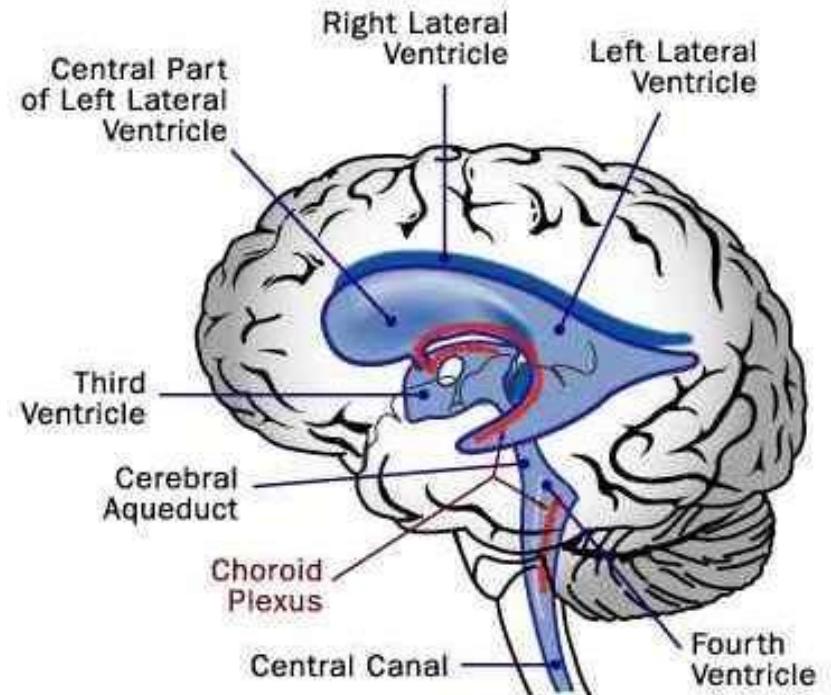


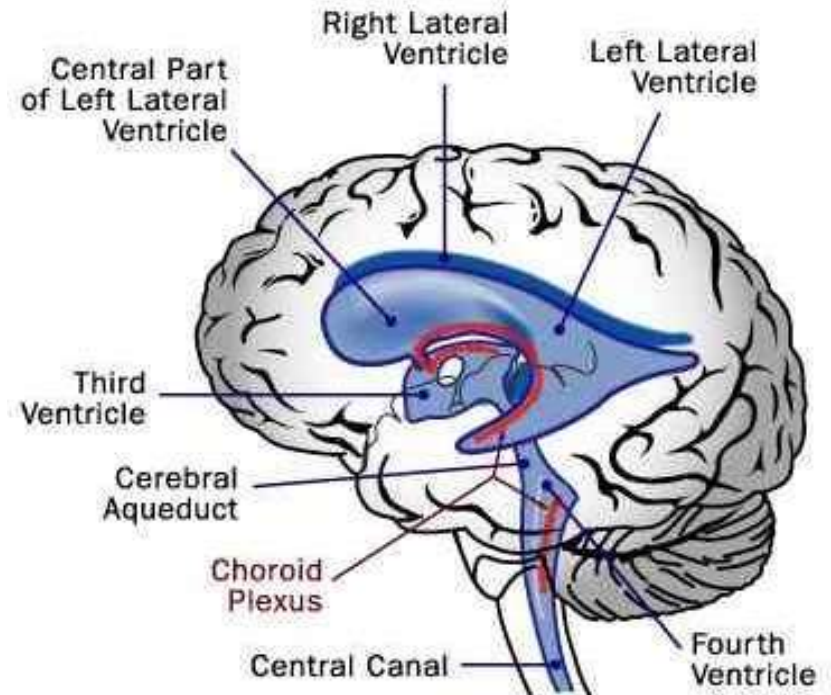
VENTRICLES(Ventricular System)

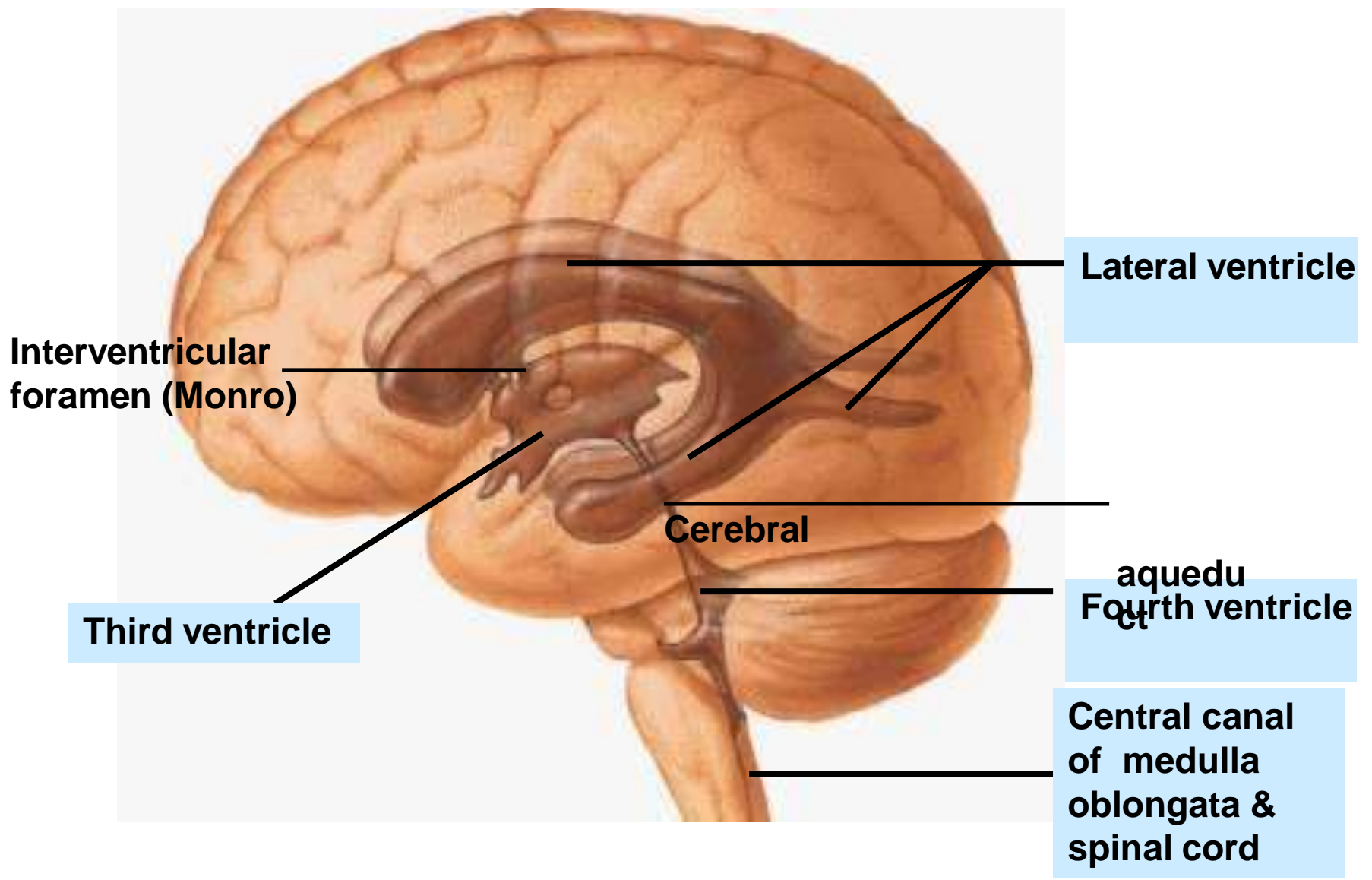
- A ventricle is an internal cavity of the brain. Within the brain, which is filled with cerebrospinal fluid(CSF).
- The ventricular system is composed of two *lateral ventricles* and two midline ventricles(*third and fourth ventricles*).



VENTRICLES(Ventricular System)

- The chambers are connected to allow the flow of cerebrospinal fluid via two *interventricular foramen* (referred to as the *foramen of Monro*) and the **cerebral aqueduct** (referred to as the *aqueduct of Sylvius*).



