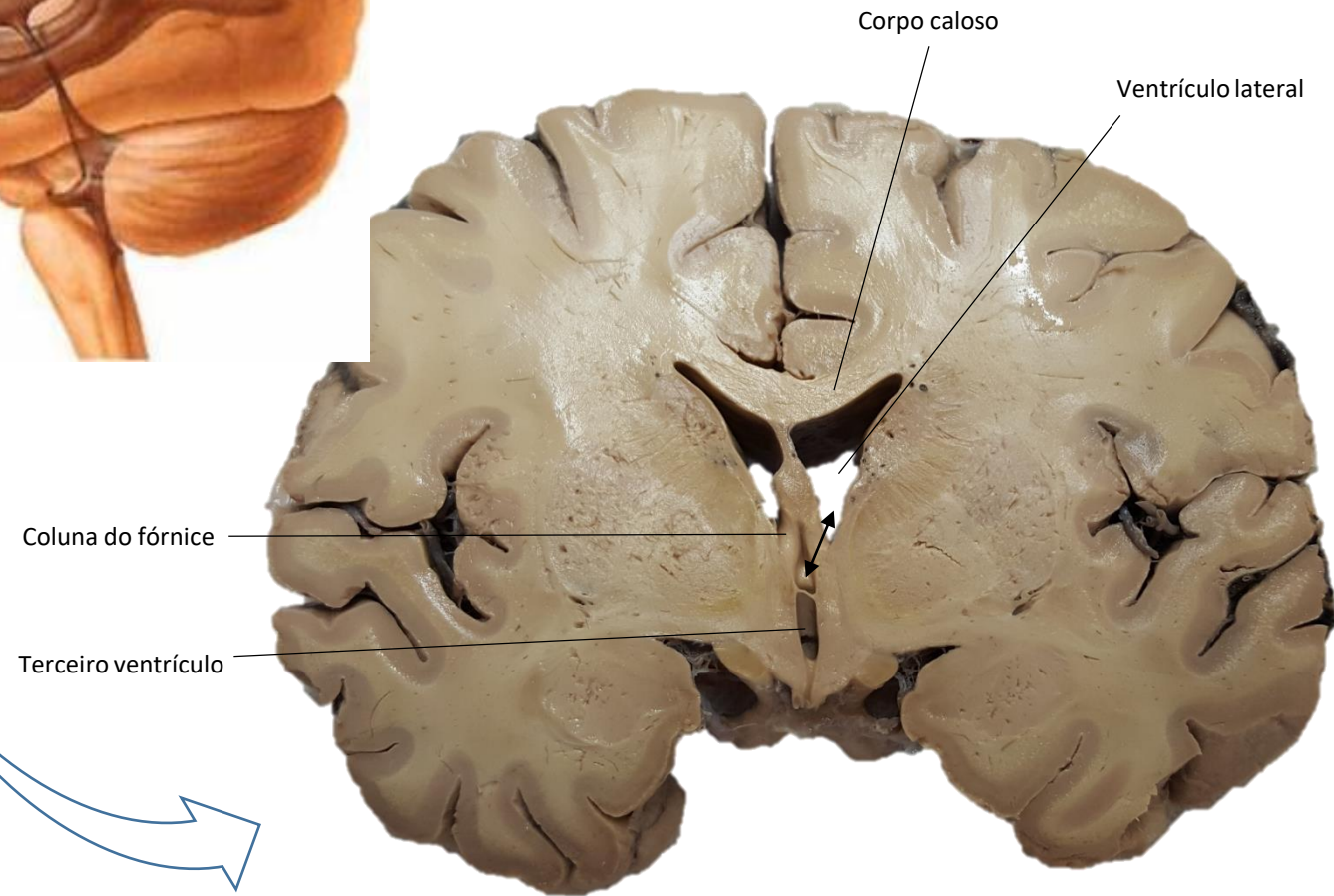


Corte frontal do cérebro



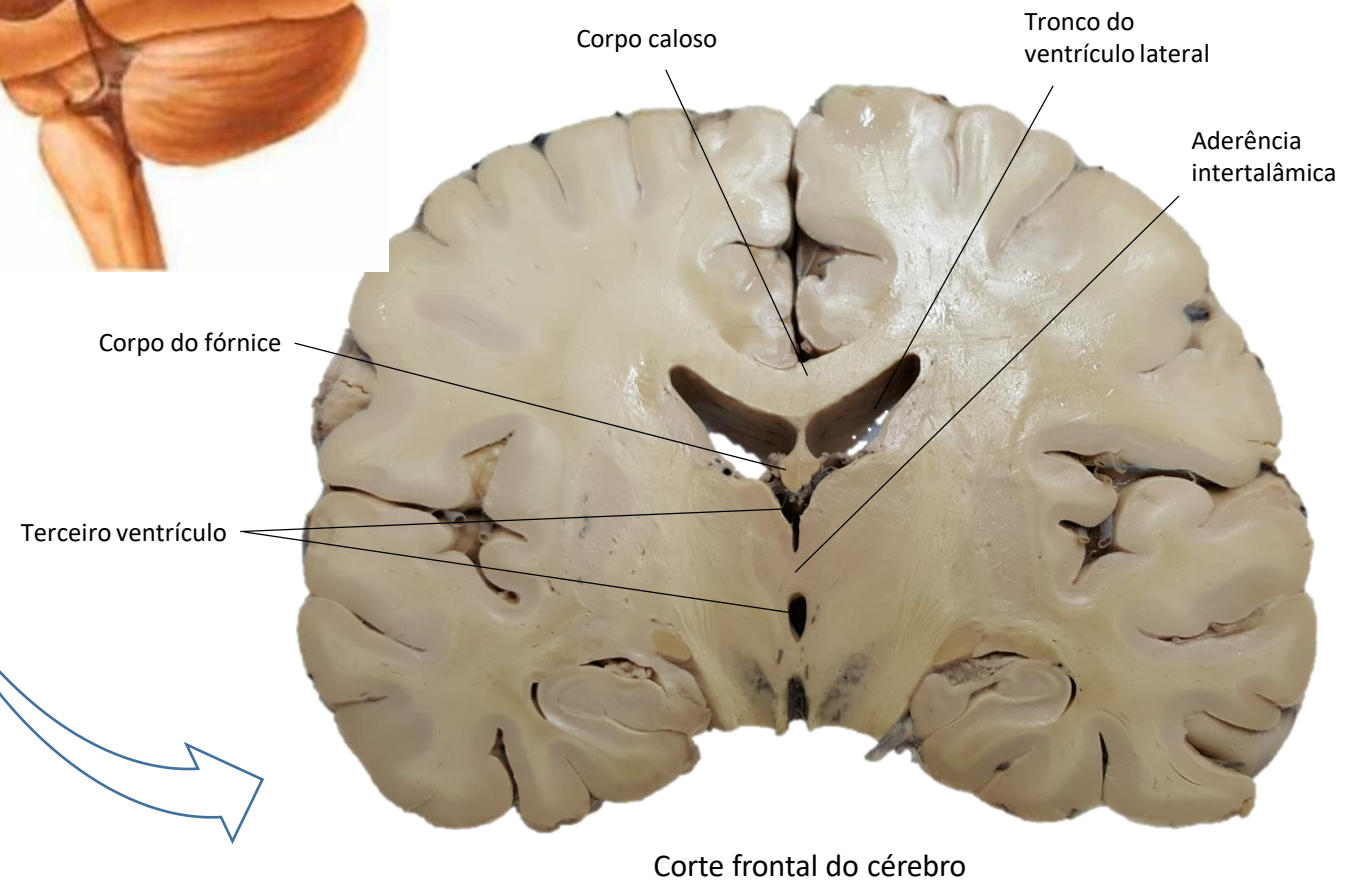
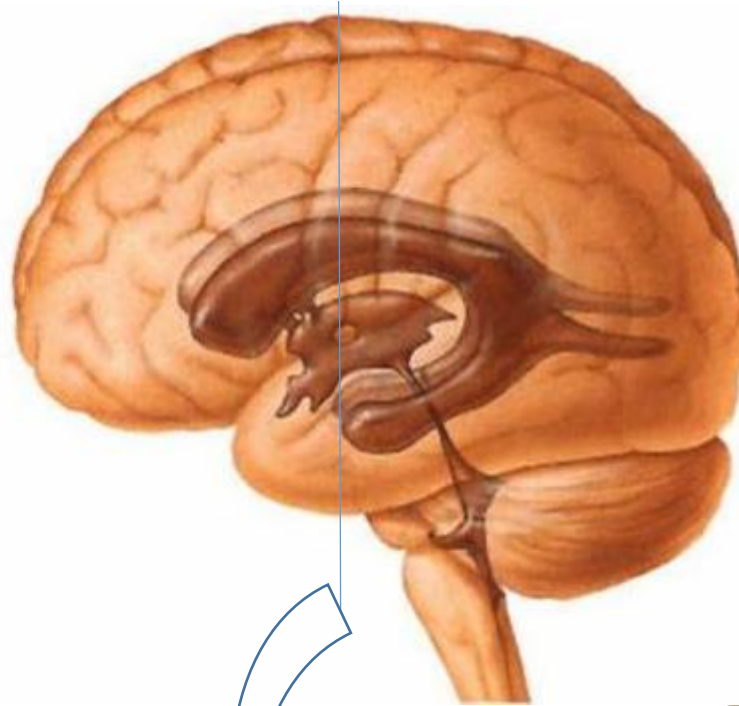
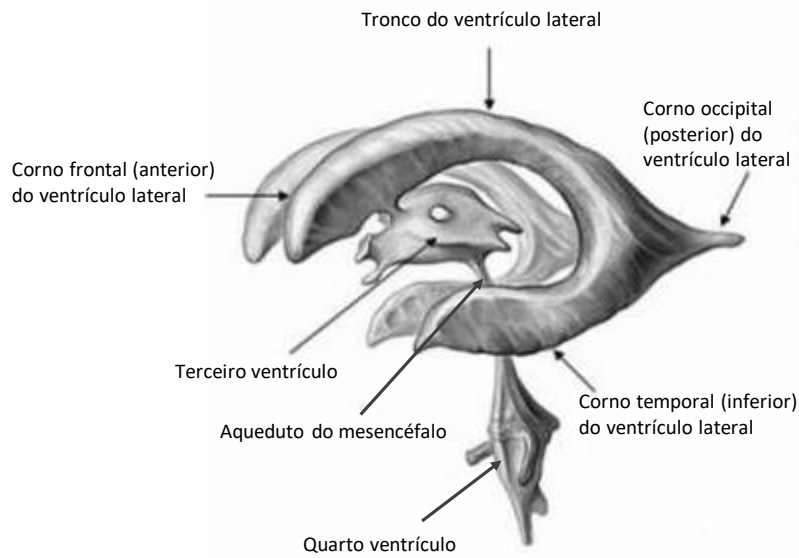
Forame interventricular

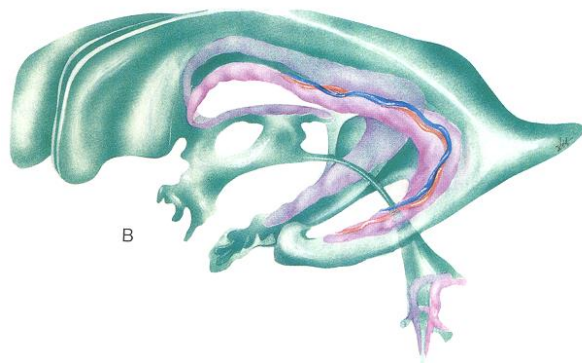
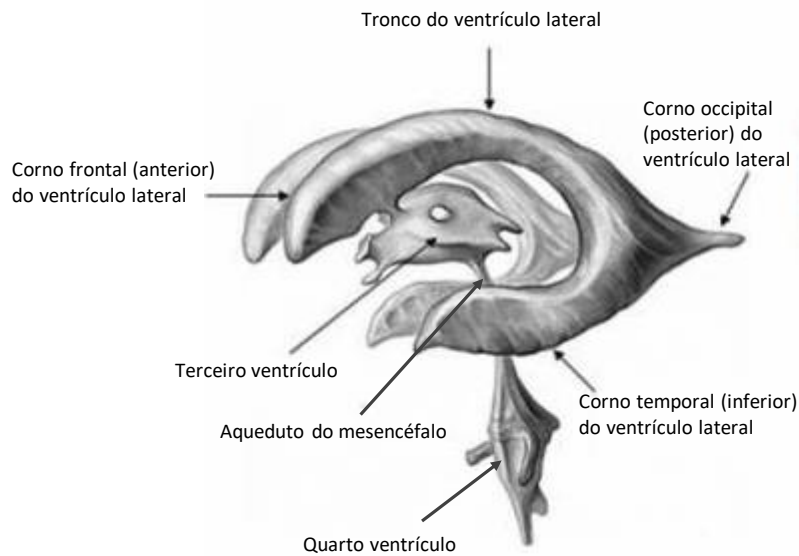
This label points to the 'Foramen interventriculare' (foramen of Monro), the opening that connects the lateral ventricle to the third ventricle. It is indicated by a double-headed arrow.



