

Skin of the face

- *Very vascular, rich in sweat & sebaceous glands .*
- *Receives the insertion of facial muscles .*

Superficial fascia

Contains :-

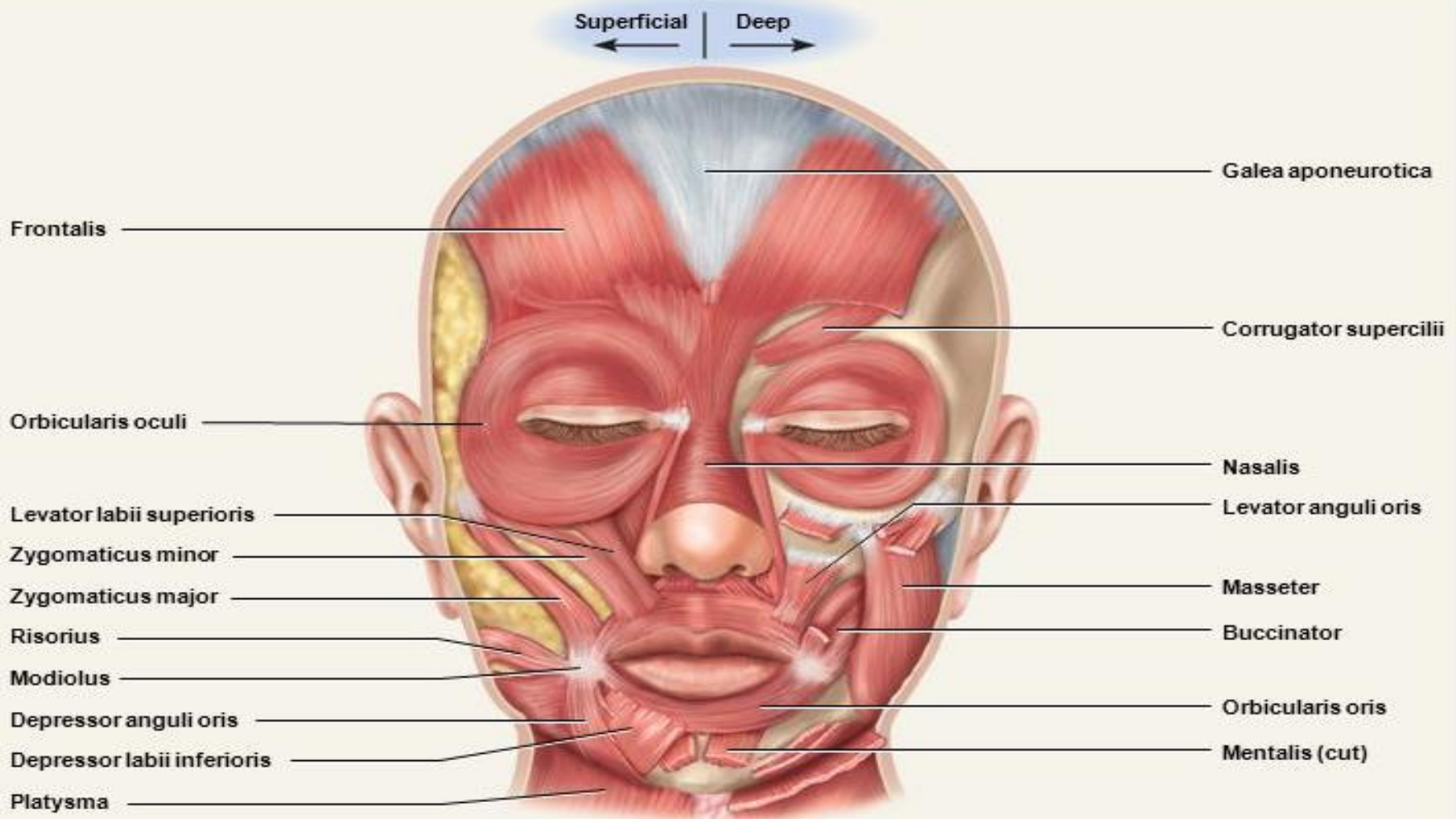
Facial muscles , vessels & nerves & fat .

Deep fascia

ABSENT except

Muscles in Facial Expression

Copyright © The McGraw-Hill Companies, Inc. Permission required for reproduction or display.



