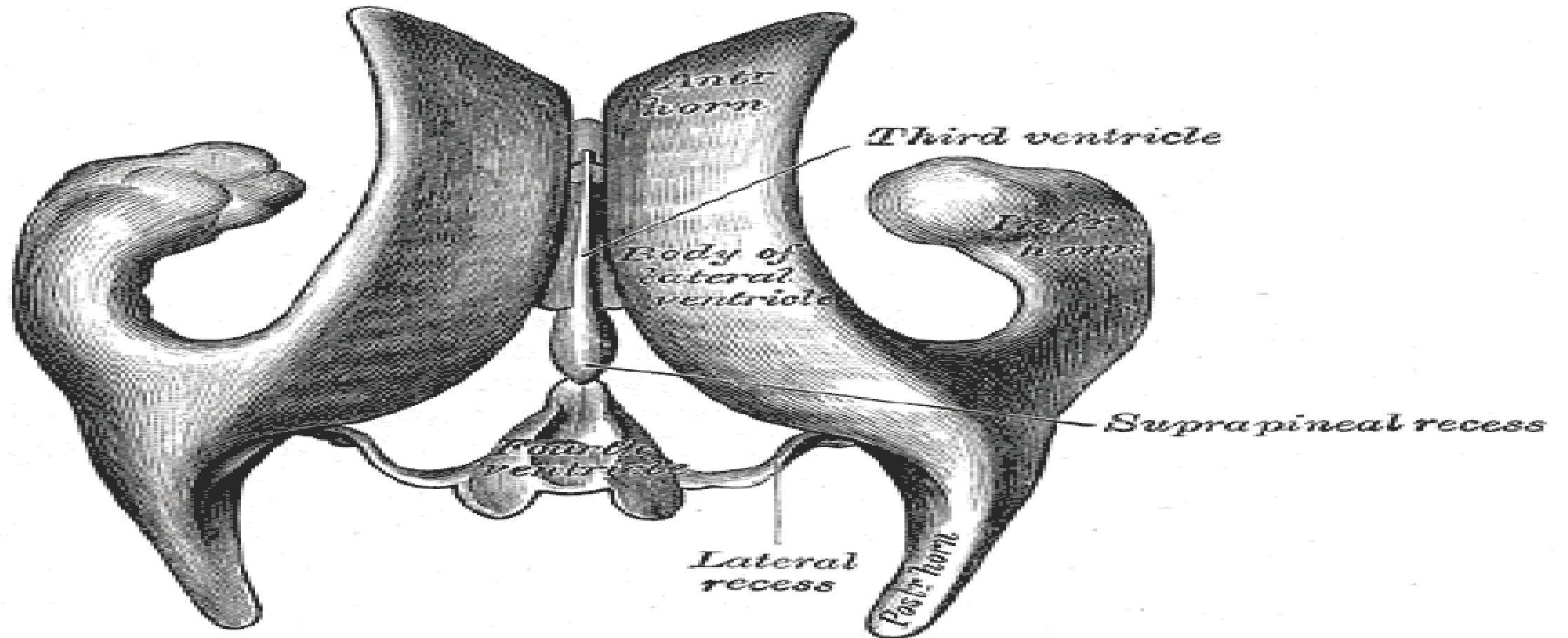


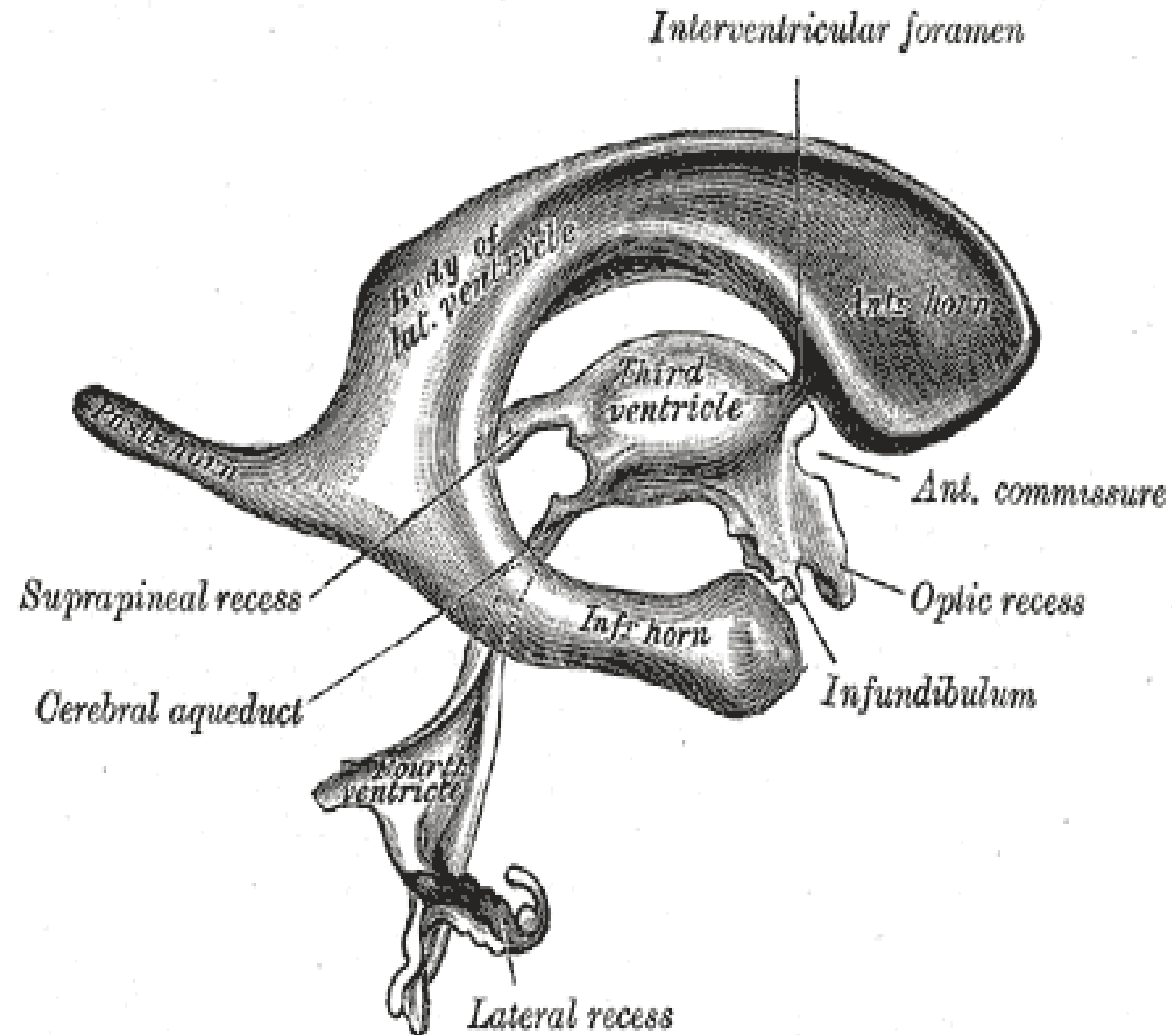
# Lateral ventricles

lateral ventricles are two irregular cavities in the two cerebral hemispheres producing cerebrospinal fluids.



# Each ventricle communicate with third ventricle thru