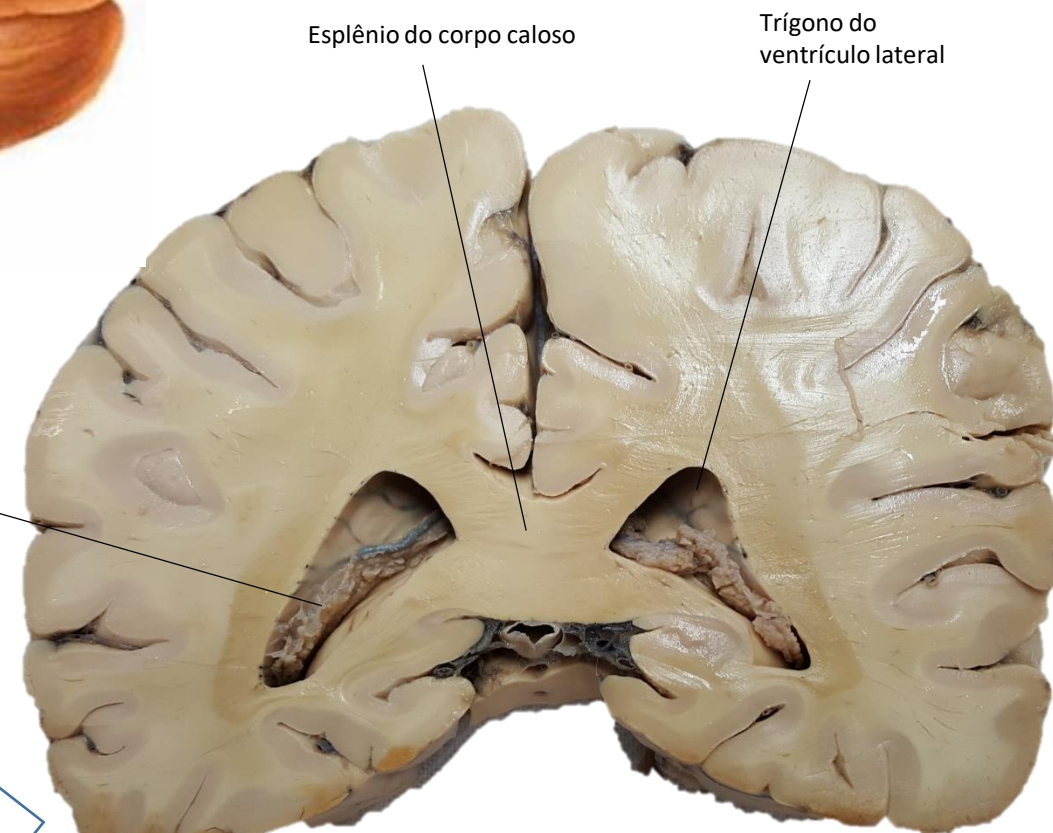
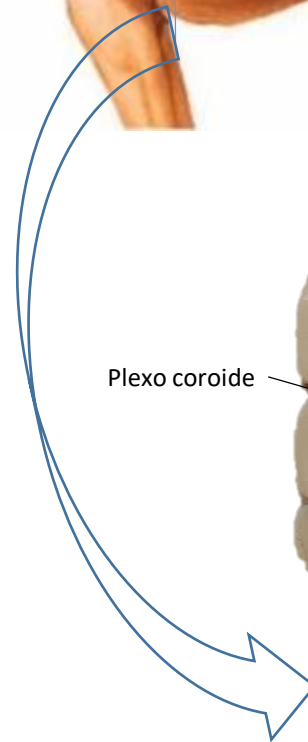
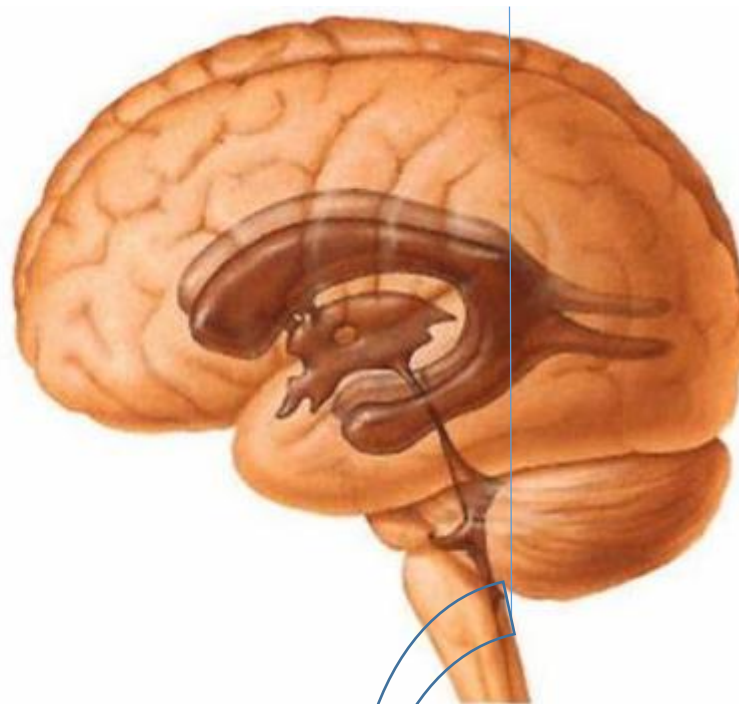
Corte frontal do cérebro

This label identifies the image as a 'Corte frontal do cérebro' (frontal section of the brain).

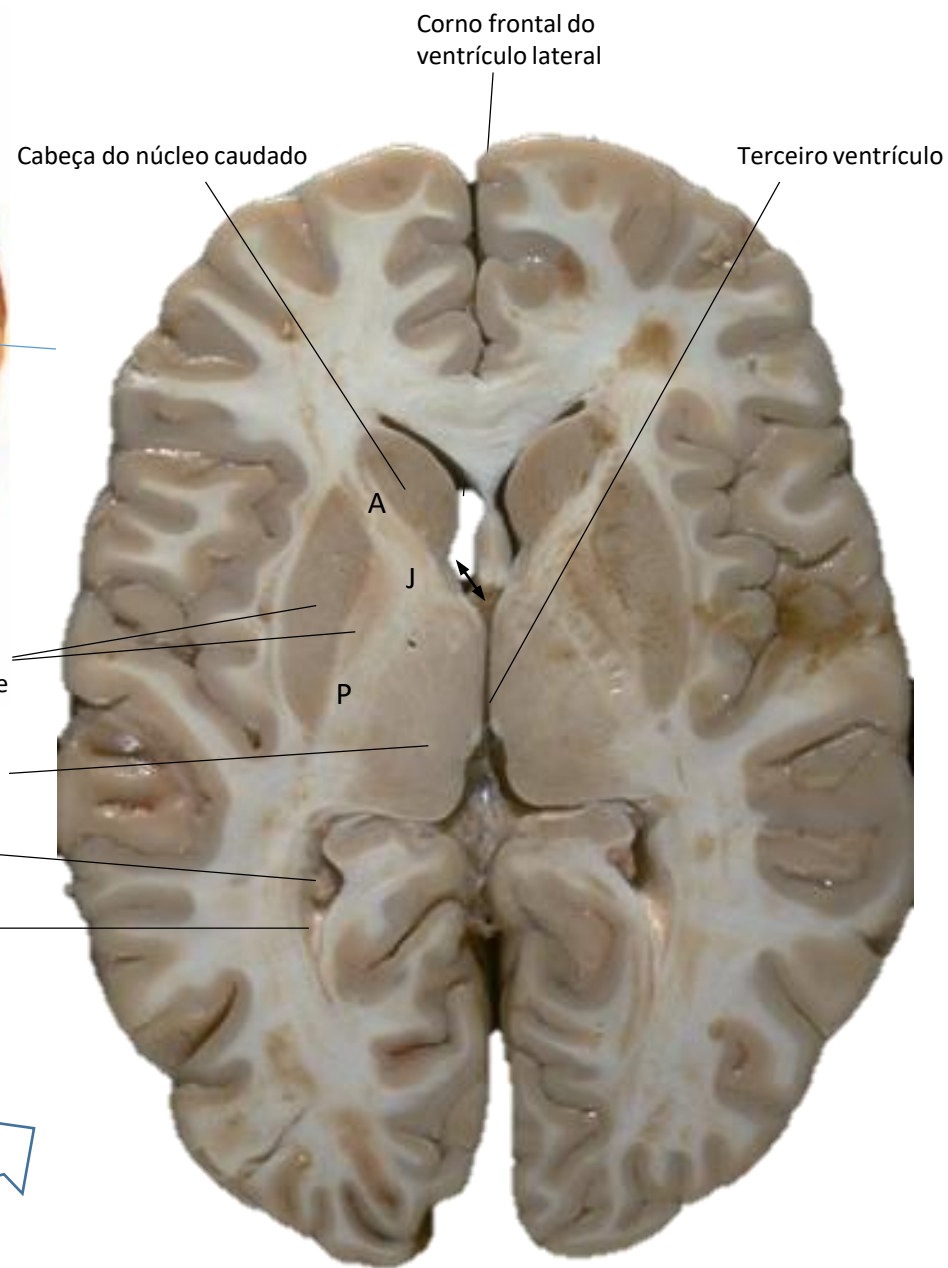
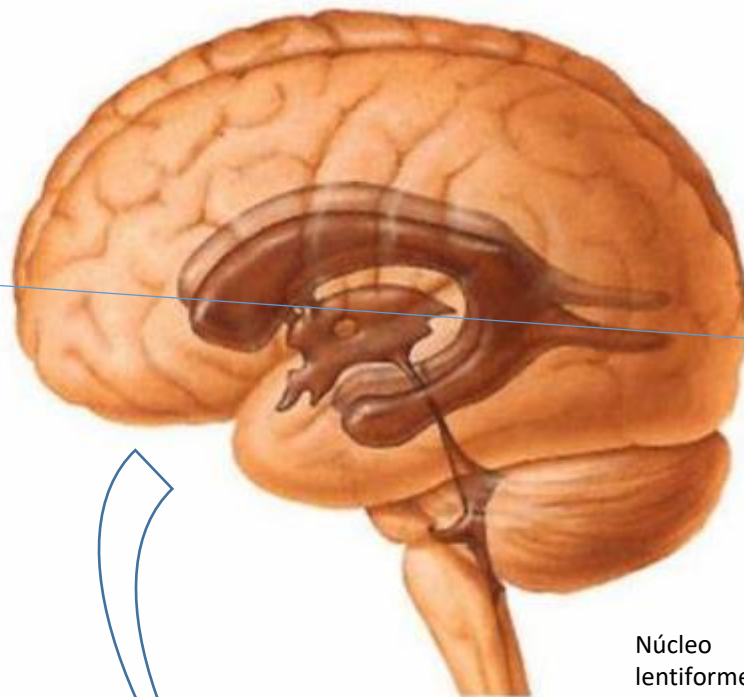
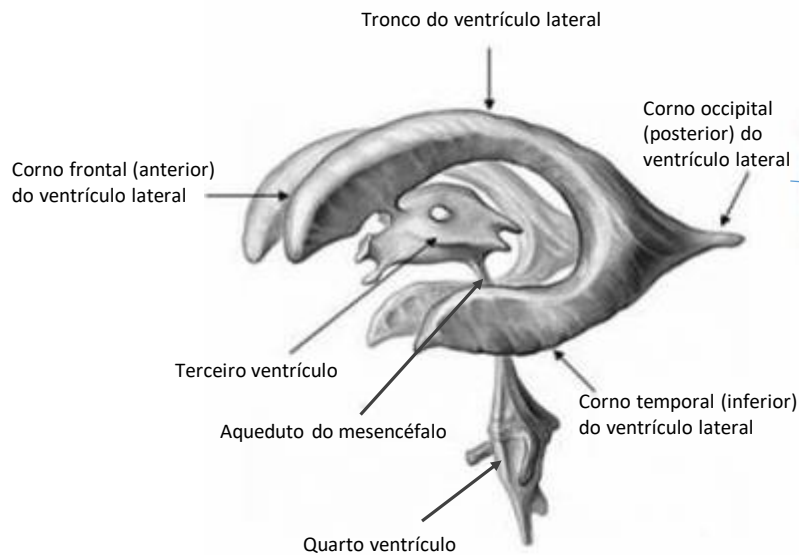




Posição do plexo coroide (roxo) no interior dos ventrículos

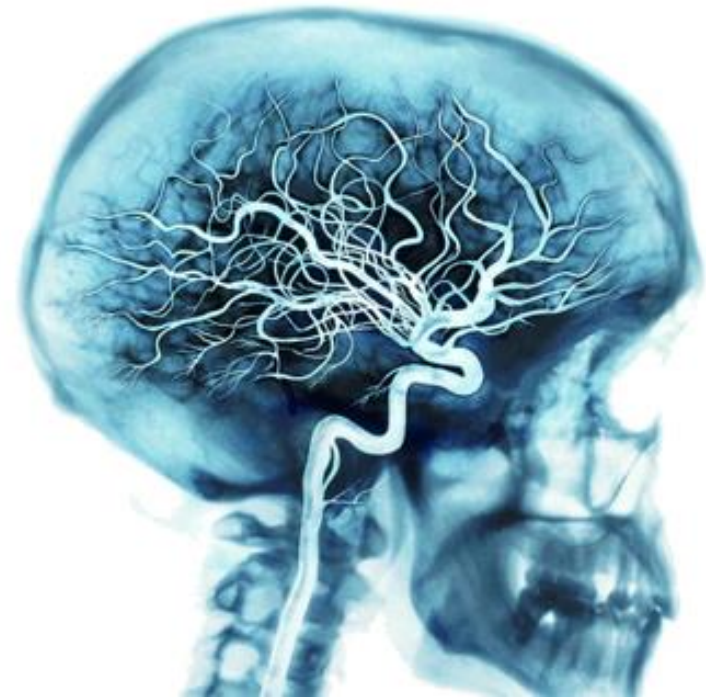


Corte frontal do cérebro

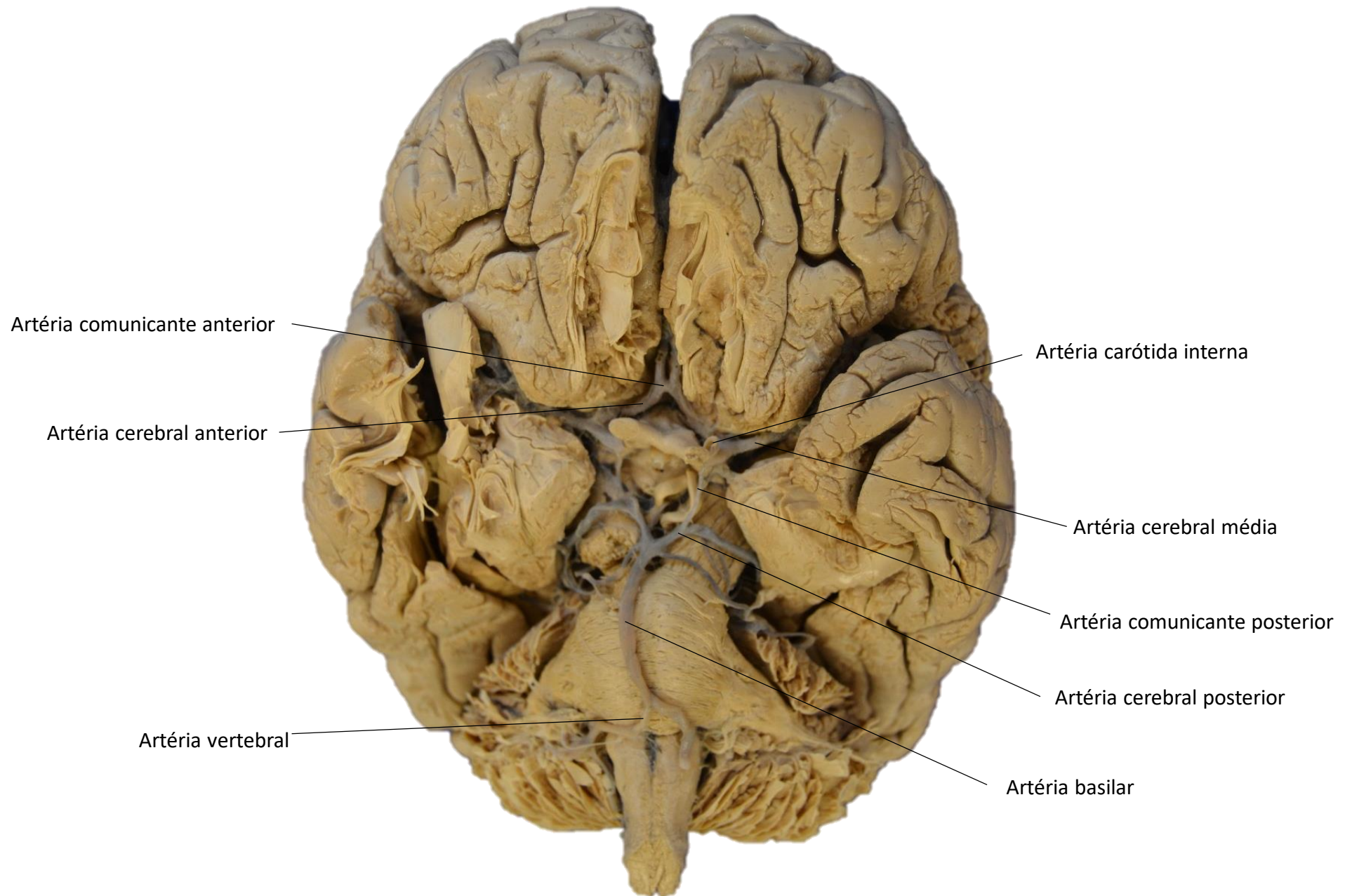


A = ramo anterior da cápsula interna
 J = joelho da cápsula interna
 P = ramo posterior da cápsula interna
 ↗ = forame interventricular

