

وسهلا



أهلا

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إذن المحرر واي اجراء  
يخالف ذلك يقع تحت طائلة  
المسؤولية القانونية  
جميع المعلومات للاستخدام  
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الأستاذ الدكتور يوسف حسين

كلية الطب - جامعة مؤتة - الأردن

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Prof. Dr. Youssef Hussein Anatomy - YouTube

الواتس (أي استفسار)  
00201224904207



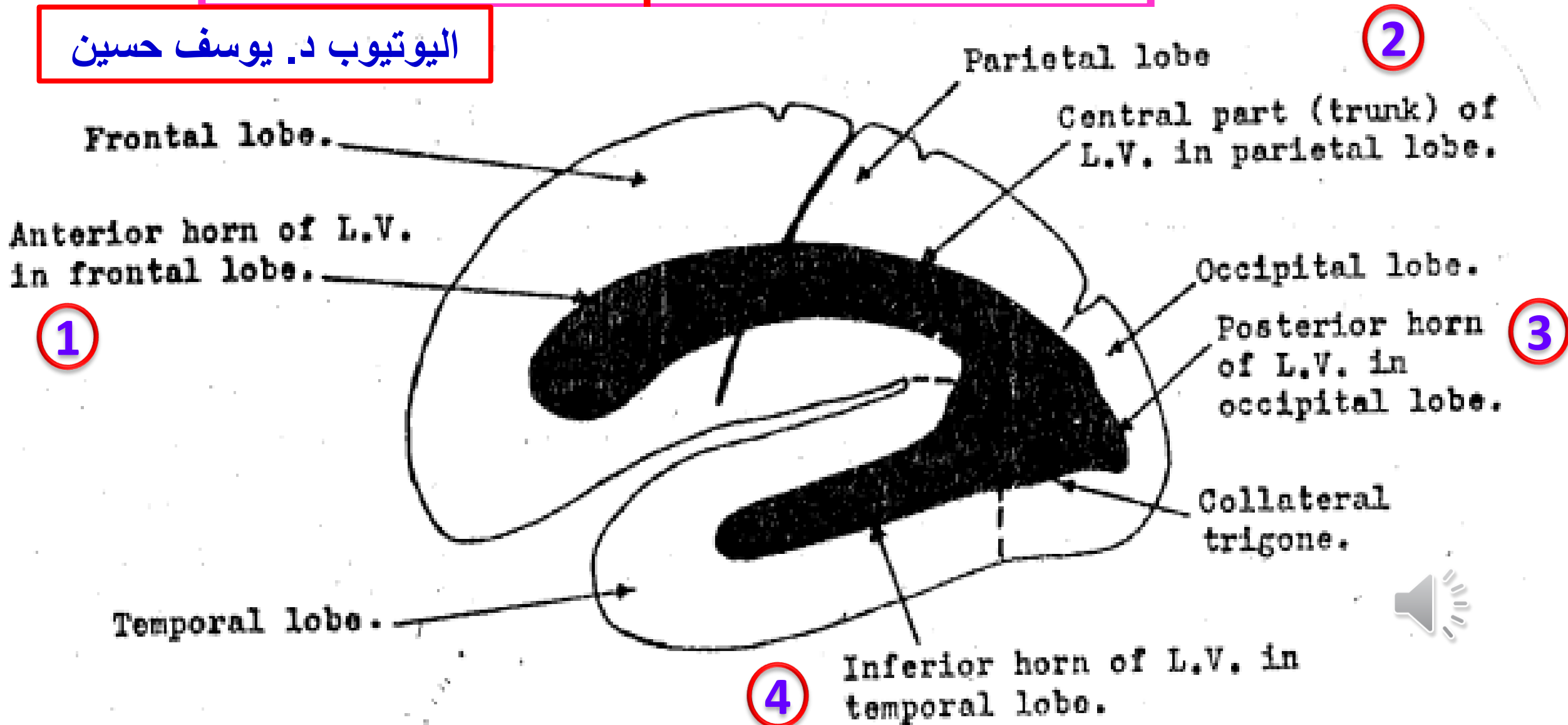
# Lateral Ventricle

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# Lateral Ventricle in the left cerebral hemisphere L.S

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- **Lateral ventricle**

**\*\* Site;** It is the cavity of the cerebral hemisphere, one on each side.

**\*\* Parts;**

- It is formed of **4 parts;**

- 1- Anterior horn; in the frontal lobe.
- 2- Central part; lies in the parietal lobe.
- 3- Posterior horn; in the occipital lobe.
- 4- Inferior horn in the temporal lobe.