interventricular foramen or foramen of monro

1. Anterior horn
2. Posterior horn
3. Body
4. Inferior horn



# Anterior horn: part above the foramen of monro lies in frontal lobe

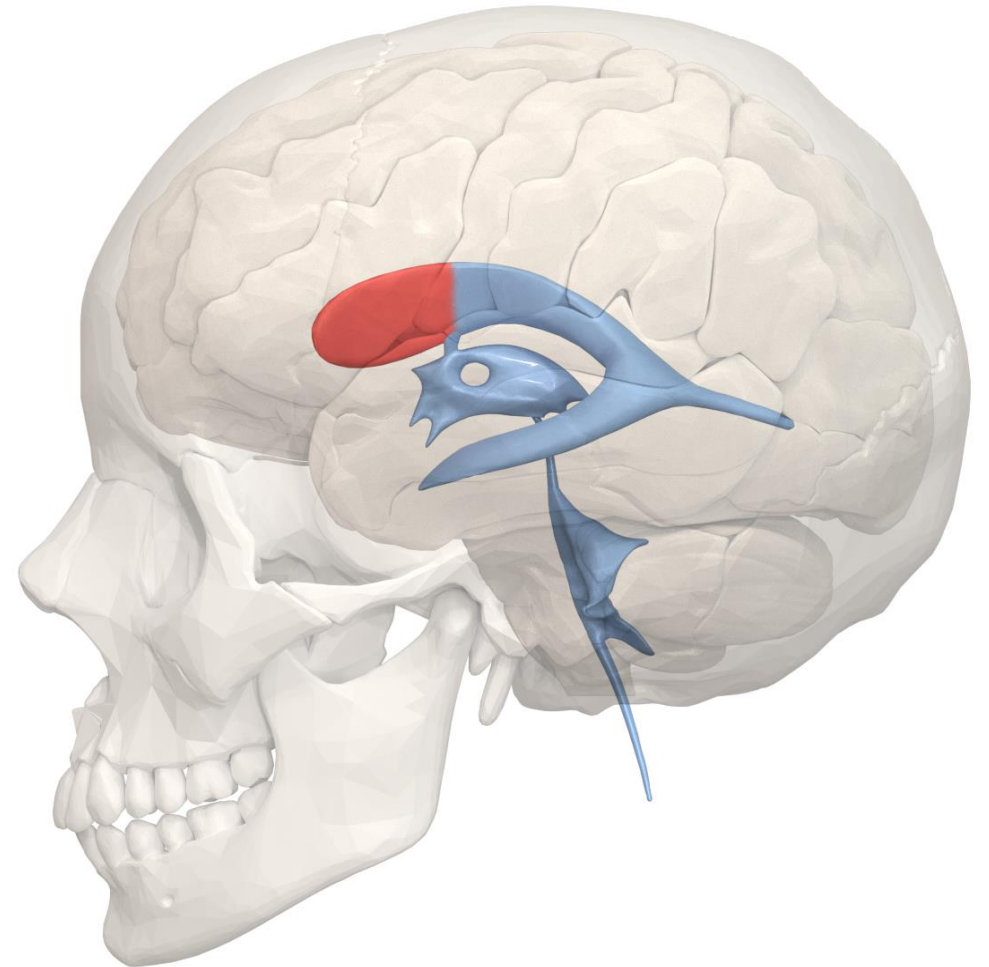
Boundaries of anterior horn of lateral ventricle.