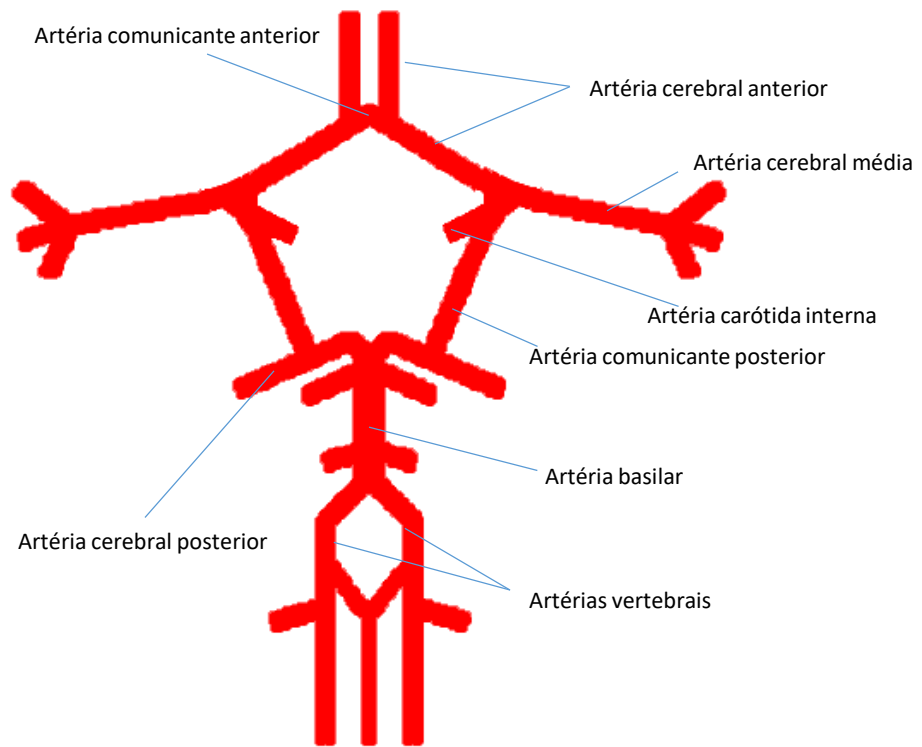
Corte horizontal do cérebro



Vascularização do Sistema Nervoso Central



Vista inferior do encéfalo

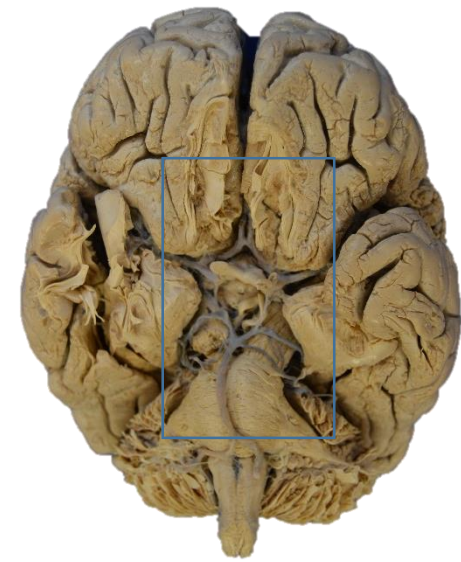


Artéria comunicante anterior

Artéria cerebral anterior

Artéria cerebral média

Artéria comunicante posterior

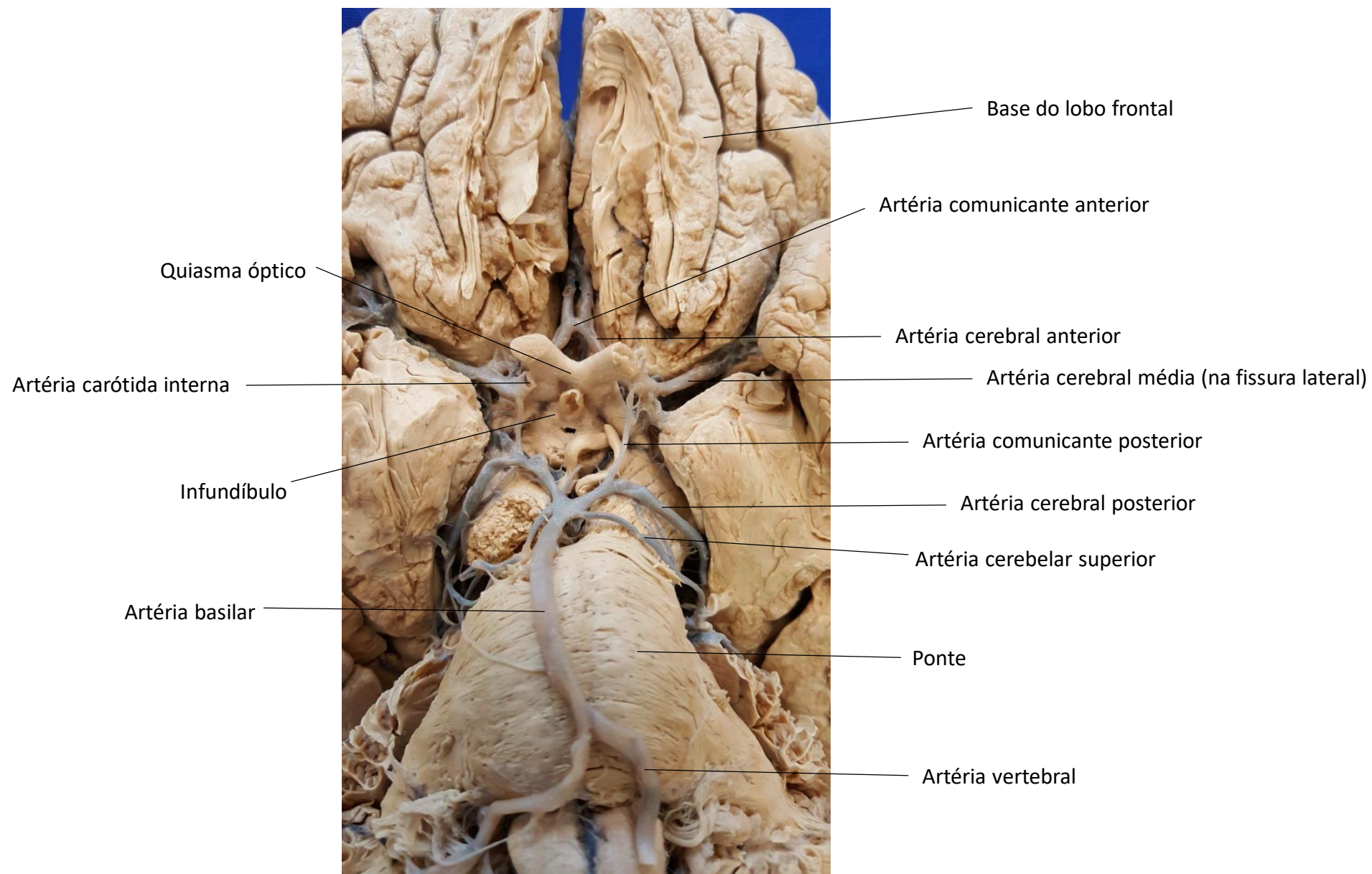


Artéria carótida interna

Artéria cerebral posterior

Artéria basilar

Vista inferior do encéfalo



Vista inferior do encéfalo

Artéria cerebral posterior

Artéria basilar

Artéria vertebral

Artéria espinal anterior

Artérias centrais do cérebro

Artéria cerebelar superior

Artéria cerebelar inferior anterior

Artéria cerebelar inferior posterior



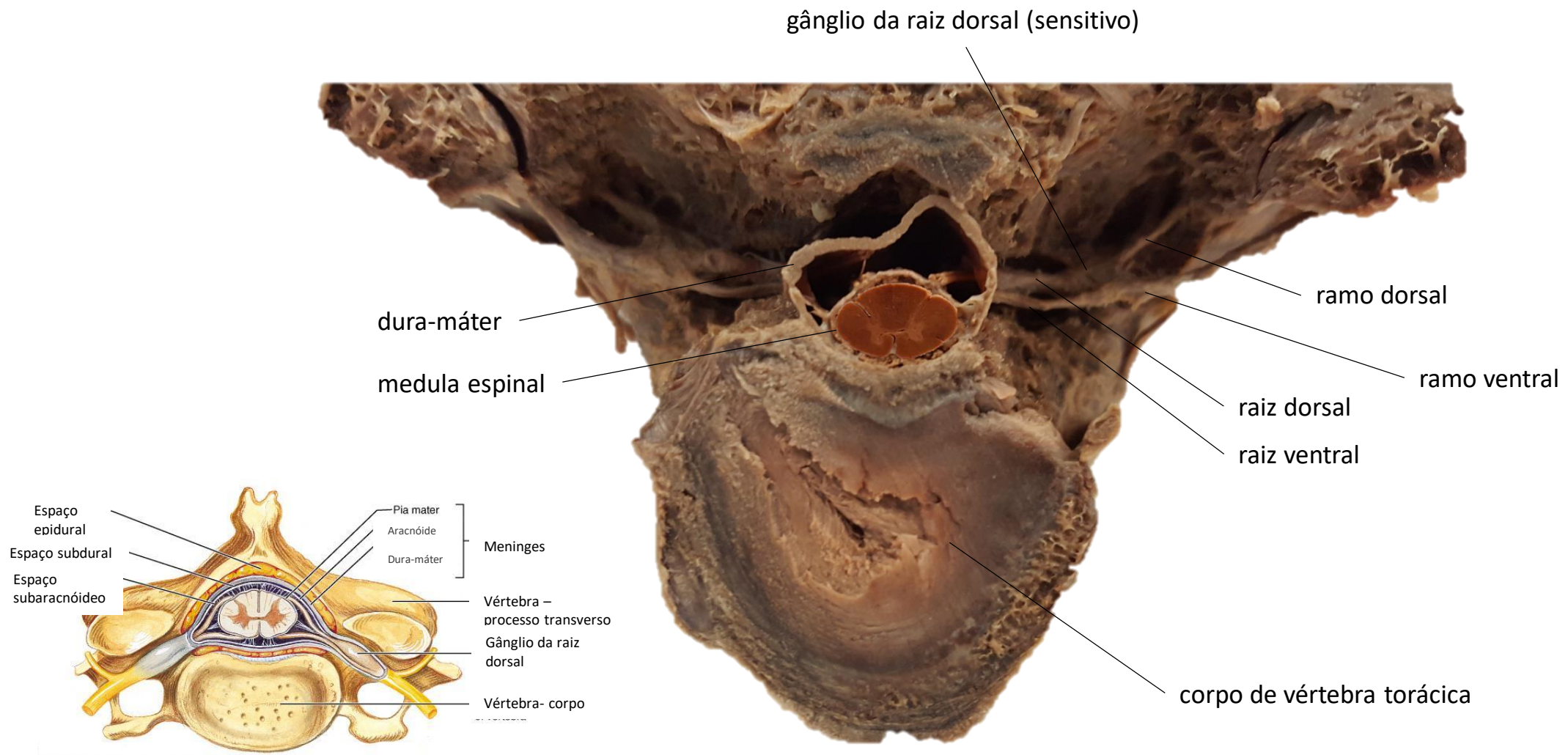
Vista inferior do encéfalo

Sistema sensorial geral

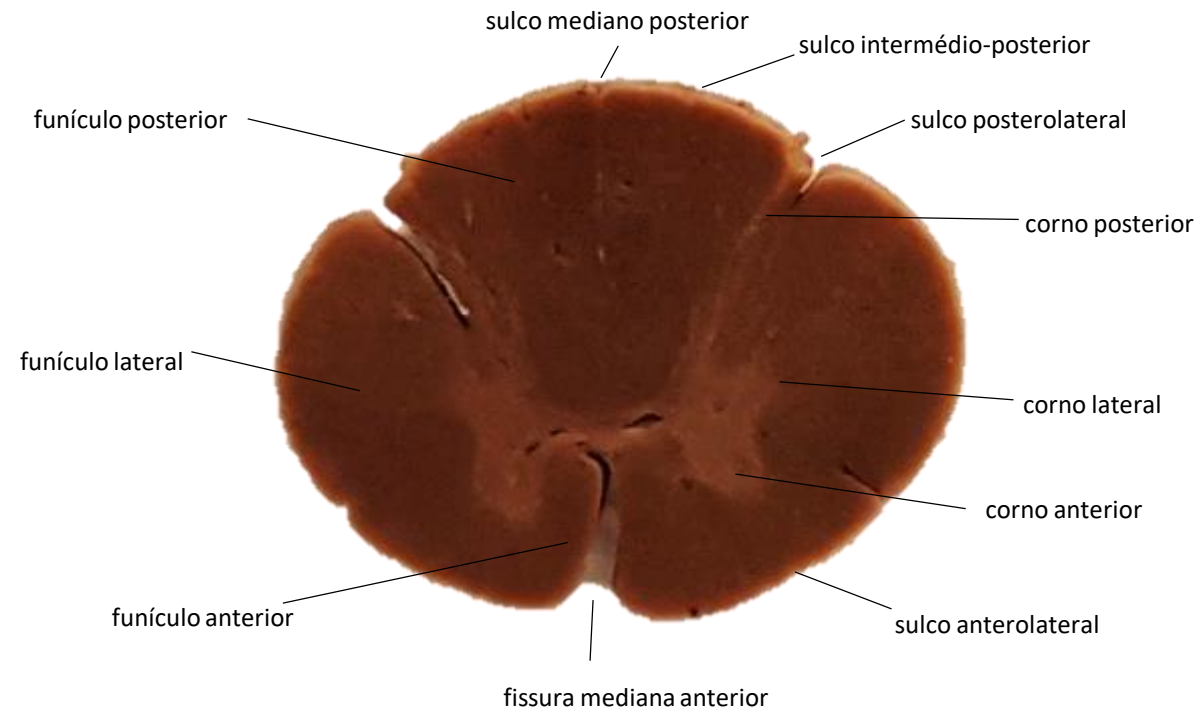
Sistema visual

Sistemas coclear e vestibular

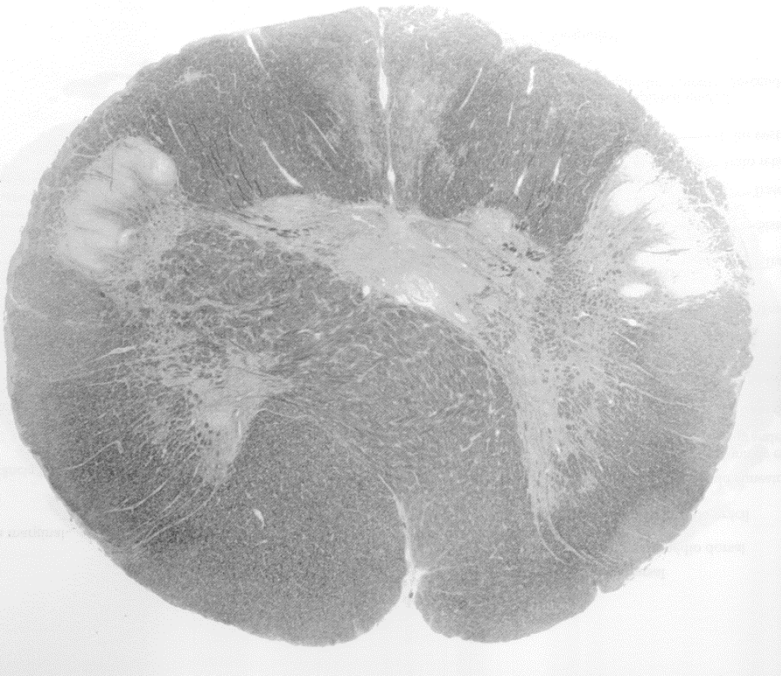
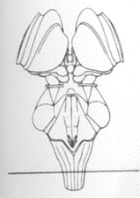