(a) Anterior view

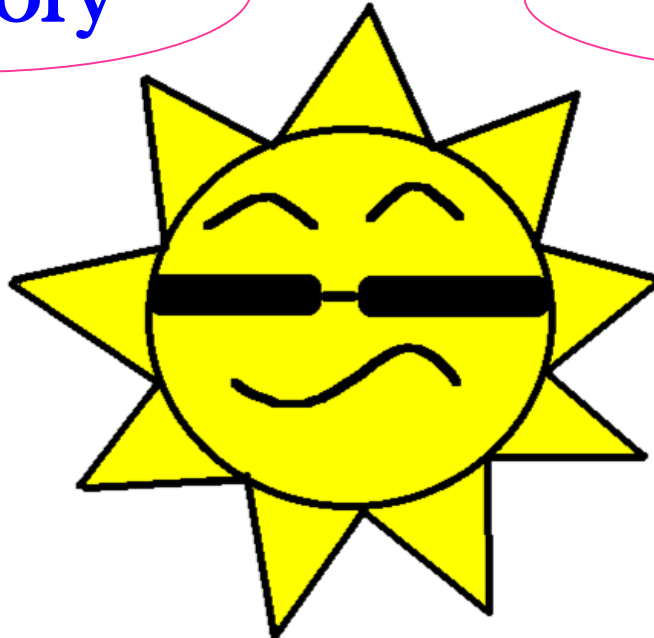


Nerve Supply of the Face

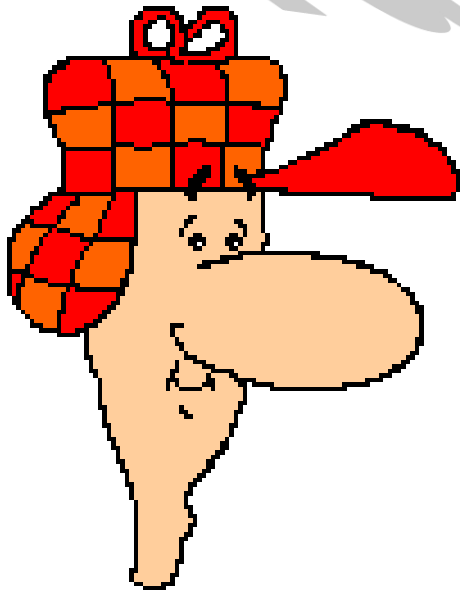
Nerve supply of the face

Sensory

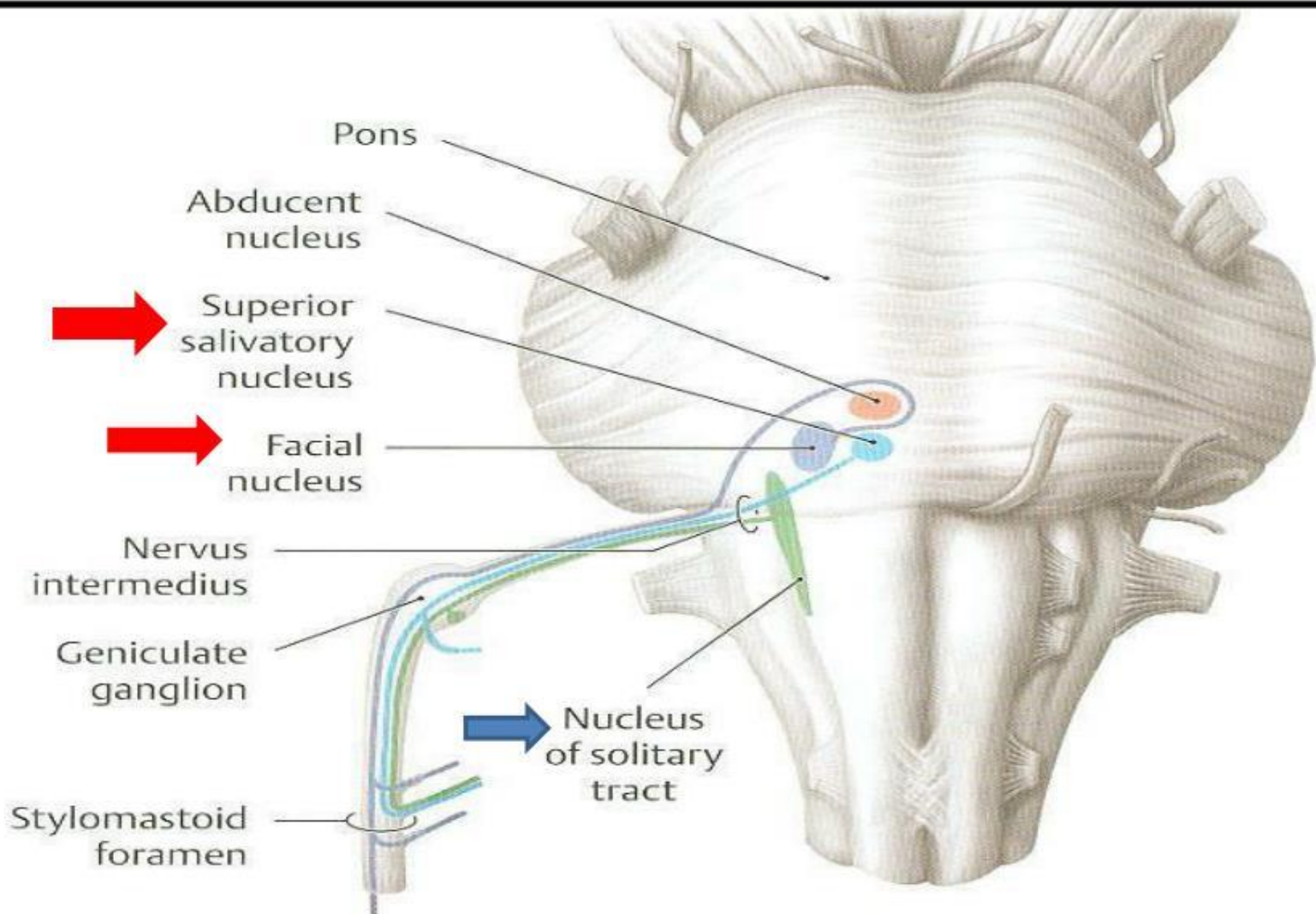
Motor

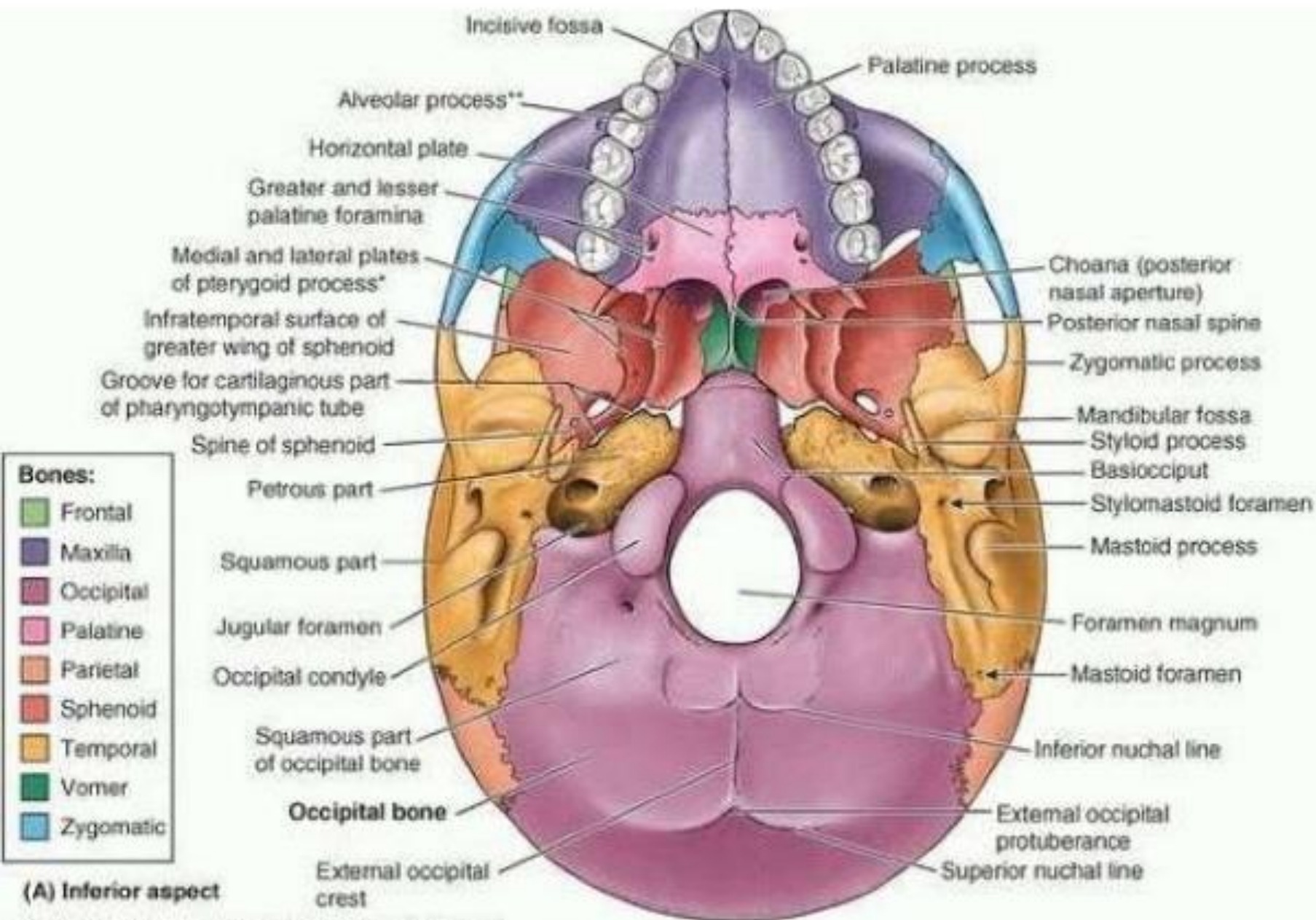


Facial Nerve



FACIAL NERVE NUCLEI



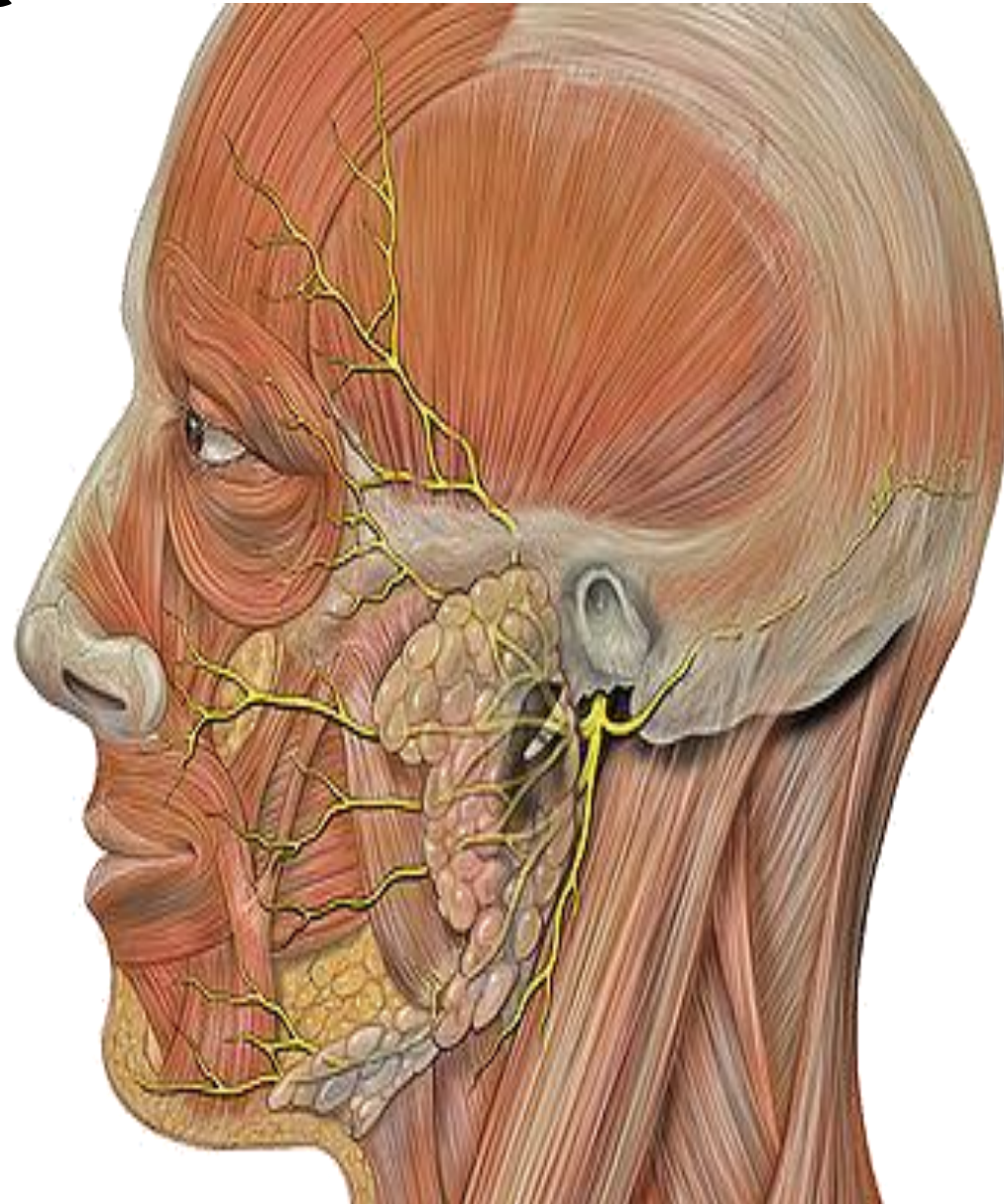
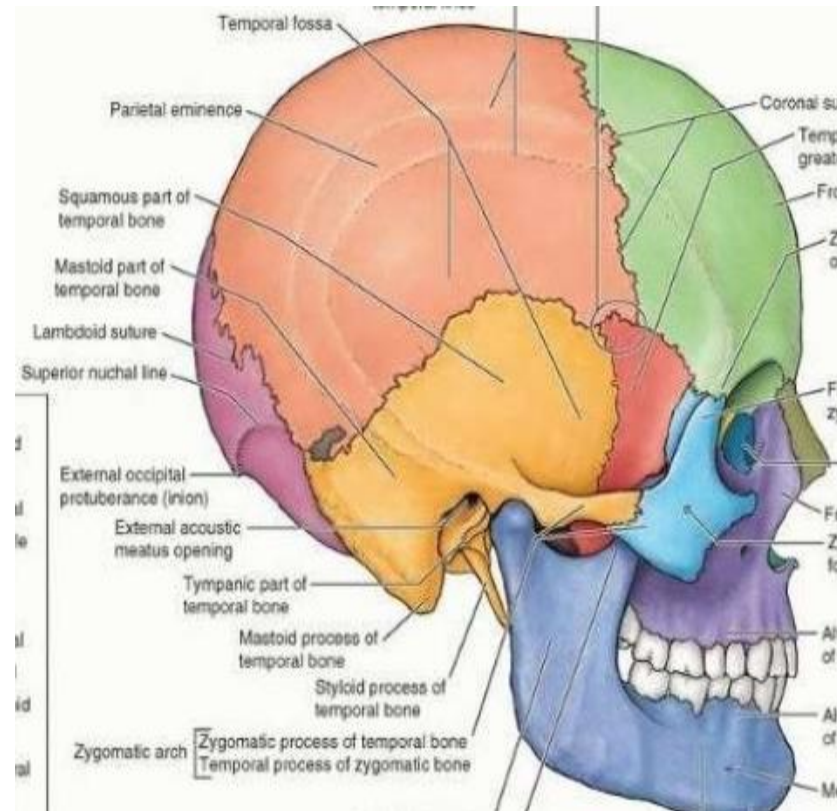


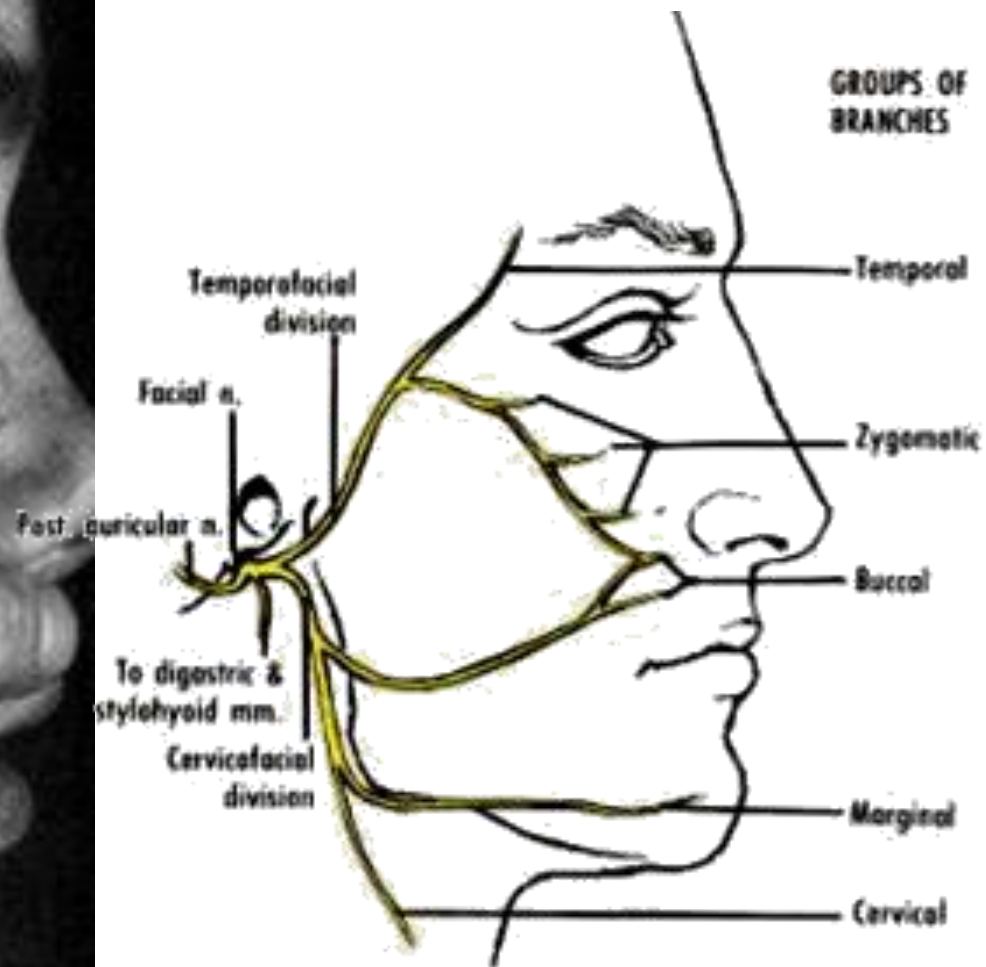
*Collectively form pterygoid process of sphenoid

**The U-shaped (inverted here) ridge formed by the free border of the alveolar processes of the right and left maxillae makes up the alveolar arch

Facial Nerve

MOTOR SUPPLY

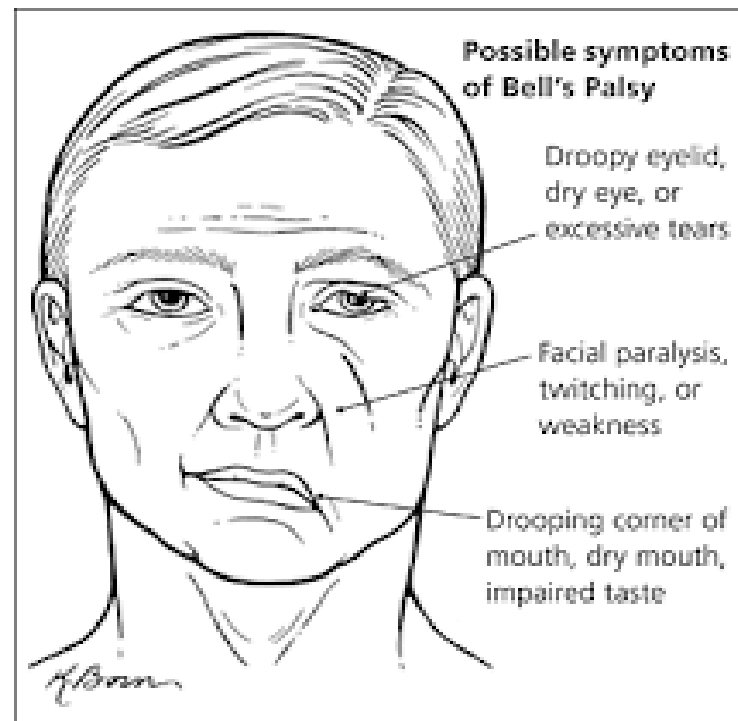




Bell's Palsy

- Palsy- paralysis of a part of the body
- Bell's palsy- paralysis or weakness of muscles on one side of the face
- Irritation of the **Facial Nerve (CN VII)** which supplies the muscles of facial expression and taste sensation in the anterior 2/3 of the tongue

Facial Nerve (Seventh Cranial nerve)