Roof: 1. corpus callosum

floor: 1. head of caudate nucleus  
2. rostrum  
3. anterior commissure

Medial wall : 1.septum pellucidum  
2.Column of fornix

Anter:1. post surface of corpus callosum  
2.Rostrum of corpus callosum



## Body: part from foramen of monro to splenium of corpus callosum. Parietal lobe

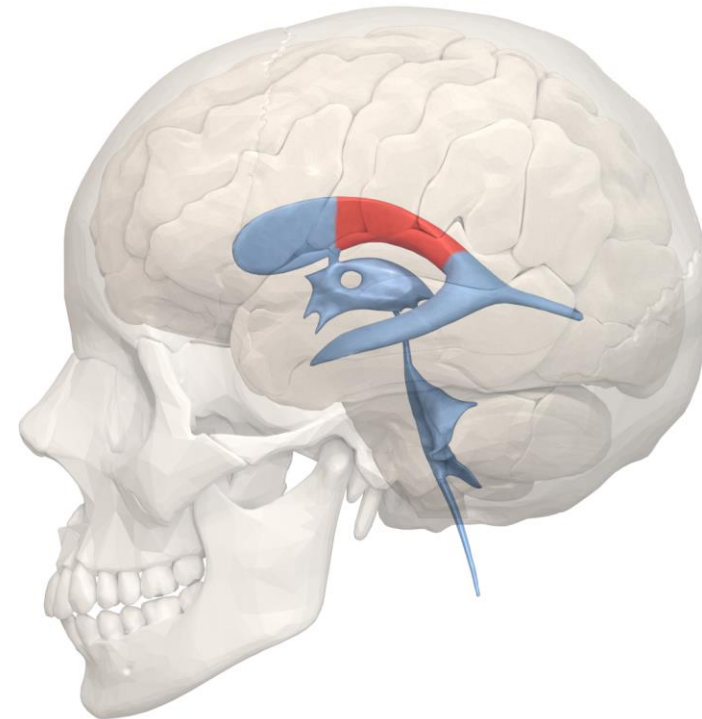
Boundaries of body of lateral ventricle.

Roof: 1. under surface of splenium of corpus callosum

floor: 1. body of caudate nucleus  
2. thalamus

Medial wall : 1. septum pellucidum  
2. body of fornix

Floor: 1. striate terminalis  
2. thalamostriate vein



# Inferior horn: Behind and lower part of posterior horn

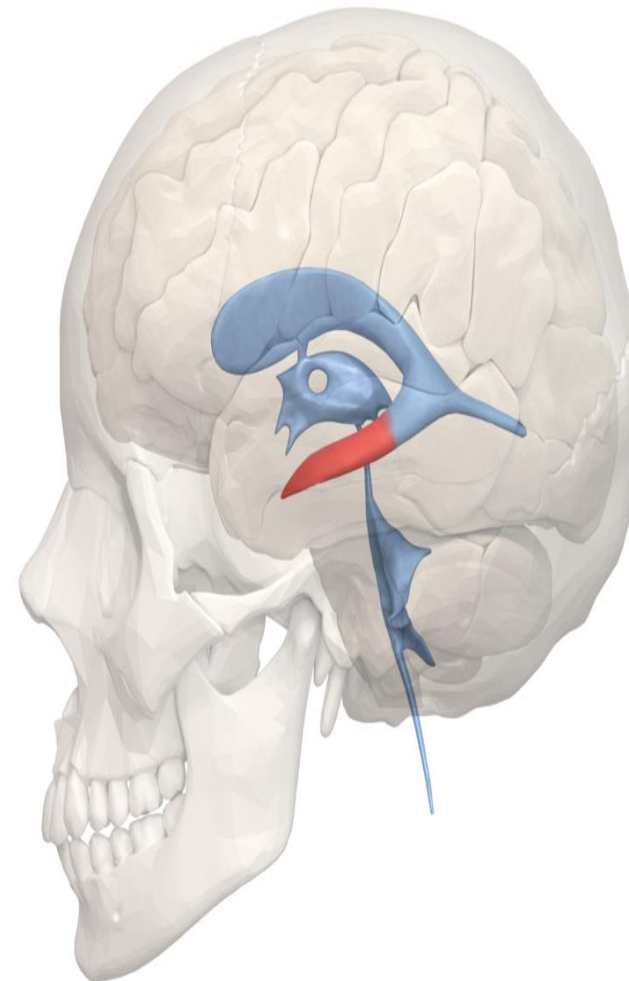
Boundaries of inferior horn of lateral ventricle.

Roof:                   1. tapetum(white fibers)  
                              2. caudate nucleus tail

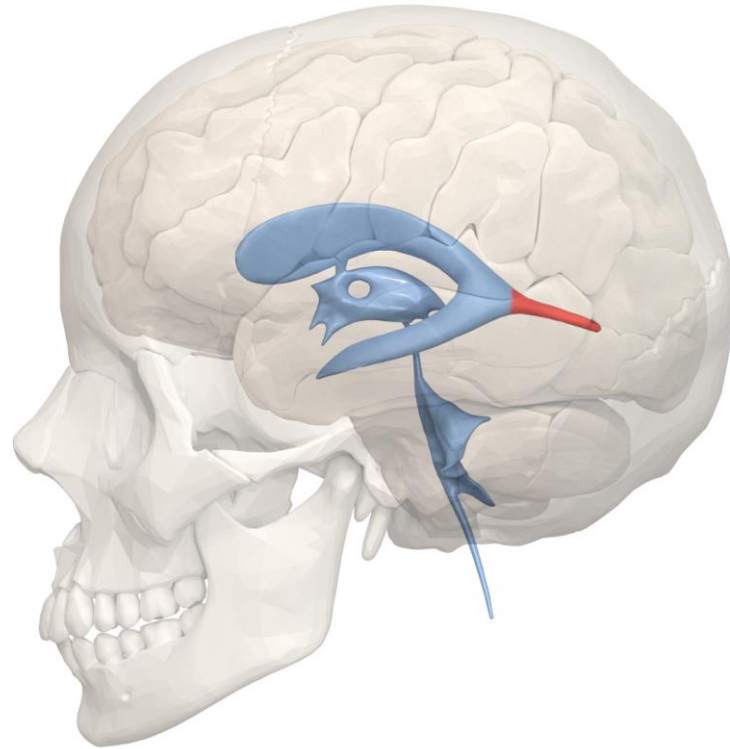
floor:                   1.collateral eminence  
raised by collateral sulcus

                              2. hippocampus

lateral wall : 1.striate terminalis  
                              2.emegdaloid body