Corte transversal do tórax, com medula espinal *in situ*

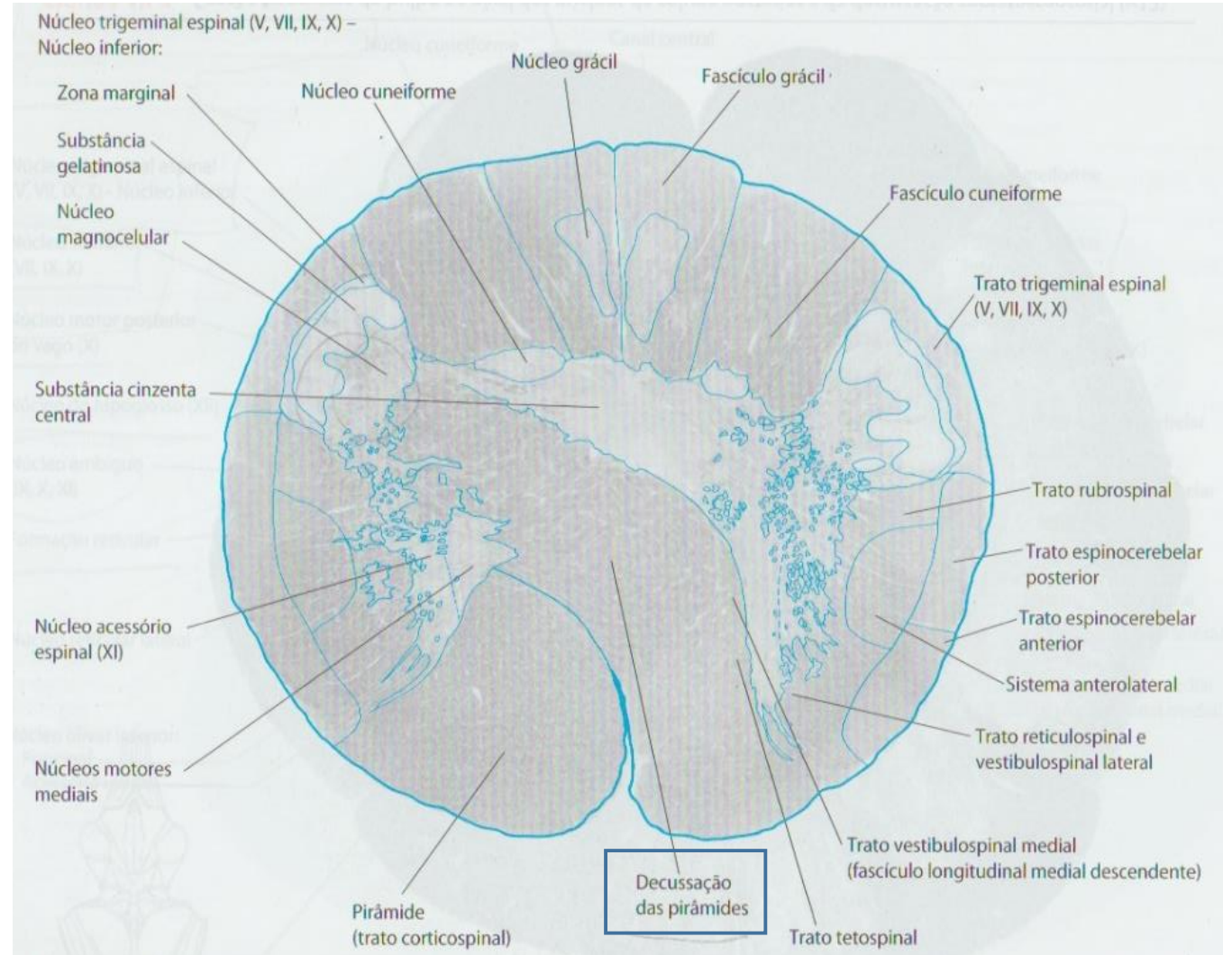


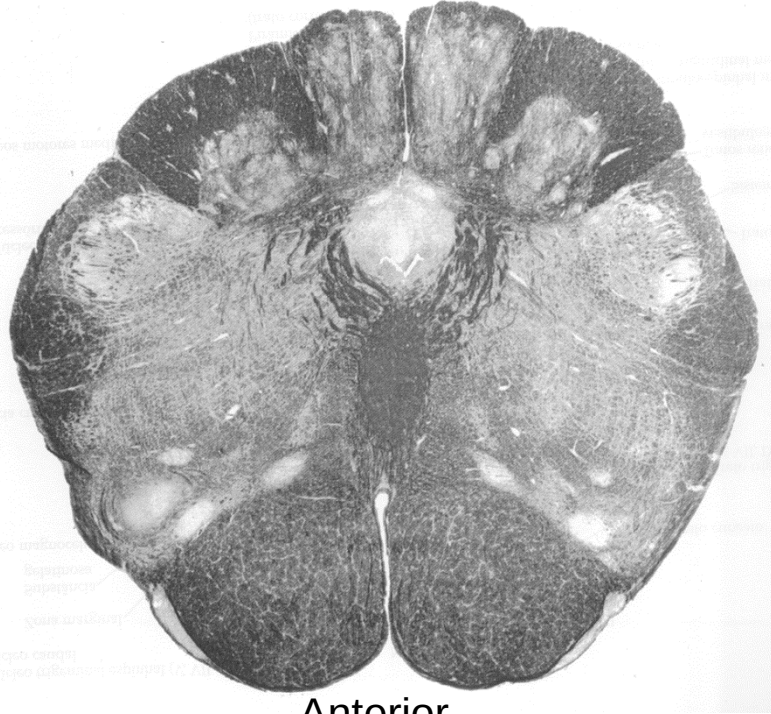
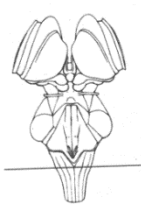
Corte transversal da medula espinal – nível torácico



Anterior

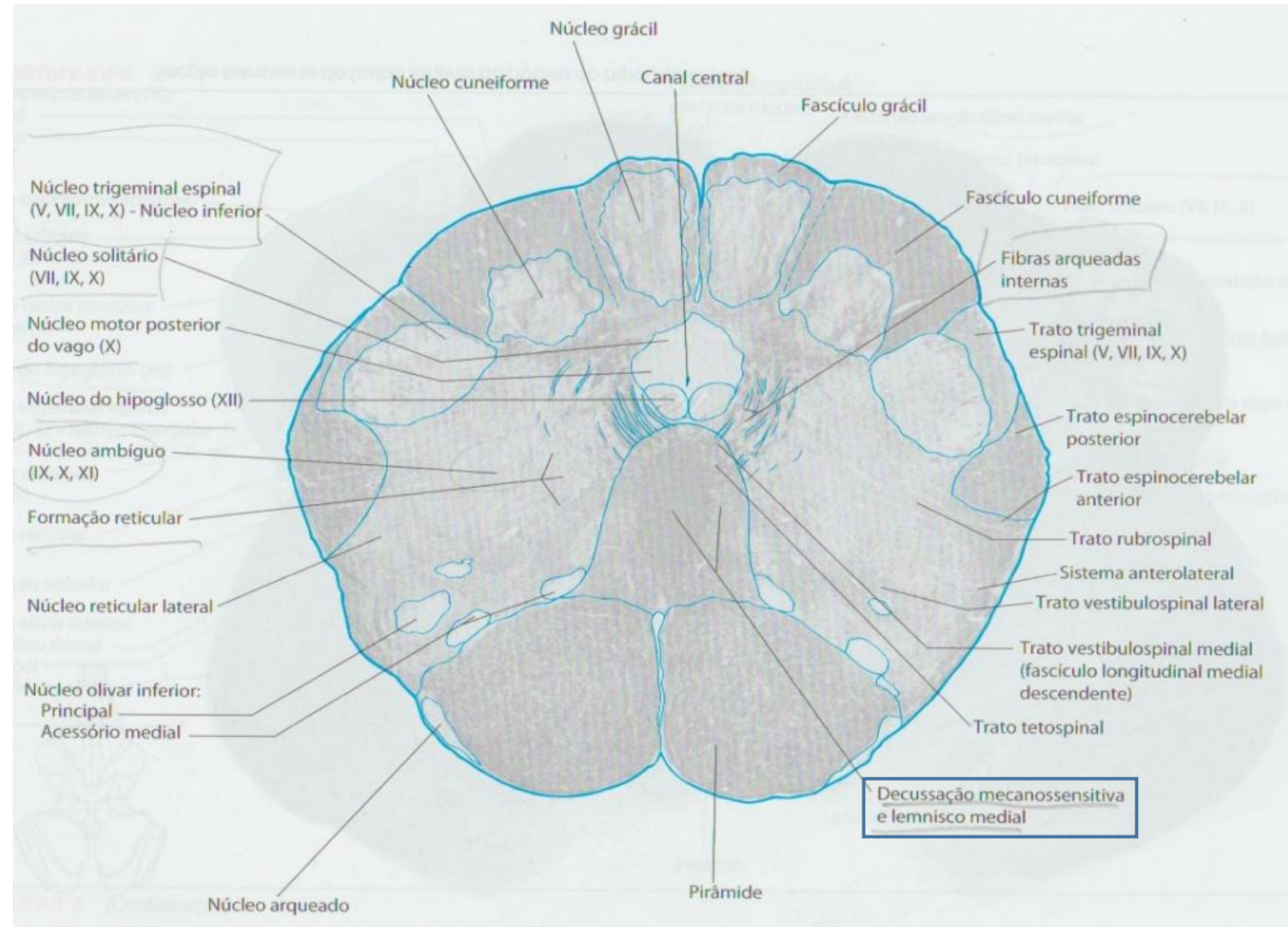
Bulbo caudal

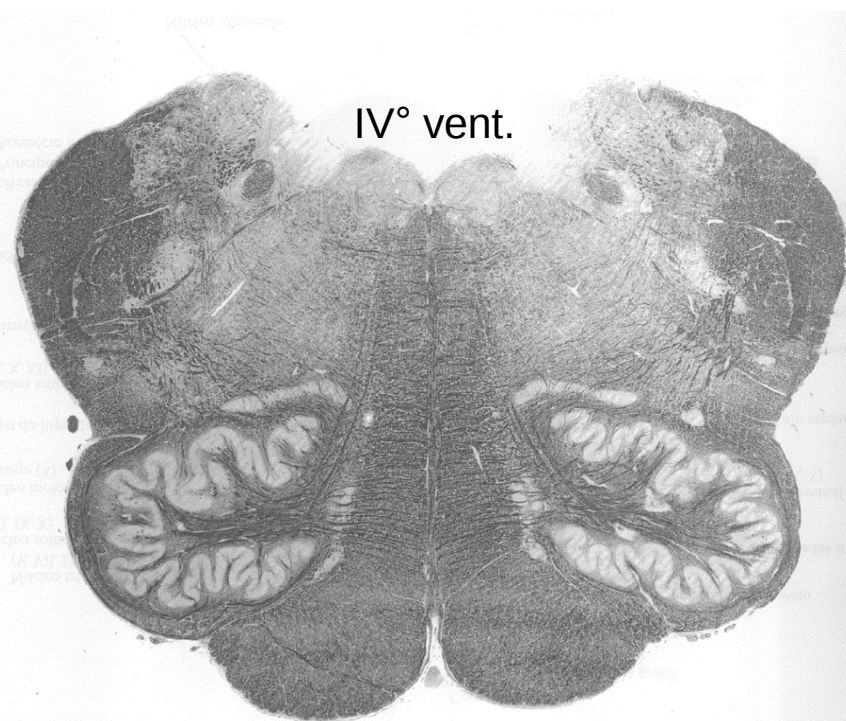
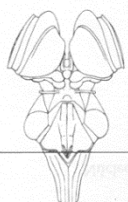




Anterior

Bulbo caudal

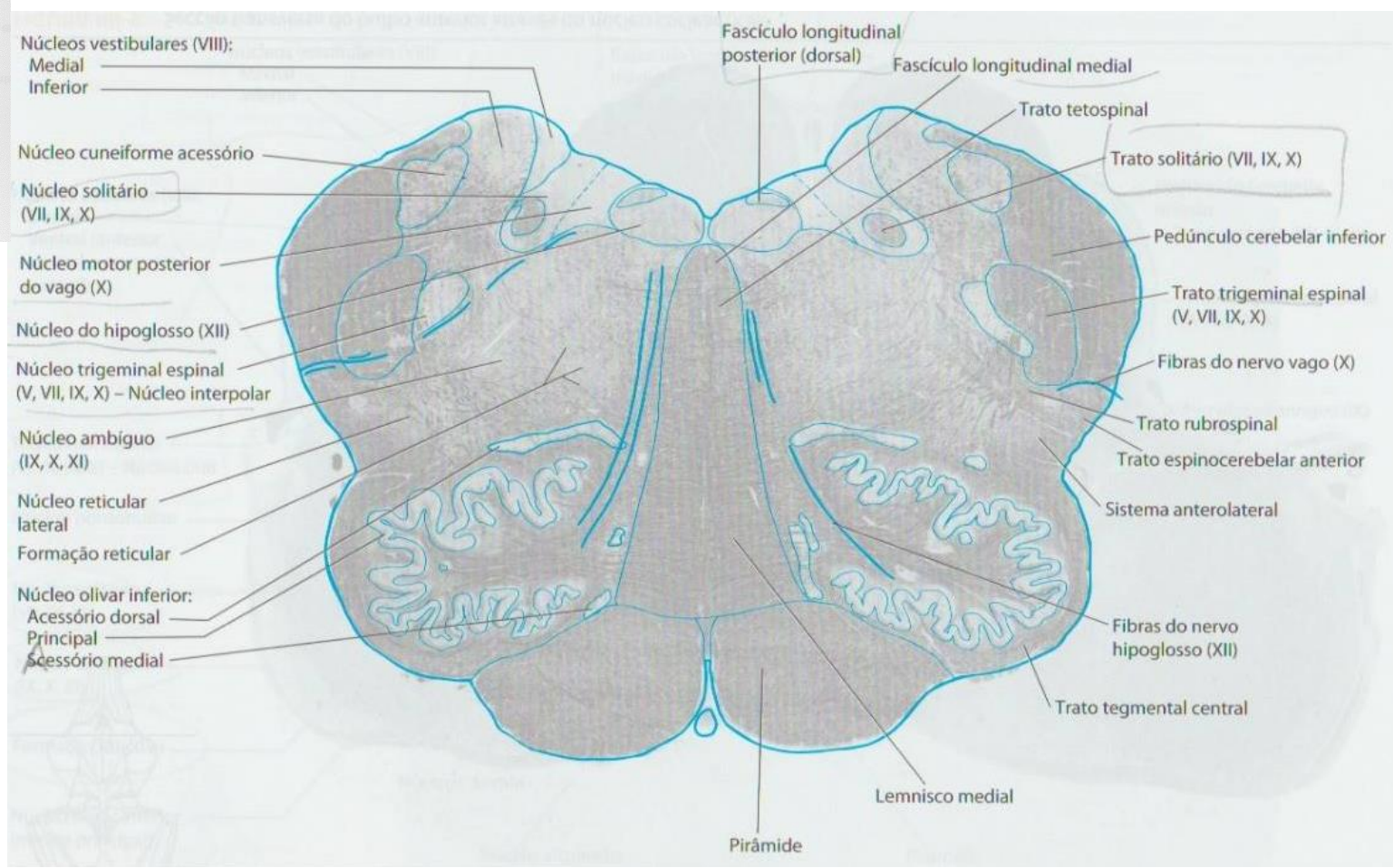


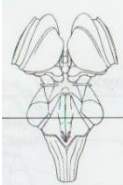


IV° vent.