Sensory supply

FROM

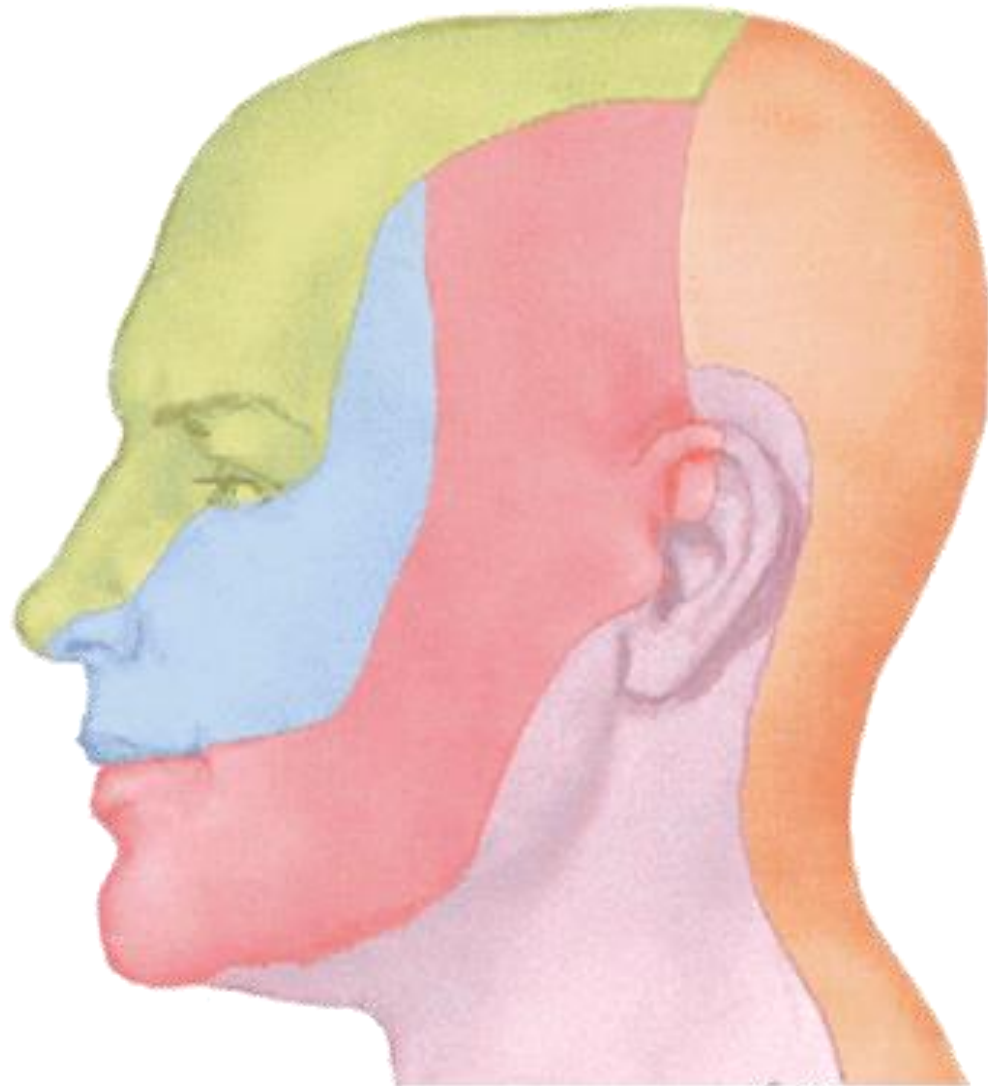
TRIGEMINAL NERVE



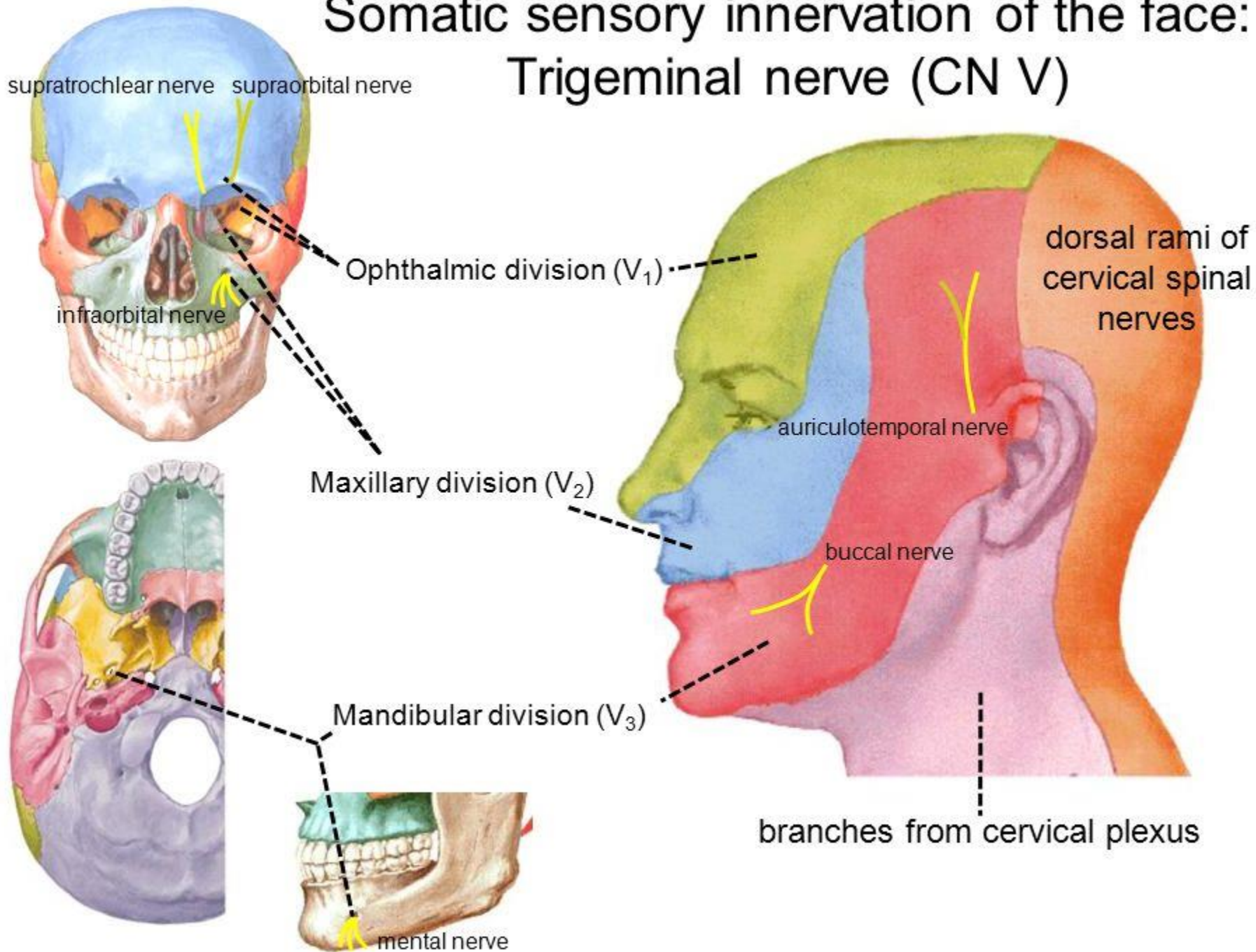
Cutaneous innervation of the face is by
Trigeminal nerve

Areas supplied :

- **Ophthalmic zone** includes tip and side of the nose, upper eye lid and forehead
- **Maxillary zone** upper lip, part of the side of nose, lower eye lid, cheeks and small part of temple
- **Mandibular zone** include lower chin, skin overlying mandible, part of pinna, external acoustic meatus and temple

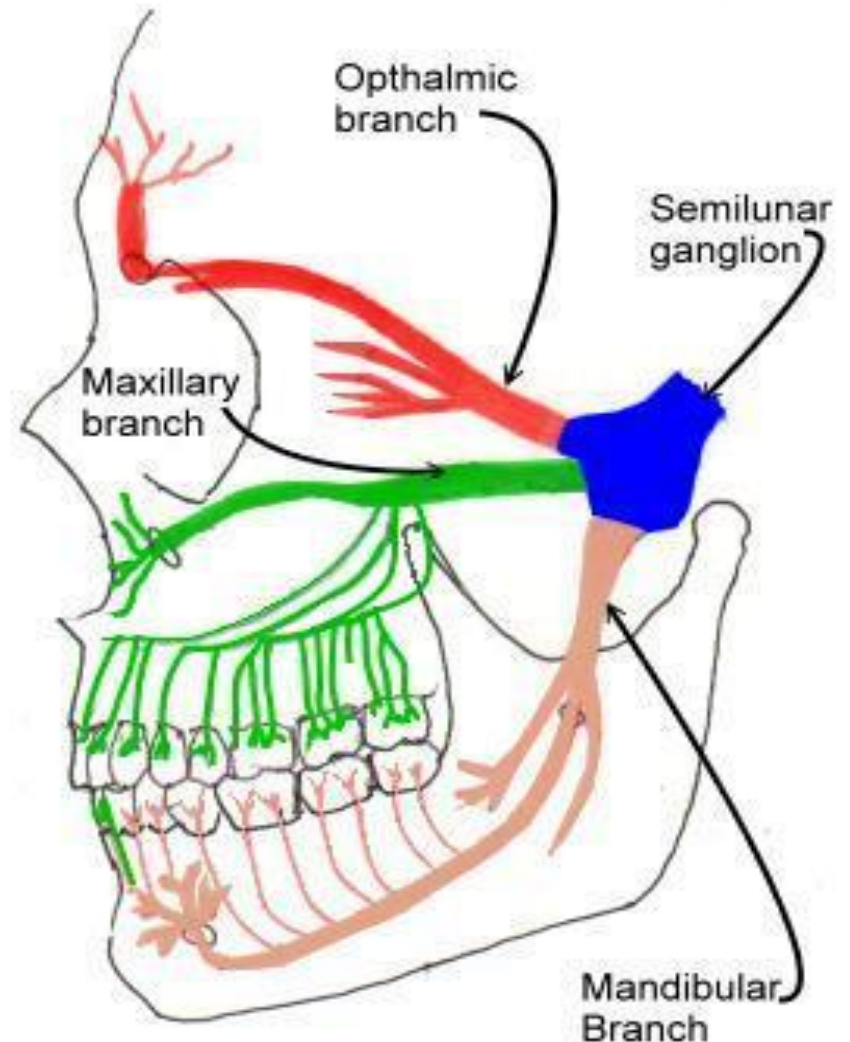
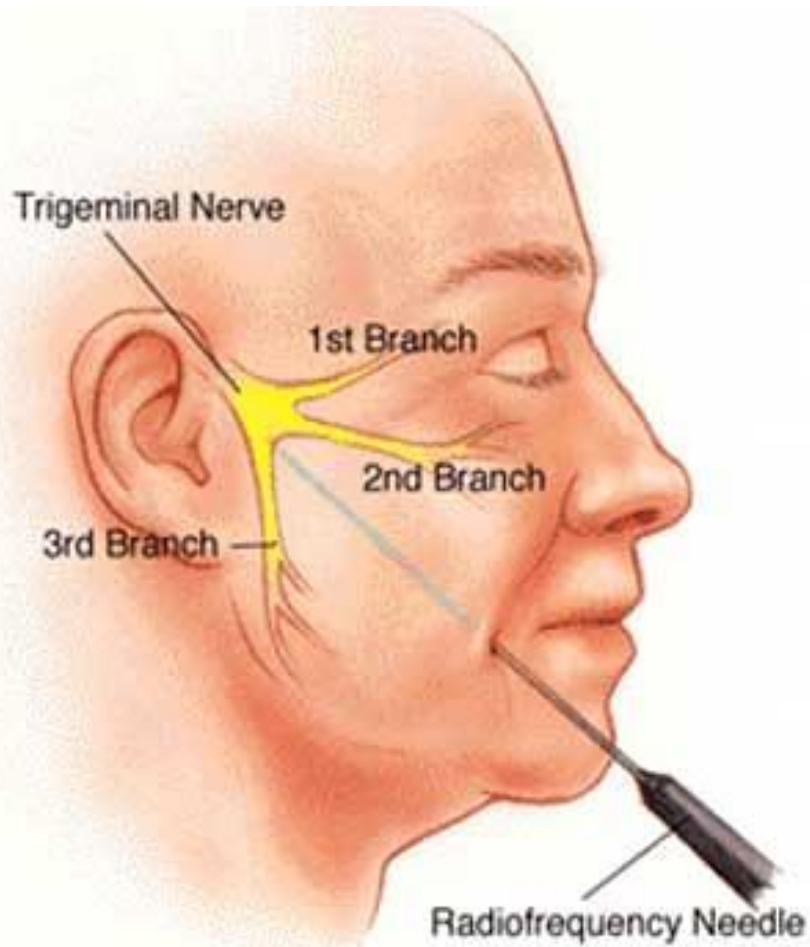


Somatic sensory innervation of the face: Trigeminal nerve (CN V)



TRIGEMINAL NEURALGIA

Medullary Tractotomy

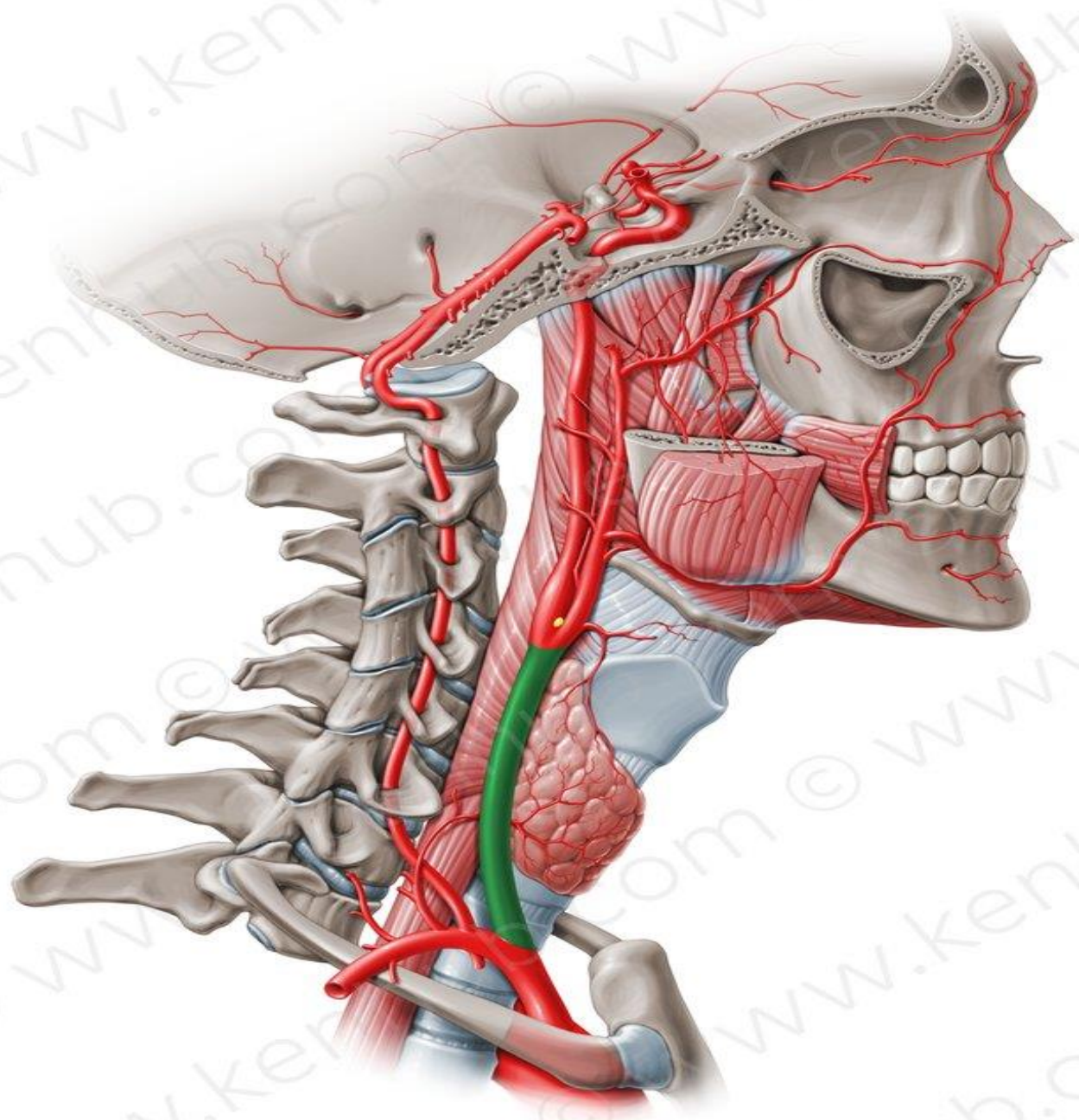




**Blood Supply of
the Face**

Arteries





Supraorbital A.

Superficial
temporal A.