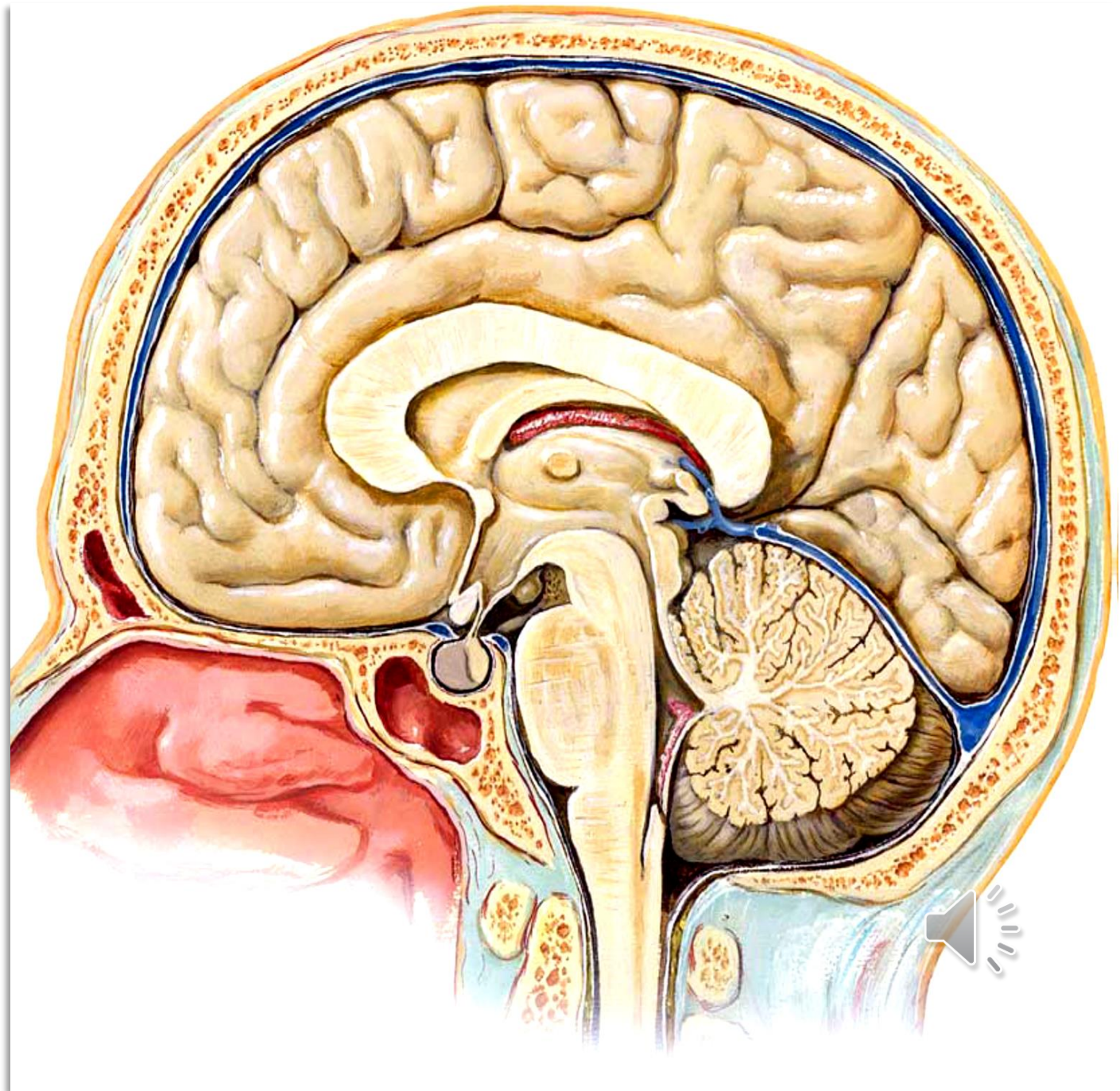
**\*\* Connections;**

-The anterior horn is connected to the 3rd ventricle by the interventricular foramen (foramen of Monro).



## Anterior horn Sagittal section

- 1- Anterior and Roof;** genu of corpus callosum.
- 3- Floor;** rostrum of corpus callosum.
- 4- Medial wall;** septum pellucidum.
- 5- Lateral wall:** head of caudate nucleus separated from lentiform by internal capsule.



# Anterior horn Coronal

Anterior horn of L.V.

Septum pellucidum

Medial

Roof

Corpus callosum (Genu)

Caudate

Floor

Lateral

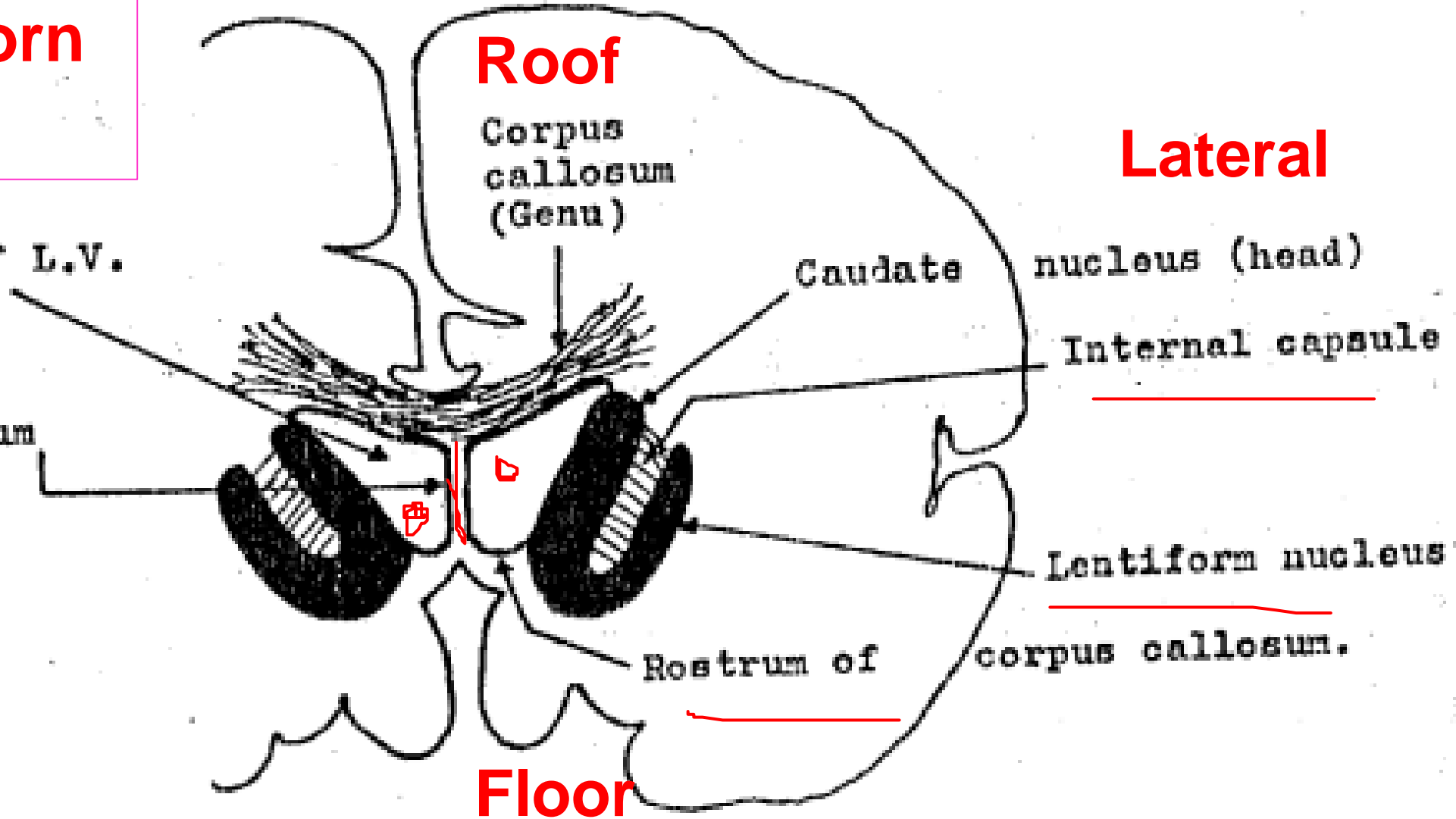
nucleus (head)

