



CNS

1) The lateral surface of diencephalon is related to one of the following structures:

- a) Third ventricle.
- b) Claustrum.
- c) External capsule.
- d) Internal.capsule

2) The following statements concern the third ventricle, one of them is correct:

- a) It is the cavity of the hindbrain.
- b) It communicates with the lateral ventricles through the cerebral aqueduct.
- c) It is continuous with the fourth ventricle through the interventricular foramen.
- d) The choroid plexus is located in the roof.

3- Which of the following is or are included in the metathalamus:

- a- Geniculate bodies
- b- Pineal body
- c- Habenular nuclei
- d- Posterior commissure
- e- None of the above

4- Which is the thalamic surface related to tela-choroidae of two ventricles?

- a-Superior
- b- Inferior

- c- Medial
- d- Lateral
- e- None of the above

5- Which is the thalamic surface related to posterior limb of internal capsule?

- a- Superior
- b- Inferior
- C- Medial
- d-Lateral
- e- None of the above

6- The medial surface of thalamus:

- a- Forms lateral wall of 3rd ventricle
- b- Is limited inferiorly by hypothalamic sulcus
- c- Is connected to the opposite surface by inter-thalamic adhesions
- d- All of the above
- e- A & B only

7- Epithalamus is formed of:

- a- Pineal body
- b- Habenular nuclei
- c- Posterior commissure
- d- All of the above
- e- A & B only

8- The lateral wall of the third ventricle is formed by:

- a- Thalamus
- b- Hypothalamus
- c- Lamina terminalis
- d- All of the above
- e- A& B only

9- third ventricle is the cavity of.....

- a-metencephalon
- b-myelencephalon
- c-mesencephalon
- d-telencephalon
- e-diencephalon

10-Thalamic nuclei project visual information to the visual cortex.

- A. Lateral
- B. Pulvinar
- C. Lateral geniculate
- D. Medial geniculate

11- Inferior boundary of diencephalon is

- A. lamina terminalis and anterior commissure.
- B. posterior commissure, pineal gland and habenular trigone.

C. tela choroidea of the third ventricle, body of the fornix and lateral ventricle.

D. optic chiasma, tuber cinereum & infundibulum, mamillary bodies and posterior perforated substance

12. Lateral wall of third ventricle is divided by..... into upper part called thalamus and lower part called hypothalamus.

A. tuber cinereum

B. subthalamic sulcus

C. hypothalamic sulcus

D. pulvinar

13. Divisions of diencephalon are all the following except

A. Meta-thalamus

B. Thalamus

C. Hypothalamus

D. Epithalamus

E. Subthalamus

14. largest component of the diencephalon

A. Meta-thalamus

B. Thalamus

C. Hypothalamus

D. Epithalamus

E. Subthalamus

15." inner chamber" refers to

- A. Meta-thalamus
- B. Thalamus
- C. Hypothalamus
- D. Epithalamus
- E. Subthalamus

16. Anterior end of thalamus is related to

- A. lamina terminalis and anterior commissure.
- B. tela choroidea, fornix and lateral ventricle.
- C. interventricular foramen.
- D. posterior commissure, pineal gland and habenular trigone.

17. posterior end of thalamus called.....

- A. Rostrum
- B. Splenium
- C. Tela choroidea
- D. Pulvinar

18. massa intermedia refers to

- A. fibers connect 2 cerebral hemispheres
- B. fibers connect 2 cerebellar hemispheres
- C. another name to corpus callosum
- D. fibers connect 2 thalami

19. Lateral surface of thalamus is related to

- A. posterior limb of the internal capsule
- B. lamina terminalis and anterior commissure.
- C. posterior commissure, pineal gland and habenular trigone.
- D. tela choroidea of the third ventricle, body of the fornix and lateral ventricle.

20. Thalamus receives all sensations except.....

- A. Taste
- B. Pain
- C. Temperature
- D. Olfaction

21. Main Arterial supply of thalamus is

- A. Posterior cerebral artery
- B. Posterior communicating artery
- C. Anterior choroidal artery
- D. Middle cerebral artery

22. Blood supply of lateral geniculate body is

- A. Posterior cerebral artery
- B. Posterior communicating artery
- C. Anterior choroidal artery
- D. Middle cerebral artery

23. part of diencephalon considered as endocrine center

- A. Meta-thalamus
- B. Thalamus
- C. Hypothalamus
- D. Epithalamus
- E. Subthalamus

24. inferior relation of hypothalamus is

- A. lamina terminalis and anterior commissure.
- B. posterior commissure, pineal gland and habenular trigone.
- C. tela choroidea of the third ventricle, body of the fornix and lateral ventricle.
- D. Interpeduncular fossa

25. Lesion in the subthalamic nucleus causes

- A. apraxia
- B. dyspraxia
- C. hemiballismus
- D. ankyloglossia

26. Epithalamus lies

- A. anterior to the thalamus and forms the posterior part of the roof of the third ventricle.
- B. posterior to the thalamus and forms the posterior part of the roof of the third ventricle.