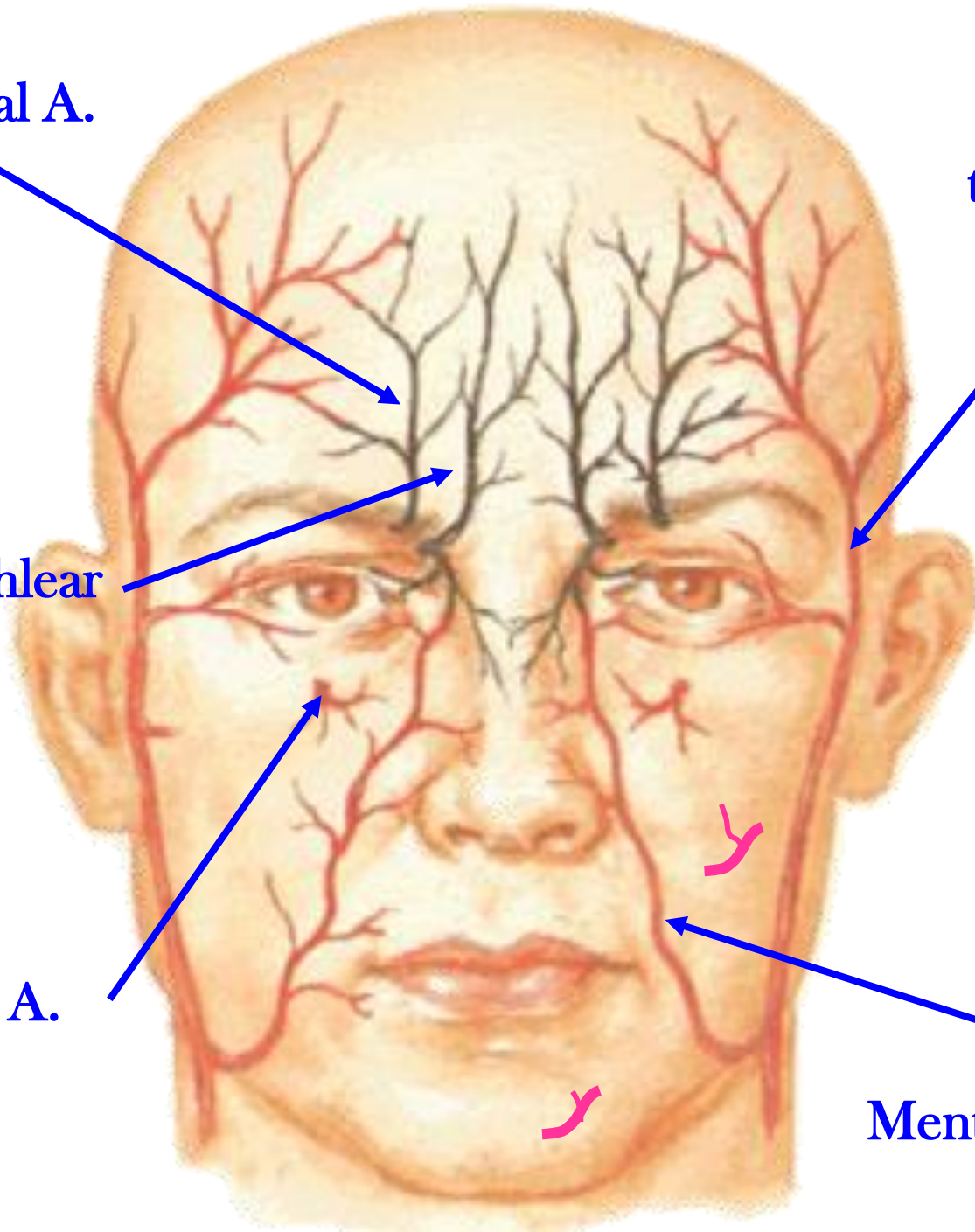
Supratrochlear
A.

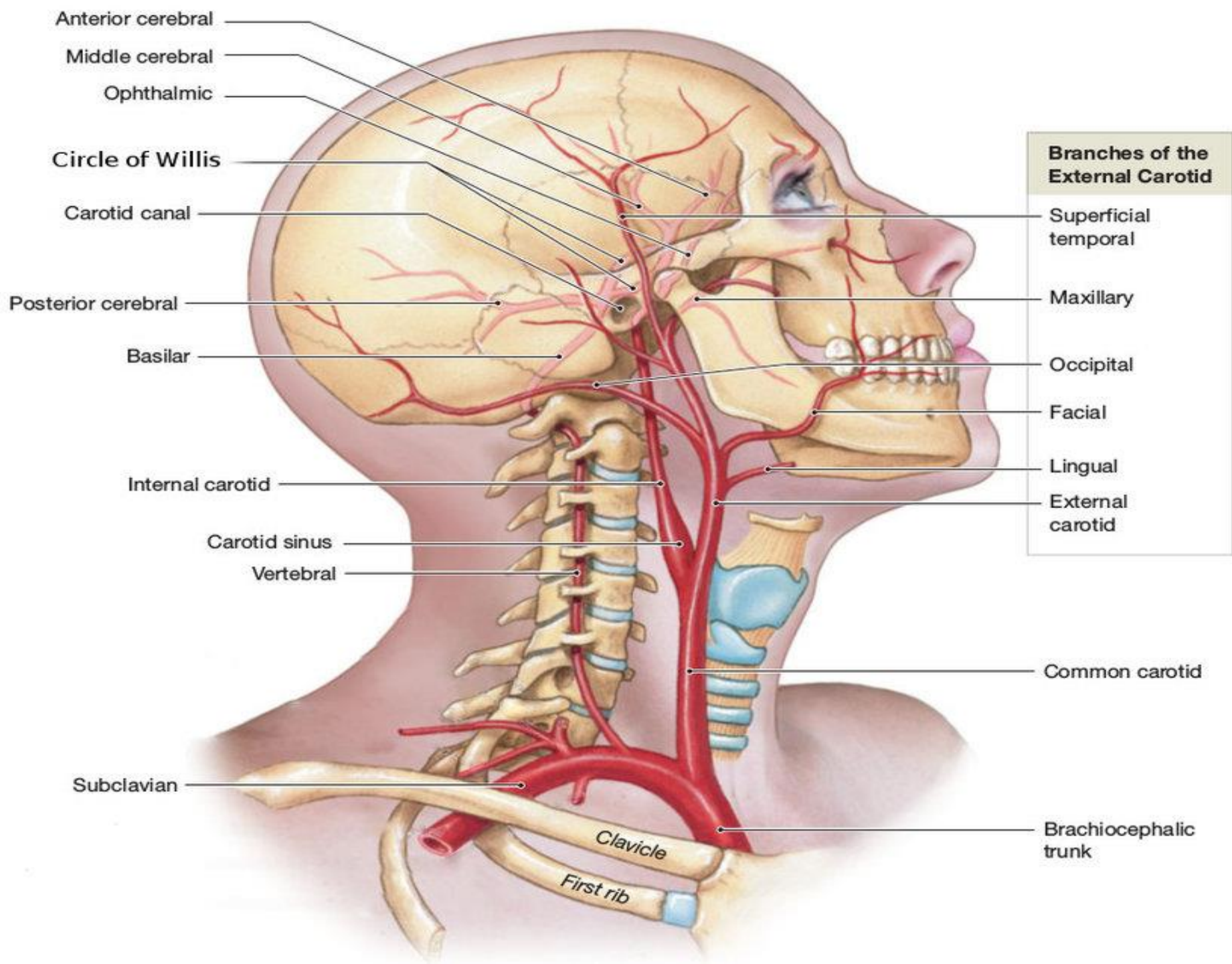
Infraorbital A.

Buccal A.

Facial A.

Mental A.





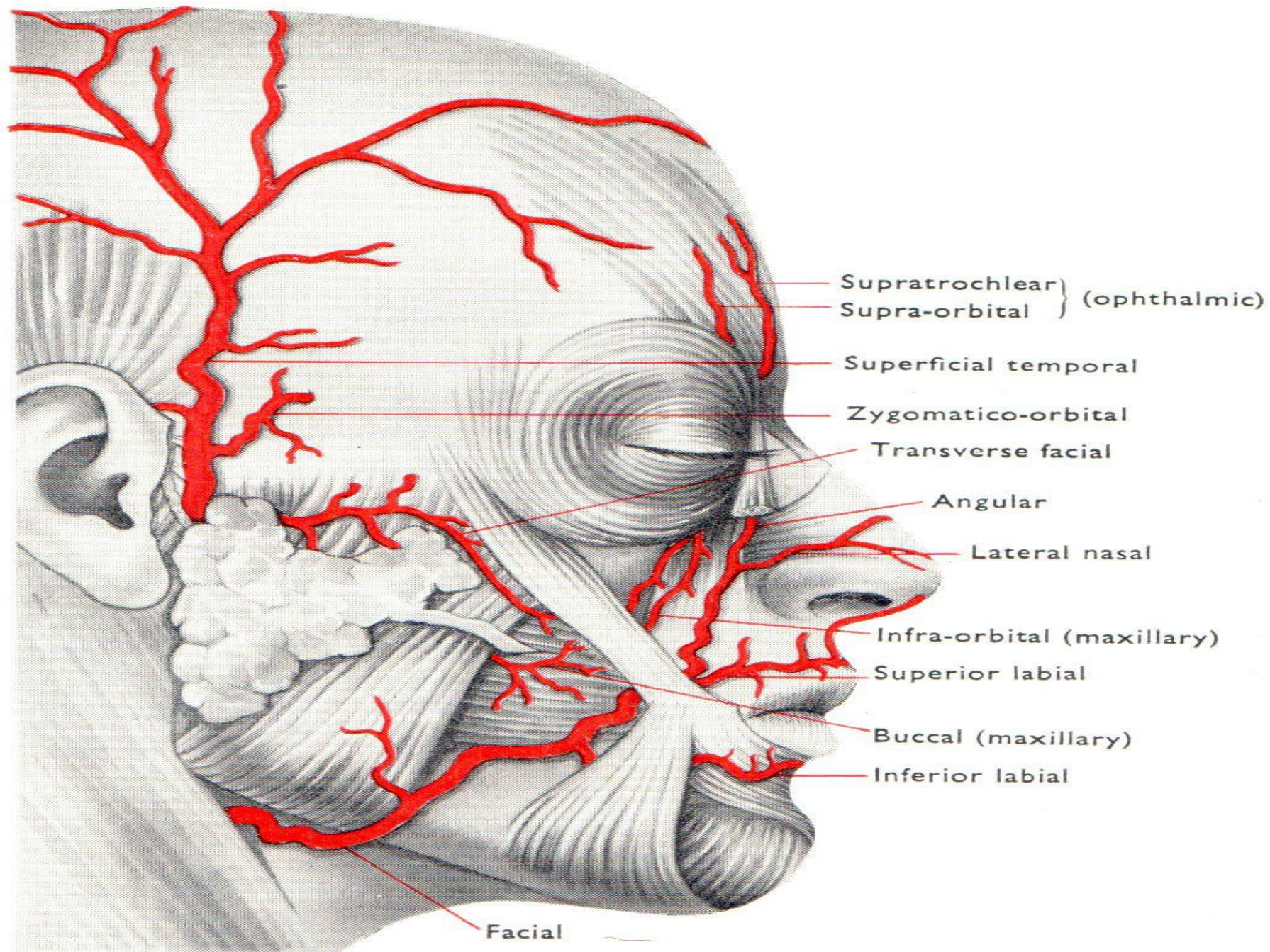


FIG. 26 The arteries of the face.