**Posterior horn lies in the occipital lobe**



# Inferior horn: Behind and lower part of posterior horn

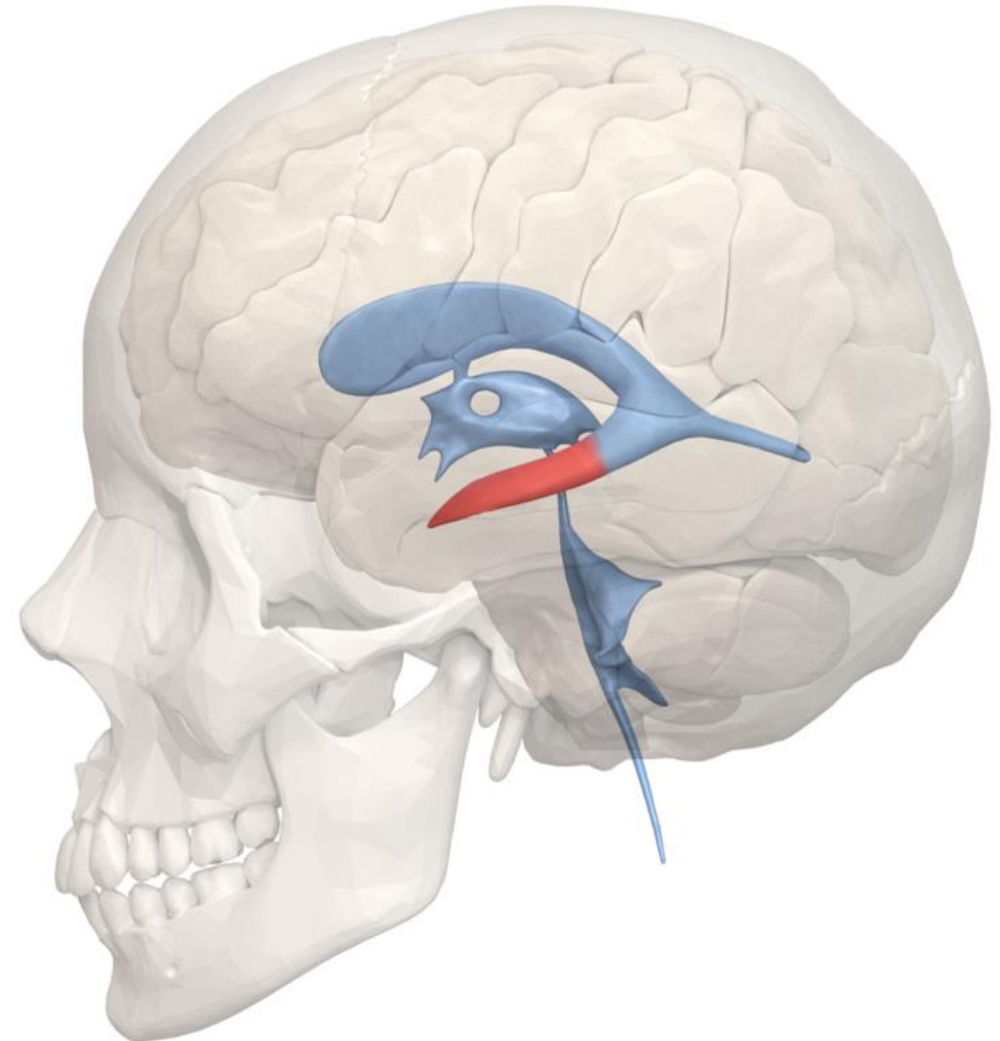
Boundaries of inferior horn of lateral ventricle.

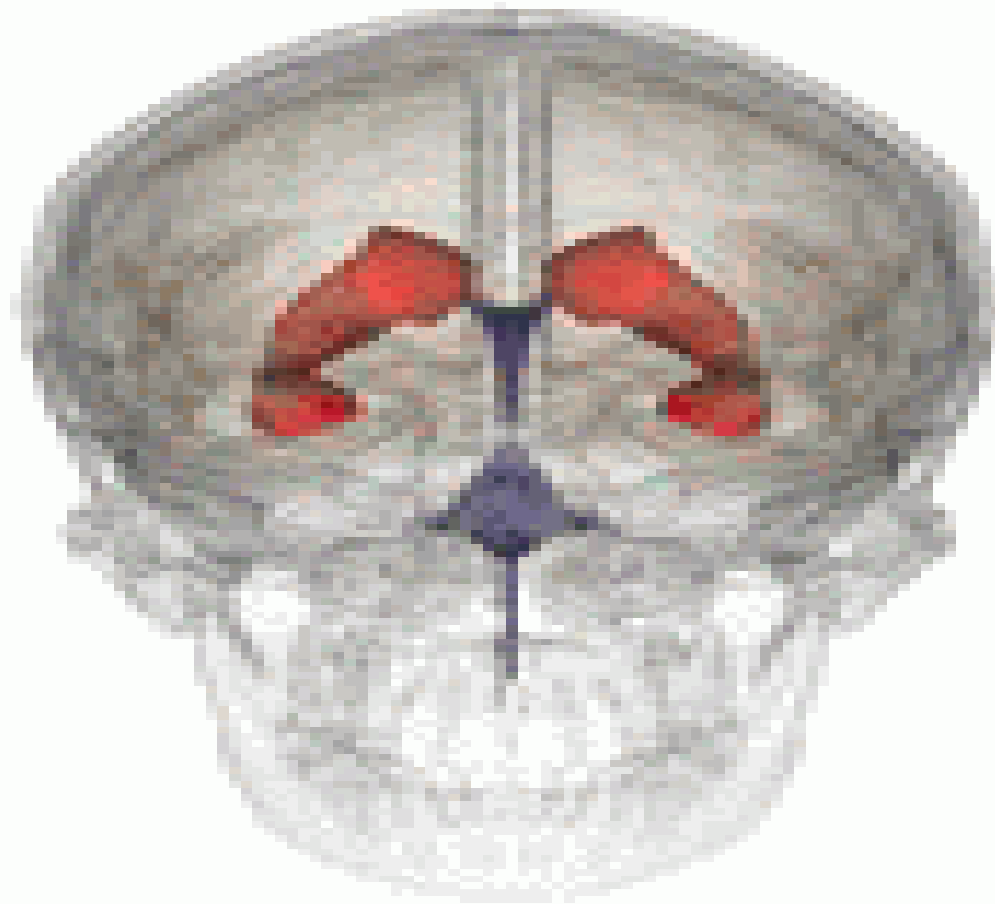
Roof:                   1. tapetum(white fibers)  
                              2. caudate nucleus tail

floor:                   1.collateral eminence  
                              raised by collateral sulcus