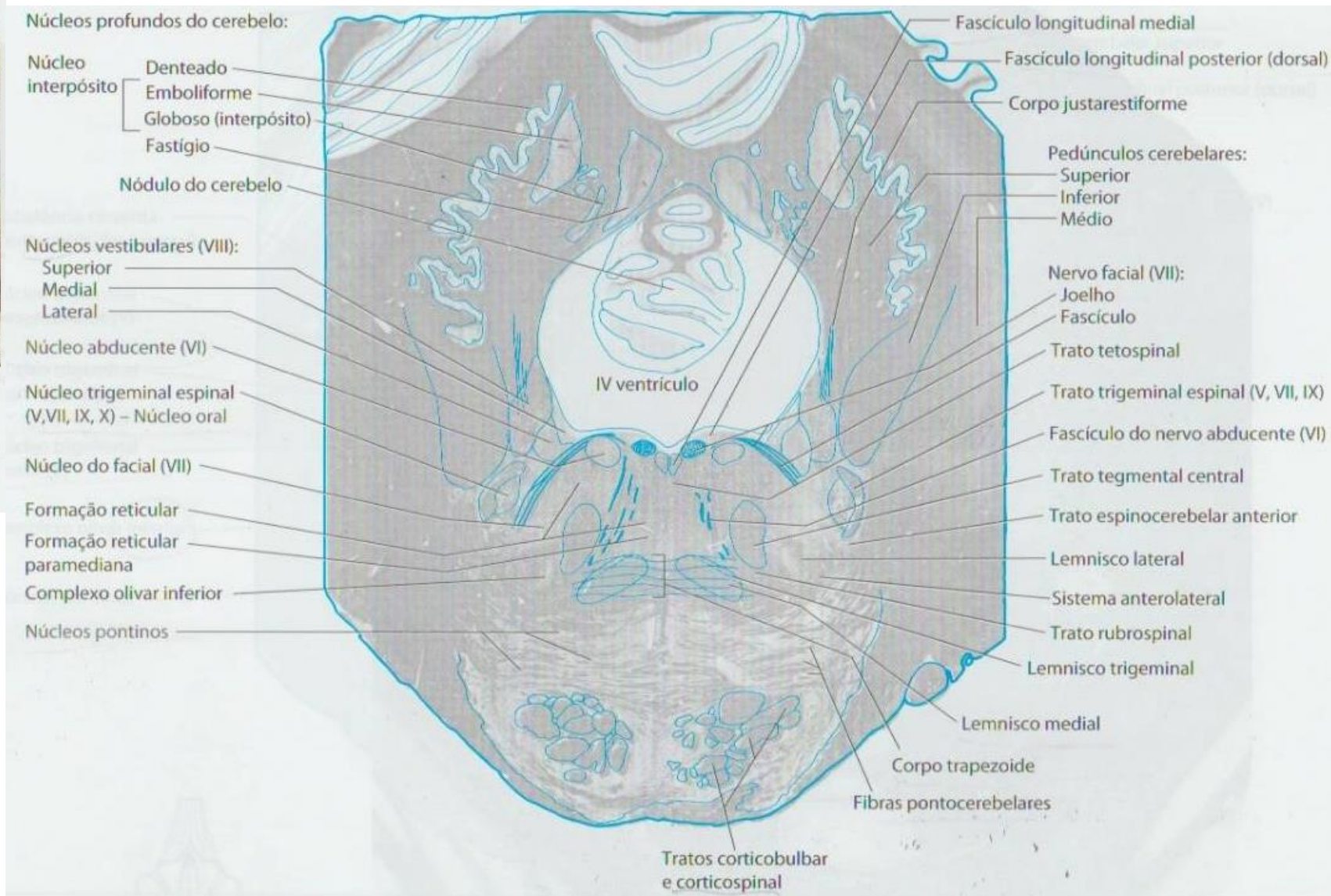
Anterior

Bulbo cranial

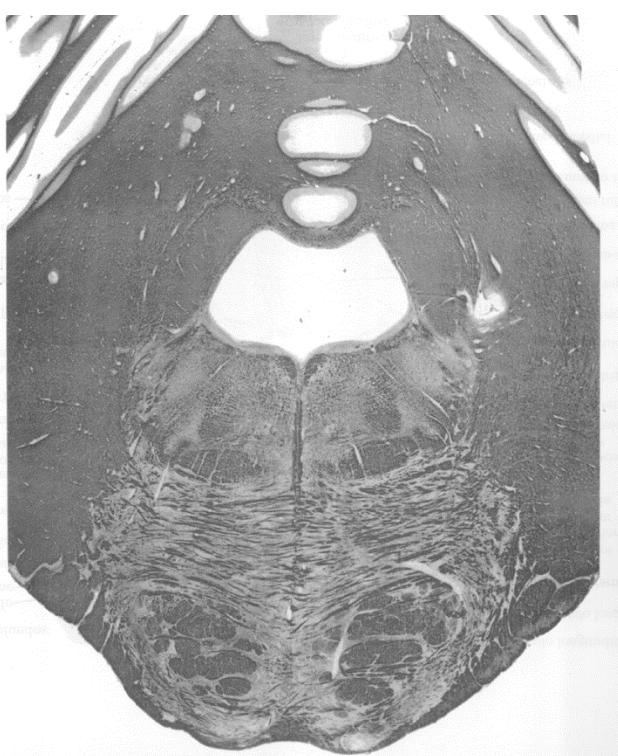
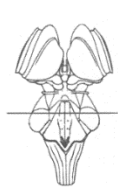




Anterior

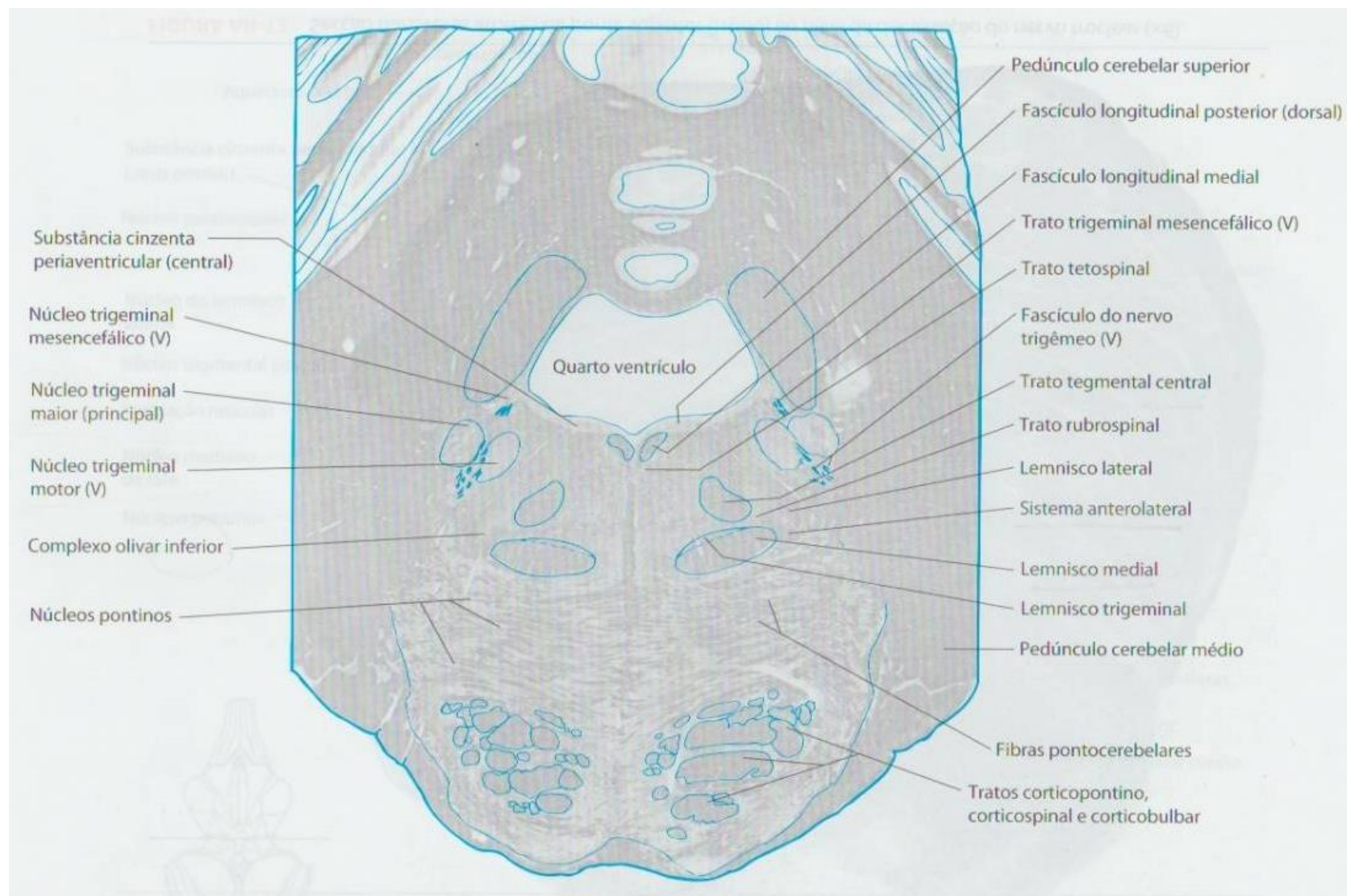


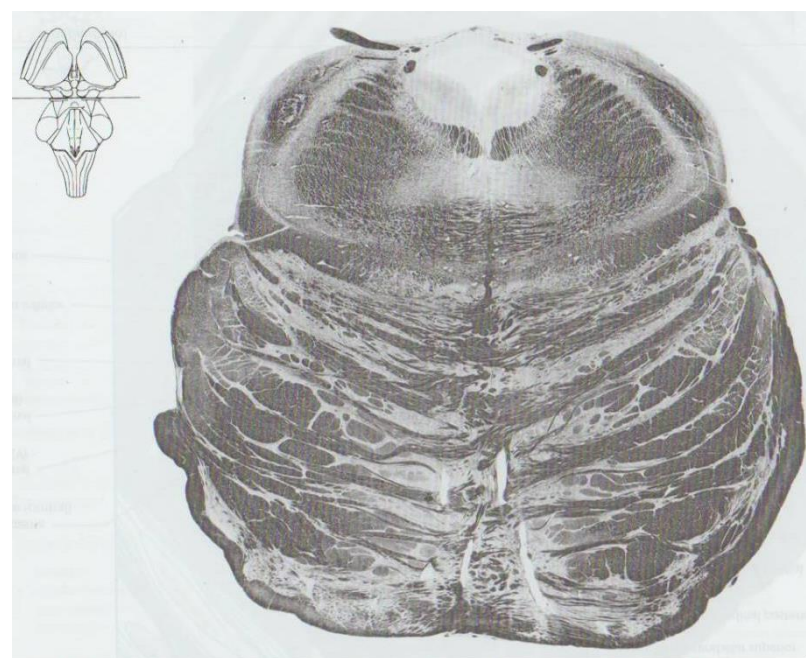
Ponte
(joelho do facial)



Anterior

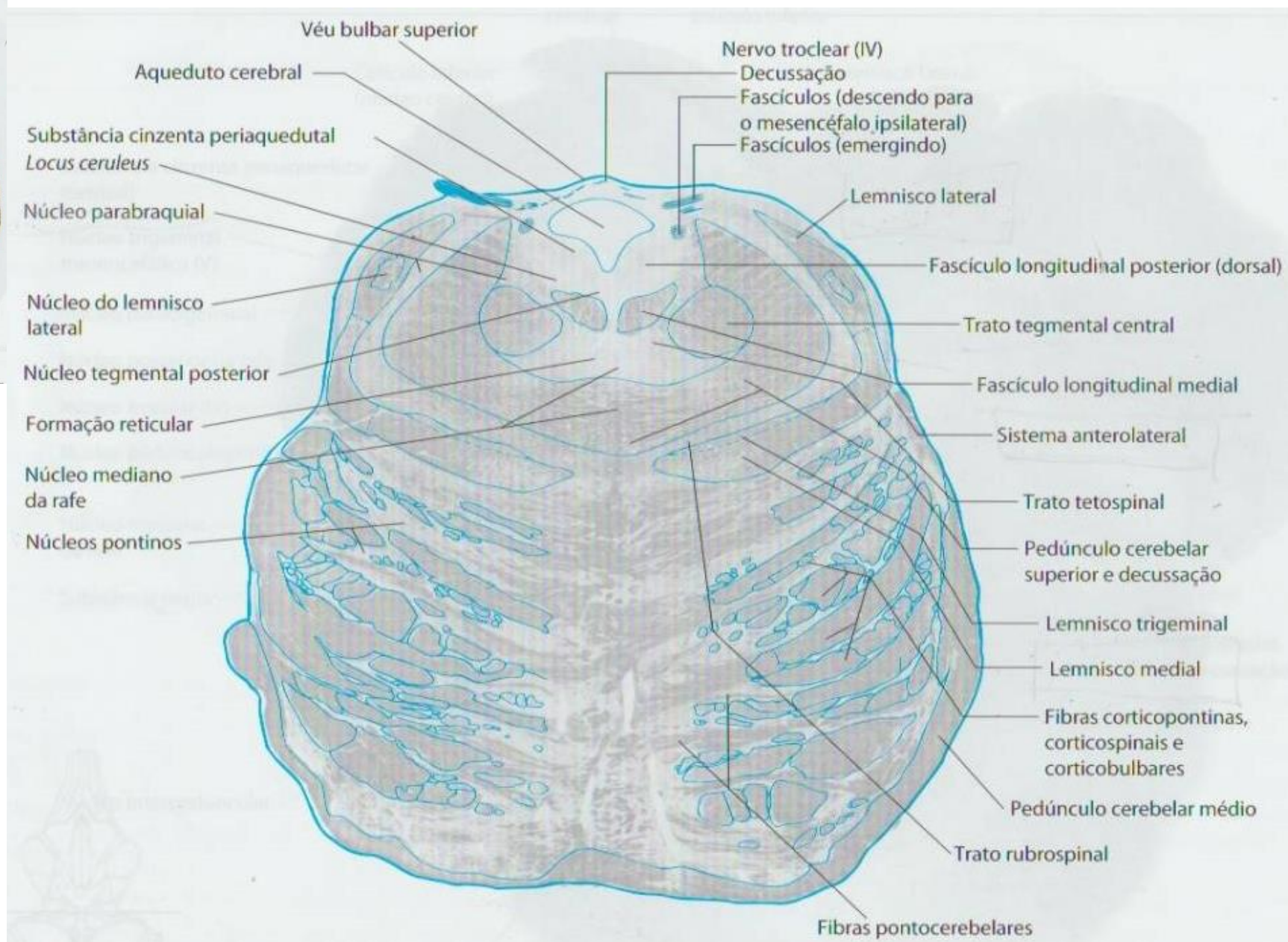
Ponte

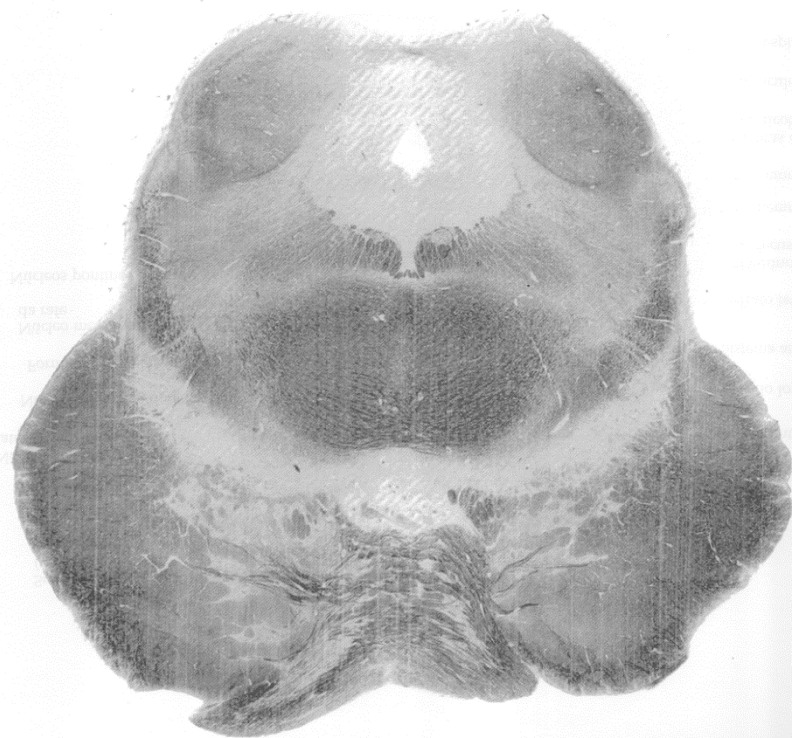
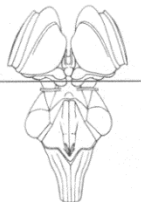