Supraorbital artery

Supratrochlear artery

Dorsal nasal artery

Angular artery

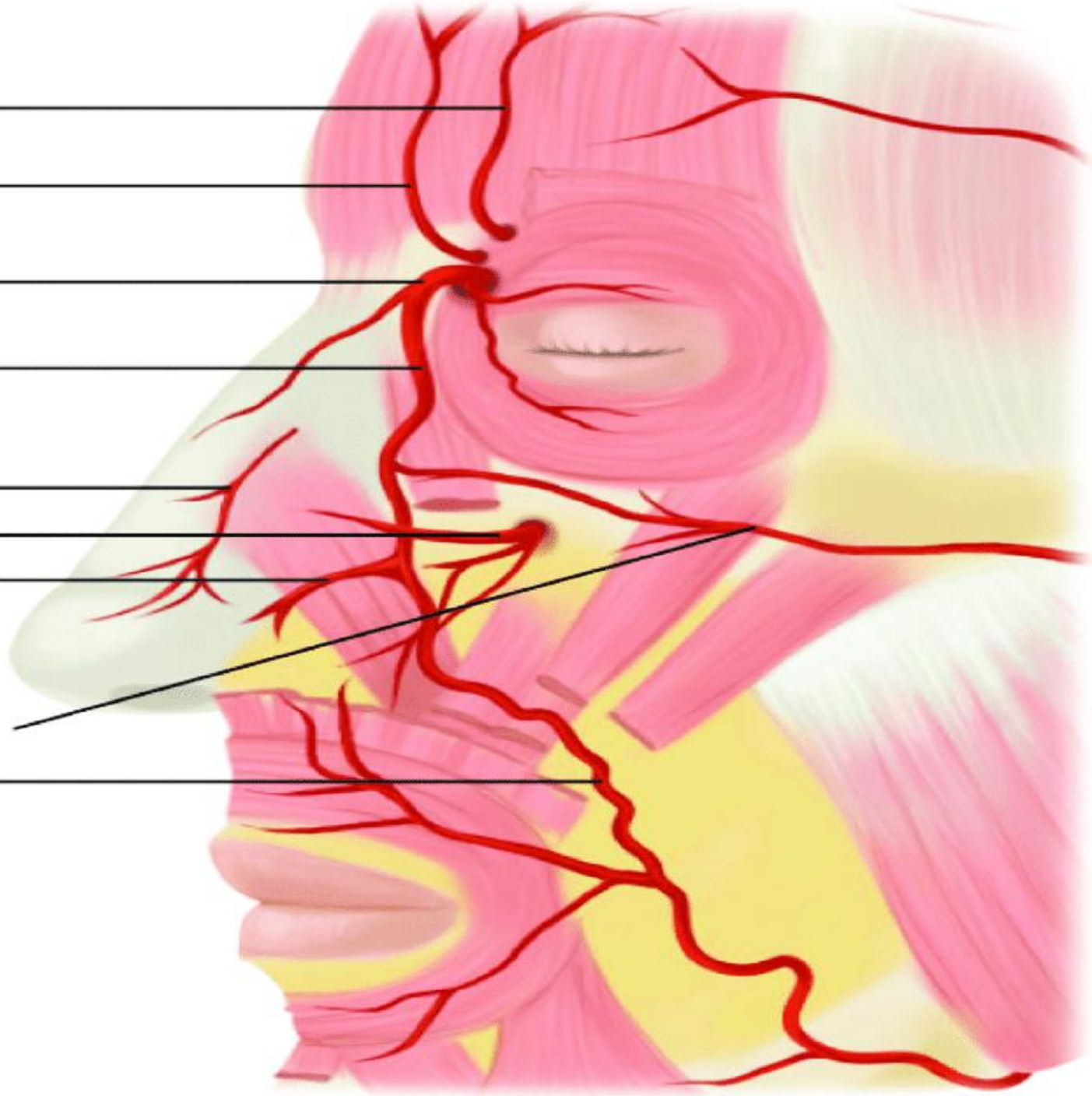
External nasal artery

Infraorbital artery

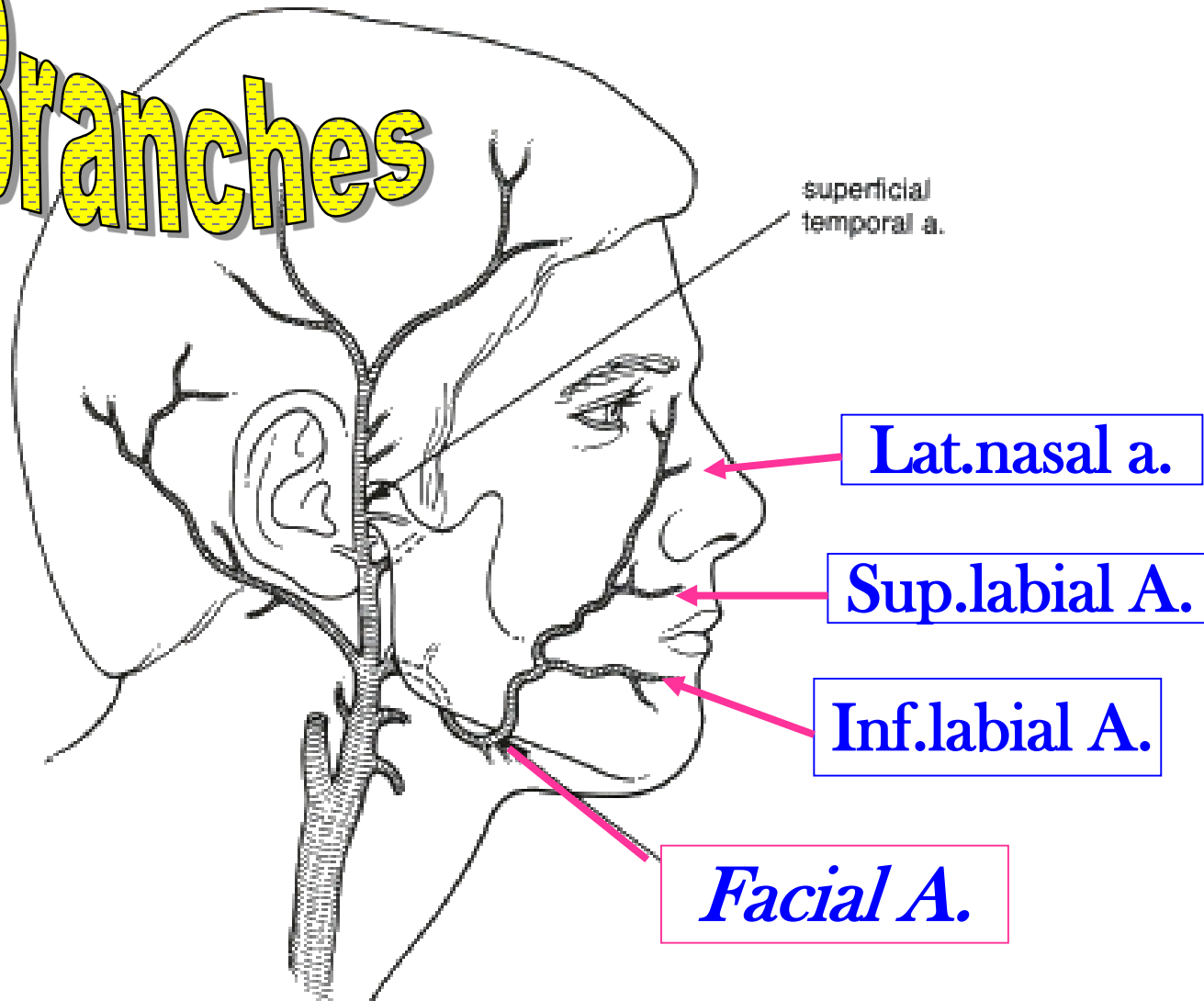
Lateral nasal artery

Transverse facial artery

Facial artery



Branches



**Superficial
temporal A.**

Supra-orbital

Frontal

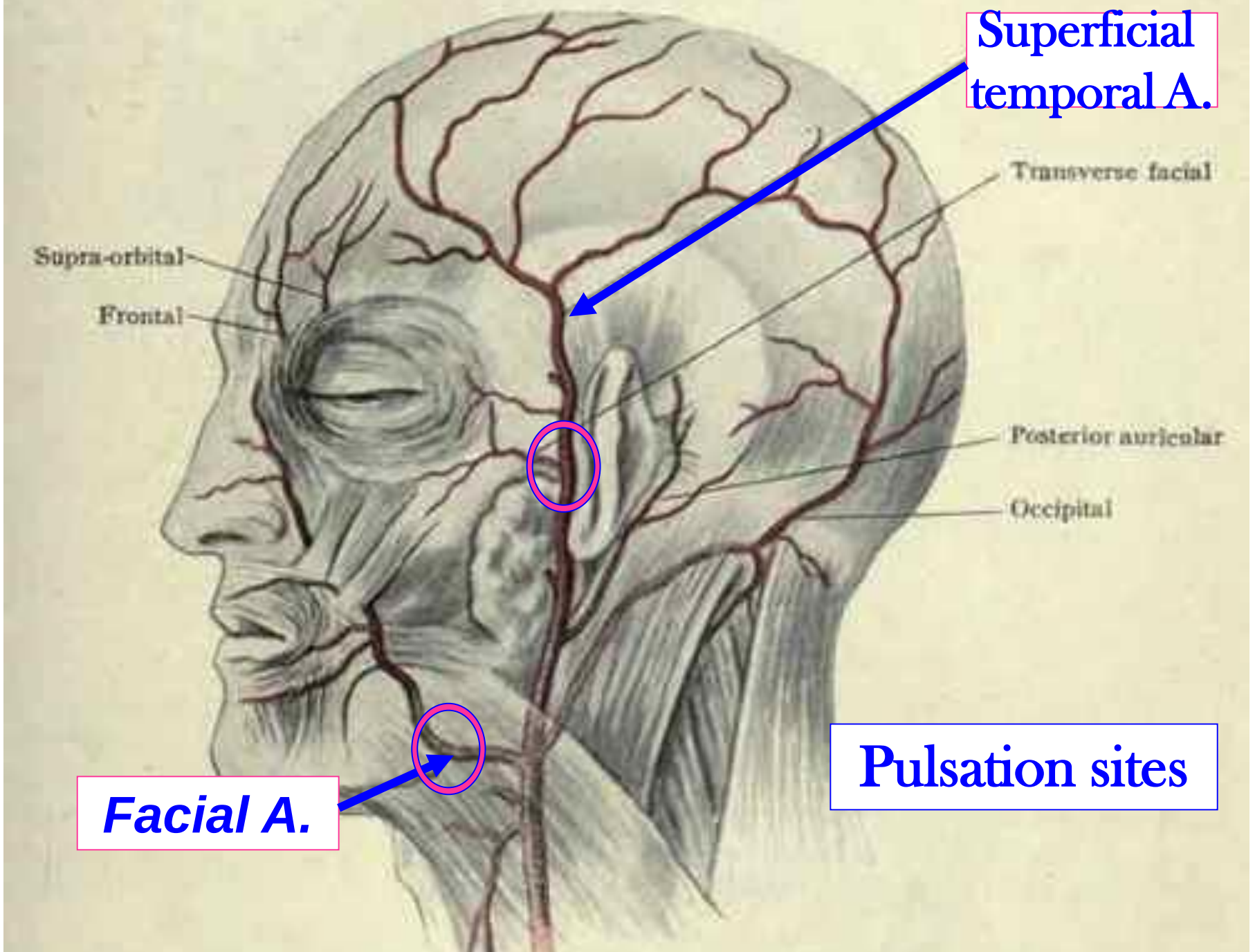
Transverse facial

Posterior auricular

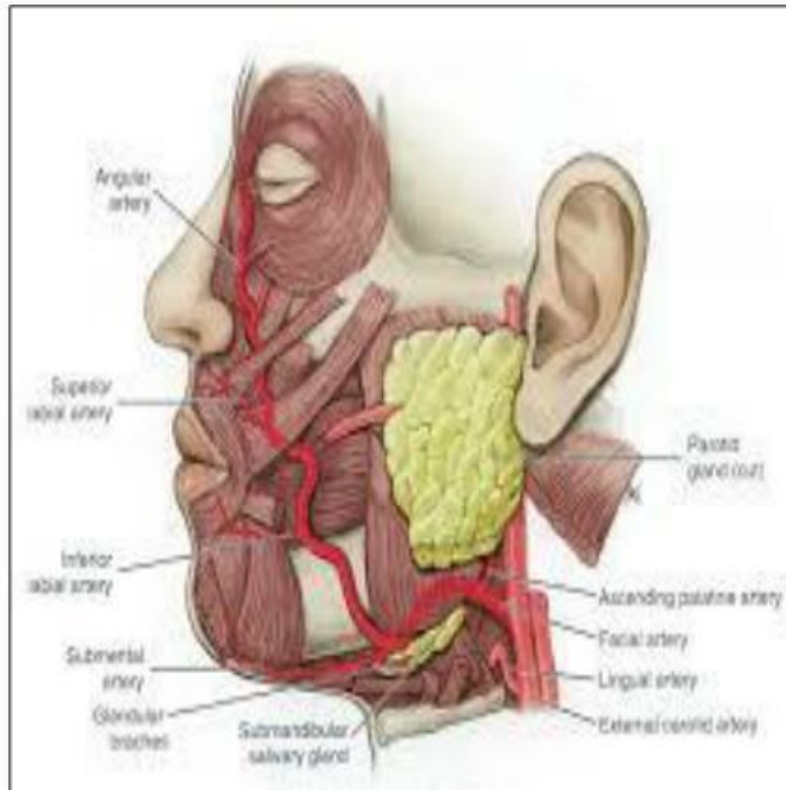
Occipital

Facial A.

Pulsation sites

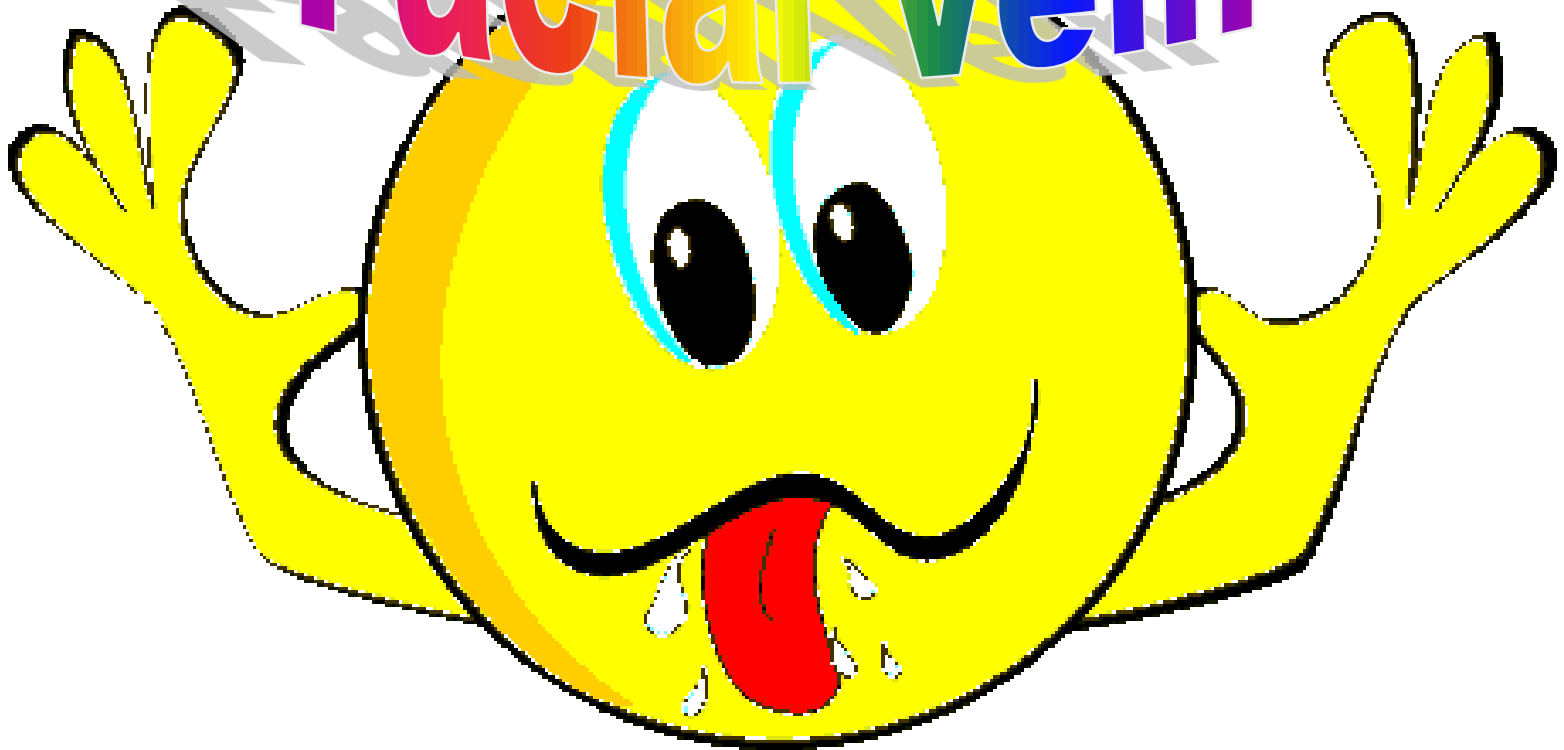


Compression of the Facial Artery



- The facial artery can be occluded by pressure against the mandible as the vessel crosses it. Because of the numerous anastomoses of the arteries of the face, compression of the facial artery on one side does not stop all bleeding from a lacerated facial artery or one of its branches.
- In lacerations of the lip, pressure must be applied on both sides of the cut to stop bleeding