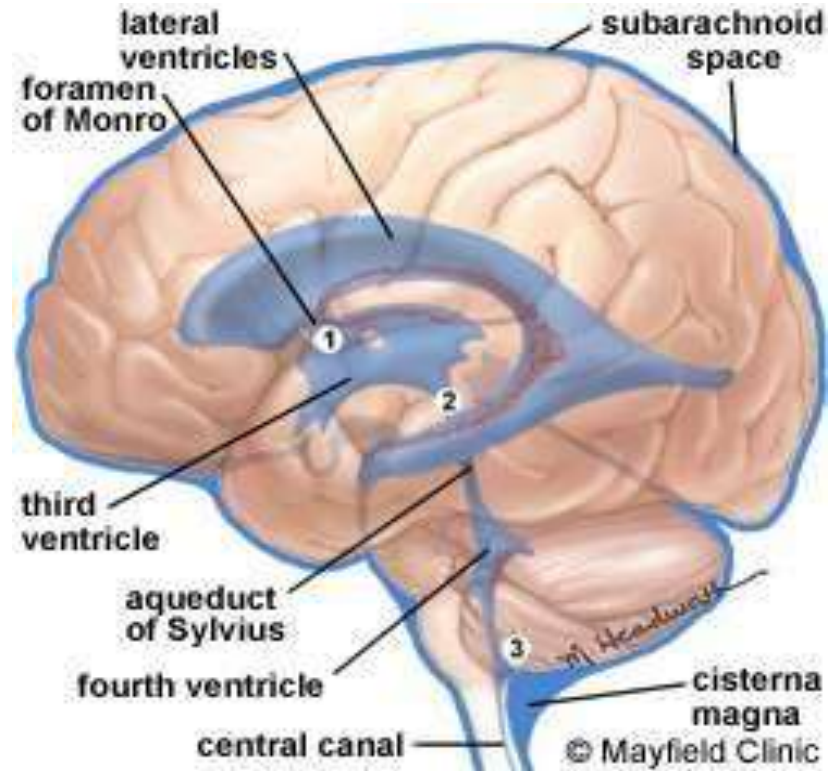


Lateral view to show the ventricular system of the CNS

VENTRICLES(Ventricular System)

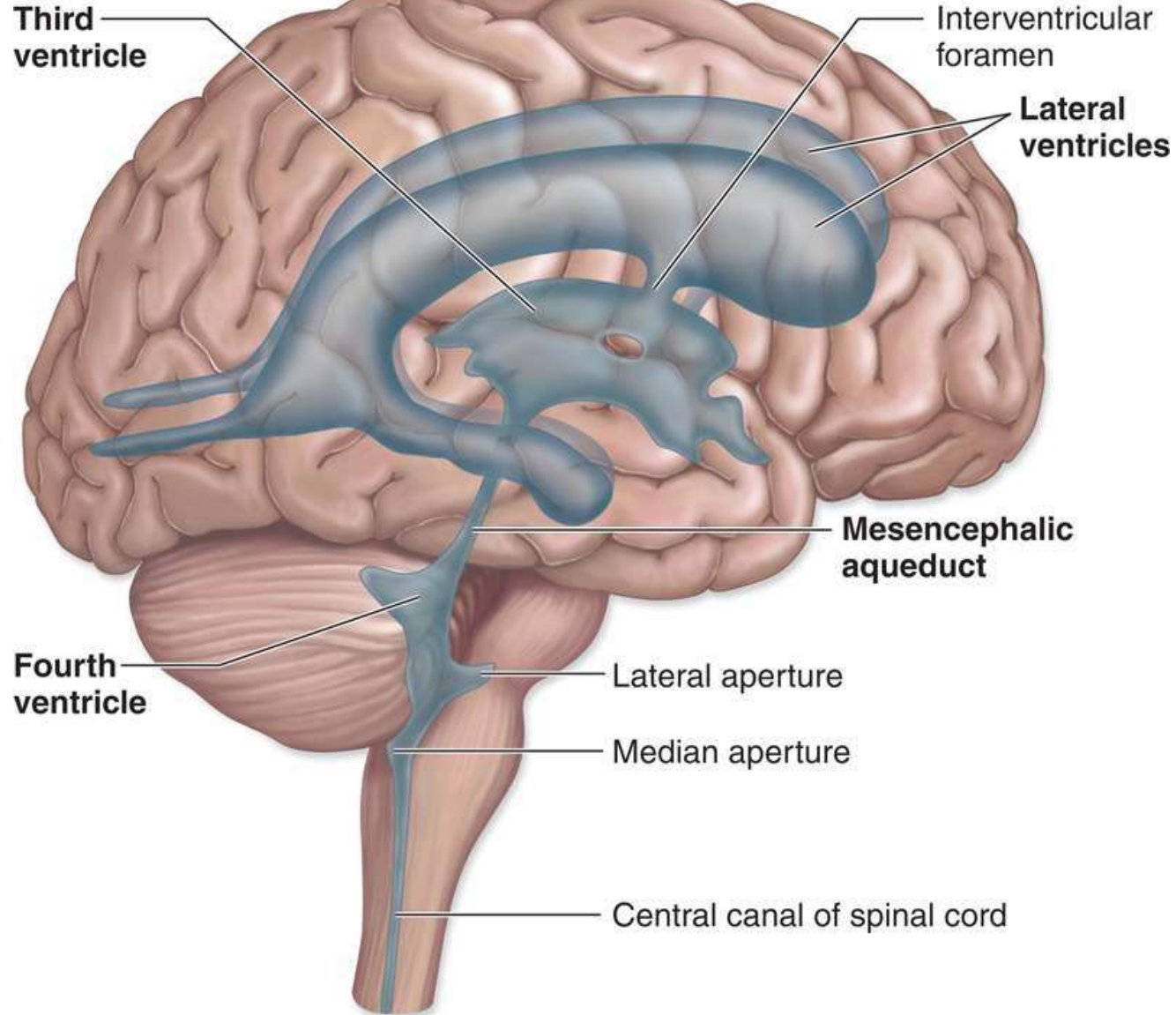
CONSISTS OF :

- Lateral ventricle
- Third ventricle
- Fourth ventricle
- Central canal of the medulla oblongata & spinal cord

