

Scalp

Extend : Anteriorly upto eyebrow
Posteriorly upto superior nuchal lines
laterally on each side upto superior temporal line

5 layers

- (S) - Skin
- (C) - Connective tissue
- (A) - Aponeurotic layer
- (L) - Loose Areolar tissue
- (P) - pericranium

⇒ Skin: thick and hairy except over forehead.
Adherent to epicranial aponeurosis by dense connective tissue

Being hairy → More number of hair follicles, associated sebaceous glands
Sweat glands.

commonest site for
Sebaceous cyst

⇒ connective tissue

Superficial fascia

binds the skin to underlying occipitofrontalis & Aponeurosis
• fibrous septa divides this layer into numerous small pockets containing lobules of fat

• blood vessels and nerves of scalp lie in this layer

⇒ Aponeurosis

Occipitofrontalis muscle and its Aponeurosis

↳ 2 bellies:
↳ 2 frontal
↳ 2 occipital
bellies

greater part → aponeurosis

(Aponeurotic layer)

Aponeurosis of occipitofrontalis is also called epicranial Aponeurosis
or galea Aponeurotica.

→ Loose Areolar tissue

layer - loose are. tissue

Serves as natural plane of cleavage during craniotomy. This layer is traversed by emissary veins connecting veins in second layer of scalp with intracranial dural venous sinuses.

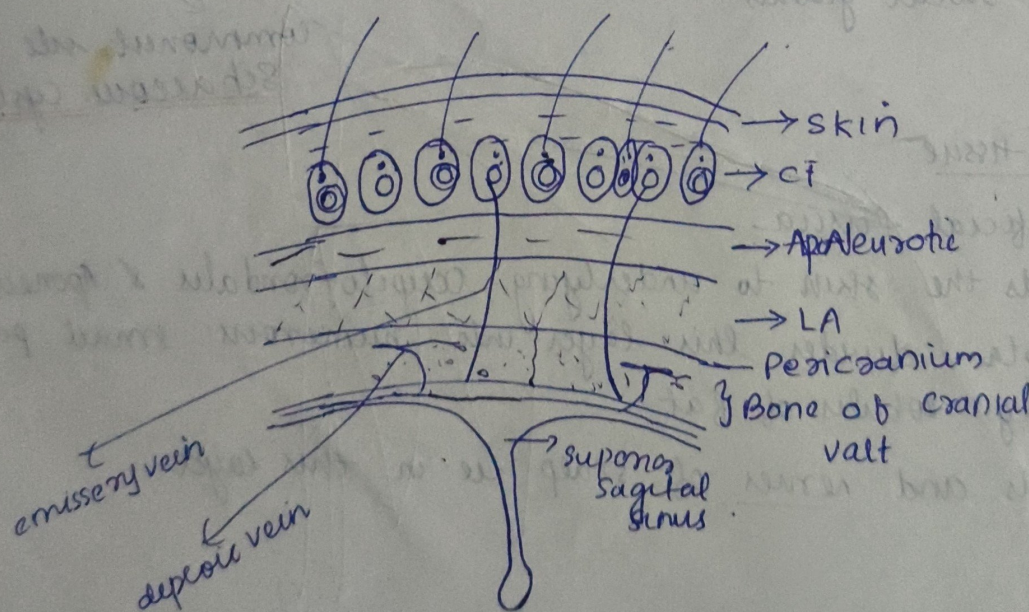
→ Pericranium.

formed by Periosteum of bones of vault of ~~skin~~ Skull

loosely attached to bones and can easily stripped

In sutures, it is attached firmly to sutural ligaments, which in turn to endocranium.

* clinical: First 3 layers firmly attached to each other and cannot be separated. These layers are ~~known~~ termed surgical layers of Scalp and form scalp proper.



on each side of midline

⑧ sensory nerves

④ in front of
Auricle.

↳ Trigeminal
nerve.

④ in behind auricle.

↳ 2nd & 3rd cranial
nerves

- Supratrochlear } branch of
- Supraorbital } ophthalmic divn.
- Zygomaticotemporal (Max)
- Auriculotemporal (man)

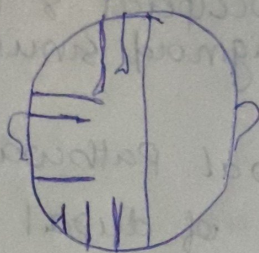
- Great Auricular (VR of 2nd & 3rd)
- Lesser occipital (VR of 2nd)
- Greater occipital (DR of 2)
- Third occipital (DR of 3)

Blood supply

⇒ Arterial supply

⑤ Arteries

↳ ③ in front



- Supratrochlear - ophthalmic Ar. from ICA.

- supraorbital

- superficial temporal external carotid Ar.

② Ar. behind

- Posterior Auricular

- Occipital

front of ear → frontal belly
temporal branch of
facial nerve

behind → Post Auricular
branch of FN.

supplies occ
Belly of
Muscle

ex CA.

ex CA

⇒ Venous drainage

⑤ Veins

Accompany Ar.

- Supratrochlear & Supraorbital

medial angle of eye
to form angular vein
that continues behind
Facial Ar as FV.

- Occipital vein: terminates
suboccipital
venous plexus.

- Superficial temporal vein
+ maxillary vein

→ Retromandibular vein

Ant + Post division
+ facial vein

common facial vein drains into
int jugular vein

- Posterior Auricular vein
descends behind auricle
with post division of
Retromandibular vein
to form external jugular
drains into
subclavian

Clinical: Intravenous infusion in children, veins deep to skin

- Emissary veins: thin walled, valveless connect extracranial veins with intracranial dural venous sinus by passing through foramina in cranium

Two sets of main EV,

1) Parietal → passes through Parietal foramen and communicates b/w scalp veins & superior sagittal sinus

Frontal condylar

2) Mastoid → Mastoid foramen, communicates with occipital & Post Aur veins with Sigmoid sinus.

Function: provide collateral pathway in case of obstruction of dural venous sinuses

- provide selective cooling of brain

⇒ Clinical: provide route for transportation of infection b/w extracranial & intracranial spaces.

• Diploic veins: large, thin walled valveless veins present in diploe b/w outer & inner tables

CC → Radiologically, seen as transparent ~~water~~ bands 3-4 mm wide.

⇒ Lymphatic drainage

Anterior part except lower half of forehead - Preauricular lymph nodes on surface of parotid gland

Post → Posterior auricular (mastoid) & occipital lymph nodes