Facial Vein



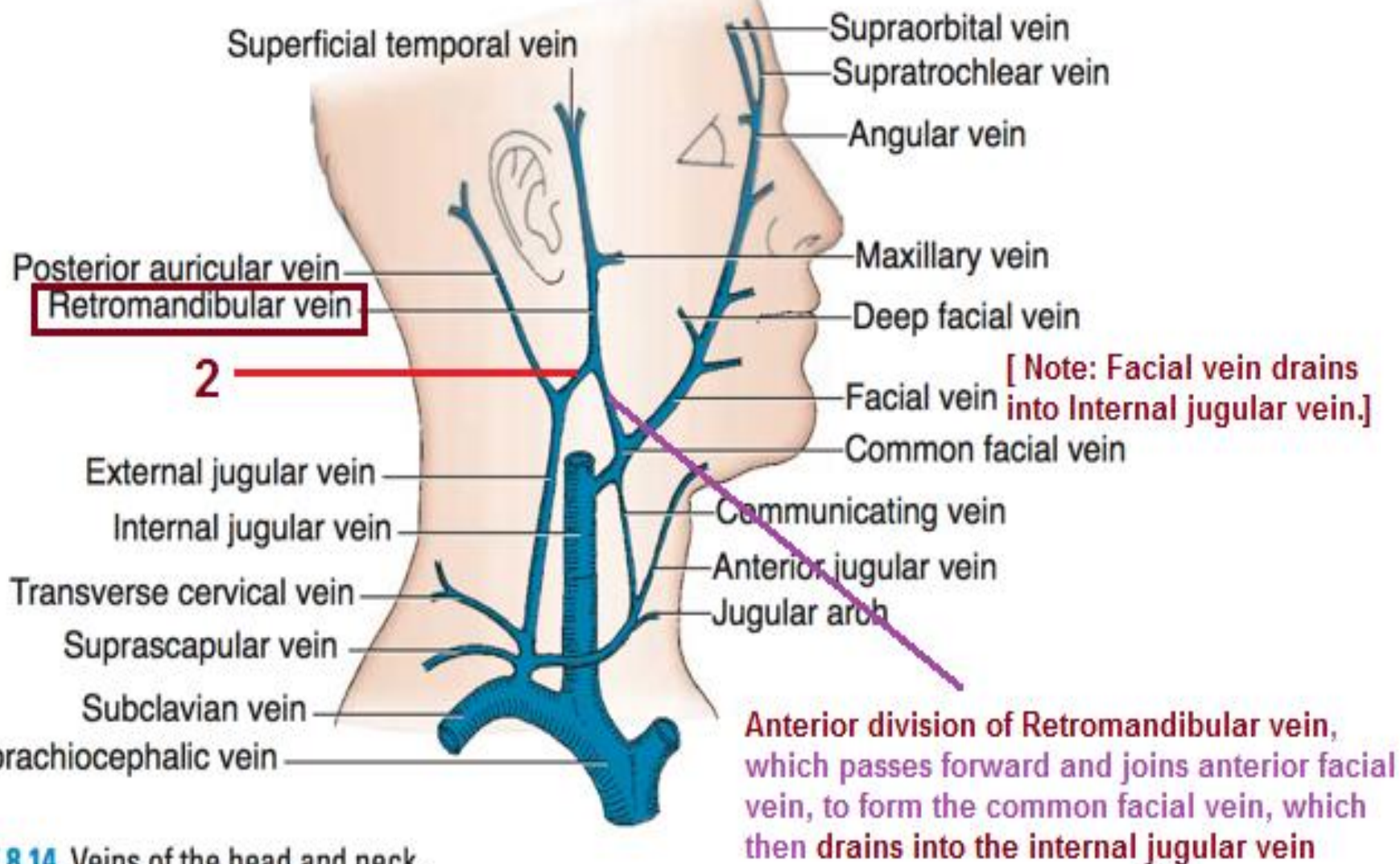


FIGURE 8.14. Veins of the head and neck.

- 2** Posterior division of Retromandibular vein, which is joined by the posterior auricular vein and becomes the external jugular vein, Which hen drains into Subclavian vein.

**Cavernous
venous sinus**

Emissary veins connecting
pterygoid venous plexus to
cavernous sinus

**Inferior
ophthalmic vein**

Superficial
temporal vein

Maxillary vein

Deep facial
vein

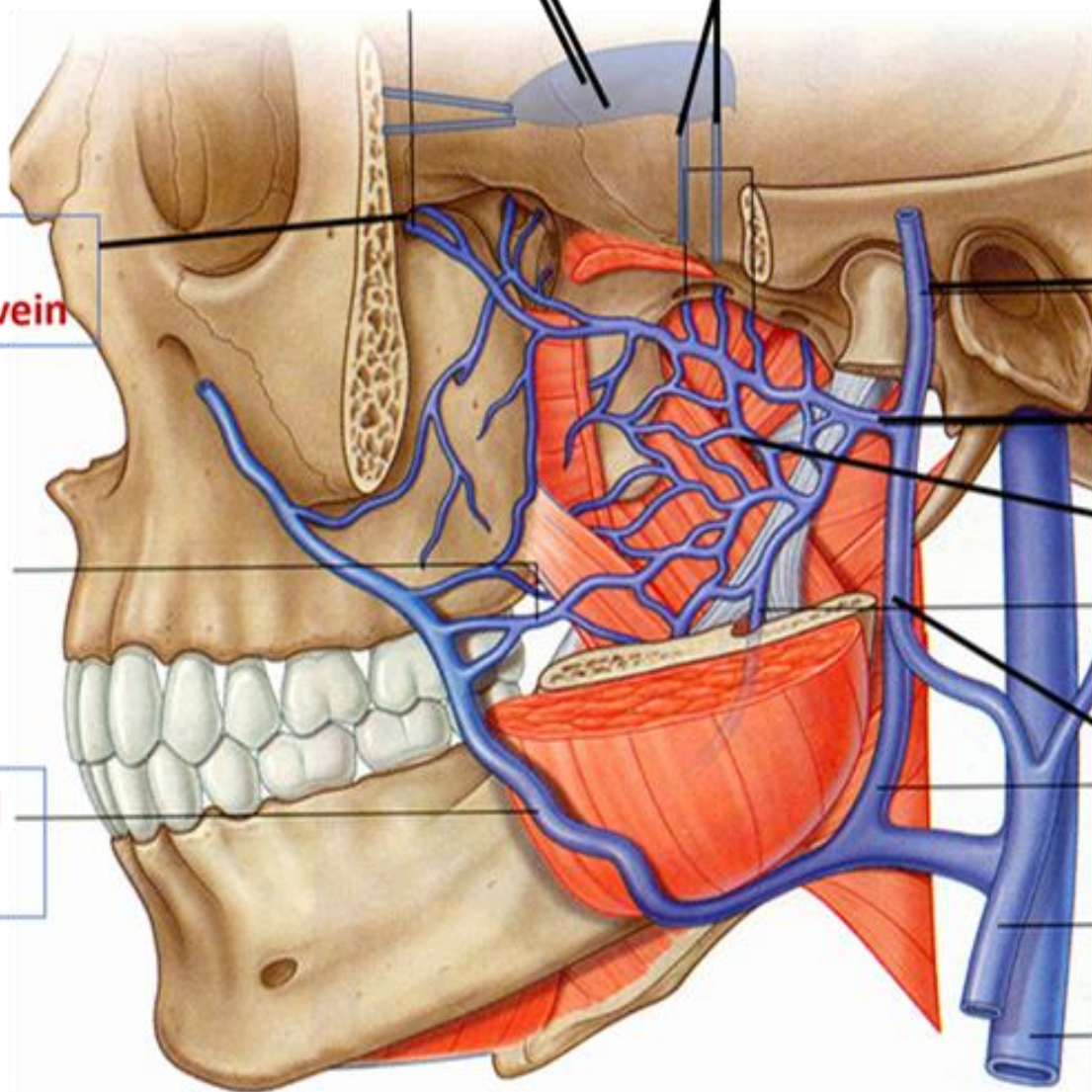
**Pterygoid
venous plexus**

**Facial
vein**

Retromandibular
vein

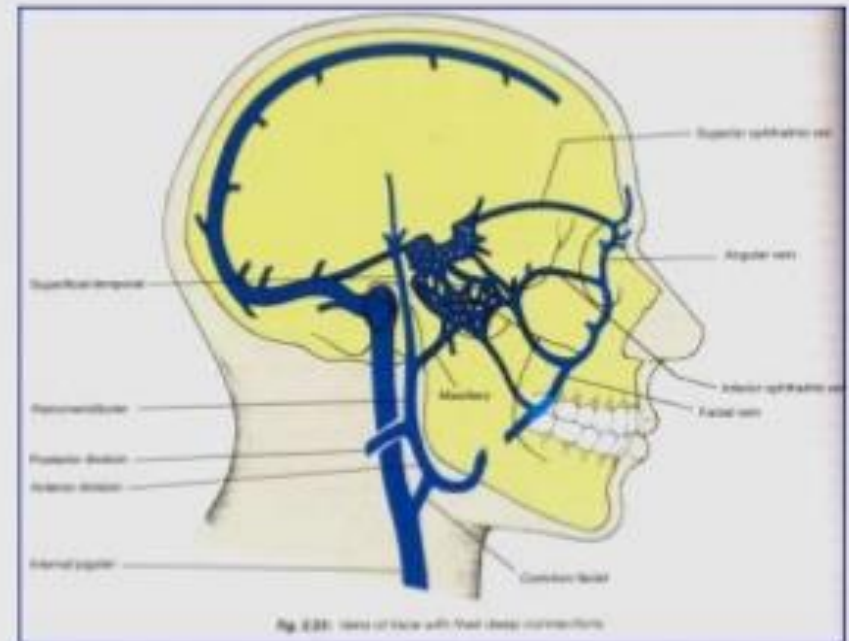
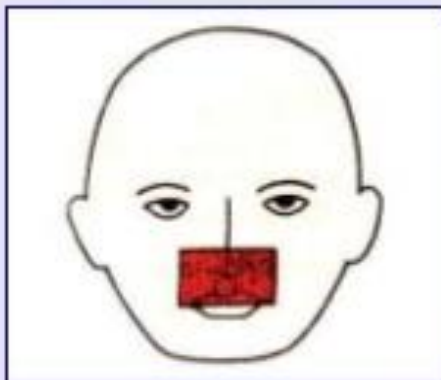
External jugular vein

Internal jugular vein



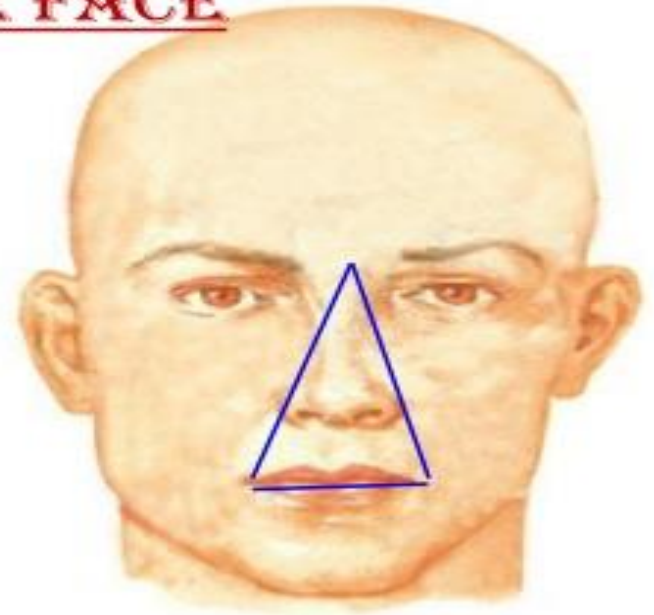
Applied anatomy

- Has no valves
- Connected to cavernous sinus
- **Danger area of face**



DANGEROUS AREA OF THE FACE

This includes the upper lip and the lower part of the nose. It is drained by the facial vein, which communicates with the cavernous sinus. Infections of this area can therefore, spread in retrograde direction and cause thrombosis of the cavernous sinus.



Ophthalmic n



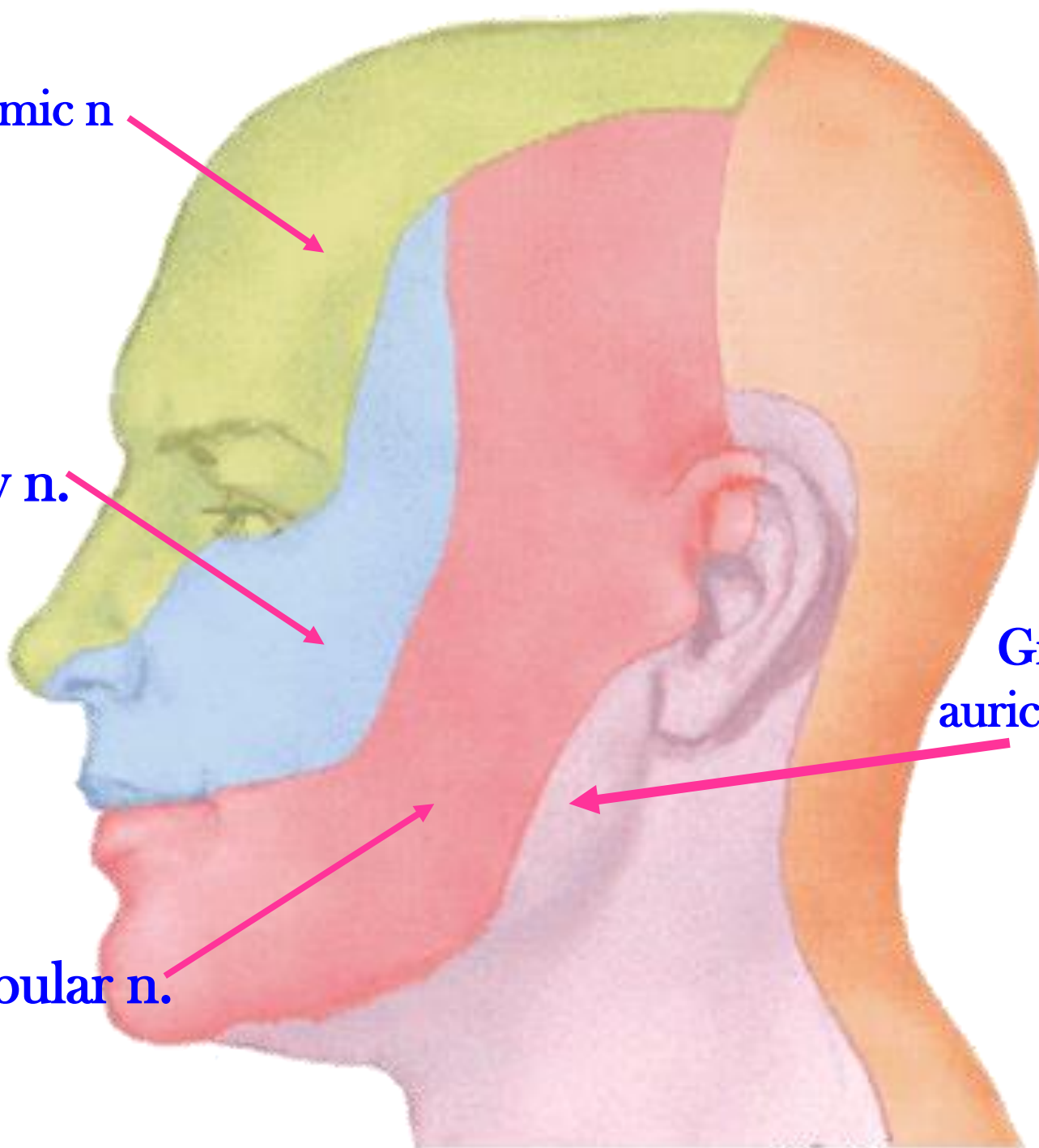
Maxillary n.