                              2. hippocampus

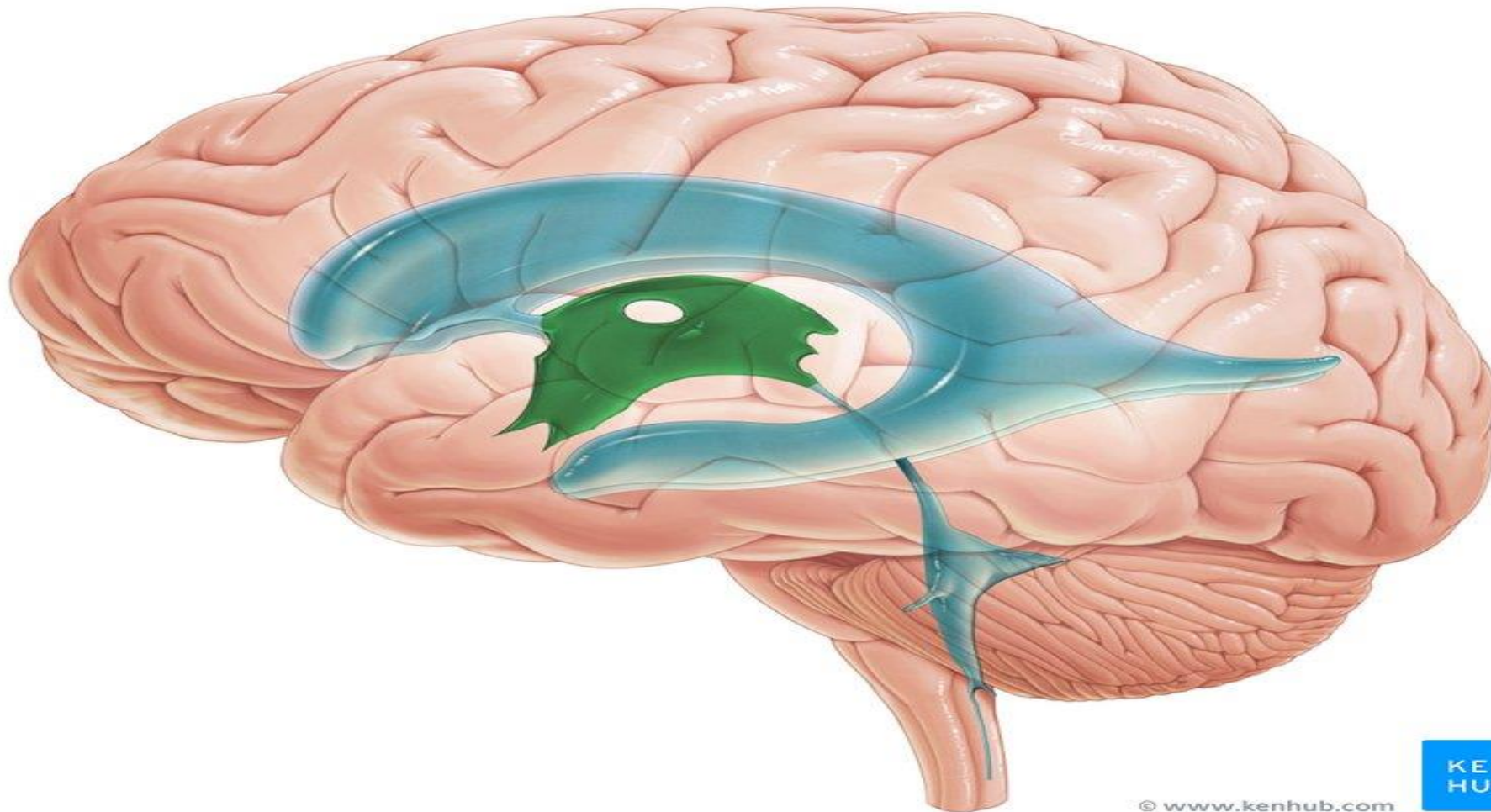
lateral wall : 1.striate terminalis  
                              2.emegdaloid body