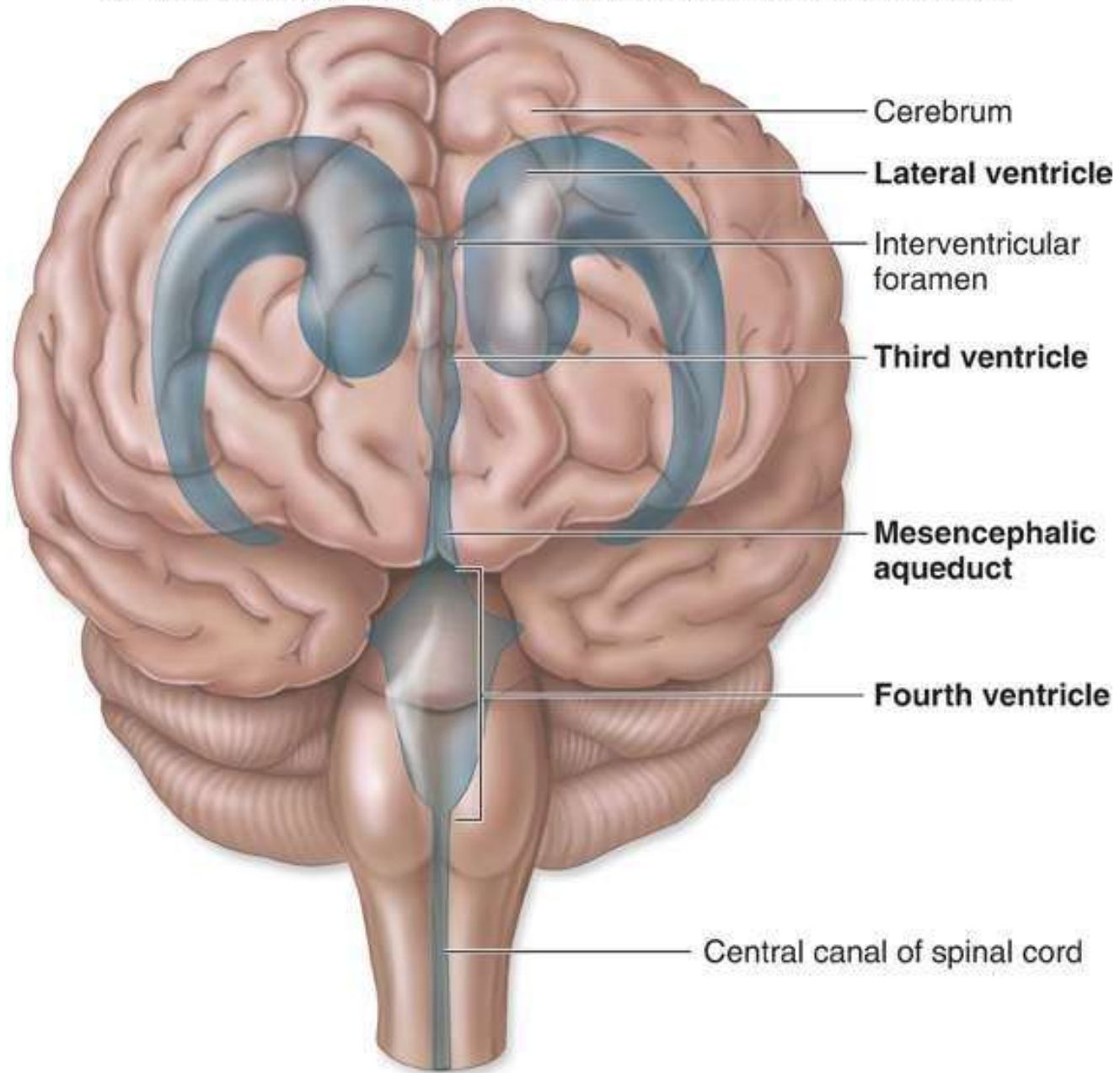


Posterior

Anterior



(a) Lateral view



(b) Anterior view

Lateral Ventricles

- The lateral ventricles are two curved shaped cavities located within the cerebrum.
- The lateral ventricles are separated by the *septum pellucidum* and do not communicate directly

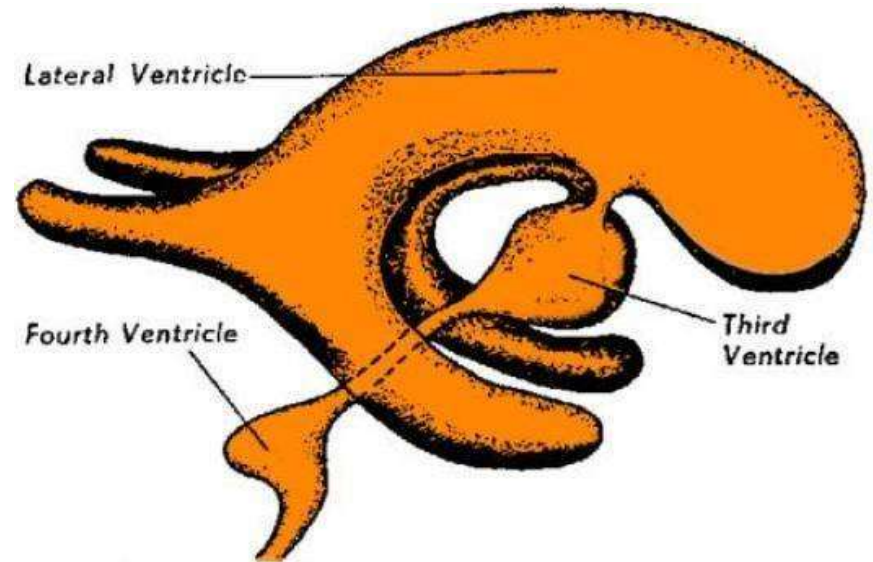


Diagram illustrating the Ventricles of the Brain.