Mandibular n.



Great
auricular n.





The Facial Nerve



NILUBOL TATAYAWONGSAKUL MD

Ophthalmic nerve [V₁]

Maxillary nerve [V₂]

Zygomaticotemporal
nerve

Supra-orbital n.

Supra trochlear n.

Lacrimal n.

Infra trochlear n.

External nasal

Infra orbital n.

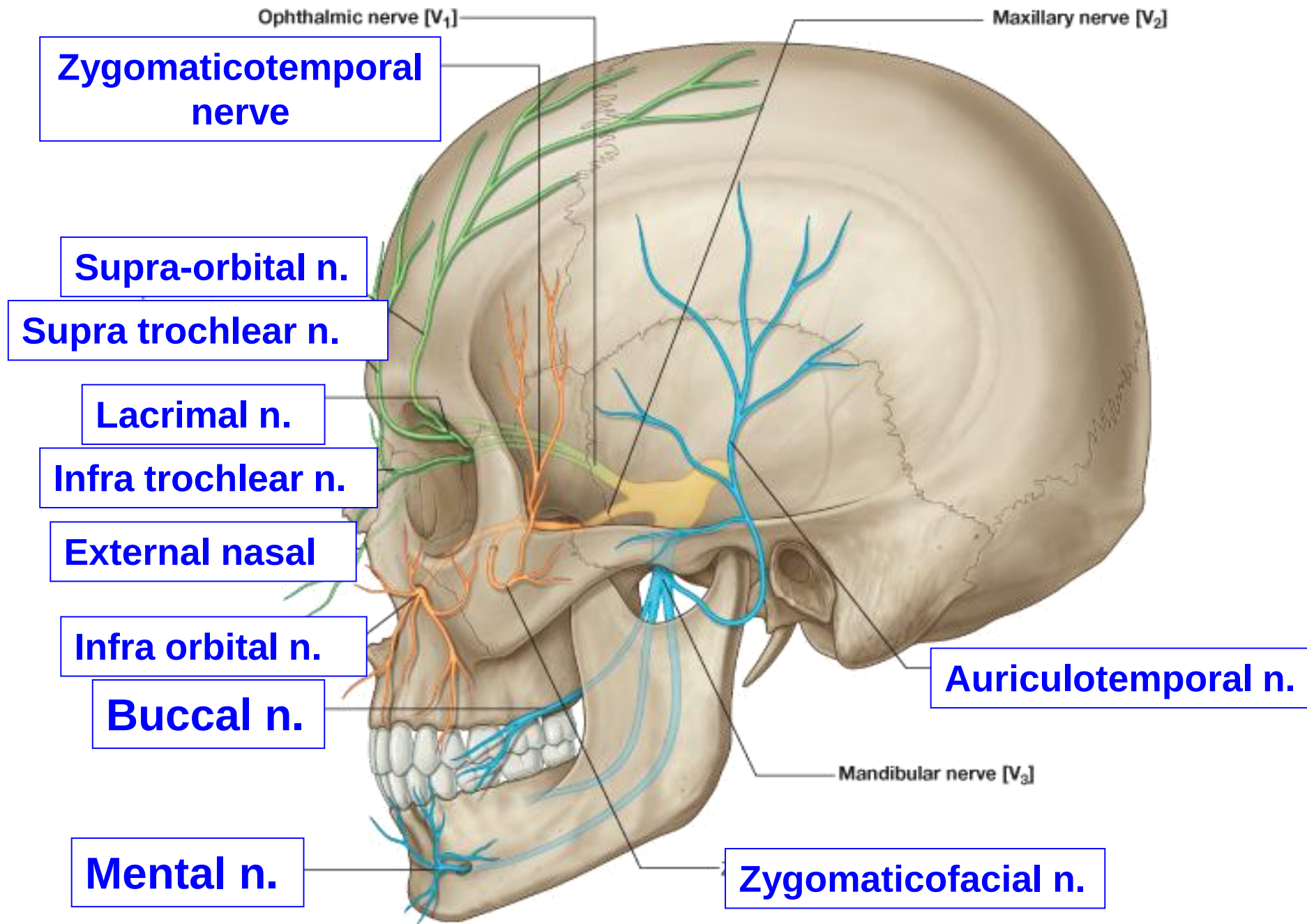
Buccal n.

Mental n.

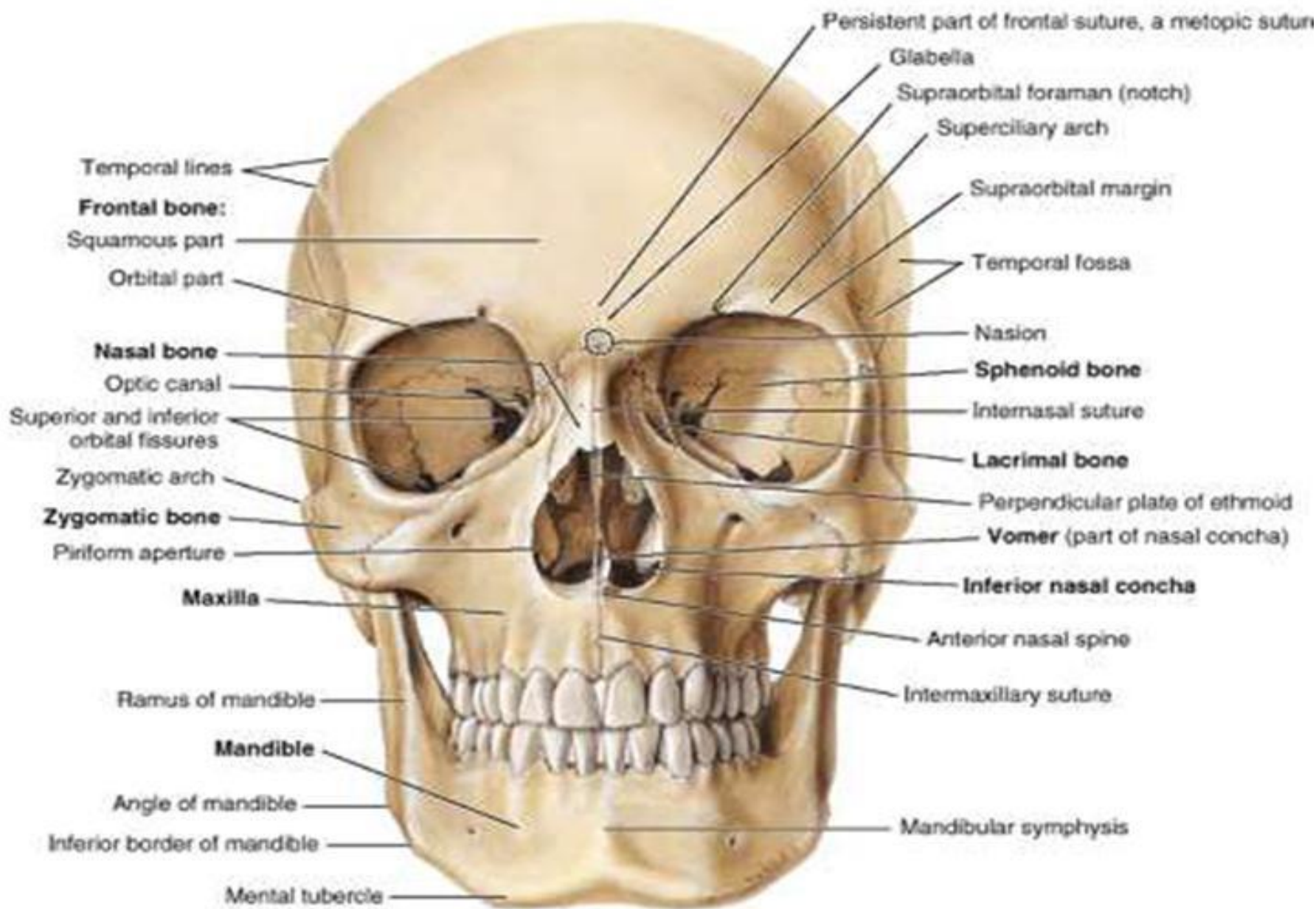
Auriculotemporal n.

Mandibular nerve [V₃]

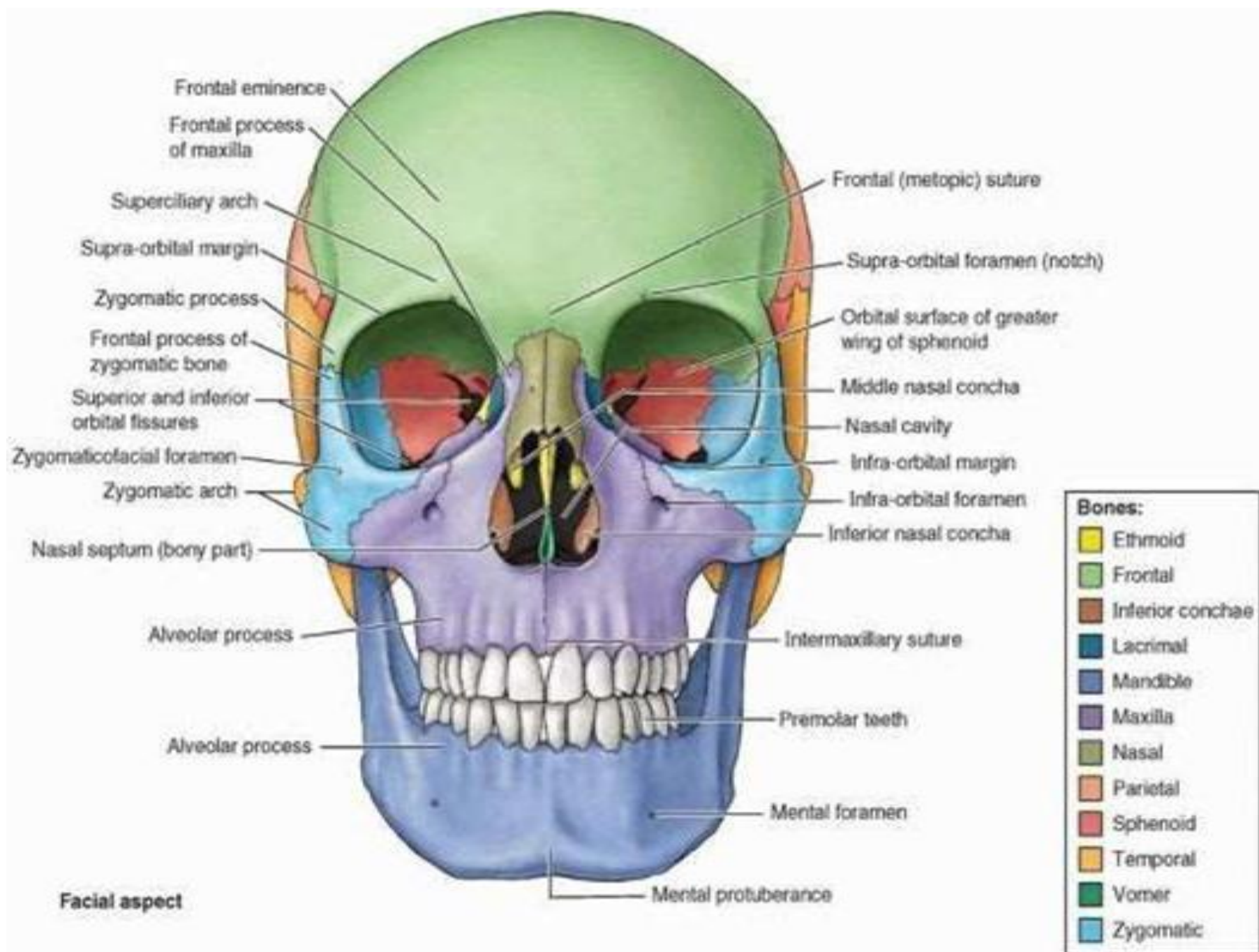
Zygomaticofacial n.