Internal capsule

Lentiform nucleus

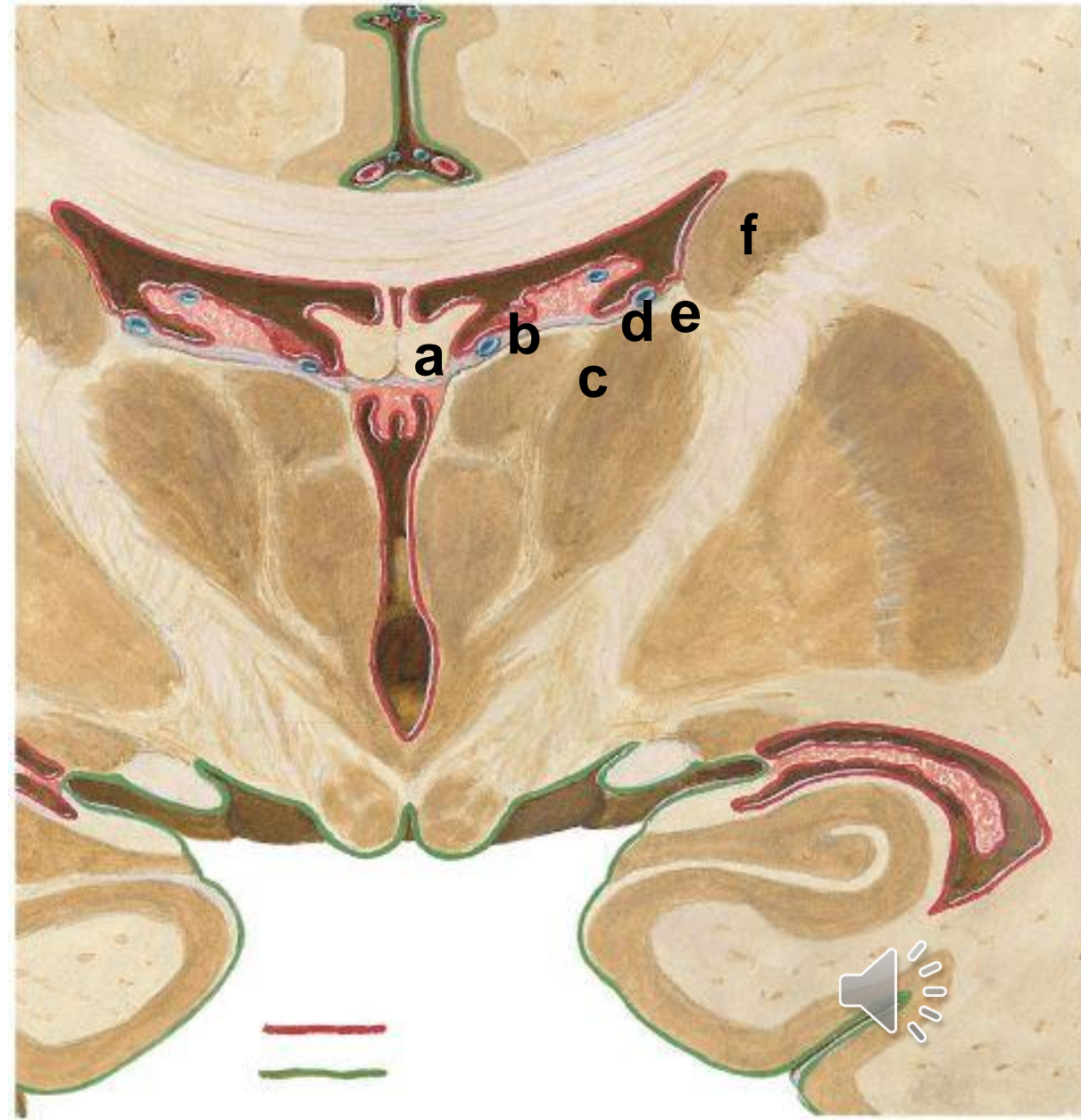
Rostrum of

corpus callosum.



- **Boundaries of the central part of the lateral ventricle (Coronal)**

- 1- Roof**, body of corpus callosum.
- 2- Medial wall**; septum pellucidum.
- 3- Floor**: from medial to lateral;
  - a- Body of fornix.
  - b- Choroid plexus of the lateral ventricle.
  - c- Superior surface of the thalamus.
  - d- Thalamostriate vein.
  - e- Stria terminalis
  - f- Body of caudate nucleus.



Central part coronal

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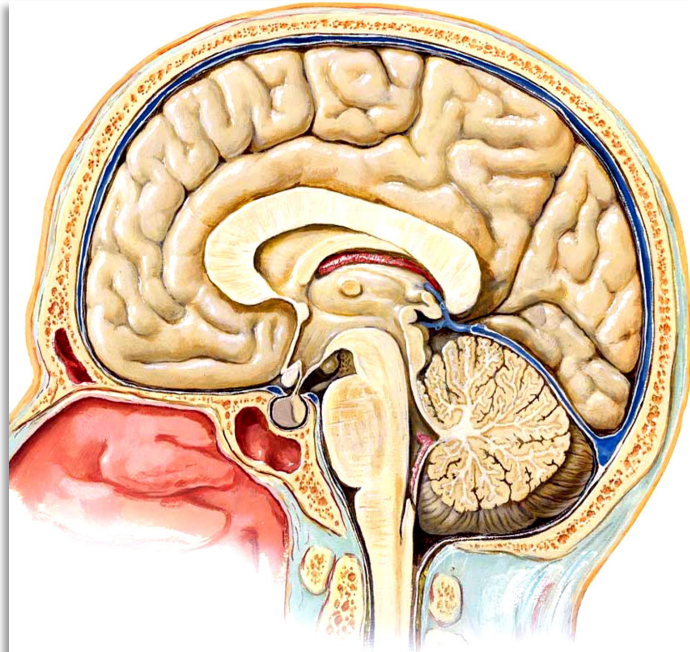
Central part of L.V.

