#### 8 | Manual of Practical Anatomy

- If the bleeding takes place deep to pericranium (cephalhaematoma), the swelling corresponds with the shape of skull bone as the pericranium fuses with the sutures along its margins.
- Since there is little regenerating capacity due to lack of cambium layer in periosteum, necrosed bone leaves a gap.

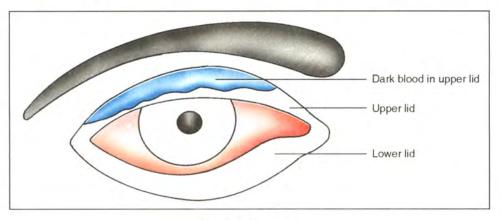


Fig. 2.6 Black eye

#### NERVES SUPPLYING THE SCALP

- A. Motor nerves Following two branches appear from facial nerve for scalp.
  - (a) Temporal branch Ascends in front of auricle and supplies frontal belly.
  - (b) Postauricular branch Ascends behind the auricle and supplies occipital belly of occipitofrontalis.

#### B. Sensory nerves (from anterior to posterior)

- (a) Branches from ophthalmic nerve
  - 1. Supratrochlear nerve Supplies forehead near midline.
  - 2. Supraorbital nerve Passes through supraorbital notch.
- (b) Branch of maxillary nerve

Zygomaticotemporal nerve - Appears in the temporal fossa region.

(c) Branch of mandibular nerve

Auriculotemporal nerve - Ascends in front of auricle.

- (d) Branches from ventral rami of cervical nerves (cervical plexus)
  - 1. Great auricular nerve  $(C_{2,3})$  Ascends just behind the auricle.
  - 2. Lesser occipital nerve  $(C_2)$ .
- (e) Branches from dorsal rami of cervical nerves
  - 1. Greater occipital nerve  $(C_2)$
  - 2. Third occipital nerve  $(C_3)$

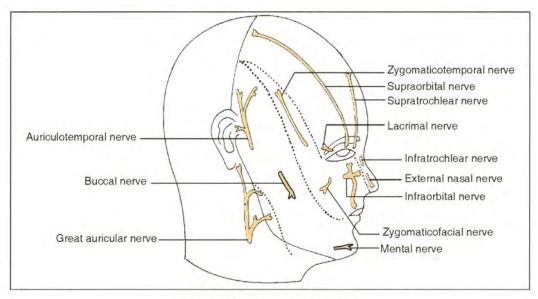


Fig. 4.13 Sensory nerves of face

# B. Named nerves

(a)	Branches	of	ophthai	mic	nerve	
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1. Lacrimal nerve	- Pierces the lateral part of the upper lid.
2. Supraorbital nerve	- Passes through supraorbital notch.
3. Supratrochlear nerve	- Appears from the orbit medial to supraorbital nerve.
4. Infratrochlear nerve	- Pierces the medial part of upper lid.
5. External nasal nerve	- Descends on the dorsum of the nose.
(b) Branches of maxillary nerve	
1. Zygomaticotemporal nerve	- Appears in the region of temporal fossa.
2. Zygomaticofacial nerve	- Appears in the region of prominence of the cheek.
3. Infraorbital nerve	- Appears from infraorbital foramen and splits into palpebral, nasal and labial branches
(c) Branches of mandibular nerve	
1. Auriculotemporal nerve	- Ascends in front of auricle along with superficial temporal artery.
2. Buccal nerve	- Pierces buccinator to supply cheek.
3. Mental nerve	- Appears from mental foramen of mandible.
(d) Branches of cervical plexus	
1. Great auricular (C <sub>2,3</sub> )	- Appears near the angle of mandible.

# **Posterior Triangle**

Morphology – Cleft in the same muscle mass (This explains innervation of two muscles by same nerve).

## **Boundaries**

- Anterior Posterior border of sternomastoid
- Posterior Anterior border of trapezius
- Base Middle 3rd of clavicle
- Apex Meeting point of two muscles i.e., sternomastoid and trapezius.
- Roof Investing layer of cervical fascia
- Floor Muscles under the prevertebral fascia form floor,

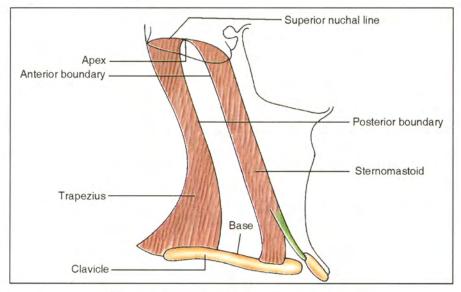


Fig. 7.1 Boundaries of the posterior triangle

There are 4 vertical columns of this plexus. 2 anterior columns lie by the side of posterior longitudinal ligament. Posterior columns lie over the laminae. Connections of plexus

- 1. With each other
- 2. With basivertebral veins
- 3. With external vertebral venous plexus
- 4. With occipital sinus and basilar venous plexus

Venous plexus drains through intervertebral veins into,

- 1. Vertebral veins
- 2. Posterior intercostal veins.
- 3. Lumbar veins.
- 4. Lateral sacral veins.

### B. Dura mater:

- 1. It continues with the meningeal layer of duramater inside the cranium.
- 2. It is free from vertebrae.
- 3. Its lower extent is second sacral verterbra.
- 4. It provides dural sleeves for nerve roots.

## C. Subdural space:

- 1. It is a potential space with thin film of lymph like fluid.
- 2. It allows slight movement of dura mater.

### D. Arachnoid mater

- 1. It is applied to dura mater.
- 2. It is thin and transparent.
- 3. It provides fibrous strands to pia mater.
- 4. There is an incomplete posterior median septum derived from it.

# E. Subarachnoid space

- It contains–
  - 1. CSF (Cerebro Spinal Fluid)
  - 2. Vessels of spinal cord
  - 3. Roots of spinal nerves.
  - 4. Spinal roots of accessory nerve
- There are following incomplete partitions in this space,
  - 1. Fibrous strands
  - 2. Posterior median septum of arachnoid
  - 3. Ligamenta denticulata It is a pair of longitudinal septum, one on each side of spinal cord, arising from pia mater.
- Below the lower end of spinal cord this space is called lumbar cistern.