Anterior

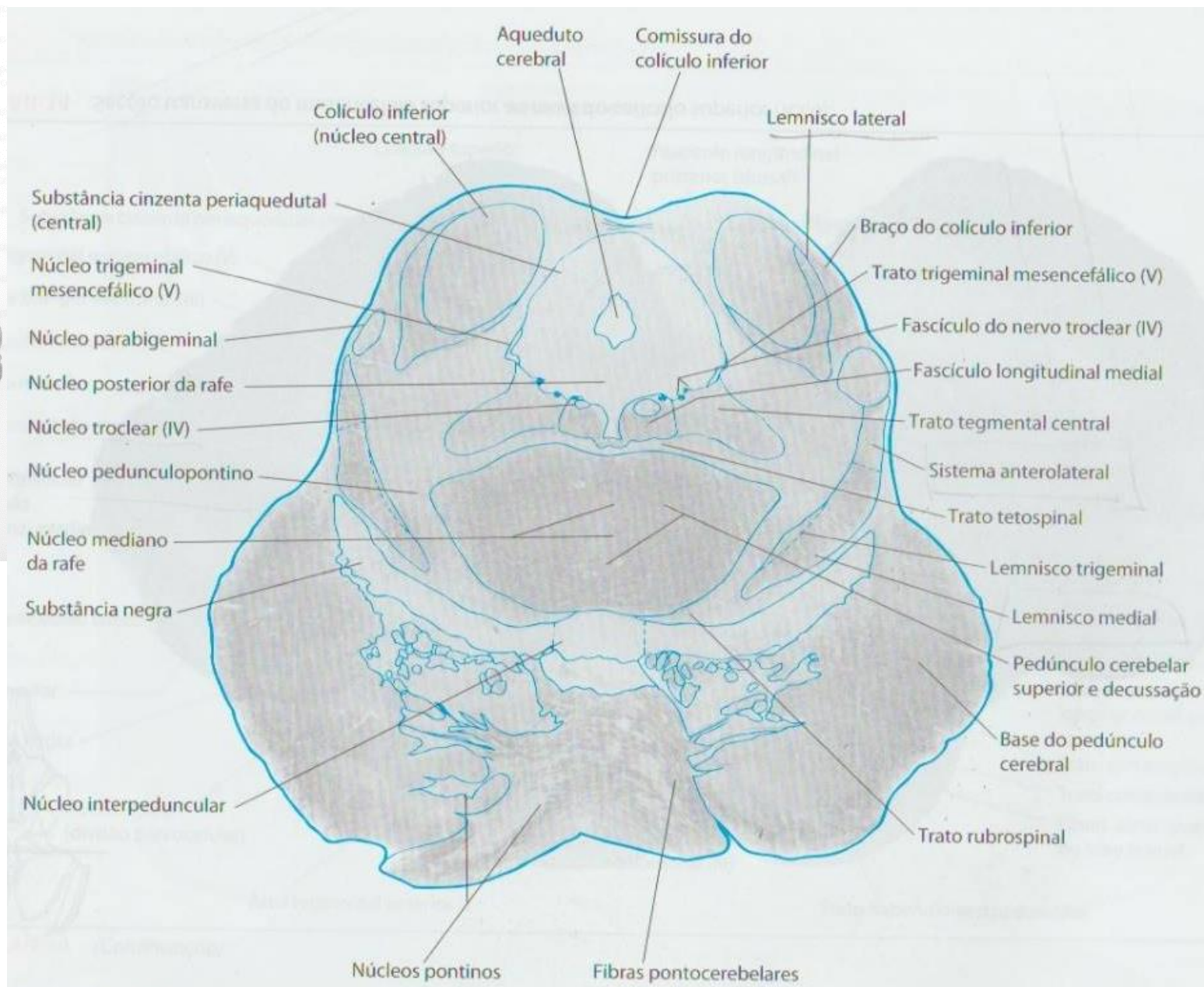
Istmo pontino

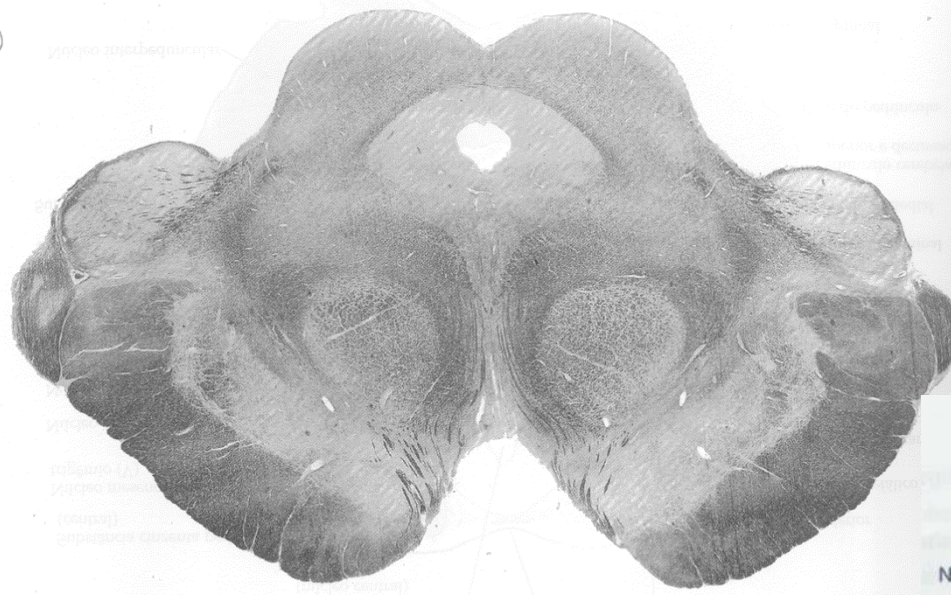
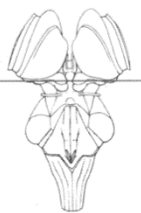