Medial

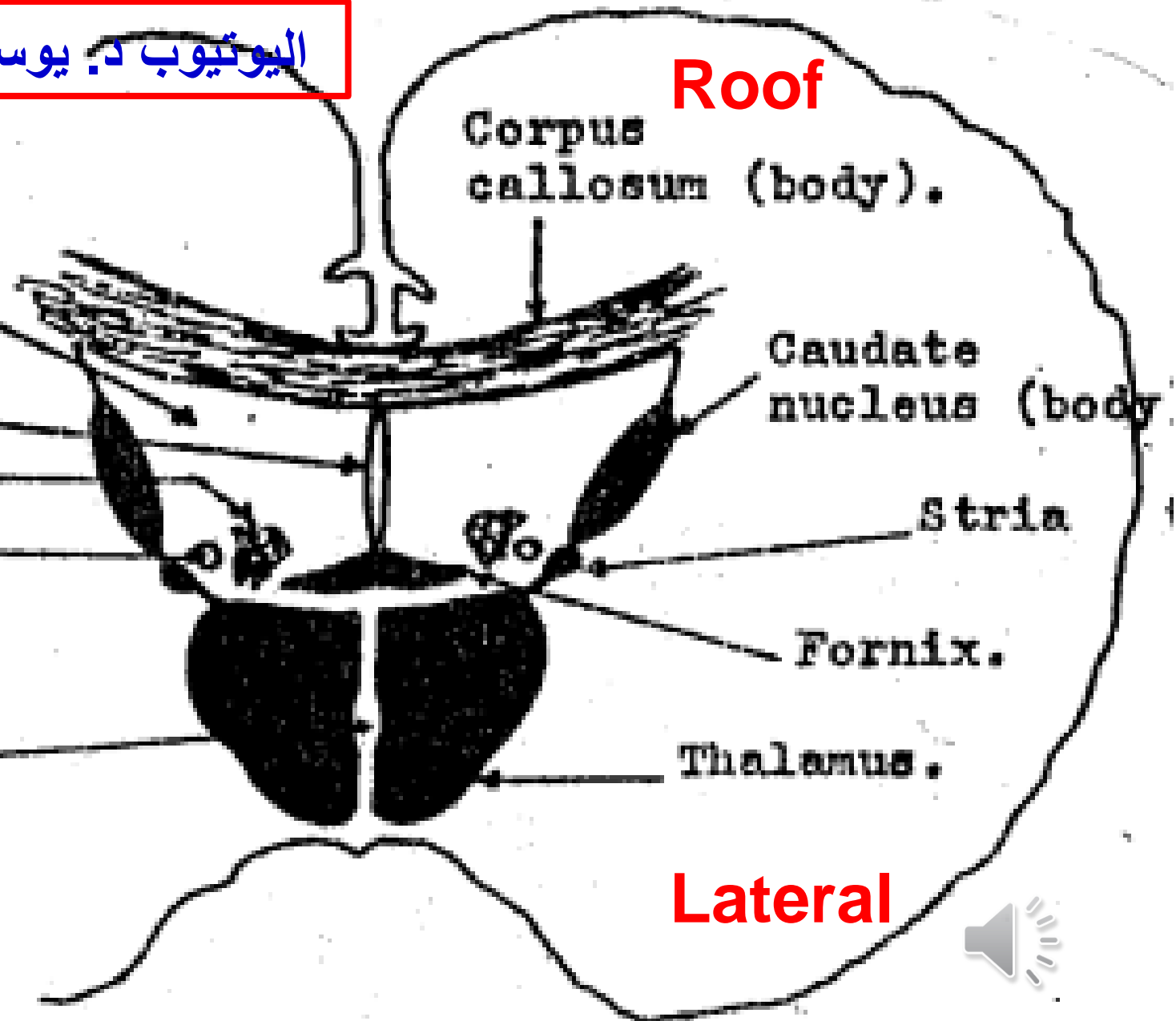
Septum pellucidum.

Choroid plexus.

Thalamostriate vein.



Circle



Roof

Corpus callosum (body).

Caudate nucleus (body)

Stria

Fornix.

Thalamus.

