• at external occipital
superior ss communicates with left transverse,
occipital & straight sinus to form confluence of sinus.

Cavernous Sinuses.

• large dural venous space situated in middle cranial fossa,
on either side of pituitary & body of sphenoid.

• length = 2cm.
breadth = 1cm.

• Interior is divided into caverns by trabeculae.
∴ cavernous sinus.

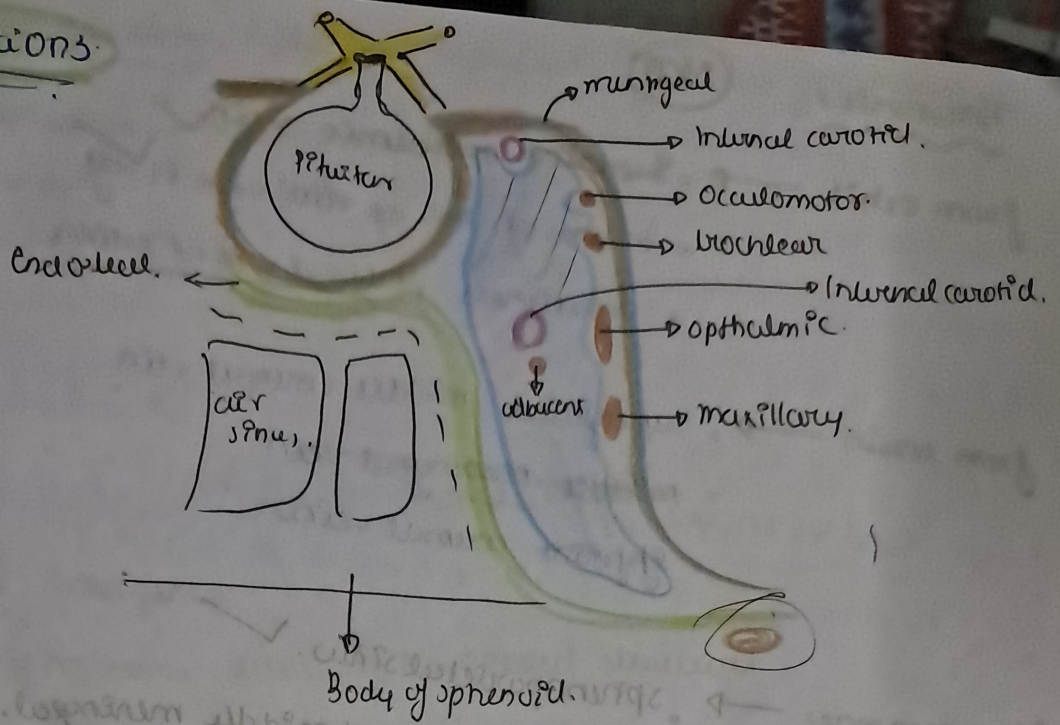
• lyg roof & medial lateral

• roof & lateral wall → meningeal layer
• floor & medial wall → endosteal layer

Features

• wide feature of venous sinuses.

Relations.



- Superiorly → optic chiasma, optic tract, internal carotid artery
- Inferiorly → foramen lacerum.
- medial → sella turica, Body of sphenoid with air sinus
- lateral → temporal bone, trigeminal ganglion within cavum trigeminale
- anterior → superior orbital fissure.
- posterior → apex of petrous temporal bone.

str within lateral wall of sinus (above ↓ down)

(1) Occulomotor
(2) trochlear
(3) ophthalmic
(4) maxillary.

structures through sinus (above ↓ down)

* Internal carotid artery
* Abducent nerve.

Tributaries. (MOB)

from orbit → • Superior ophthalmic vein
• branch of inf. op. vein/vein itself.
• sometimes, central vein of retina

from brain → • superficial middle cerebral vein.
• ~~middle meningeal vein~~.
• Inferior cerebral veins.

from meninges → • sphenoparietal sinus.
• frontal trunk of middle meningeal vein.

Communications → valveless → both directions.

- into transverse sinus through superior petrosal sinus
- Into internal jugular vein through inferior pet sinus
- Into pterygoid plexus through emissary vein
- into facial vein through superior ophthalmic vein.
- With each other → Ant & post intercavernous sinus.

Factors ~~affecting~~ helping Expulsion of Blood from sinus,

(1) pulsations of internal carotid.
(2) gravity
(3) head position.

Applied Aspects

(1) Cavernous Sinus Syndrome.

→ Medical Emergency.

→ diff symptoms according to affected structure.

→ Severe lesion involving entire sinus →.

- total ophthalmoplegia {CN III, IV, V injury}.
- fixed & dilated pupils → due to compression of superficial parasympathetic fibres of CN III

→ Can lead to horner's syndrome. when sympathetic plexus around internal carotid is damaged.

→ If maxilla & ophthalmic involved → sensory loss in face, scalp, maxilla, nasal cavity, palates, sinuses.

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Cavernous Sinus thrombosis.

→ due to Infections. reaching via emissary veins.

→ total opthalmoplegic due to involvement of III, IV & VI th cranial nerve

→ pulsating exophthalmos

If there is rupture of internal carotid artery within Cavernous sinus → producing an arteriovenous fistula.

⇒ eye bulge → exophthalmos.

⇒ bulging eye pulsate → in synchrony with radial pulse.

Other paired Sinuses

- Superior petrosal Sinus → attached border of tentorium cerebelli along Superior border of petrous temporal lobe.
  - It connects cavernous sinus with transverse sinus.
- Inferior petrosal sinus → drains cavernous sinus into internal Jugular vein.

- Transverse sinuses → posterior attached border of tentorium cerebelli
  - Right TS → Continuation of SSS
  - L TS → Straight sinus

  ] both continue as sigmoid sinus

Sigmoid Sinuses

- continuation of transverse sinus.
- S shaped.
- they become the superior bulb of internal jugular vein.