Anterior

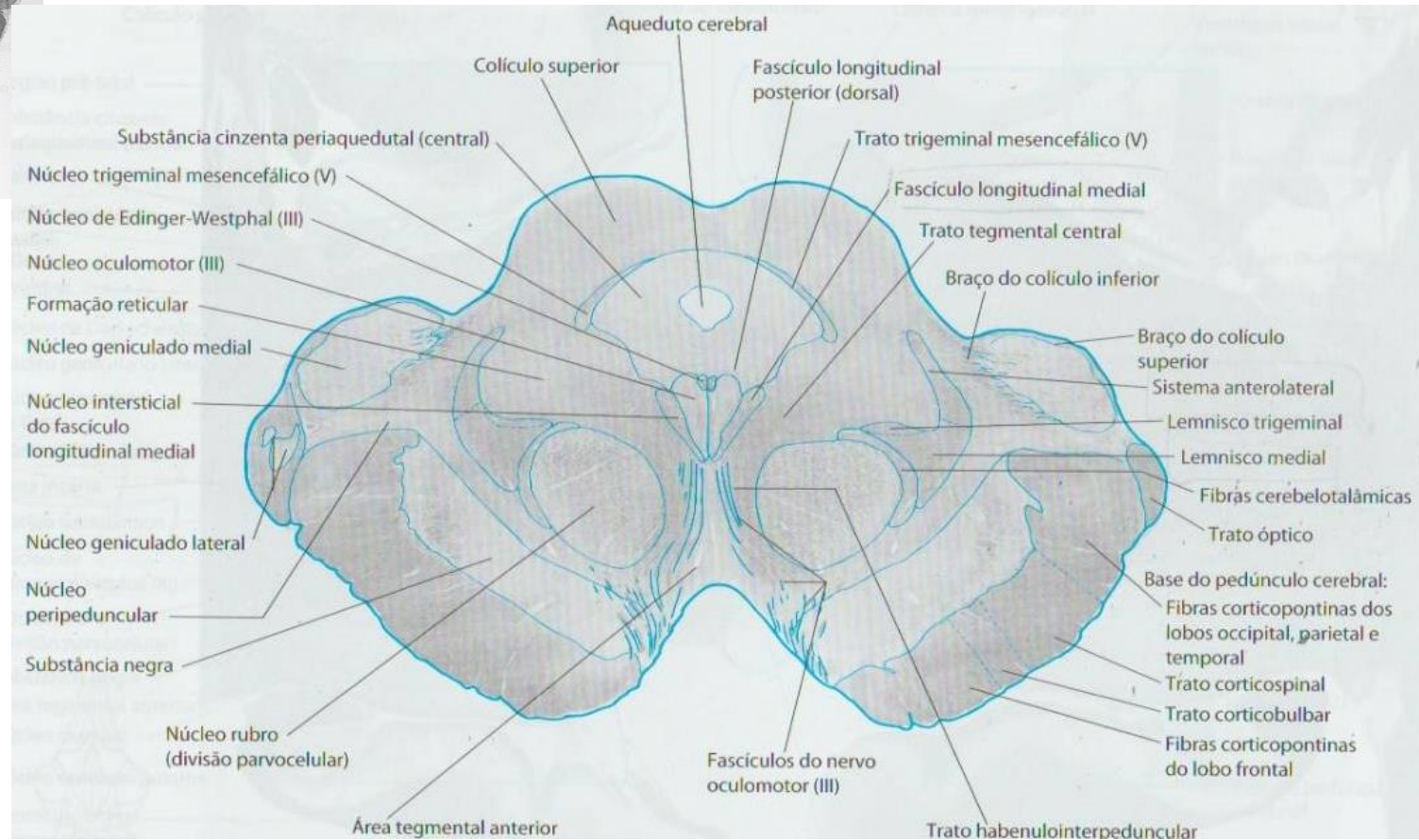
Mesencéfalo caudal

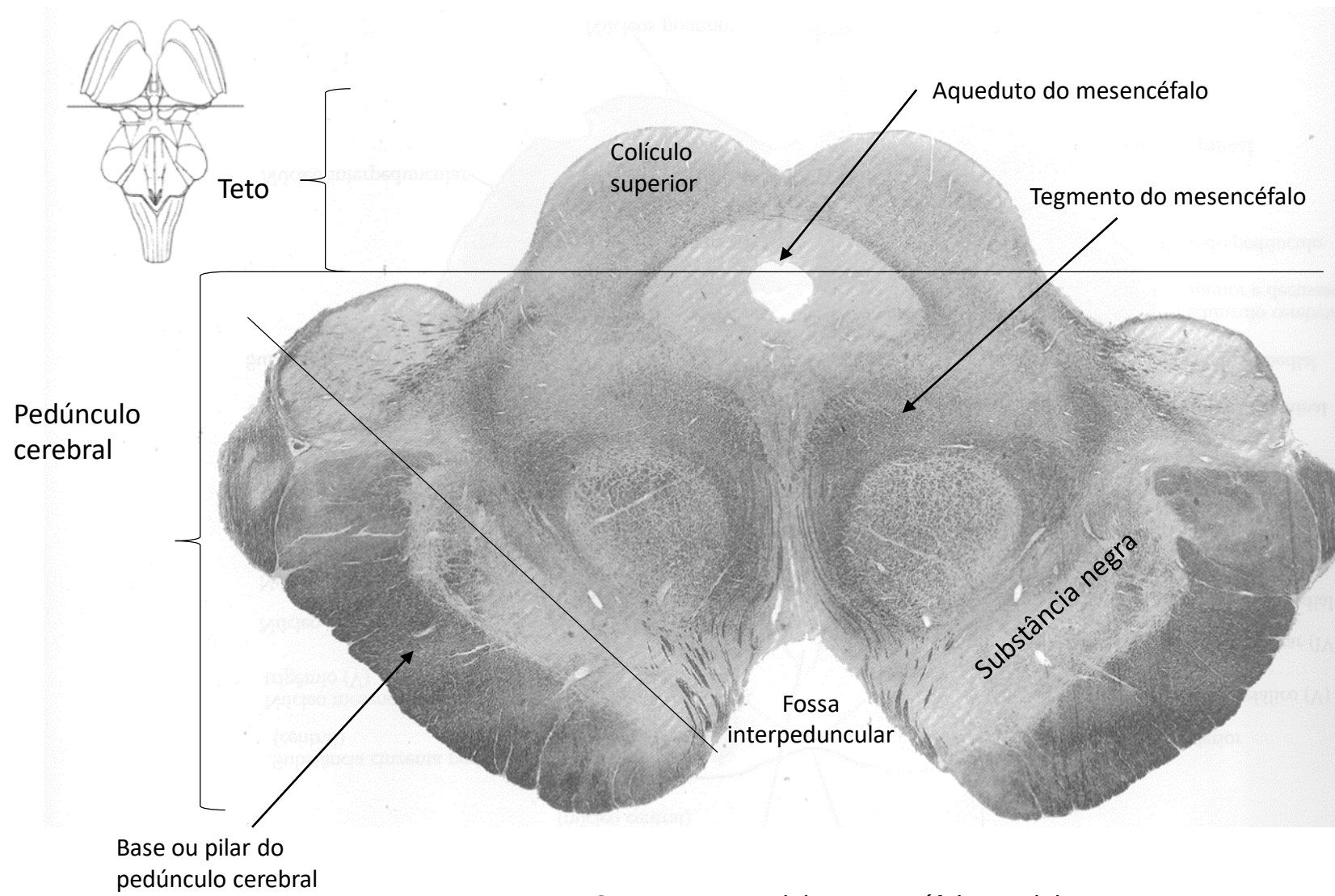




Anterior

Mesencéfalo cranial





Corte transversal do mesencéfalo cranial

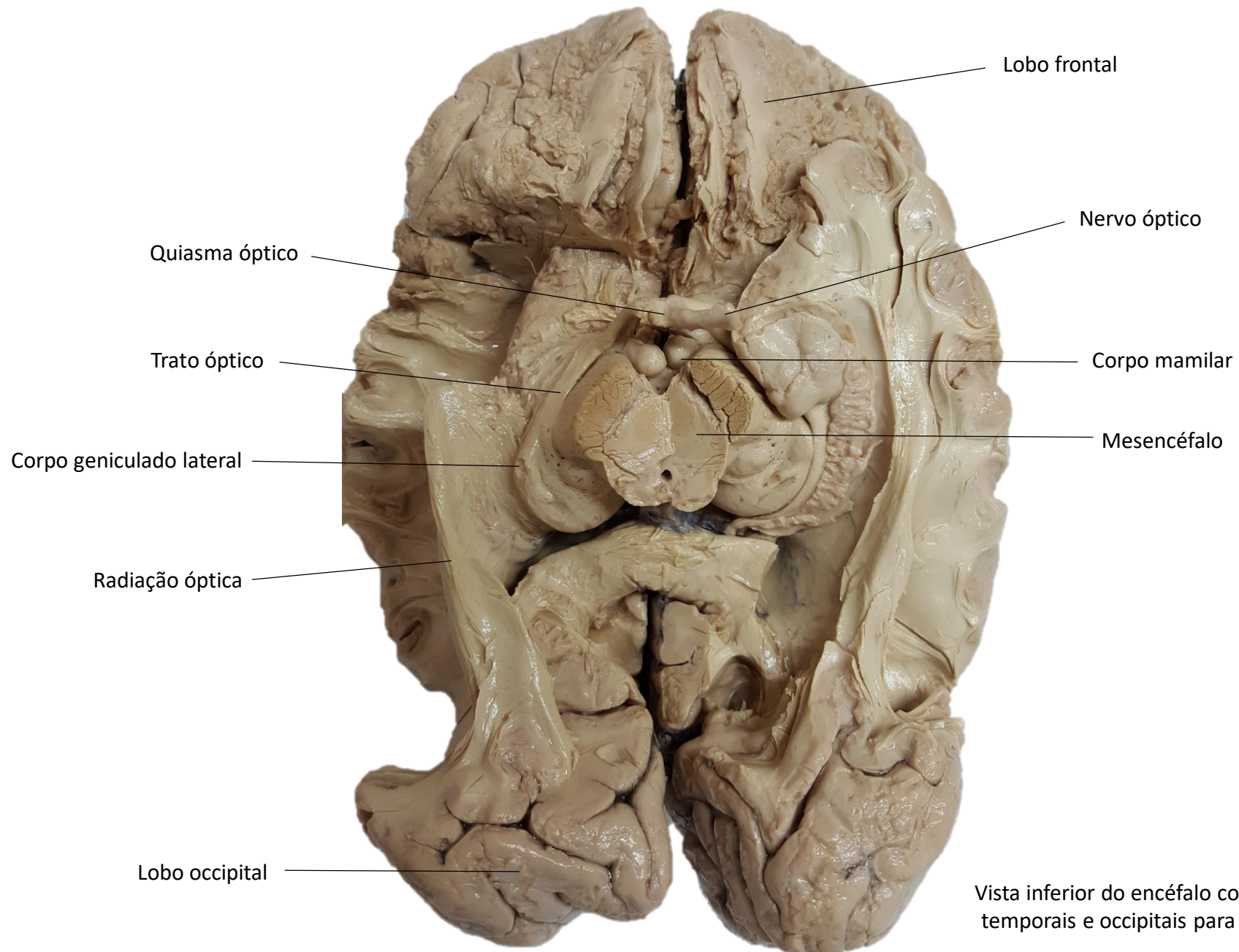


Vista lateral do encéfalo

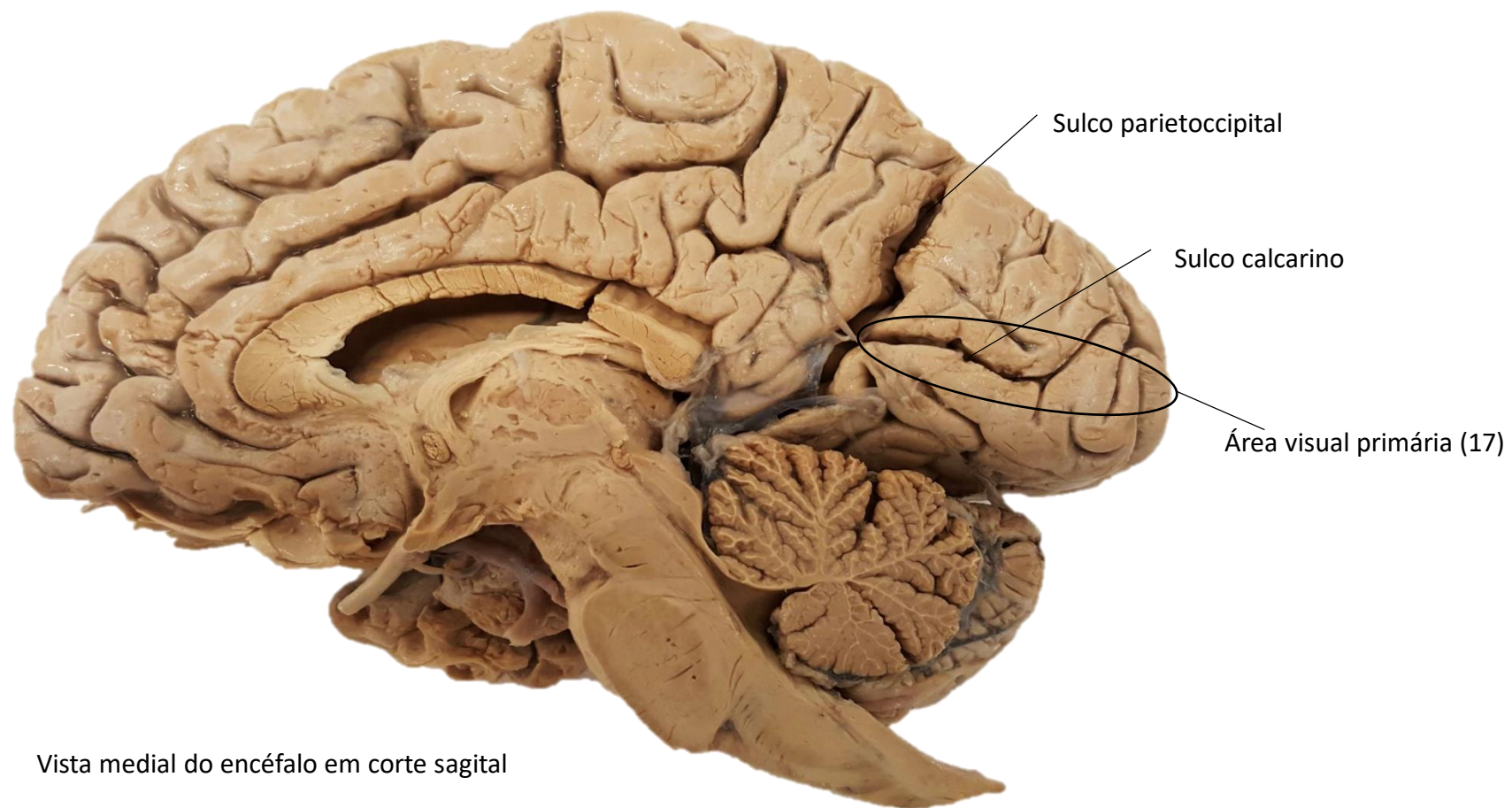
- Nervo óptico (II)
- Nervo oculomotor (III)
- Nervo troclear (IV)
- Nervo trigêmeo (V)
- Nervo abducente (VI)
- Nervo facial (VII)
- Nervo vestibulococlear (VIII)
- Nervo glossofaríngeo (IX)
- Nervo vago (X)
- Nervo acessório (XI)
- Nervo hipoglosso (XII)

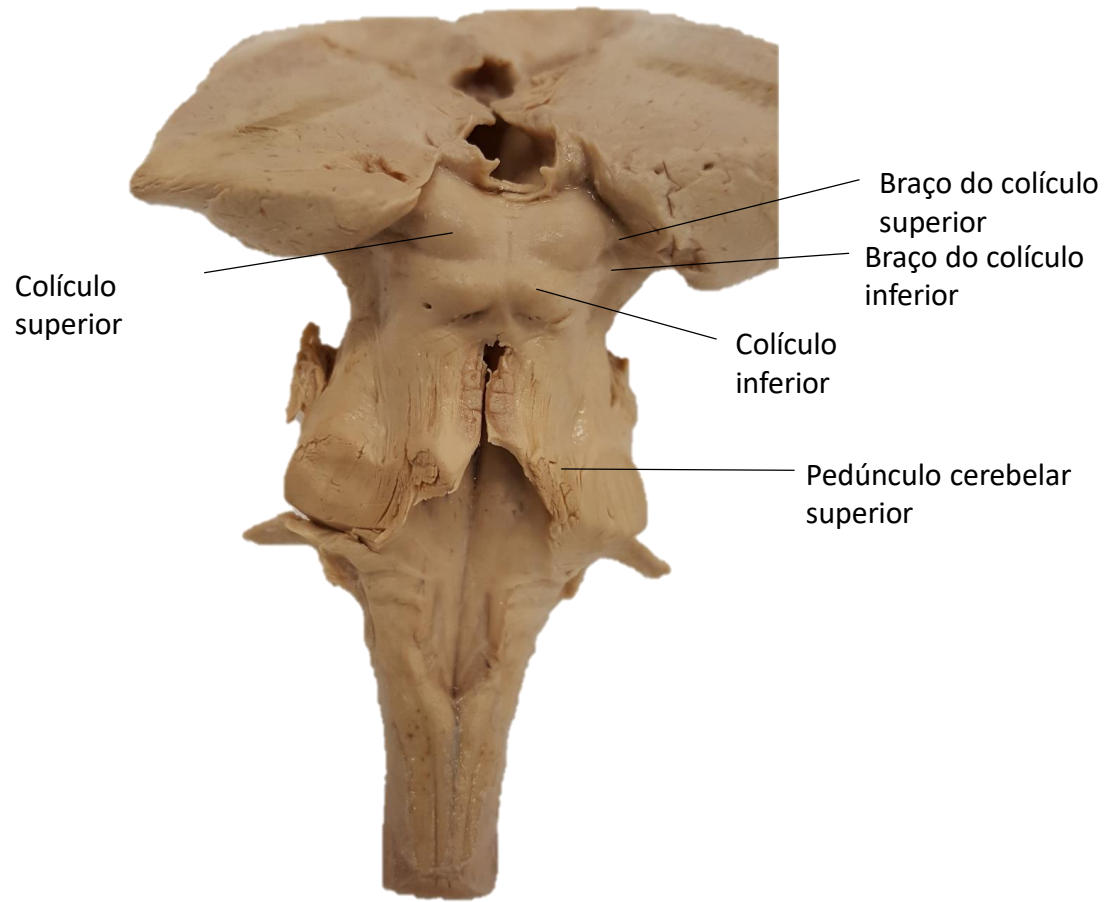


Vista inferior do encéfalo
(face anterior do tronco encefálico)

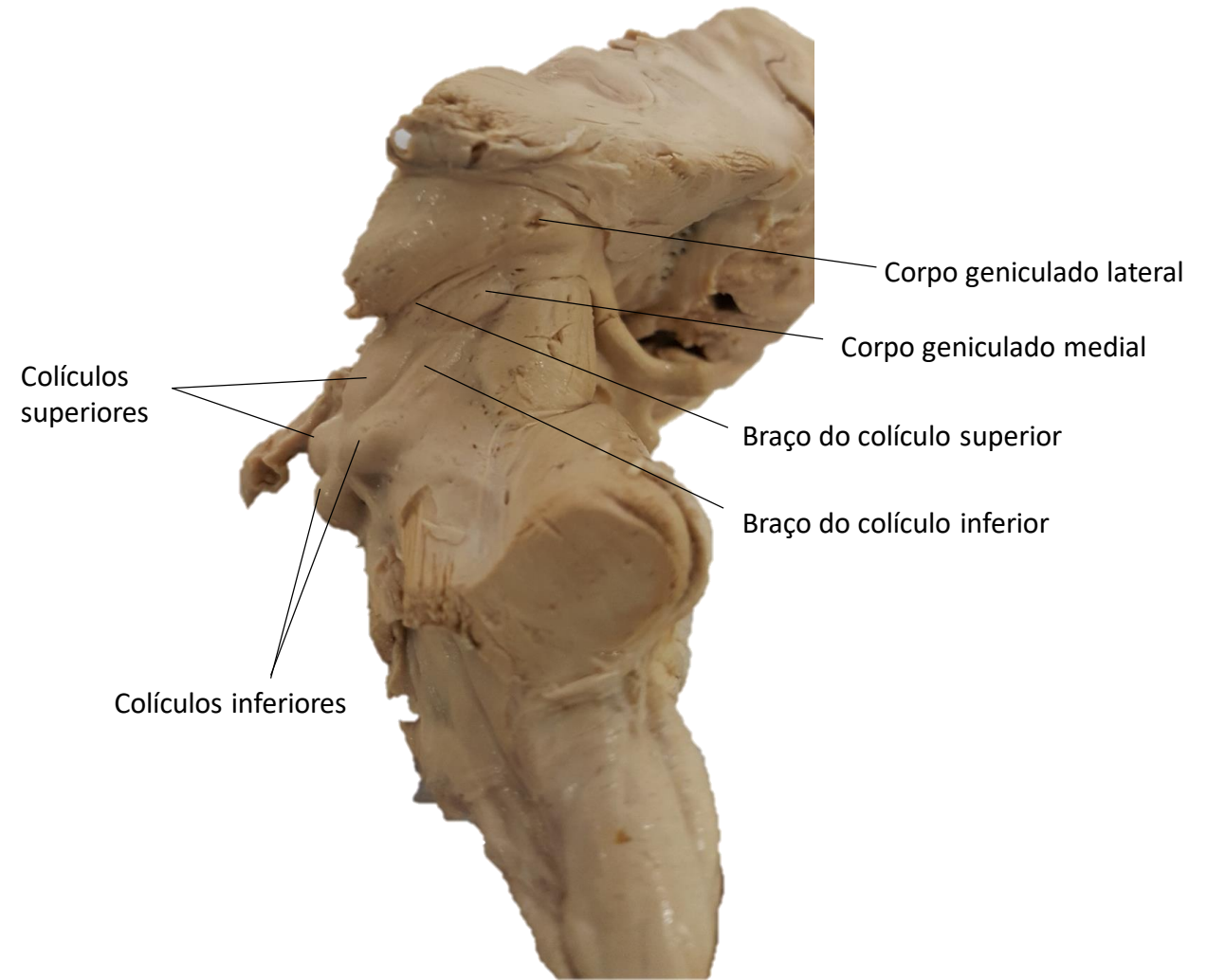


Vista inferior do encéfalo com dissecação dos lobos temporais e occipitais para exposição da via visual