Lateral





## Inferior Horn coronal

**1- Lateral wall,** tapetum of corpus callosum.

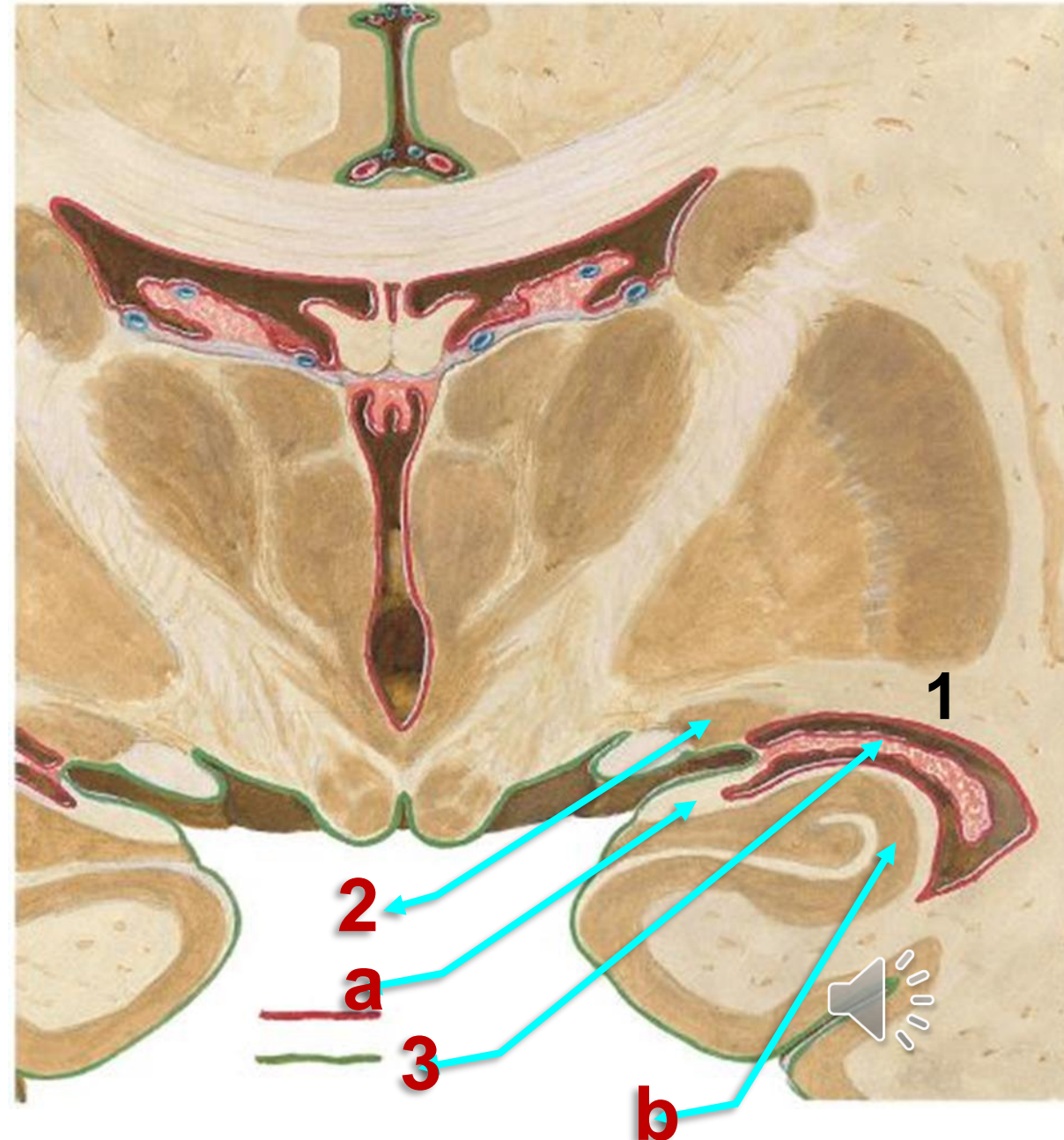
**2- Roof,** Tail of caudate nucleus & Stria terminalis.

**3- Medial wall:** choroid fissure invaginated by choroid plexus.

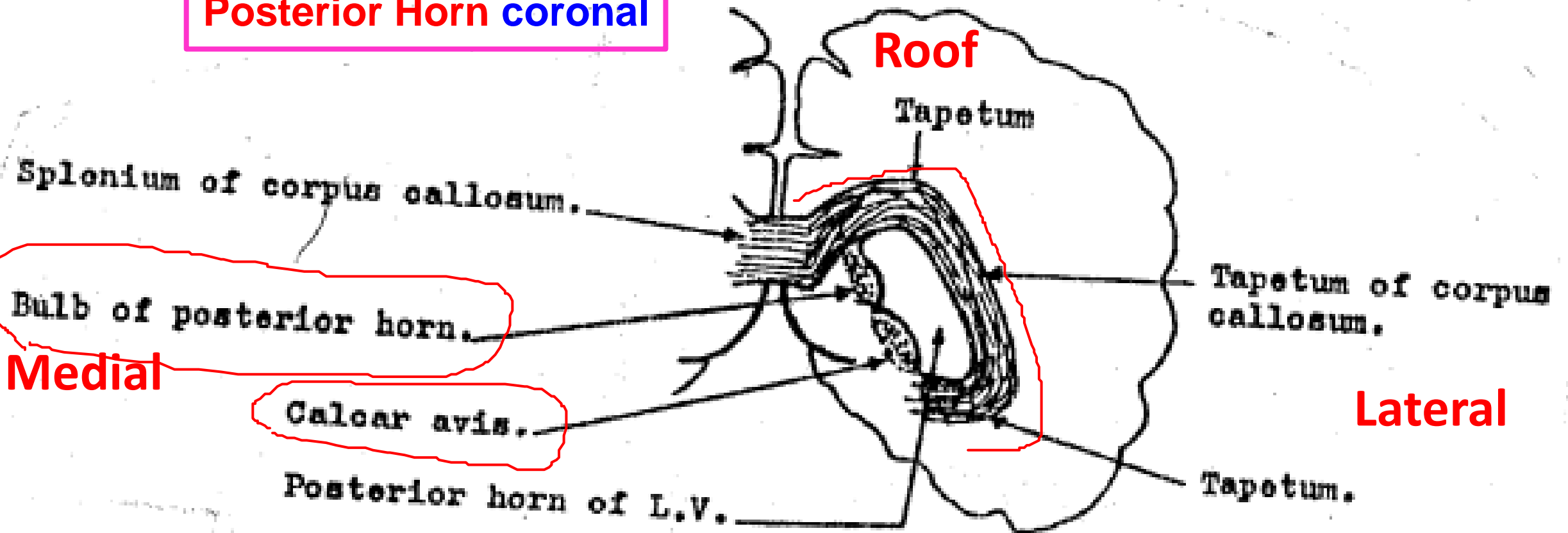
**4- Floor;**

a- Fimbria of the hippocampus.

b- Hippocampus



## Posterior Horn coronal



1- Roof, lateral wall and floor; tapetum of corpus callosum.

2- Medial wall; shows 2 elevations;

a- Bulb of posterior horn (upper); is formed by forceps major of corpus callosum.