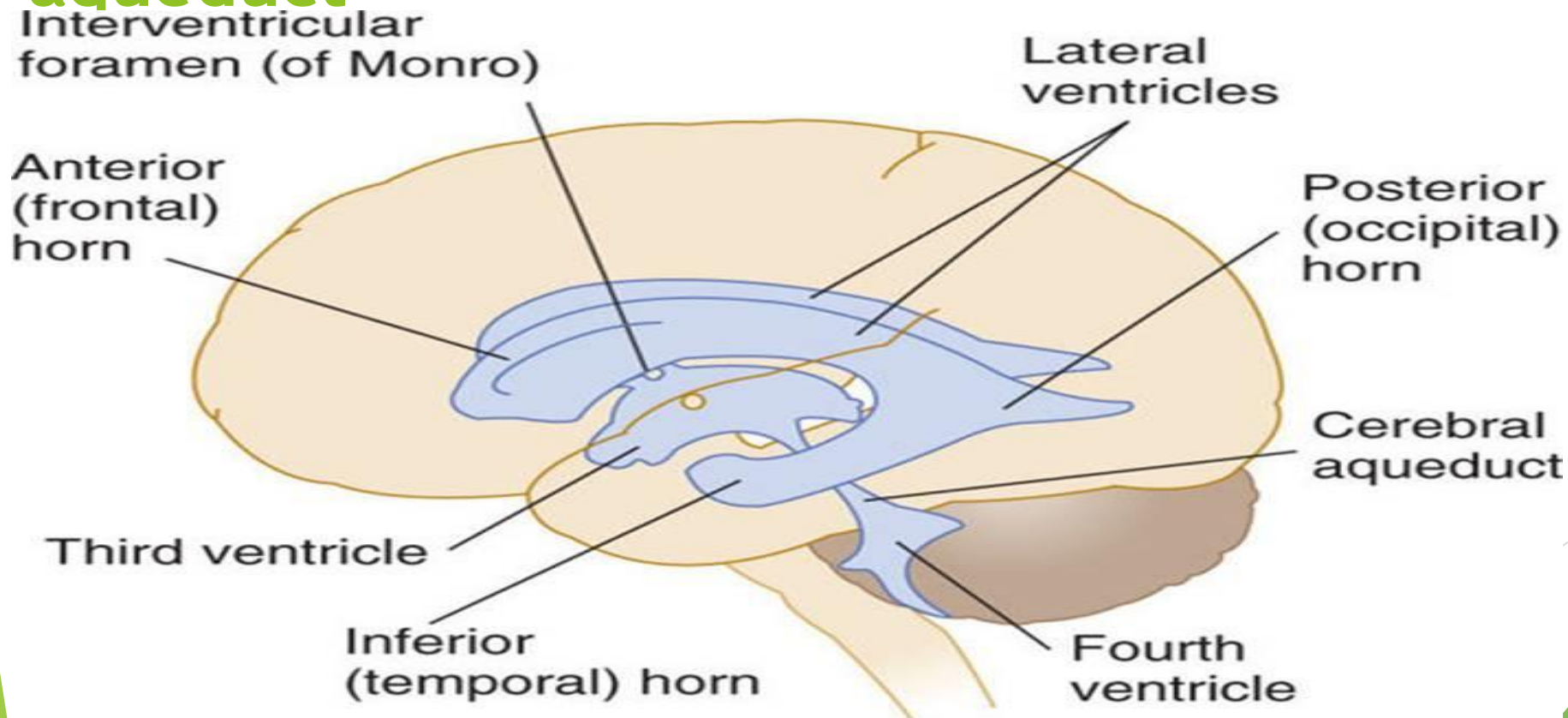
# Third Ventricle: medial cleft between the two thalamus



## Communications:

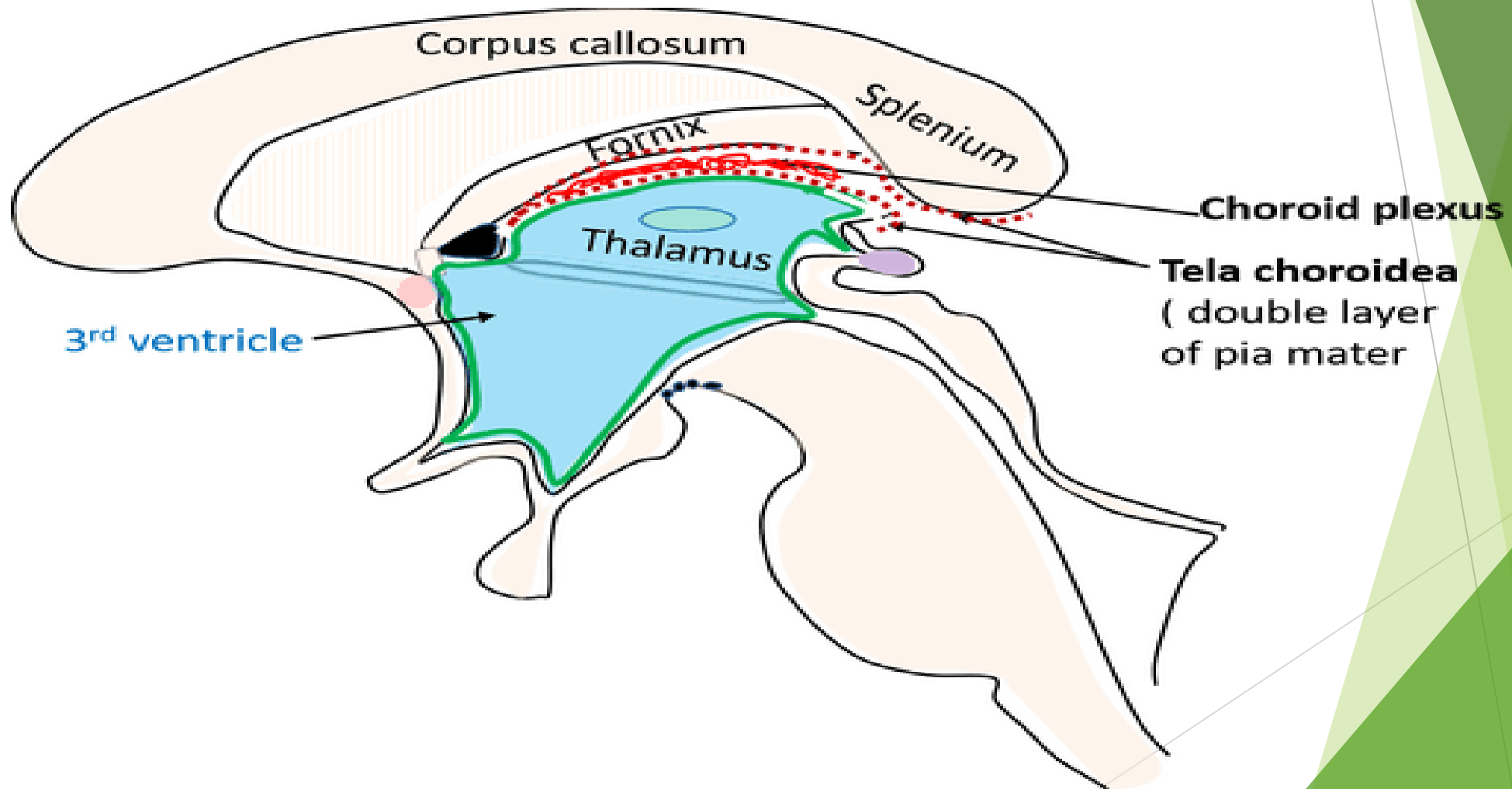
Anterosuperior: lateral ventricle and foramen of monro