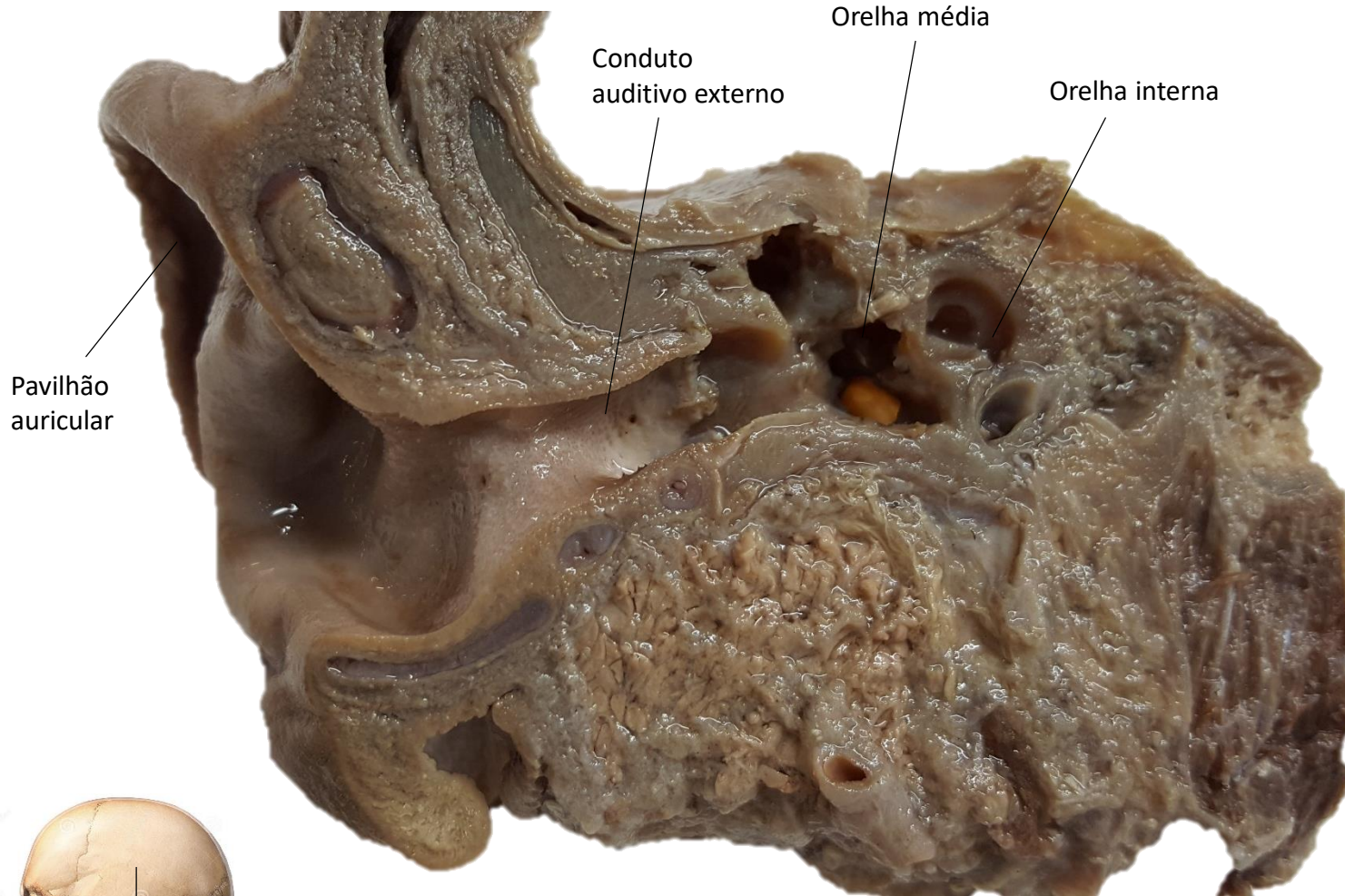




Vista posterior do tronco encefálico



Vista lateral do tronco encefálico



Pavilhão
auricular

Conduto
auditivo externo

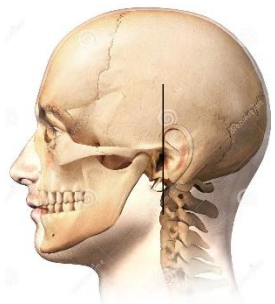
Orelha média

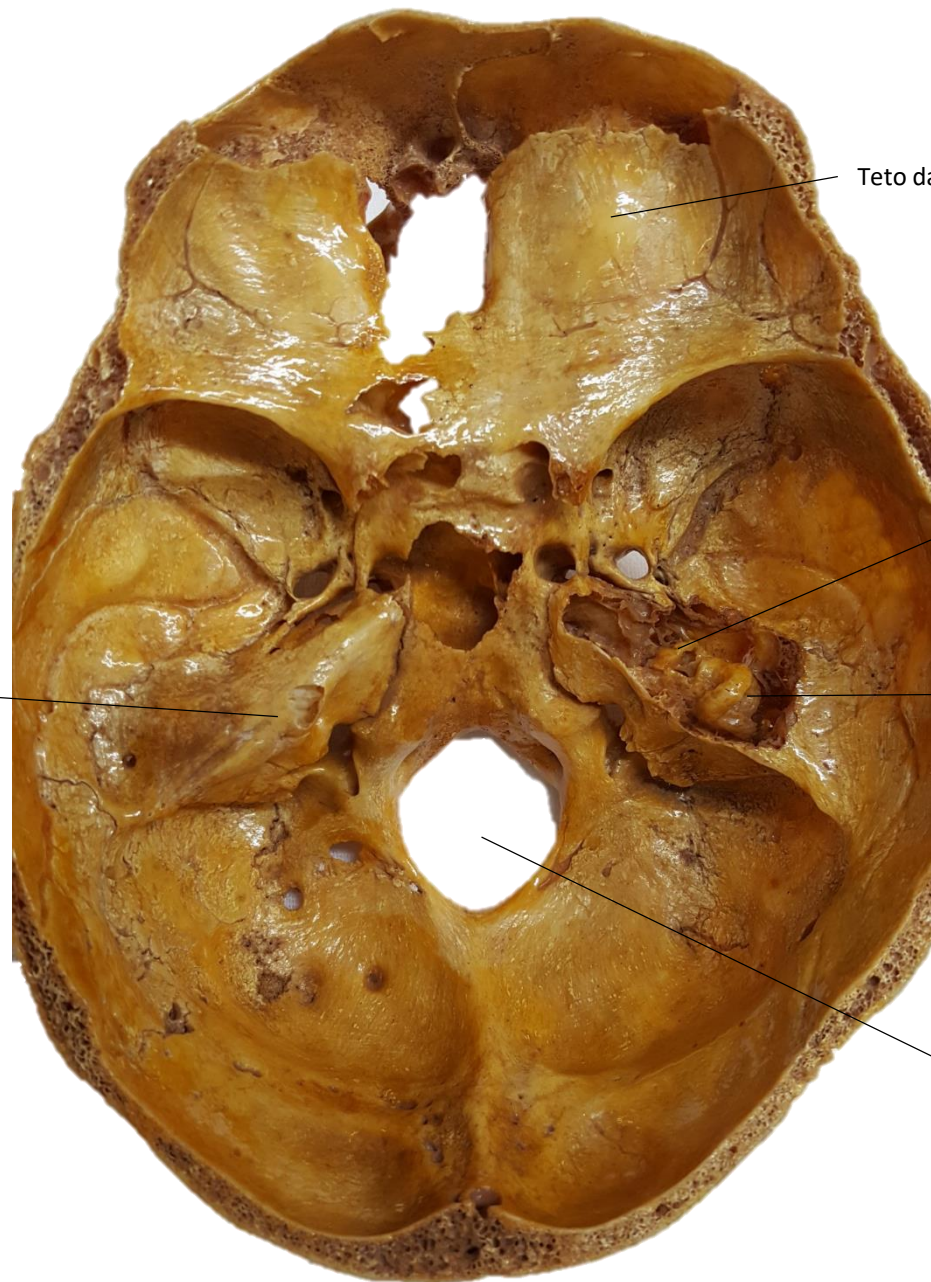
Orelha interna

Corte frontal da cabeça passando pelo conduto auditivo externo
(osso temporal)



Ossículos da orelha média





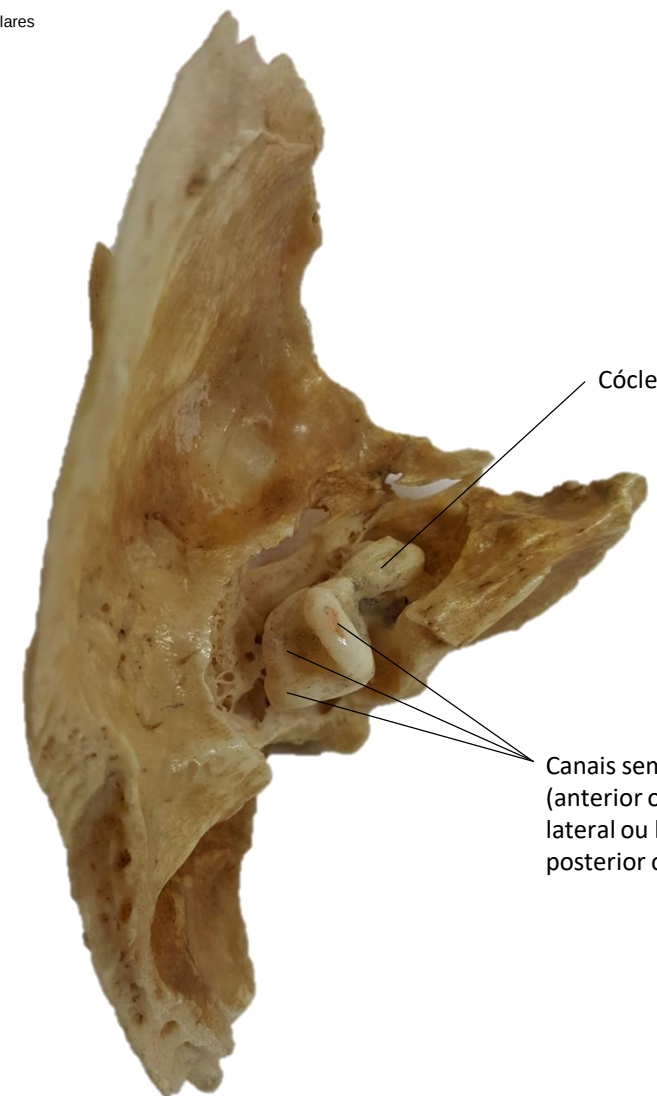
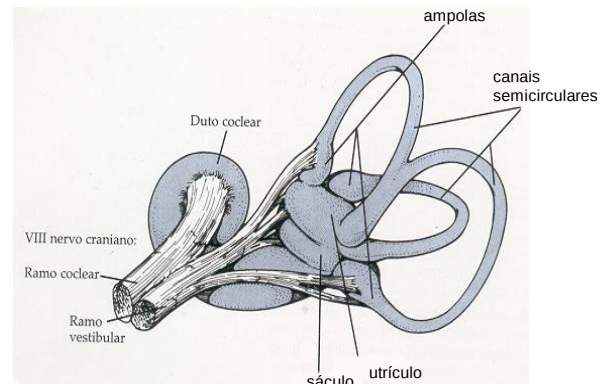
Teto da órbita

Cóclea

Canais
semicirculares

Forame magno

Porção petrosa
do osso
temporal



Cóclea

Canais semicirculares
(anterior ou superior,
lateral ou horizontal e
posterior ou inferior)

Vista superior do osso temporal esquerdo
A parte petrosa foi aberta para exposição do labirinto ósseo

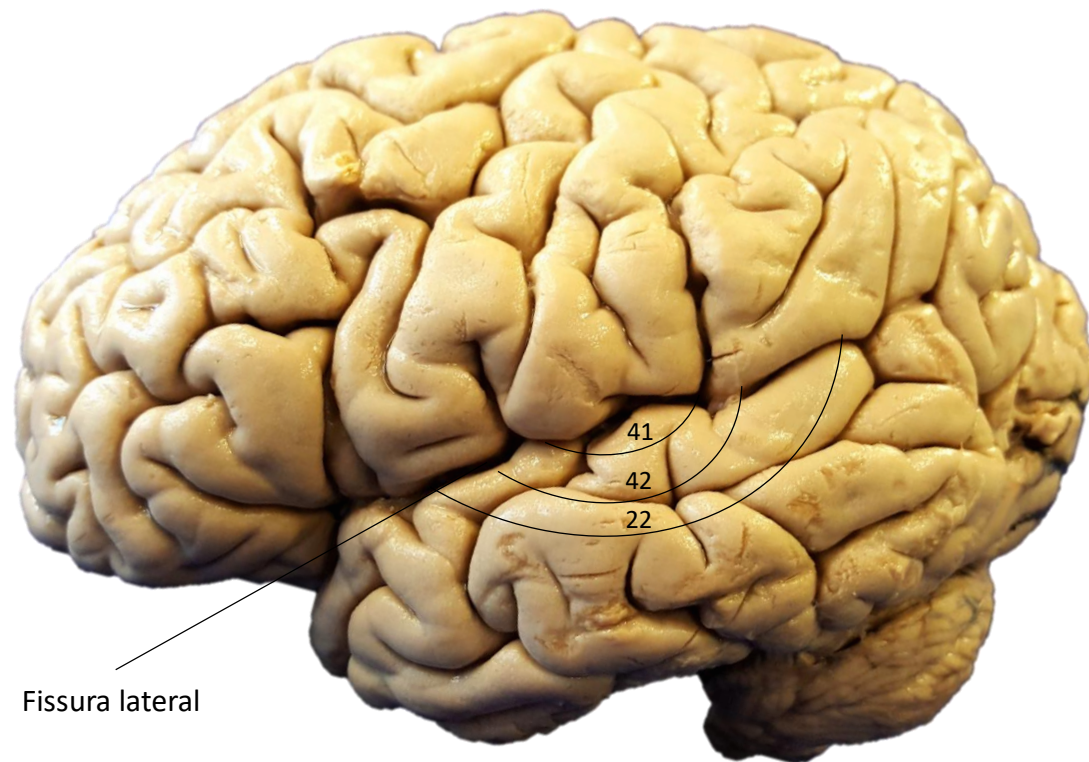
Vista superior da base do crânio
A parte petrosa o osso temporal foi aberta à direita para exposição do labirinto ósseo



Vista lateral do encéfalo
(afastamento das bordas da
fissura lateral)

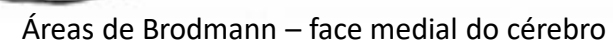
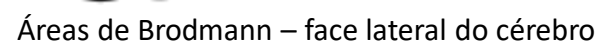
Córtex auditivo primário (área 41)

Áreas auditivas no lobo temporal



Fissura lateral

Vista lateral do encéfalo





Vista lateral do encéfalo

Oração ao cadáver desconhecido:

"Ao curvar-te com a lâmina rija de teu bisturi sobre o cadáver desconhecido, lembra-te que este corpo nasceu do amor de duas almas; cresceu embalado pela fé e esperança daquela que em seu seio o agasalhou, sorriu e sonhou os mesmos sonhos das crianças e dos jovens; por certo amou e foi amado e sentiu saudades dos outros que partiram, acalentou um amanhã feliz e agora jaz na fria lousa, sem que por ele tivesse derramado uma lágrima sequer, sem que tivesse uma só prece. Seu nome só Deus o sabe; mas o destino inexorável deu-lhe o poder e a grandeza de servir a humanidade que por ele passou indiferente."

Karl Rokitansky (1876)