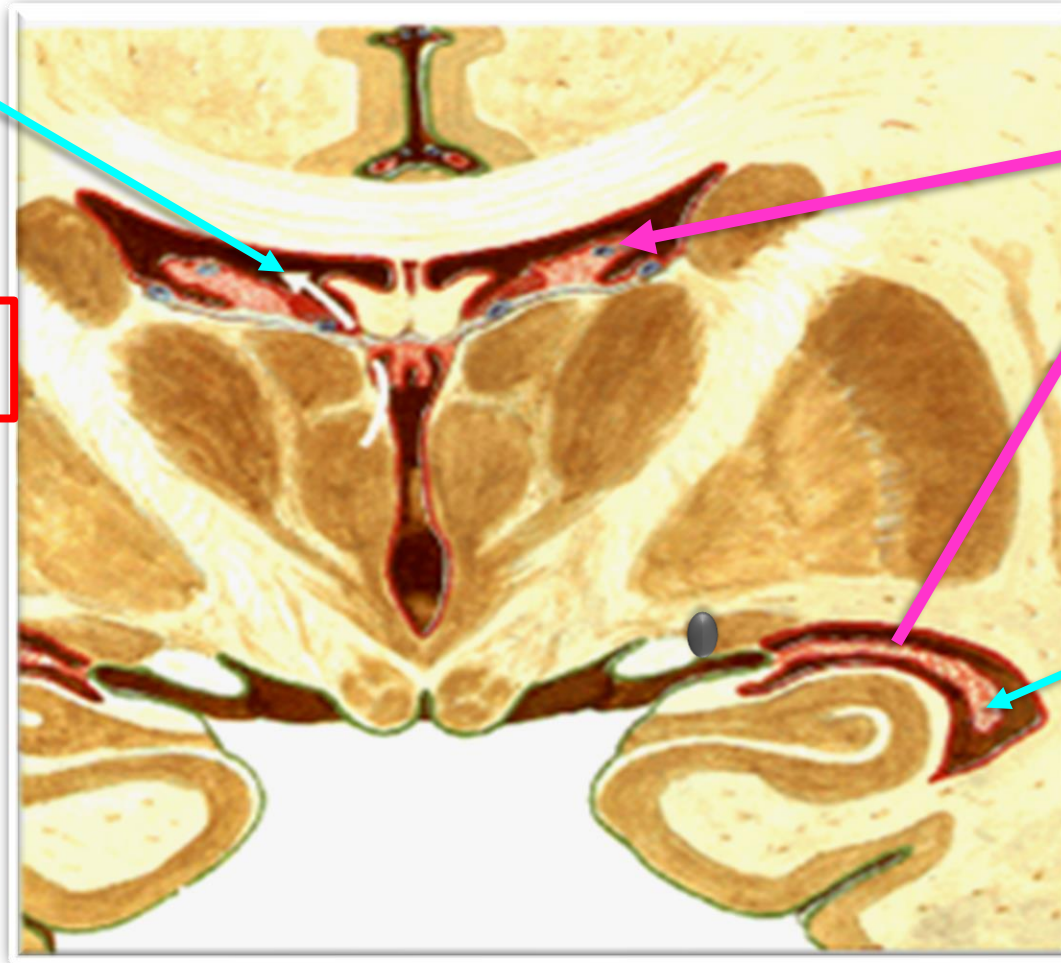
b- Calcar avis (lower); produced by the calcarine sulcus.

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The central part  
of the lateral  
ventricle

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Choroid plexus  
of the lateral  
ventricle



Choroid Plexus of  
the Lateral  
Ventricle

The inferior horn  
of the lateral  
ventricle

- **Tela choroidea**; double-layer of pia matter contains choroid plexuses
- **Choroid plexus** in **central part** is formed by **posterior choroidal branches of posterior cerebral artery**.
- **Choroid plexus** in **inferior horn** is formed by **anterior choroidal branches of internal carotid artery**.





**C.S.F.**  
**(Cerebrospinal Fluid)**  
**Circulation**



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## • Functions of cerebrospinal fluid

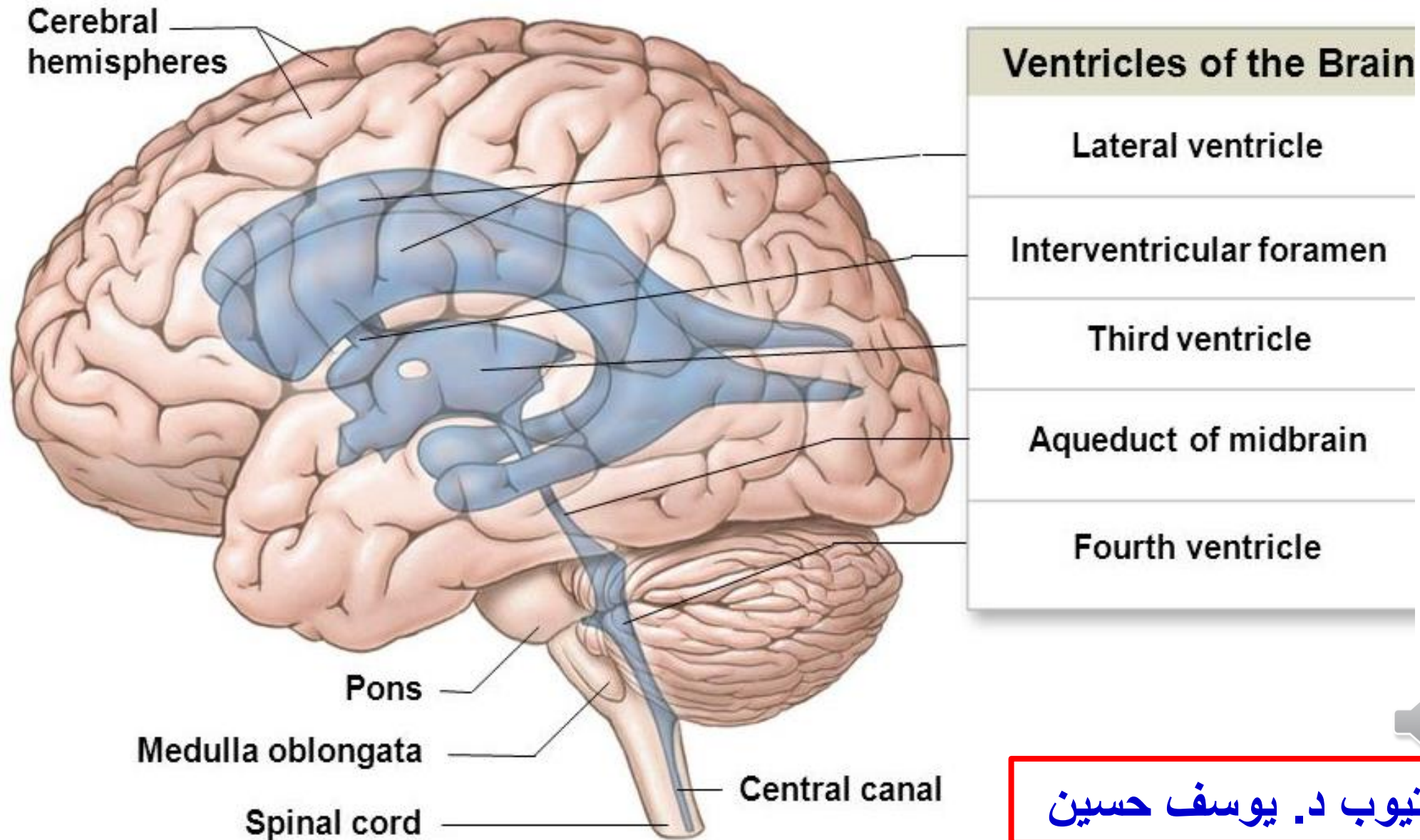
- 1- Protects the brain and spinal cord from the external shocks and trauma.
- 2- Supports the brain and spinal cord.
- 3- Regulation of the intracranial pressure.
- 4- Used for diagnosis of some diseases (Lumbar puncture)