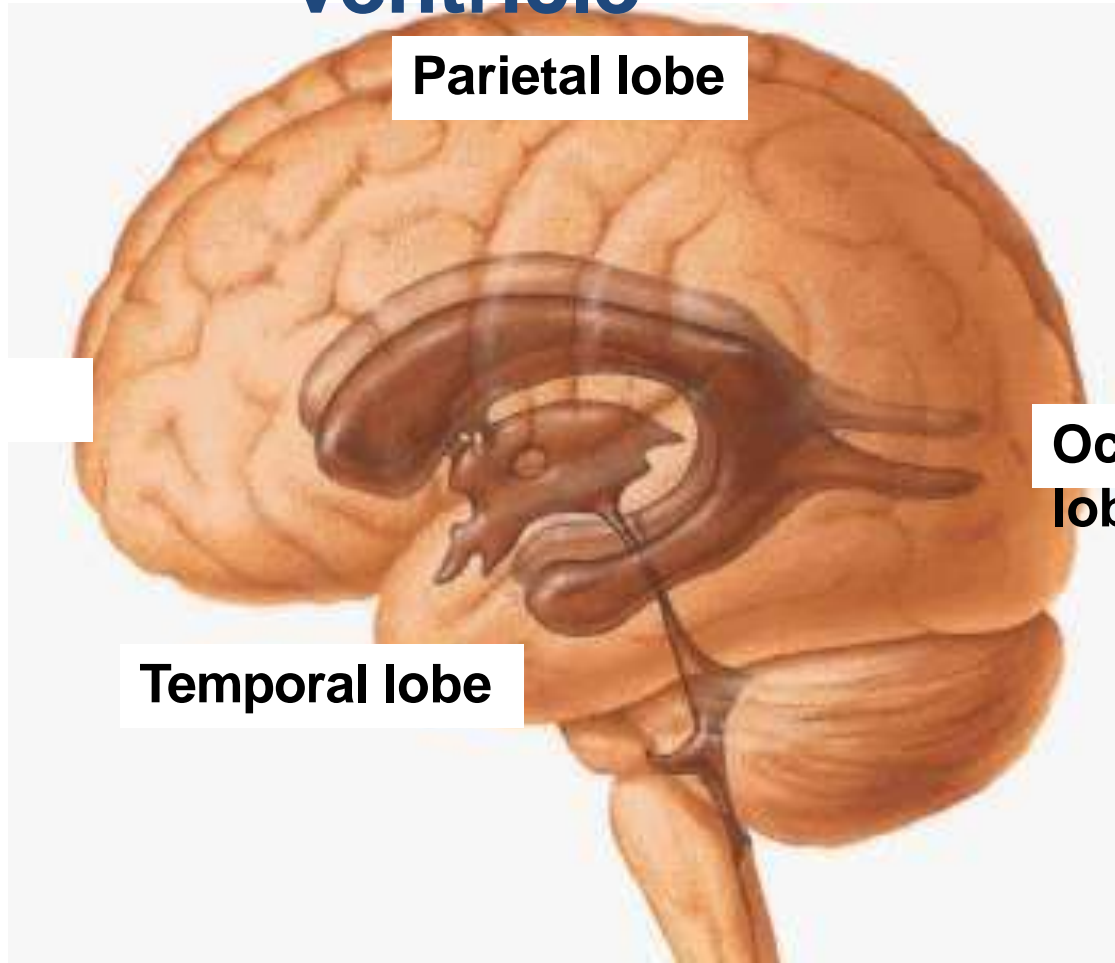
Lateral ventricle

Parietal lobe

Frontal
lobe

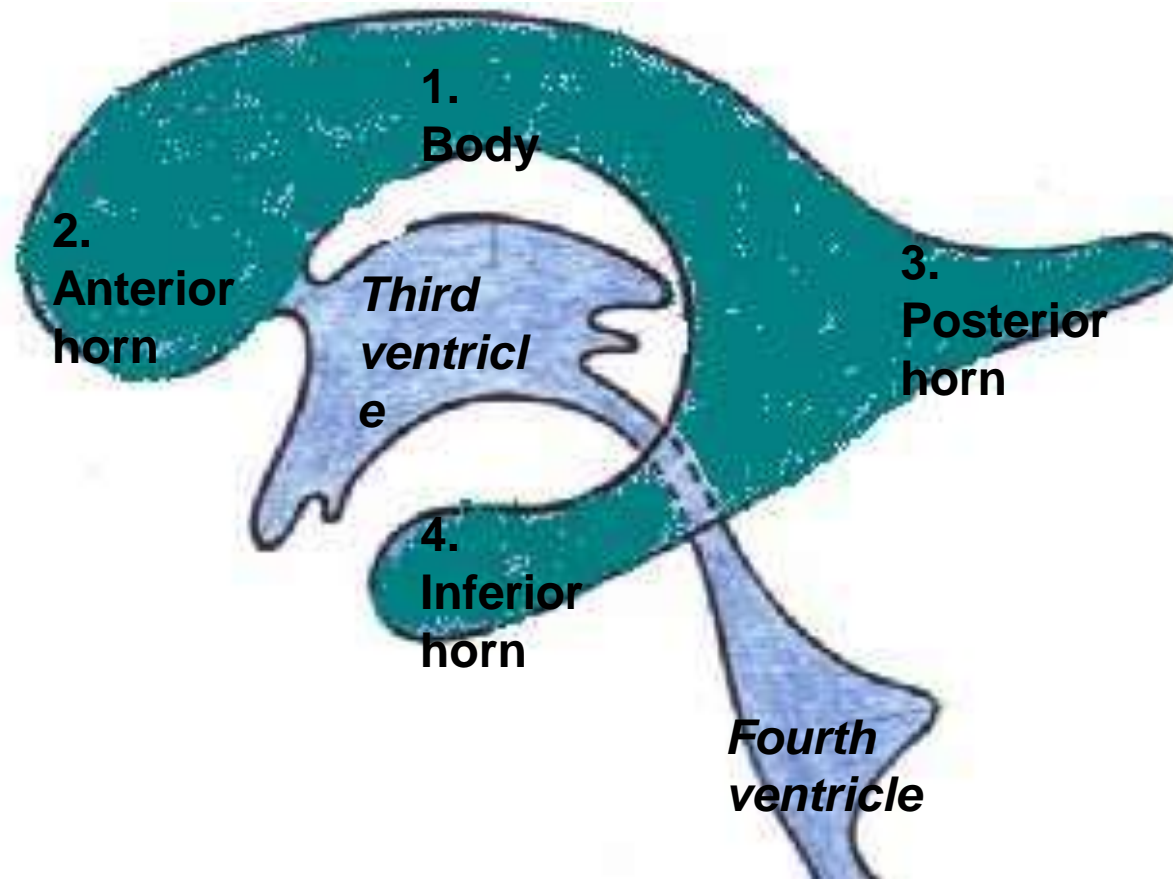
Occipital
lobe

Temporal lobe

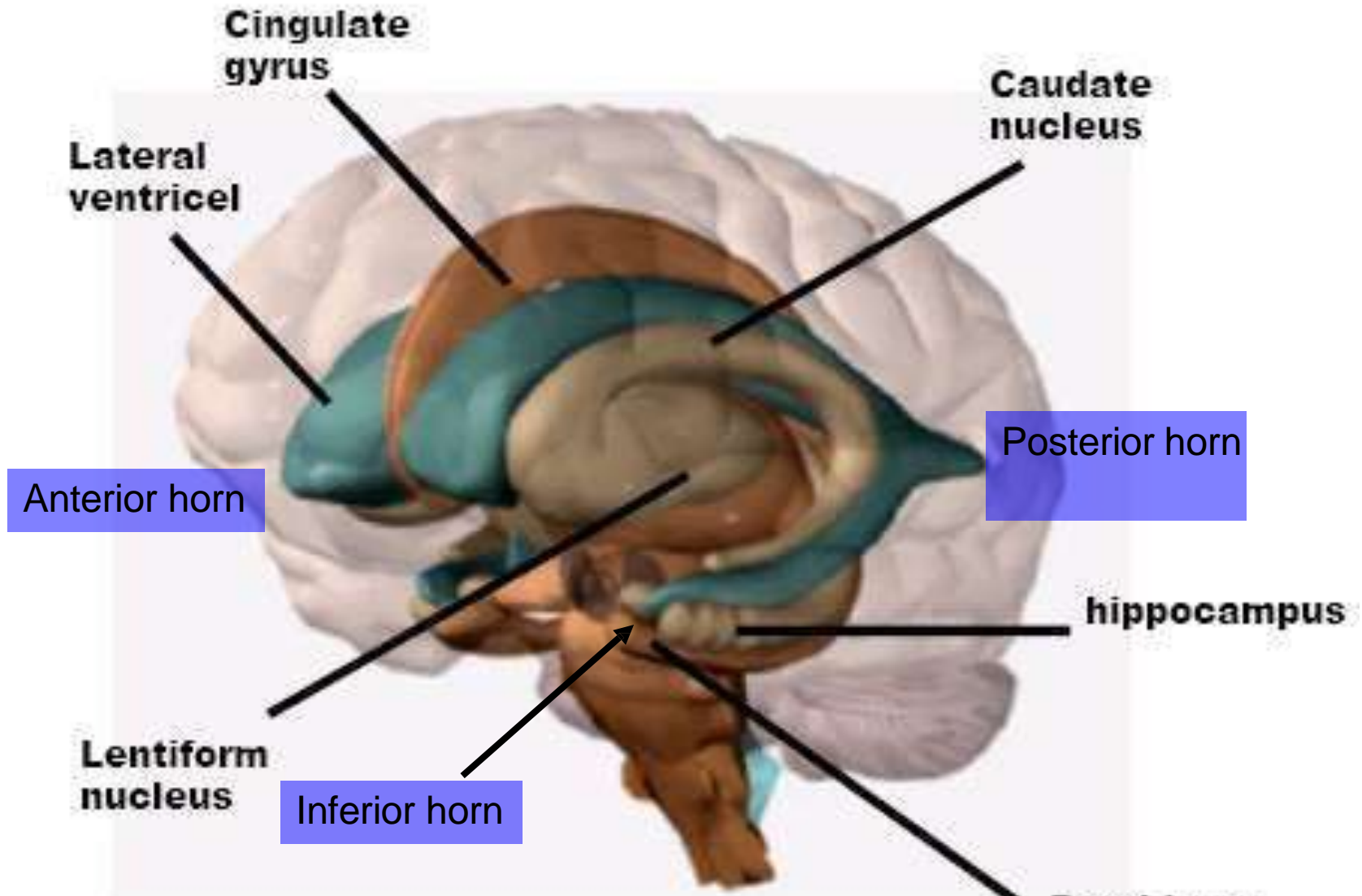


Lateral ventricle

- C-shaped cavity & may be divided into :



Lateral view of the ventricular cavities of the brain



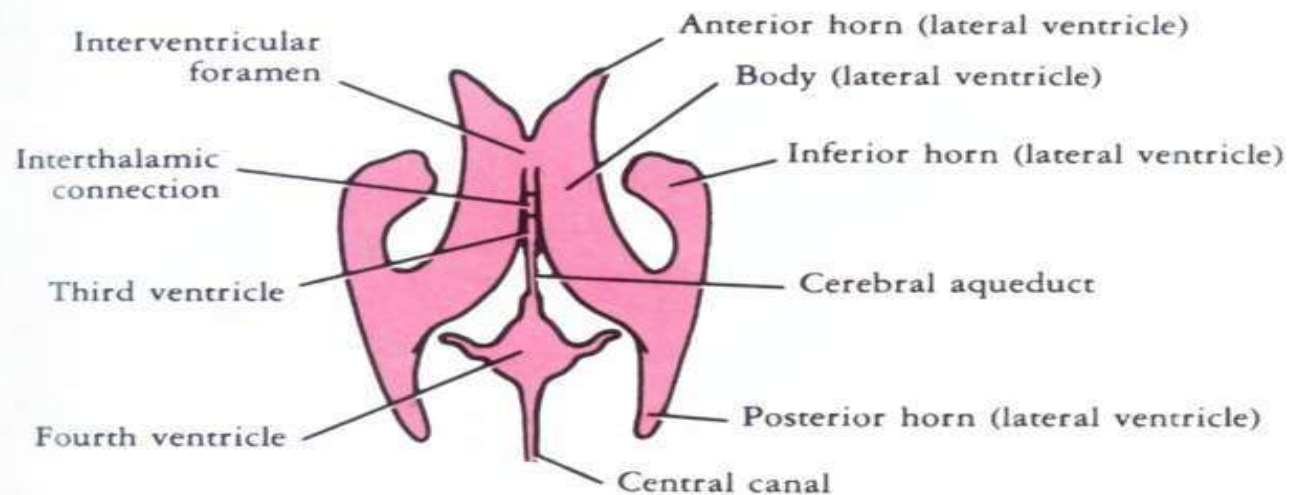
Lateral view to show the ventricular system of the CNS

Third ventricle

❑ The third ventricle is a narrow cavity or a slitlike cleft between the 2 thalamus

❑ Communicates ;

- Anteriorly with lateral ventricles through **interventricular foramina (of monro)**
- Posteriorly with fourth ventricle through **cerebral aqueduct (of sylvius)**



