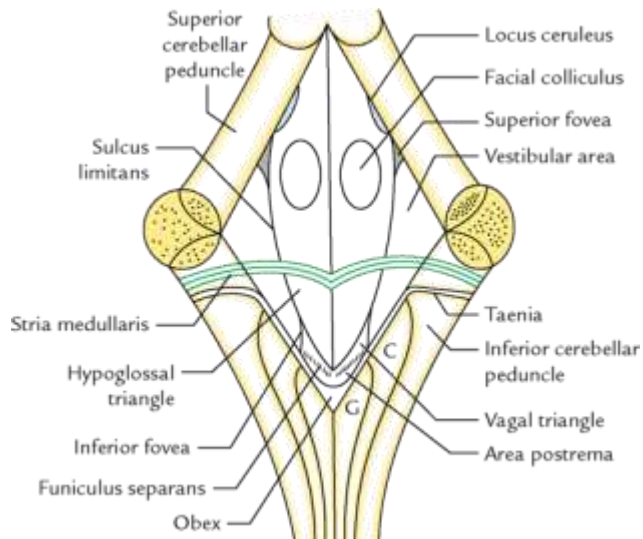


VENTRICLES OF BRAIN

FLOOR OF 4TH VENTRICLE (LABELED DIAGRAM) (SE)



RHOMBOID FOSSA (4TH VENTRICLE) (SE)

The floor of the fourth ventricle is known as rhomboid fossa

Features:

Median sulcus divides floor into two symmetrical halves

Each half is further divided into medial eminence and lateral vestibular area by sulcus limitans.

Superior fovea- depression in upper part of sulcus limitans.

Facial colliculus- oval elevation opposite to superior fovea due to abducent nucleus encircled by fibers of motor root of facial nerve.

Locus ceruleus- bluish grey area in the upper end of sulcus limitans related to reticular formation.

Inferior fovea- depression at the lower end of sulcus limitans.

Hypoglossal triangle- triangular elevation in the medial eminence overlying hypoglossal nucleus opposite to inferior fovea

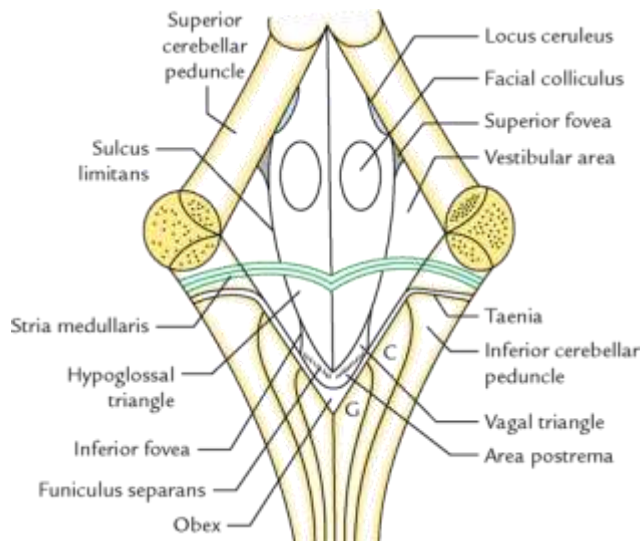
Vagal triangle- triangular elevation below hypoglossal triangle overlying dorsal nucleus of vagus.

Vestibular area- area overlying 4 groups of vestibular nuclei lateral to sulcus limitans.

Area postrema- area devoid of blood brain barrier present between the vagal triangle and gracile tubercle.

Striated medullaris- fibers arising from arcuate nucleus winds round inferior cerebellar peduncle, extend across vestibular area, medial eminence and pass deeply into substance of brain stem.

Calamus scriptorius- lower end of the fossa resembling the nib of writing pen



THIRD VENTRICLE (SE)

Third ventricle is slit like space present between two thalami.