## • Characters of the C.S.F.

- 1- **Appearance**; clear watery fluid. If it becomes turbid this indicates meningitis.
- 2- It is **formed by choroid plexuses in the brain ventricles**
- 3- **Amount**, is about 120-150 ml
- 4- **Secretion** about 20 ml per hour

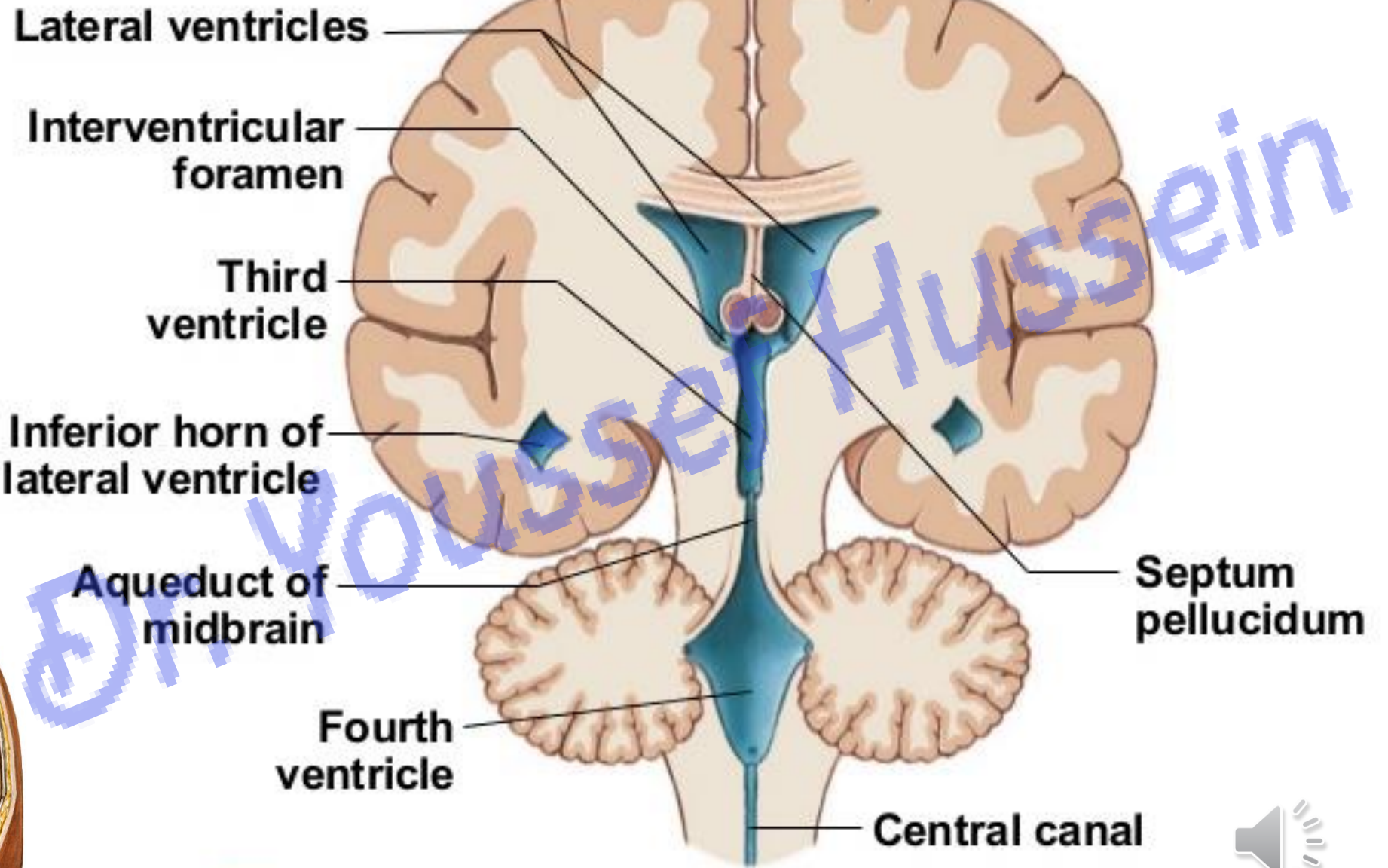


# Ventricular system (lateral view)

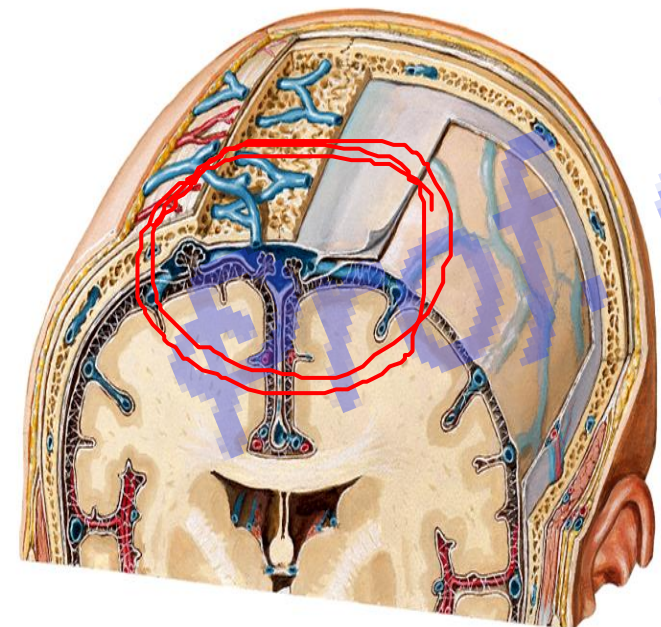


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**d** Diagrammatic coronal section showing the interconnections between the ventricles



## • C.S.F. Circulation

- **C.S.F.** is filtrated by the choroid plexus of the lateral ventricles on each side → interventricular foramina of Monro → 3rd ventricle (more C.S.F. is added by the choroid plexuses) → cerebral aqueduct of Sylvius → 4th ventricle (more