Posterior view to show the ventricular system of the CNS

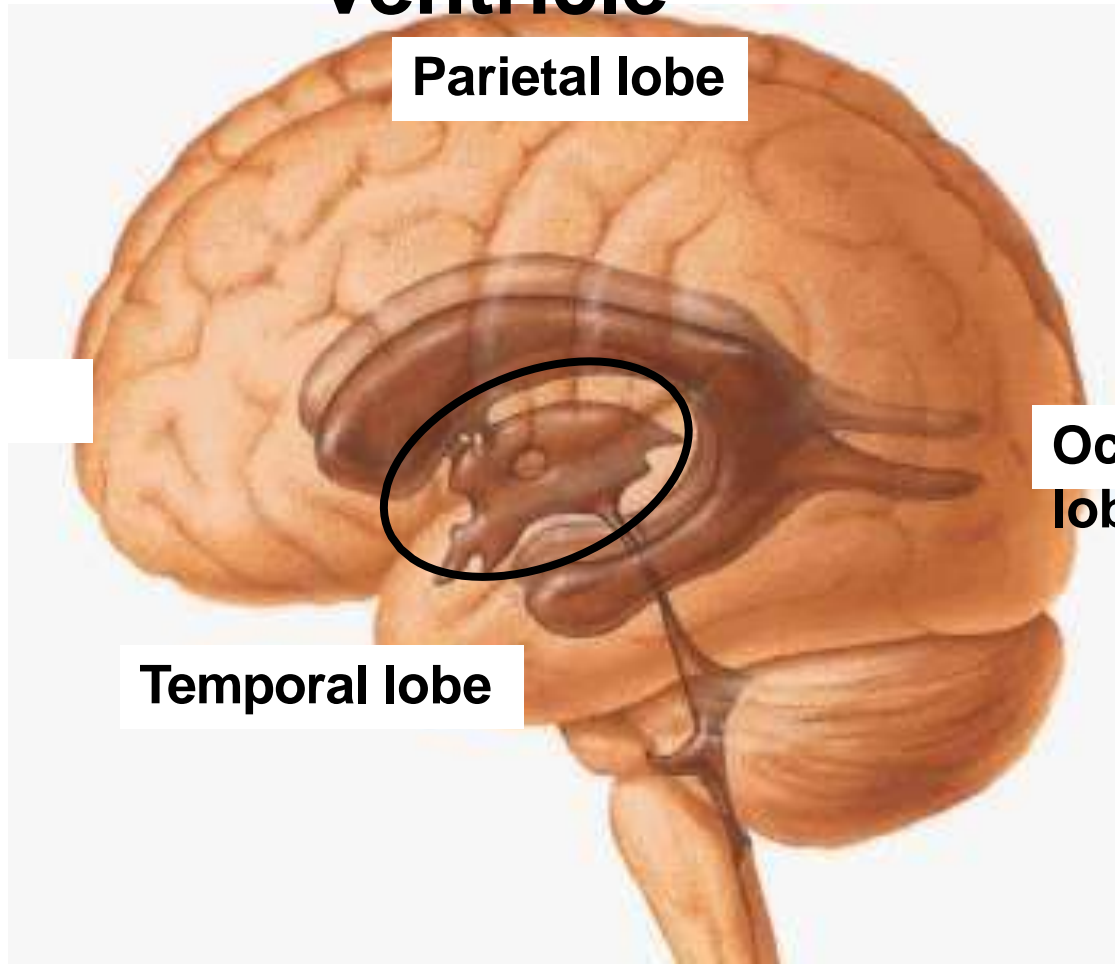
Third ventricle

Parietal lobe

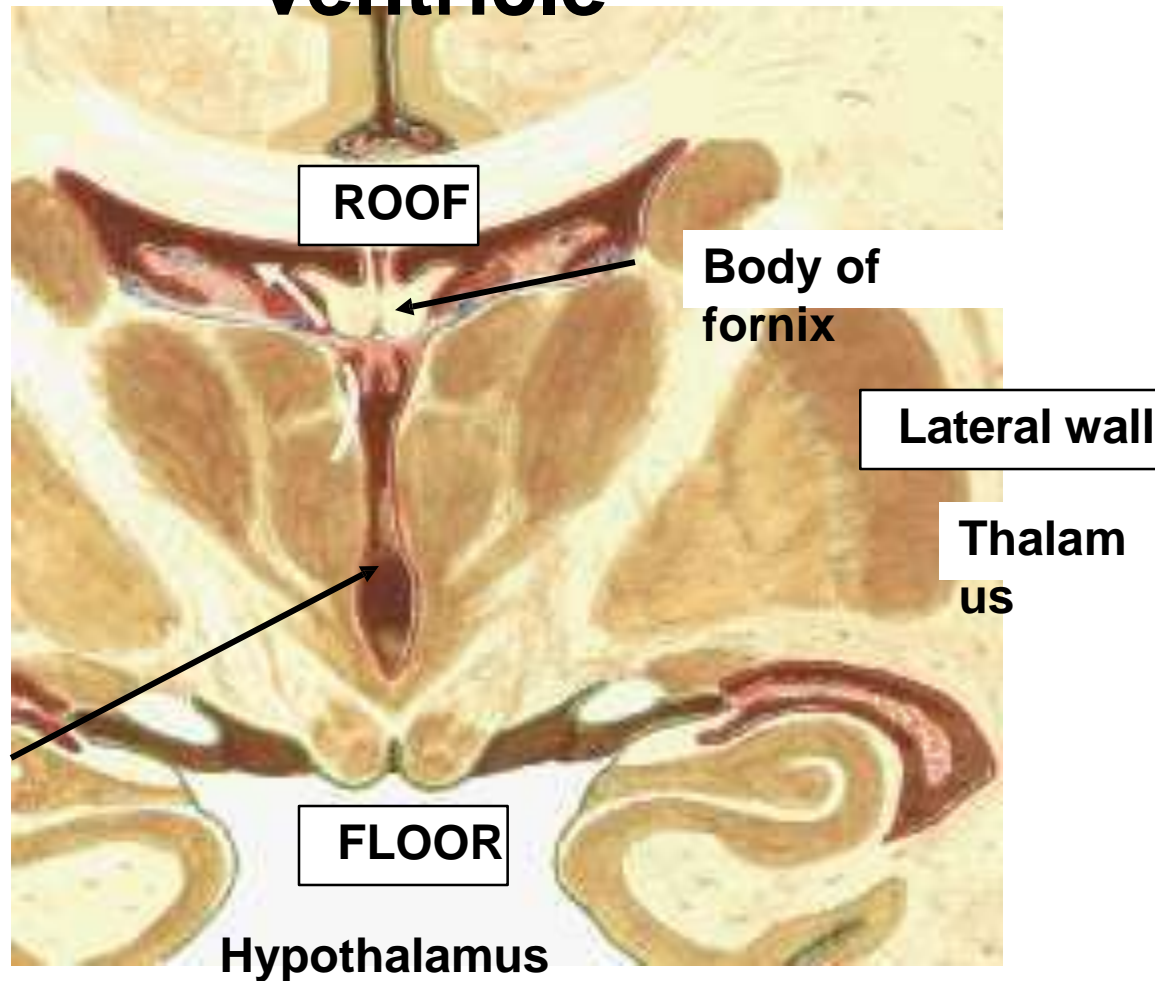
Frontal
lobe

Occipital
lobe

Temporal lobe



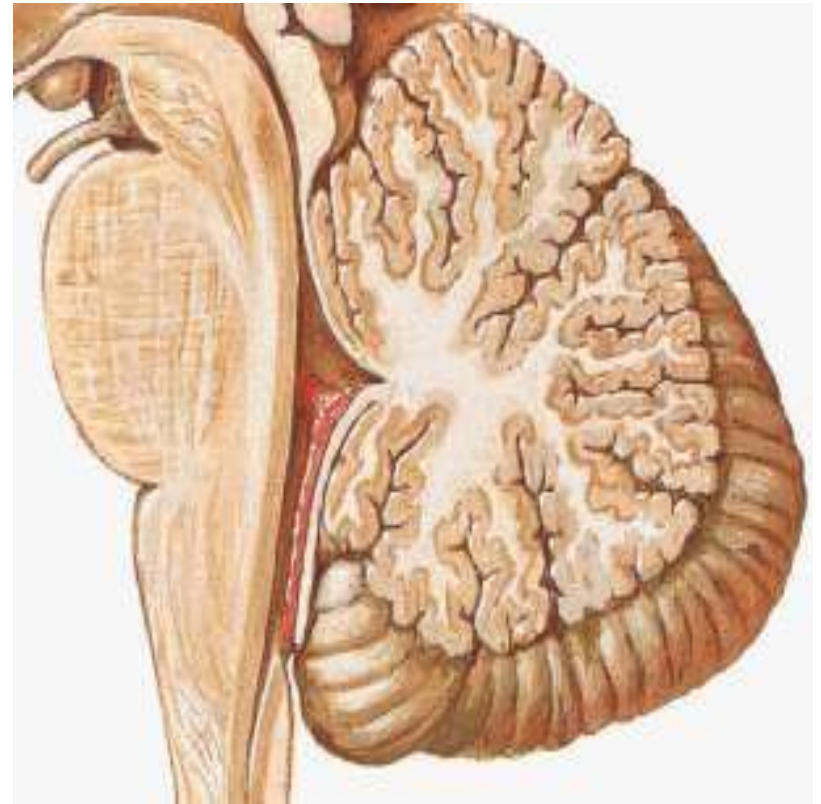
Third ventricle



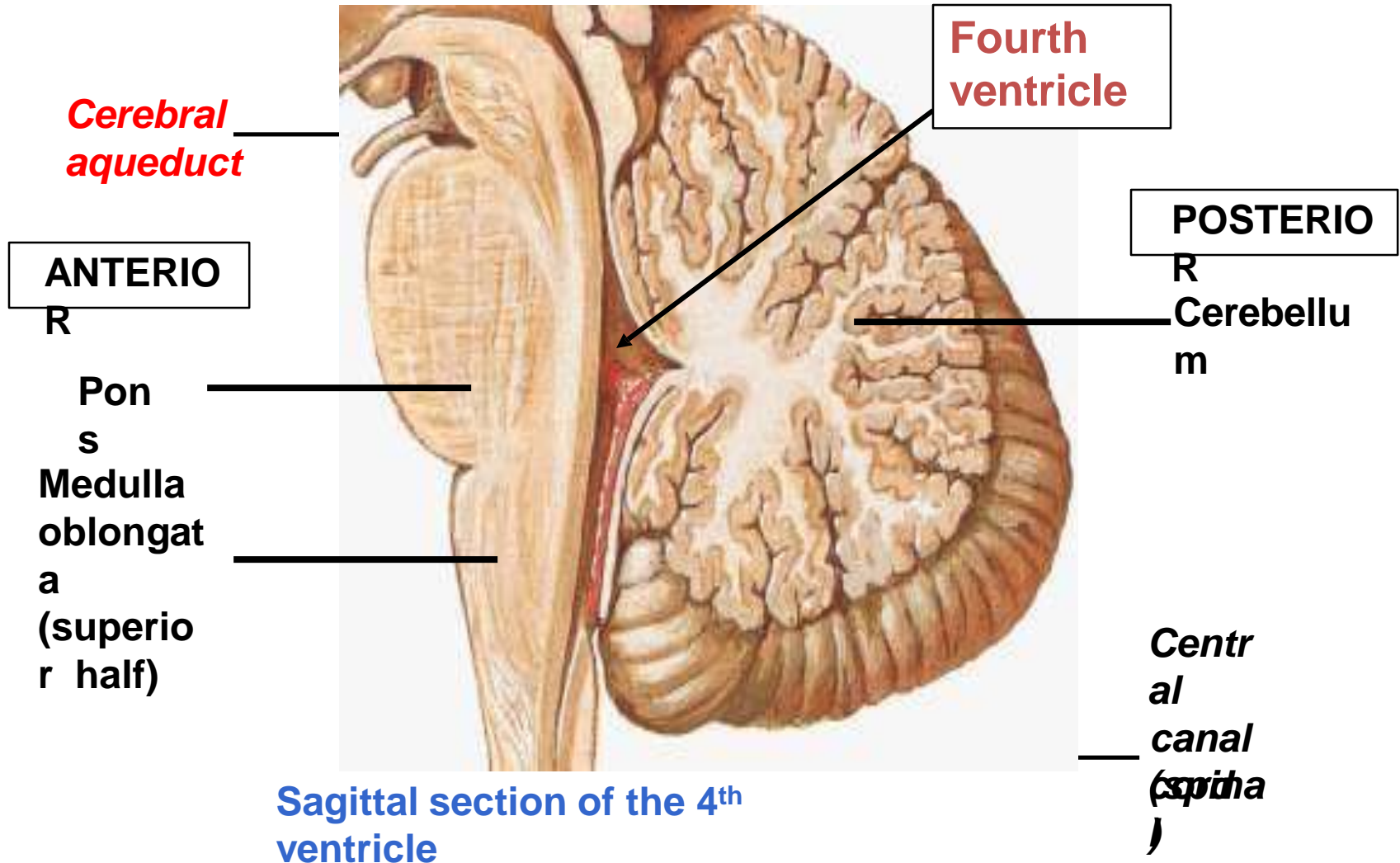