Posteriorly: 4<sup>th</sup> ventricle and cerebral aqueduct



## Boundaries:

ROOF: Ependyma, under surface of Tela Choroida



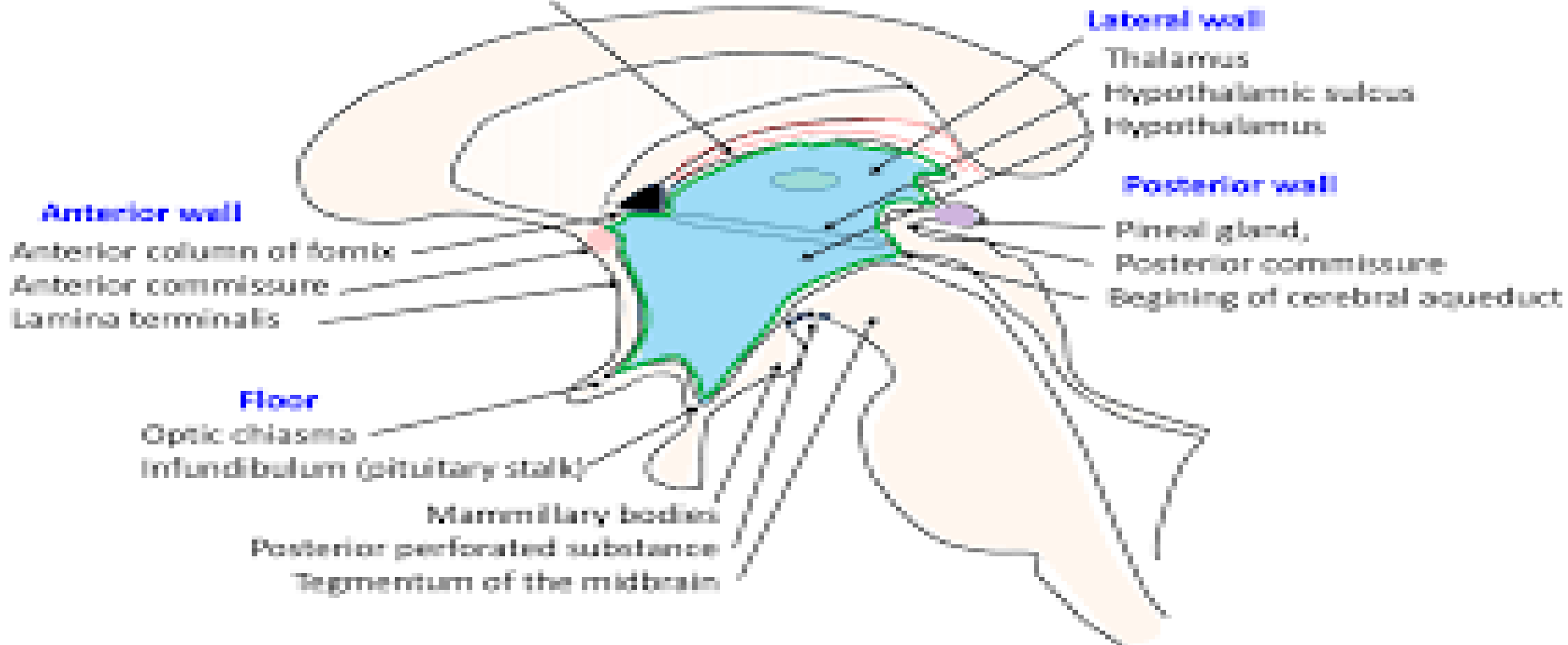
# Floor:

1. Optic chiasma
2. Pituitary stalk
5. Tegmentum of brain

3. Mammary bodies

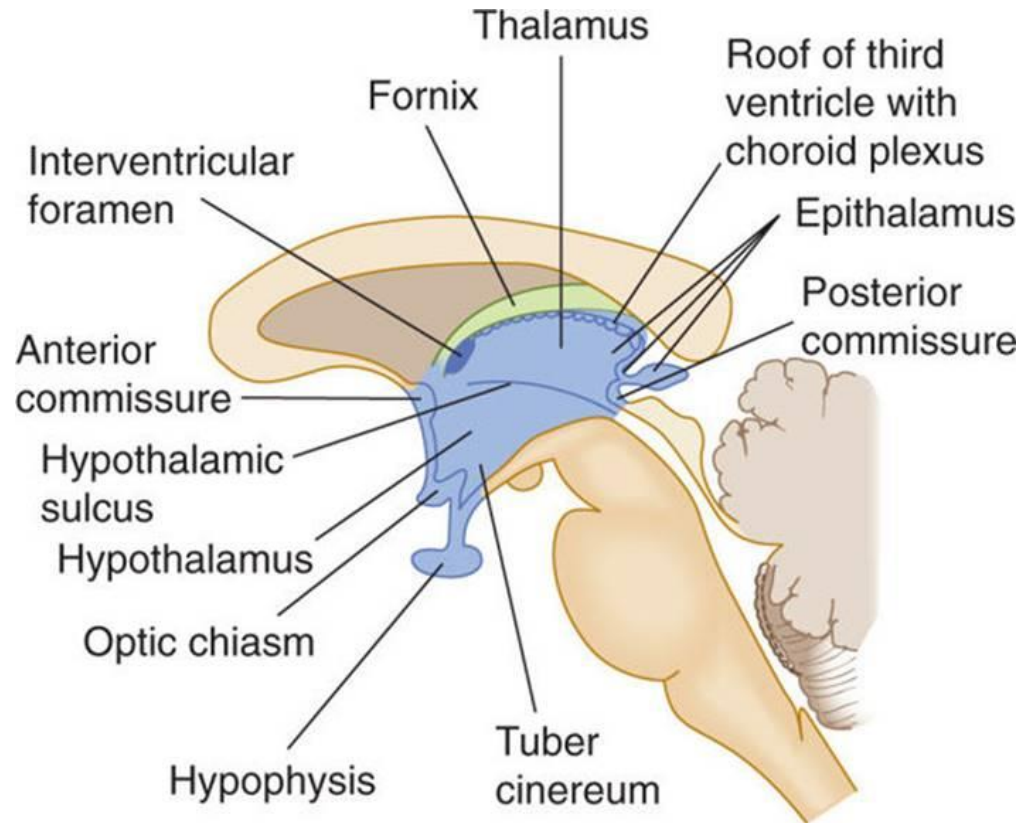
4. Posterior perforating substance

**Roof** ependyma that stretches across the upper limits of two thalami.



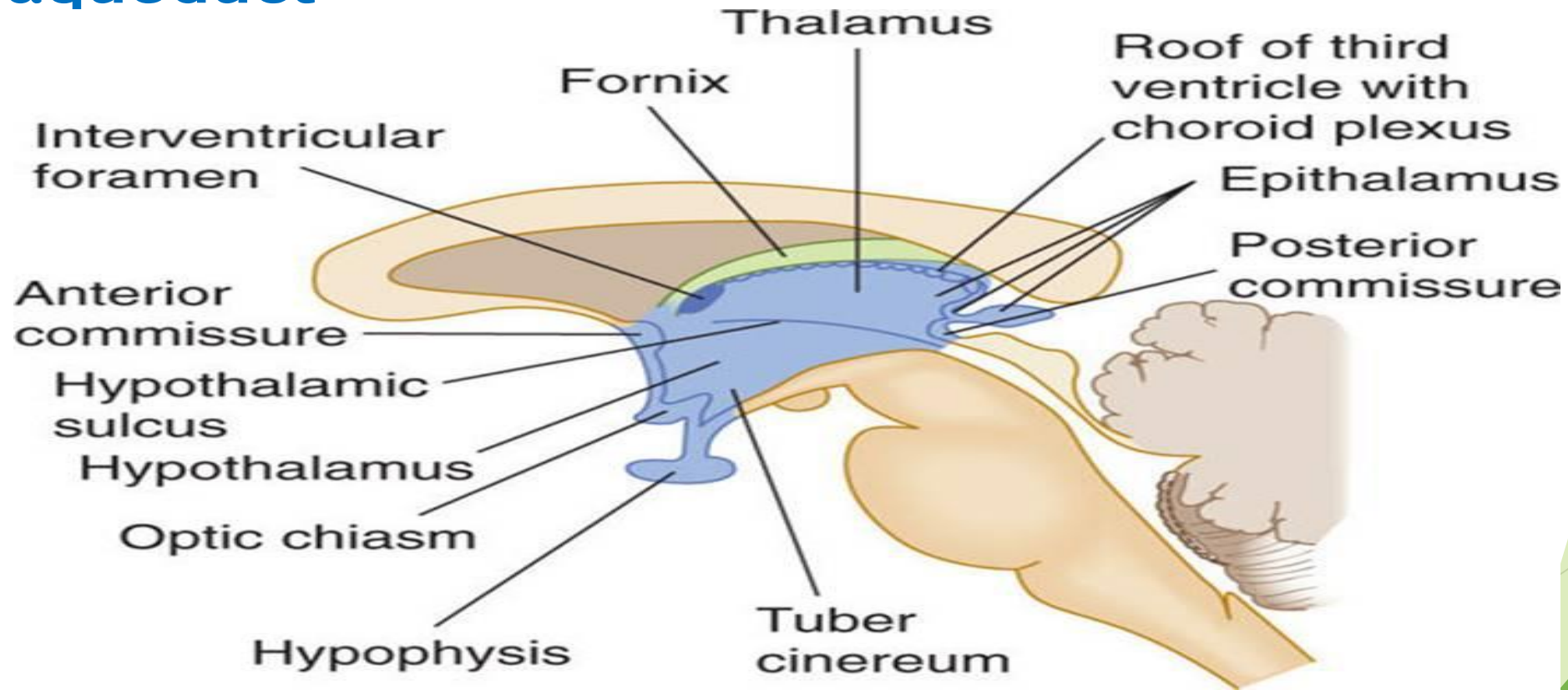
## Lateral wall:

1. Medial surface of thalamus,
2. Hypothalamus,
3. Hypothalamic sulcus



# Posterior wall:

1. Posterior commissure, 2. Habenular commissure, 3. Pineal body, 4. Cerebral aqueduct



- tent-like cavity of hindbrain
- situated in the posterior cranial fossa.
- triangular outline in sagittal section and appears rhomboidal in shape in horizontal section.



- Behind the pons and the upper part of medulla oblongata.
- in front of the cerebellum





## ANGLES

- Superior angle is continuous above with the **cerebral aqueduct of midbrain**.
- Inferior angle is continuous below with the **central canal** of the closed part of the medulla oblongata.
- Two lateral angles - **lateral recess**.



## BOUNDARIES

- On each side, the fourth ventricle is bounded,
  - **Inferolaterally** by **inferior cerebellar peduncle**, supplemented by **gracile and cuneate tubercles**, and
  - **Superolaterally**, by **superior cerebellar peduncle**



## ROOF

○ *Upper part:-*

convergence of two superior cerebellar peduncles and

a thin sheet of white matter, the **superior medullary velum**.



○ Lower part:

- Inferior medullary velum.
- Median aperture of Magendie.
- T-shaped choroid plexus.



## FLOOR (RHOMBOID FOSSA)

- rhomboid in shape (diamond-shaped).
- formed by posterior surfaces of the pons and the upper part of the medulla.



○ Three parts:

A) Upper triangular part - The posterior surface of the pons.

B) The lower triangular part - the upper part of the posterior surface of the medulla.

C) The intermediate part at the junction of the medulla and pons.