C. posterior to the thalamus and forms the anterior part of the roof of the third ventricle.

D. Medial to cerebellum

27. Regarding pineal gland which is wrong

A. endocrine gland

B. doesn't contain nerve cells.

C. Has nerve cells

D. contains cells called pinealocytes.

28. Pineal gland secretes.....

A. Melanin

B. Growth hormone

C. Oxytocin

D. Melatonin

29. Veins present in tela choroidea of third ventricle are

A. External cerebral veins

B. internal cerebral veins

C. superior sagittal sinus

D. occipital veins

30. Which of the following is true as regards to the thalamus?

A. The Thalamus has two ends and two surfaces

B. Its Inferior surface is related to epithalamus.

- C. The metathalamus projects downward from its anterior end
- D. Its medial surface is related to the lateral ventricle.
- E. Its Lateral surface is related to the posterior limb of the internal capsule

31. Which of the following is true as related to of 3rd ventricle?

- A. The epithalamus forms its anterior wall
- B. The thalamus forms its posterior wall
- C. The hypothalamus forms the lower part of its lateral wall
- D. The subthalamus forms its inferior wall
- E. The metathalamus forms its posterior wall

32. Choroid plexus of the 3rd ventricle is Supplied by

- A. Posterior choroidal artery
- B. PCA
- C. ACA
- D. MCA

| | |
|----|---|
| 1 | D |
| 2 | D |
| 3 | A |
| 4 | A |
| 5 | D |
| 6 | D |
| 7 | D |
| 8 | E |
| 9 | E |
| 10 | C |
| 11 | D |
| 12 | C |
| 13 | A |
| 14 | B |
| 15 | B |
| 16 | C |
| 17 | D |
| 18 | D |
| 19 | A |
| 20 | D |
| 21 | A |
| 22 | C |
| 23 | C |
| 24 | D |
| 25 | C |
| 26 | B |
| 27 | C |
| 28 | D |
| 29 | B |
| 30 | E |
| 31 | C |
| 32 | A |

Enumerate boundaries of diencephalon

| | |
|-------------|--|
| Anteriorly | lamina terminalis and anterior commissure. |
| Posteriorly | posterior commissure, pineal gland and habenular trigone |
| Superiorly | tela choroidea of the third ventricle, body of the fornix and lateral ventricle |
| Inferiorly | optic chiasma, tuber cinereum & infundibulum, mamillary bodies and posterior perforated substance. |
| Medially | the 3 rd ventricle. The medial wall is divided by the hypothalamic sulcus into upper part called thalamus and lower part called hypothalamus. |
| Laterally | posterior limb of the internal capsule |

What are divisions of diencephalon

1. Thalamus
2. Hypothalamus
3. Epithalamus
4. Subthalamus

What is the medial boundary of thalamus

- ✓ third ventricle.
- ✓ It is connected with the opposite one in 70% of humans by the interthalamic adhesion (massa intermedia)

Enumerate arterial supply of thalamus

| | |
|--------------------------------|---|
| Posterior cerebral artery | from the basilar artery. It is the main arterial supply. |
| Posterior communicating artery | from the internal carotid artery. |
| Anterior choroidal artery | from the internal carotid artery to the lateral geniculate body |

Enumerate arterial supply of hypothalamus

- ✓ Arterial supply: from circulus arteriosus
- ✓ Anterior part: Anterior cerebral & anterior communicating arteries.
- ✓ Posterior part: Posterior cerebral & posterior communicating arteries
- ✓ Lateral part: middle cerebral artery.

What is the function of subthalamic nucleus

- ✓ it is a motor nucleus which regulates movement of muscles.
- ✓ Lesion in the subthalamic nucleus causes hemiballismus (involuntary movement)

Epithalamus is formed of

- ✓ Pineal gland: or epiphysis cerebri
- ✓ Posterior commissure
- ✓ Habenular nucleus
- ✓ Stria medullaris thalami

Roof of third ventricle is formed of

- ✓ Ependymal Layer between the two stria medullaris thalami.
- ✓ Tela choroidea of the third ventricle above the ependymal layer.
- ✓ Two internal cerebral veins inside the tela choroide

Mention Recesses of the 3rd ventricle

- ✓ Optic recess: above the optic chiasma.
- ✓ Infundibular recess: extends into the infundibulum.
- ✓ Pineal recess: extends into the stalk of the pineal gland.
- ✓ Suprapineal recess: above the pineal gland.