Coronal section of the brain (posterior view)

Fourth ventricle

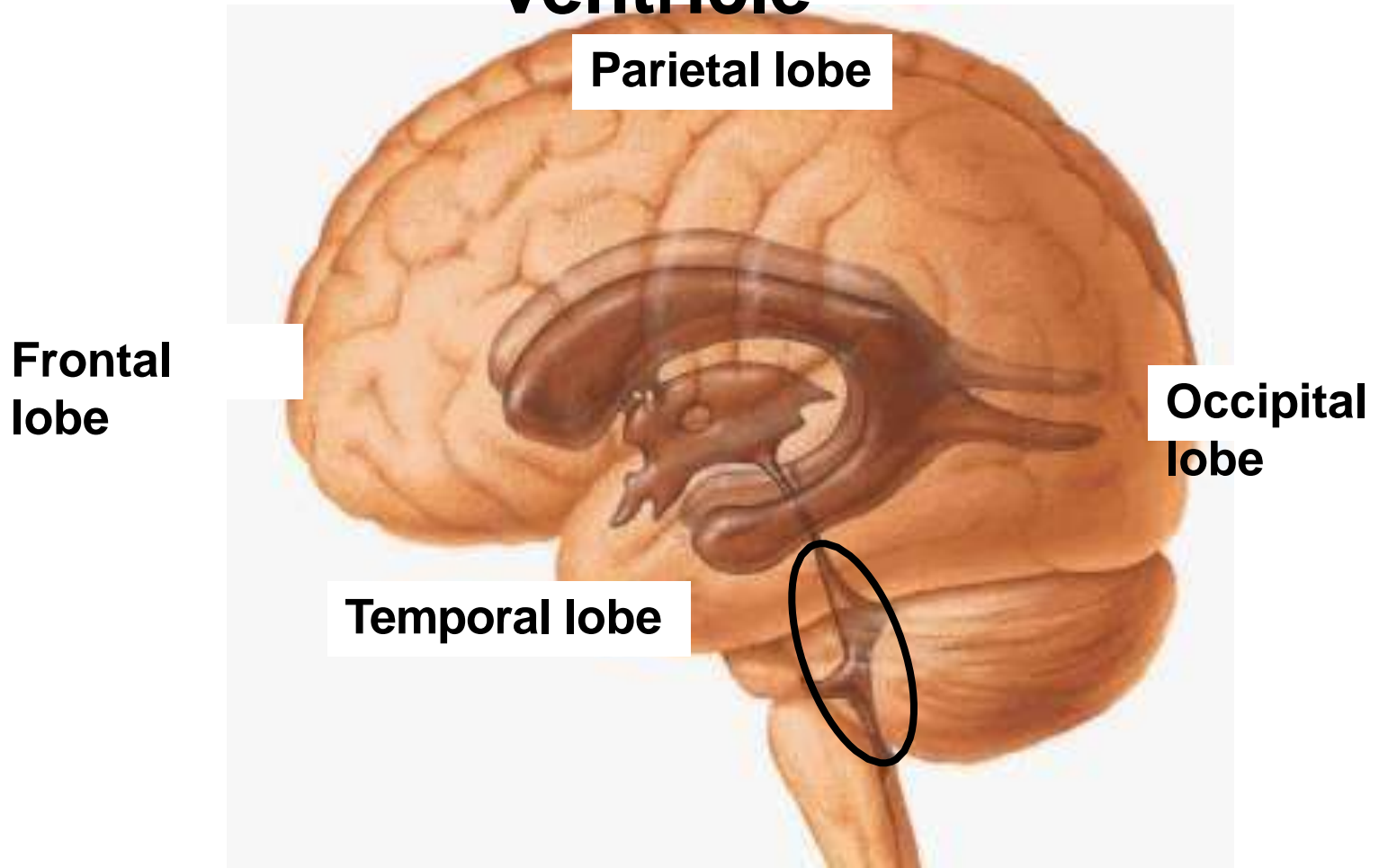
- The fourth ventricle is a rhomboid or diamond shaped cavity.
- It is a wide and flattened space located just anterior to the cerebellum and posterior to the upper, or superior, half of the medulla oblongata and the pons.