C.S.F. is added by the choroid plexuses) → 3 apertures in the roof of the 4th ventricle (2 lateral foramina of Luschka and median foramen of Magendi) → subarachnoid space.
- Some of the C.S.F. passes down through the central canal of the closed medulla oblongata.

**3- Absorption;** C.S.F. was filtrated by arachnoid villi and granulations into the superior sagittal sinus.

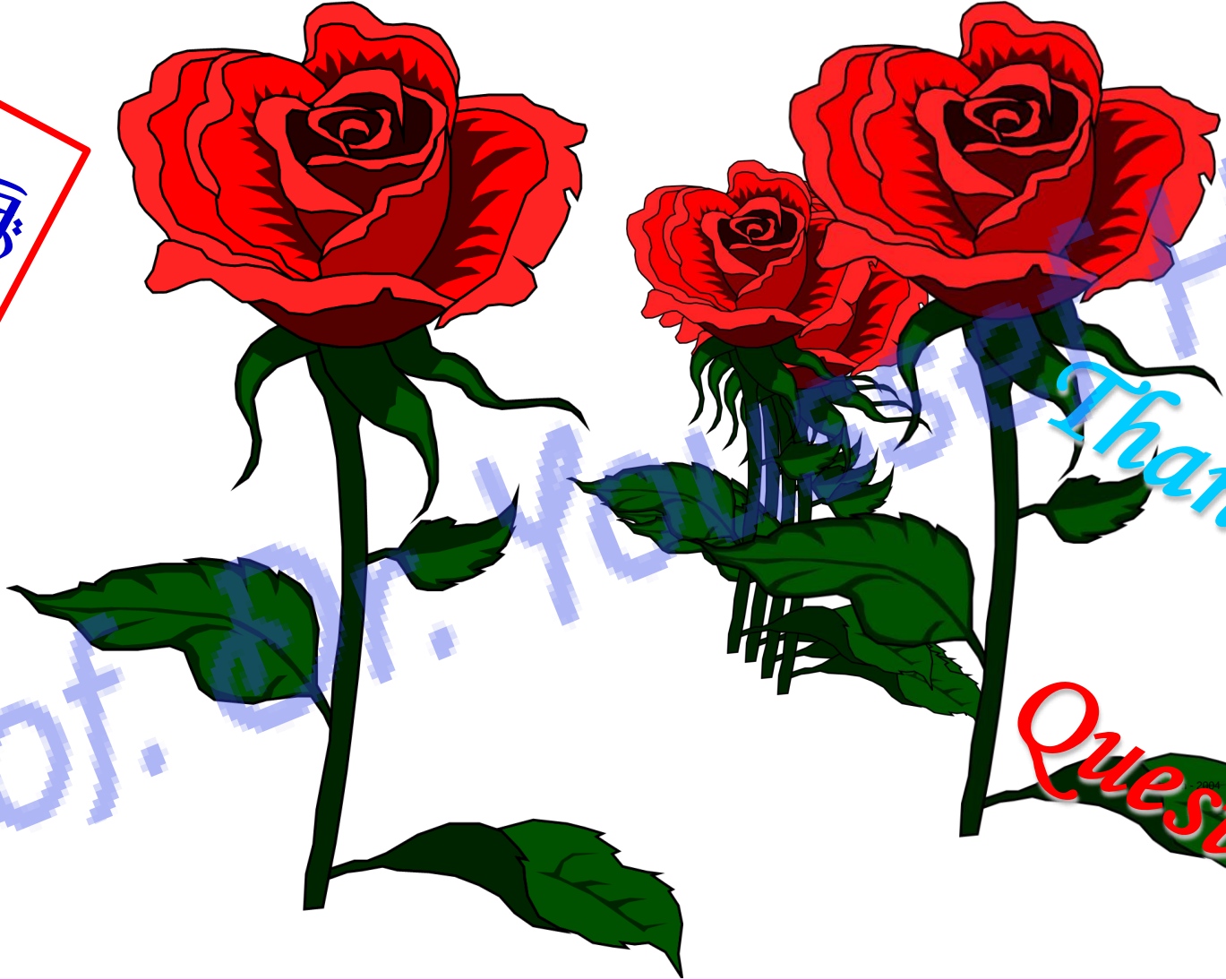
**N.B:-** Pulsation of the large arteries present in the subarachnoid space, helping the circulation of the C.S.F.



[https://www.youtube.com/channel/UCVSNqbibj9UWYaJdd\\_cn0PQ](https://www.youtube.com/channel/UCVSNqbibj9UWYaJdd_cn0PQ)

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Thank You

Questions



<https://www.youtube.com/@ProfDrYoussefHusseinAnatomy/playlists>