Boundaries:

Anterior wall:

lamina terminalis, anterior commissure, column of fornix

Posterior wall:

suprapineal recess, habenular commissure, pineal gland, posterior commissure, aqueduct of Sylvius

Lateral wall:

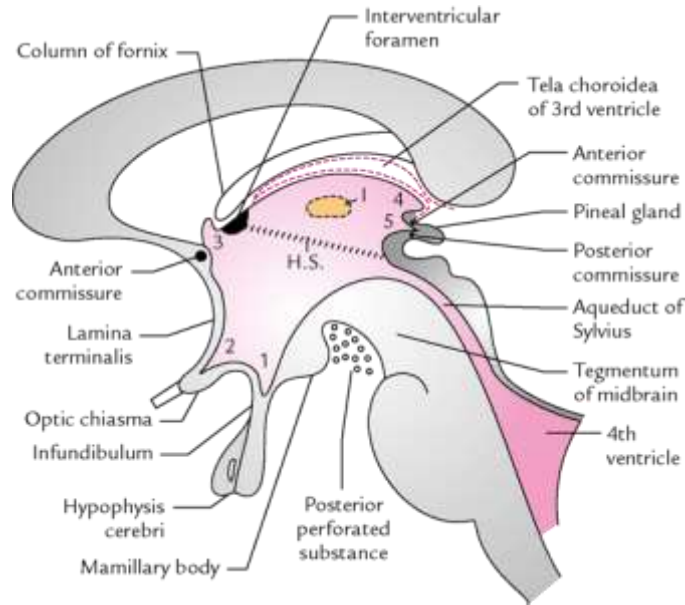
thalamus, hypothalamic sulcus, hypothalamus, interthalamic adhesion

Roof:

ependyma, tela choroidea, choroid plexus

Floor:

optic chiasma, optic recess, tuber cinereum, infundibulum of pituitary gland, infundibular recess, mammillary bodies, posterior perforated substance, tegmentum of midbrain



RHOMBOID FOSSA- BOUNDARIES (SA)

Boundaries:

Superolateral-

superior cerebellar peduncle

Inferolateral-

from medial to lateral - gracile tubercle, cuneate tubercle, inferior cerebellar peduncle

Floor-

dorsal surface of lower part of pons and upper part of medulla

Roof-

superior medullary velum in the upper part; ependyma, tela choroidea in the lower part

NAME STRUCTURES IN FLOOR OF 4TH VENTRICLE (SA)

Median sulcus

sulcus limitans.

Superior fovea

Facial colliculus

Locus ceruleus

Inferior fovea

Hypoglossal triangle

Vagal triangle

Vestibular area

Area postrema

Stria medullaris

Calamus scriptorius

ROOF OF 4TH VENTRICLE (SA)

The roof of the fourth ventricle is tent shaped.

Upper part of roof is formed by the neural tissue superior medullary velum bridging the two superior cerebellar peduncles. Lower part of roof is formed by non-nervous tissue ependyma and pial membrane.

MENTION FORAMINA IN 4TH VENTRICLE (SA)

Superior angle continuous with aqueduct of Sylvius

Inferior angle continuous with central canal of medulla

Lateral aperture foramina of Luschka opens into subarachnoid space

Dorsal aperture foramen of Magendie opens into subarachnoid space

FACIAL COLLICULUS (SA)

It is a rounded elevation present in the medial eminence of floor of 4th ventricle at the level of superior fovea.

It is formed by the abducent nerve nucleus encircled by the nerve fibers of motor root of facial nerve.

STRUCTURES SEEN IN FLOOR OF BODY OF LATERAL VENTRICLE (SA)

Medial to lateral the structures are-

lateral part of thalamus,

thalamostriate vein,

stria terminalis,

body of caudate nucleus.

INFERIOR HORN OF LATERAL VENTRICLE (SA)

It is the lower extension of lateral ventricle into the temporal lobe of cerebrum.

Boundaries:

Medial wall and floor-

collateral eminence formed by inward projection of collateral sulcus, hippocampus

Roof and lateral wall-

tapetum of corpus callosum in the lateral part, tail of caudate nucleus and amygdaloid body in the medial part