Fourth ventricle



Fourth ventricle



Roof or posterior wall of fourth ventricle :

Superior part of the roof :

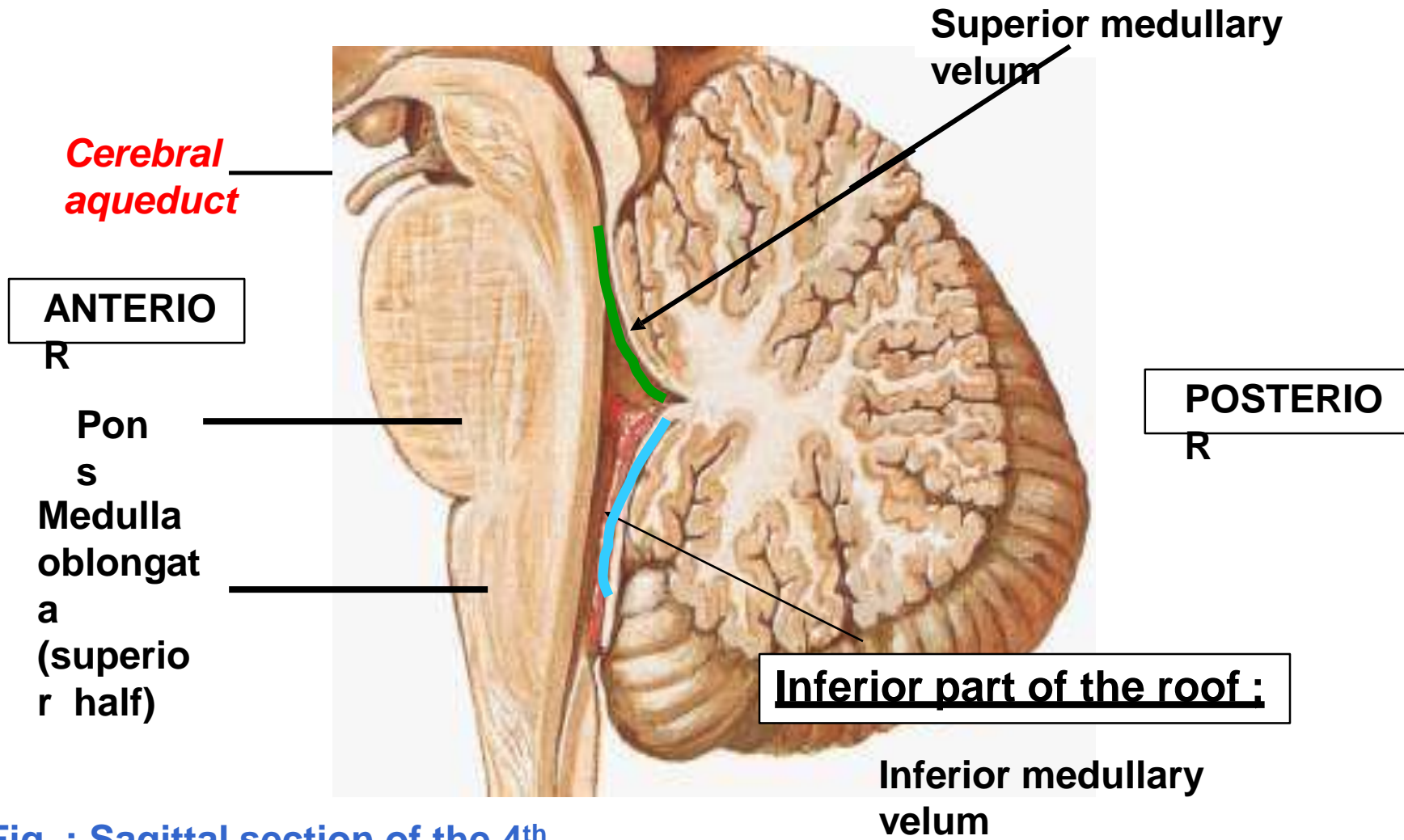


Fig. : Sagittal section of the 4th ventricle

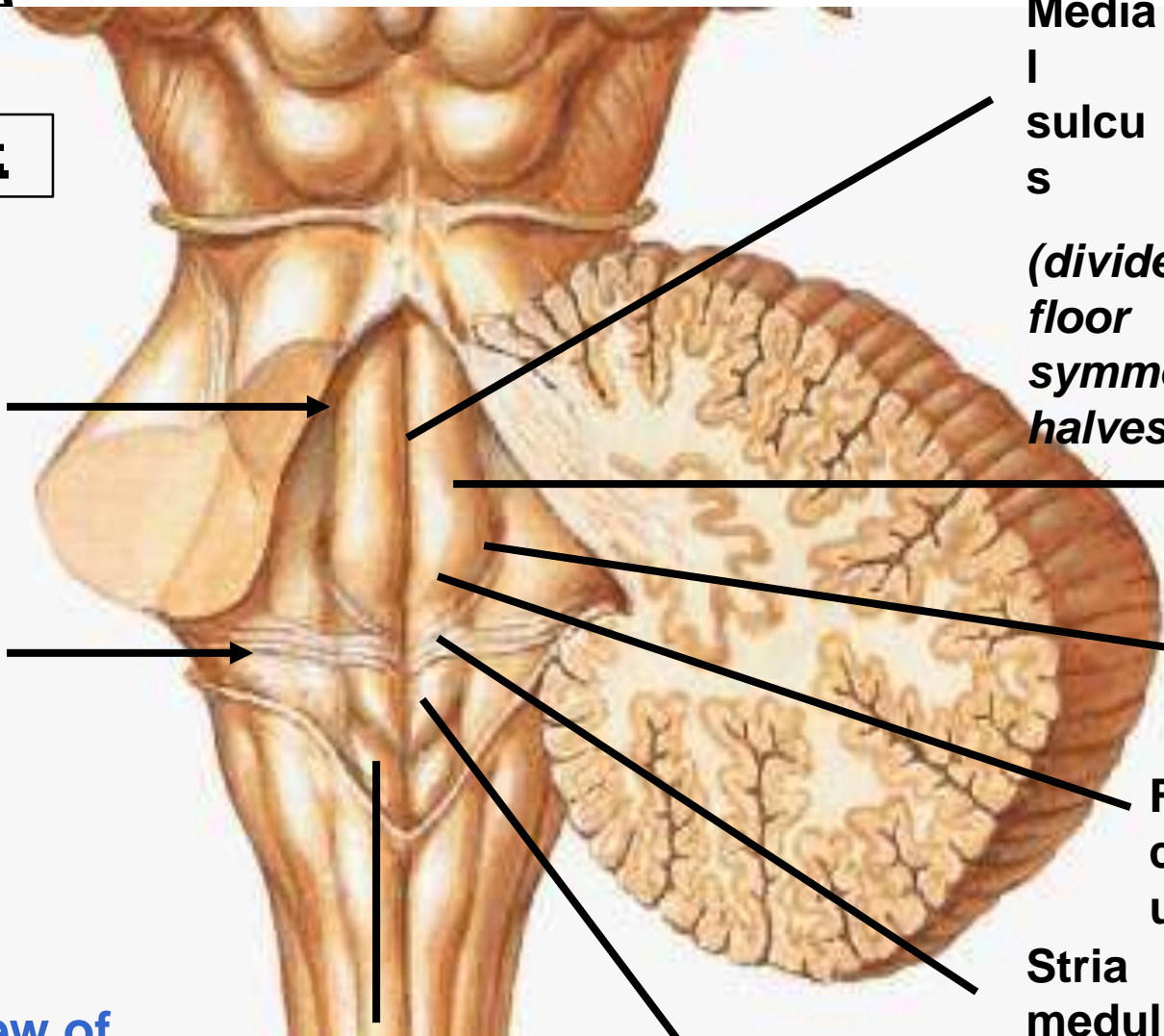
Floor or rhomboid fossa of fourth ventricle :

Formed by :

1. Posterior surface of the pons

2. Cranial 1/2 of the medulla oblongata

Posterior view of the 4th ventricle



Medial sulcus
(divides the floor into symmetrical halves)
Medial eminence
Sulcus limitans
Facial colliculus
Stria medullaris
(strands of nerve fibers)

Vagal triangle
Hypoglossal triangle

CENTRAL CANAL

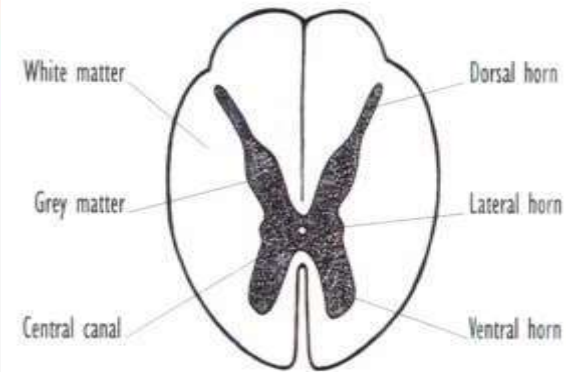
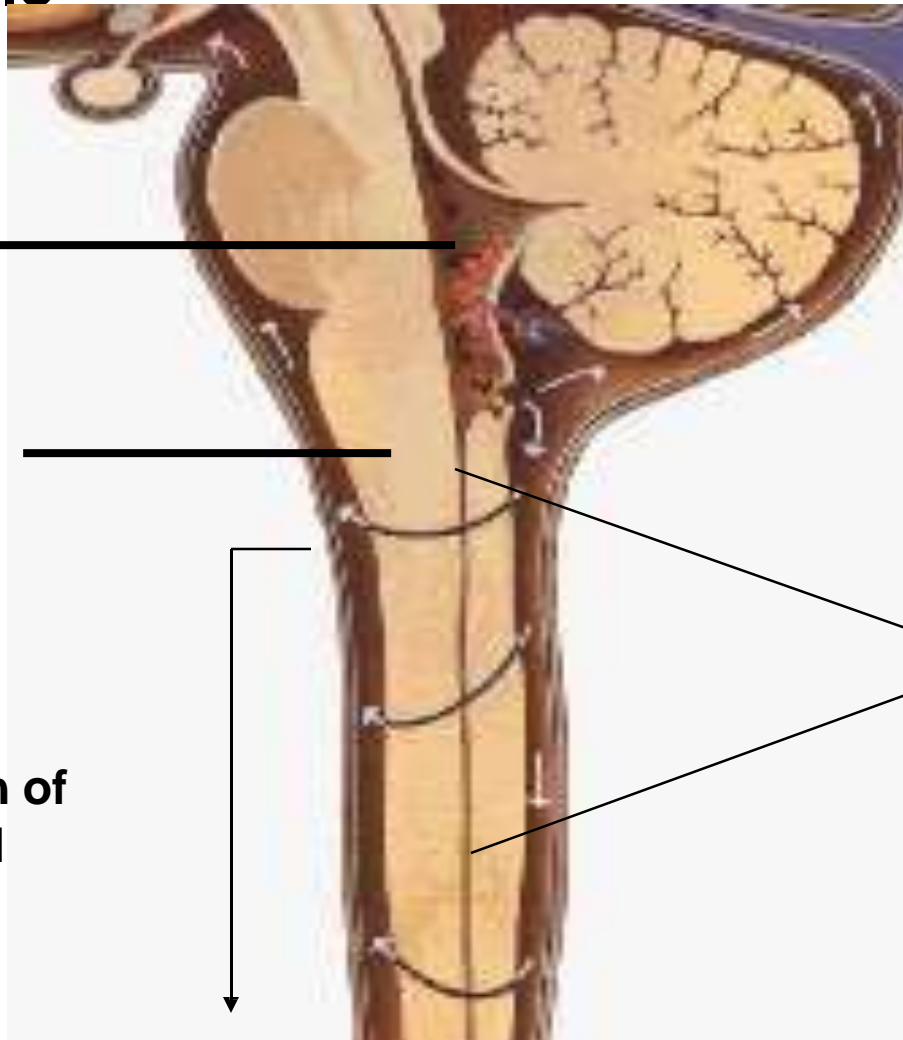
- ❑ Opens superiorly into the fourth ventricle

Fourth ventricle

Extends :

Inferior ½ of medulla oblongata

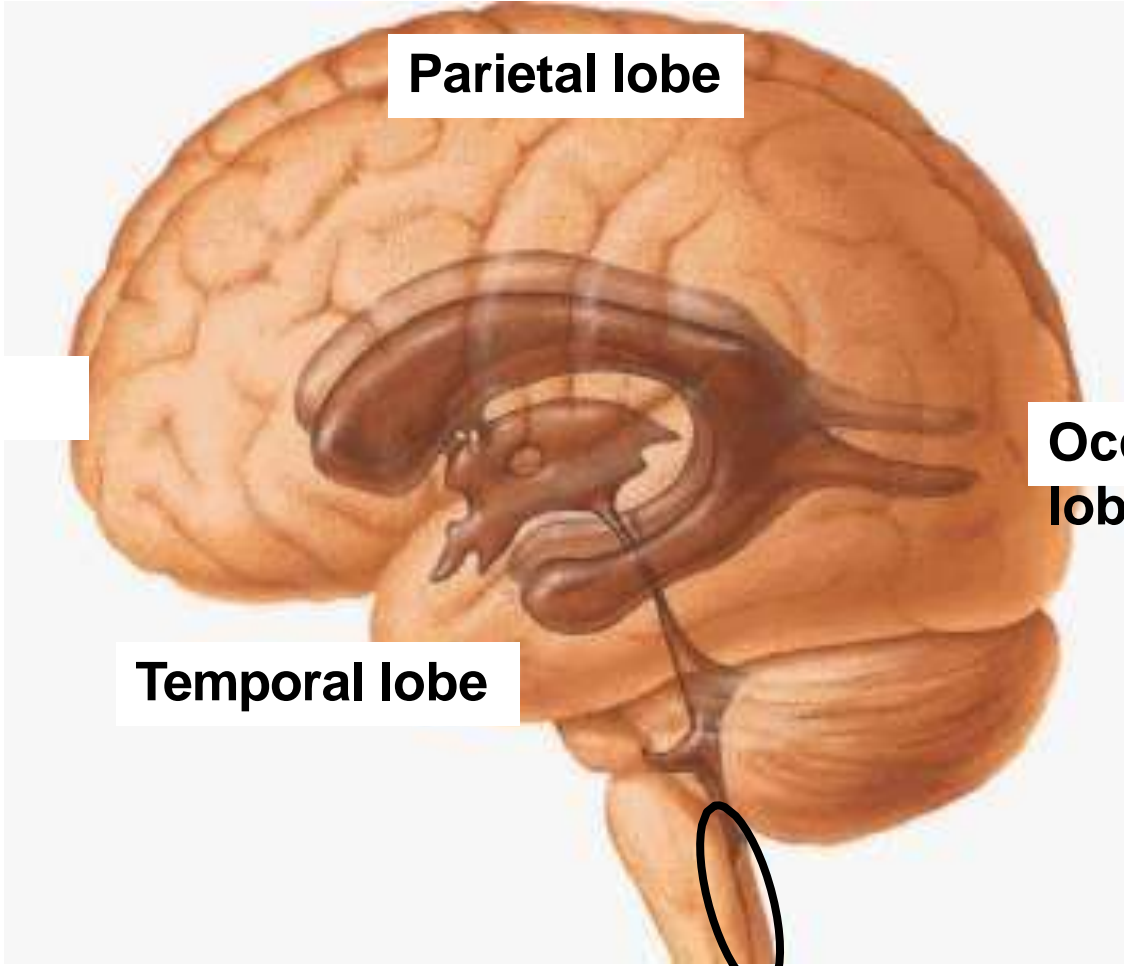
Entire length of spinal cord



Central canal

(Lined with ependyma but no choroid plexus in the central canal)

CENTRAL CANAL



Parietal lobe

Frontal lobe

Occipital lobe

Temporal lobe



**THANK
YOU**