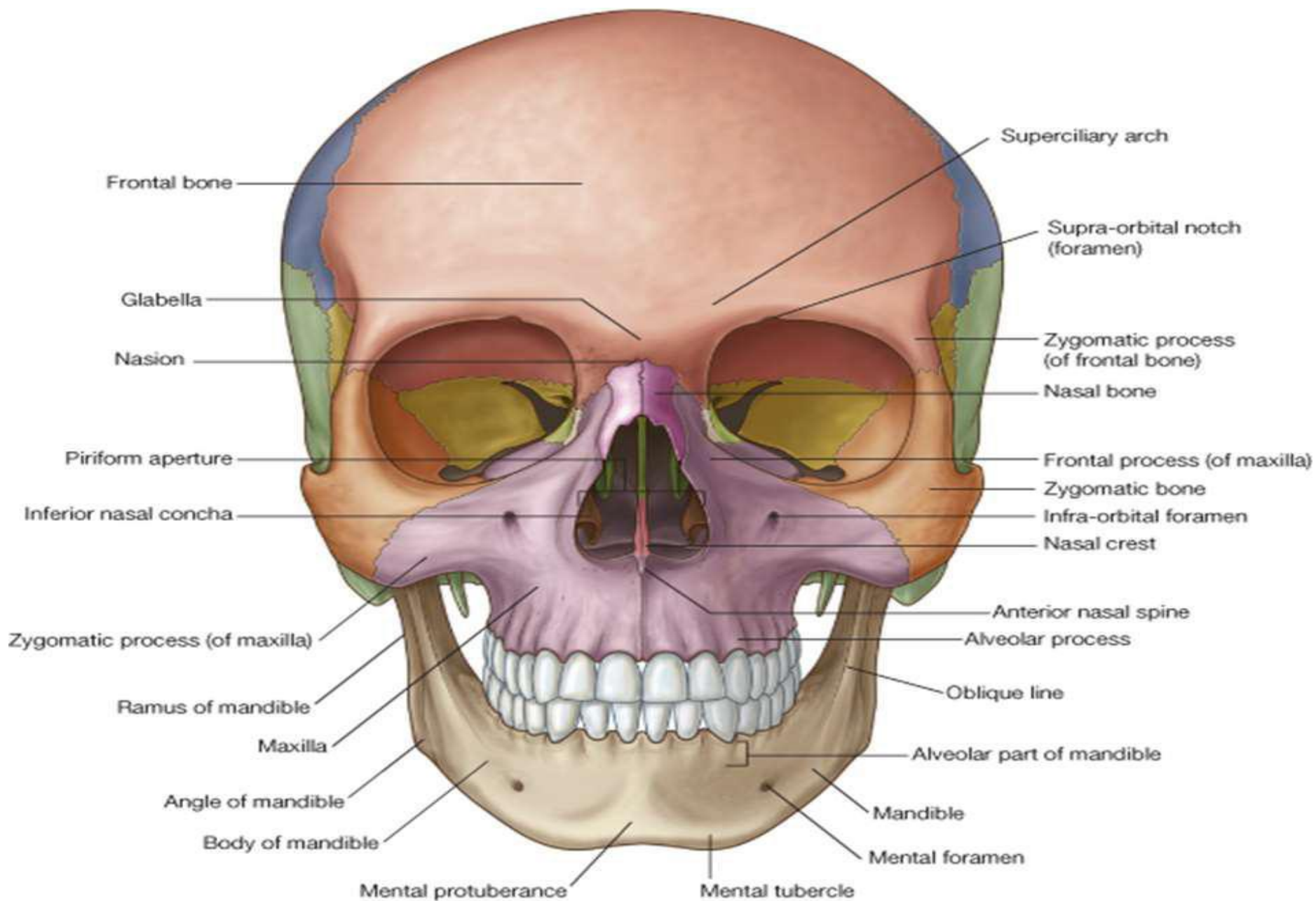


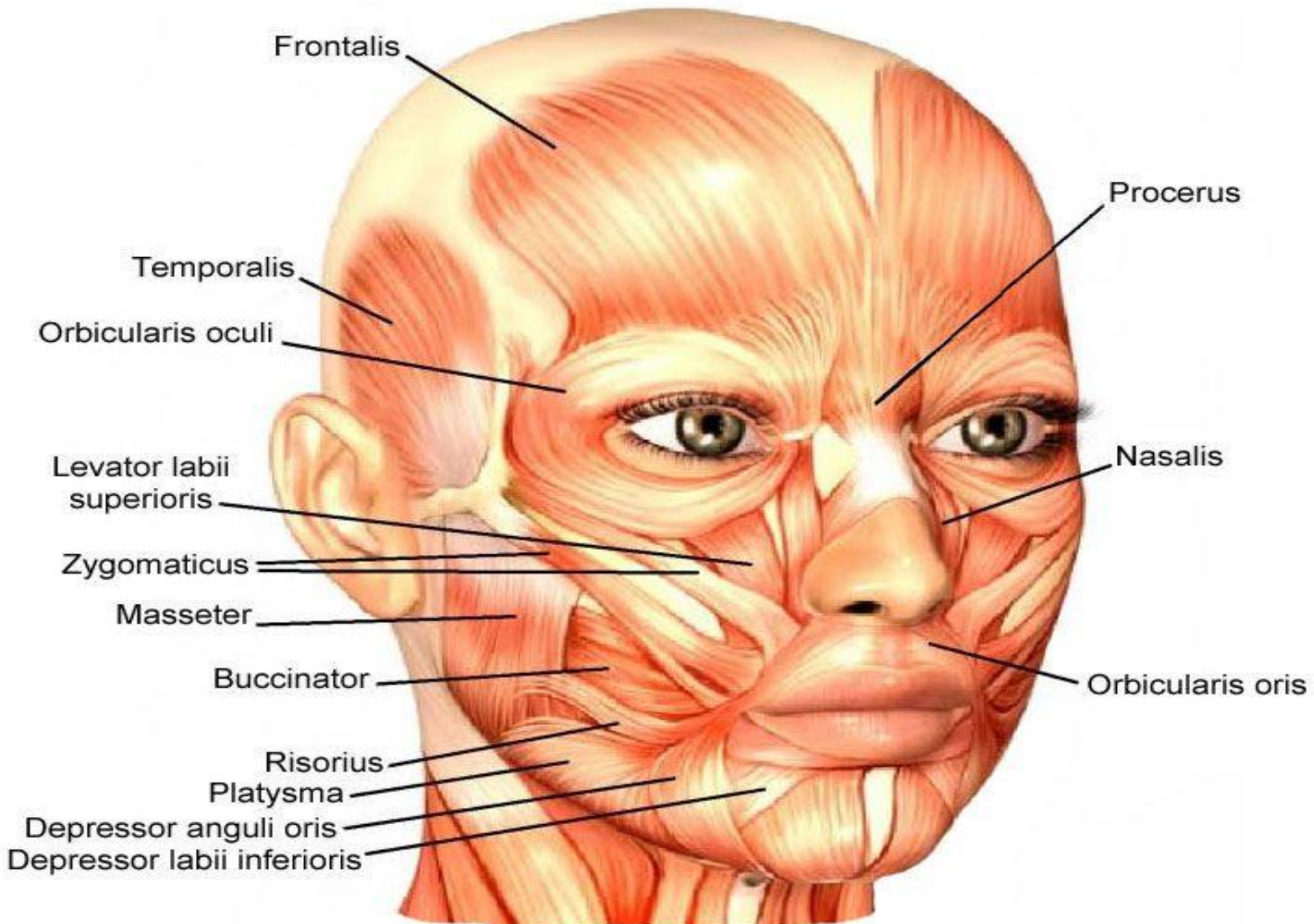
Norma Frontalis

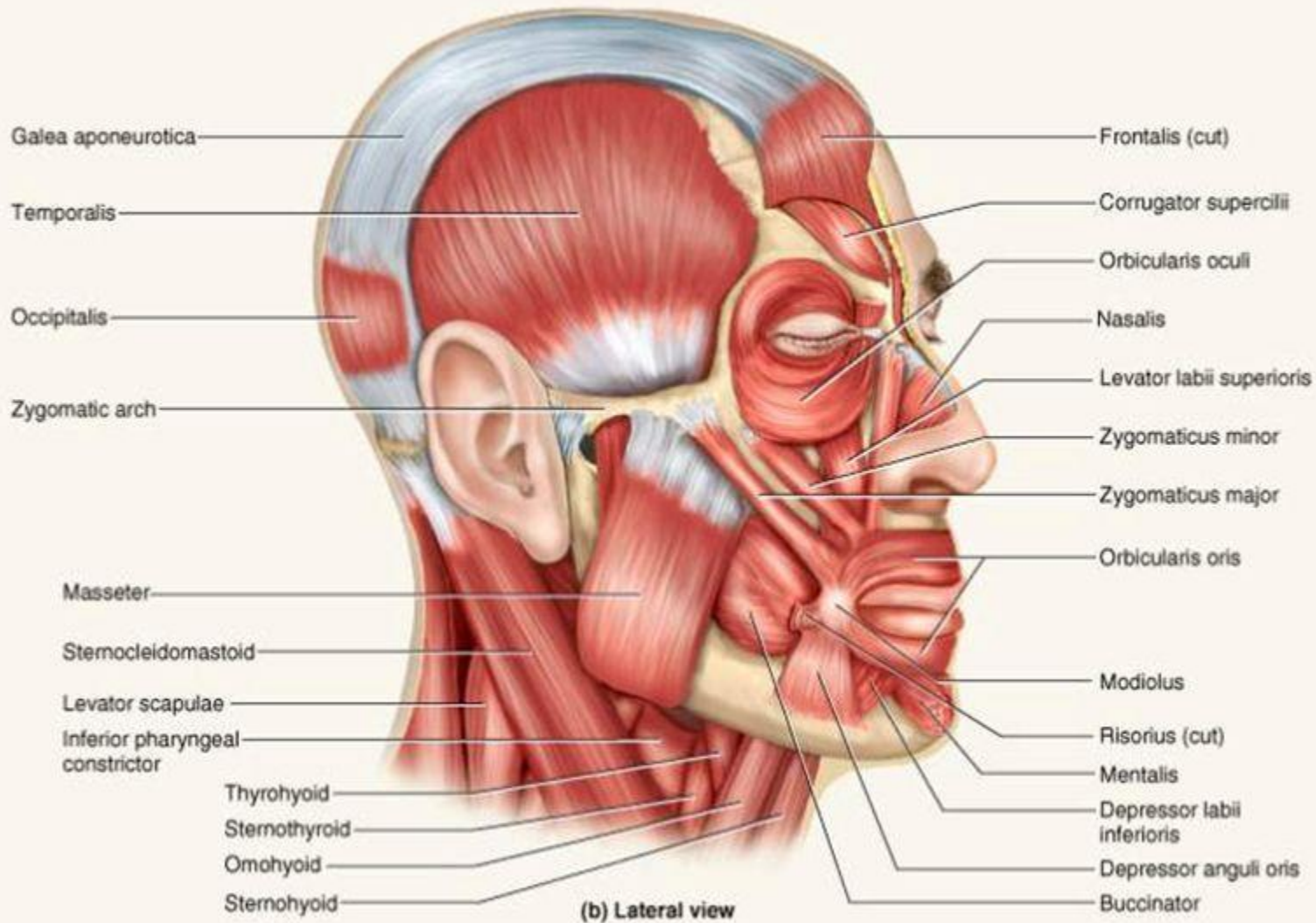


(D) Anterior (frontal) aspect









Muscles of Facial Expression

Supratrochlear V.

Supra-orbital V.

facial vein

To sup. ophthalmic v.

Angular v.

Deep facial v.

Facial v.

Angular a.

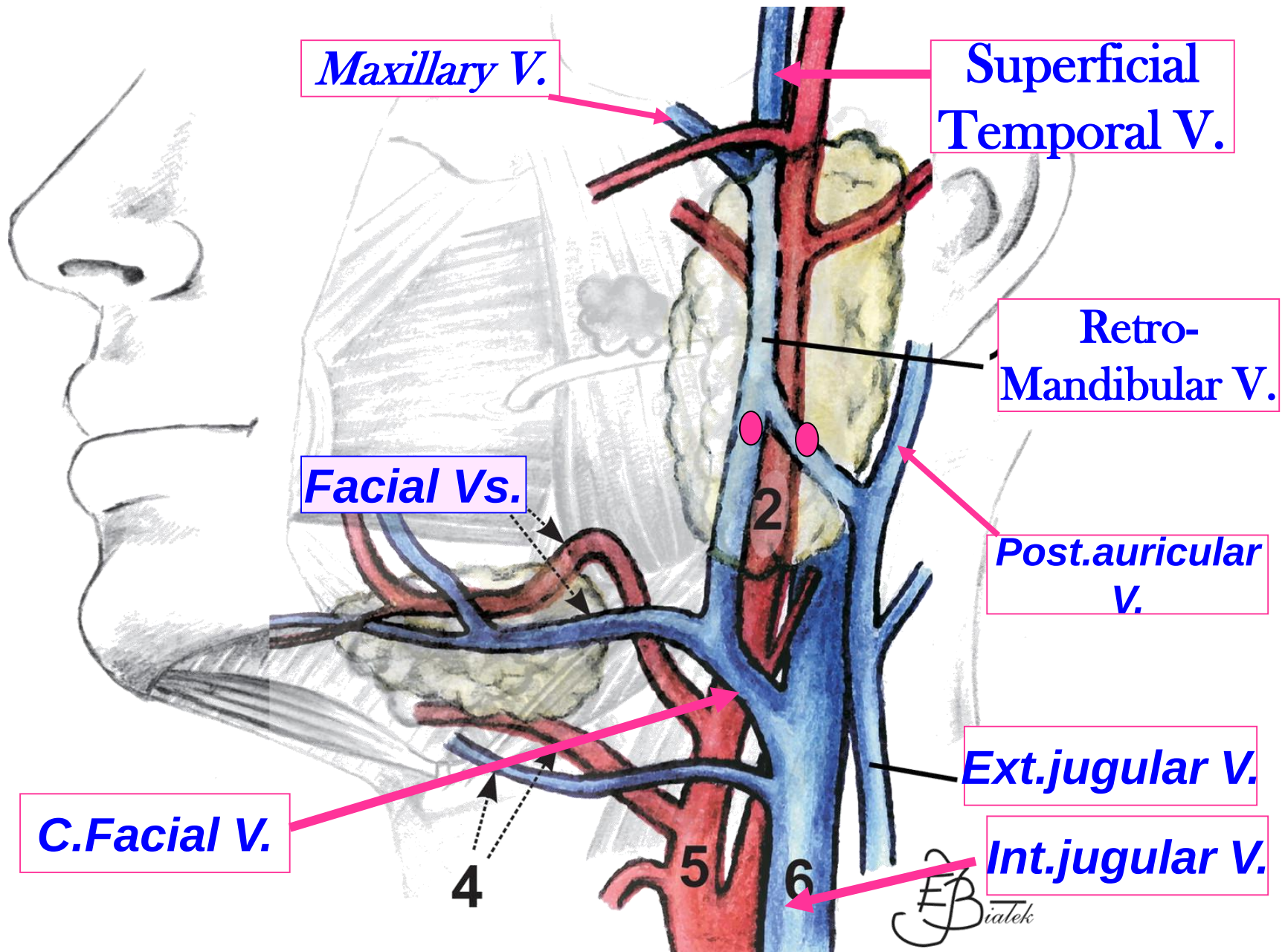
Lat. nasal branch

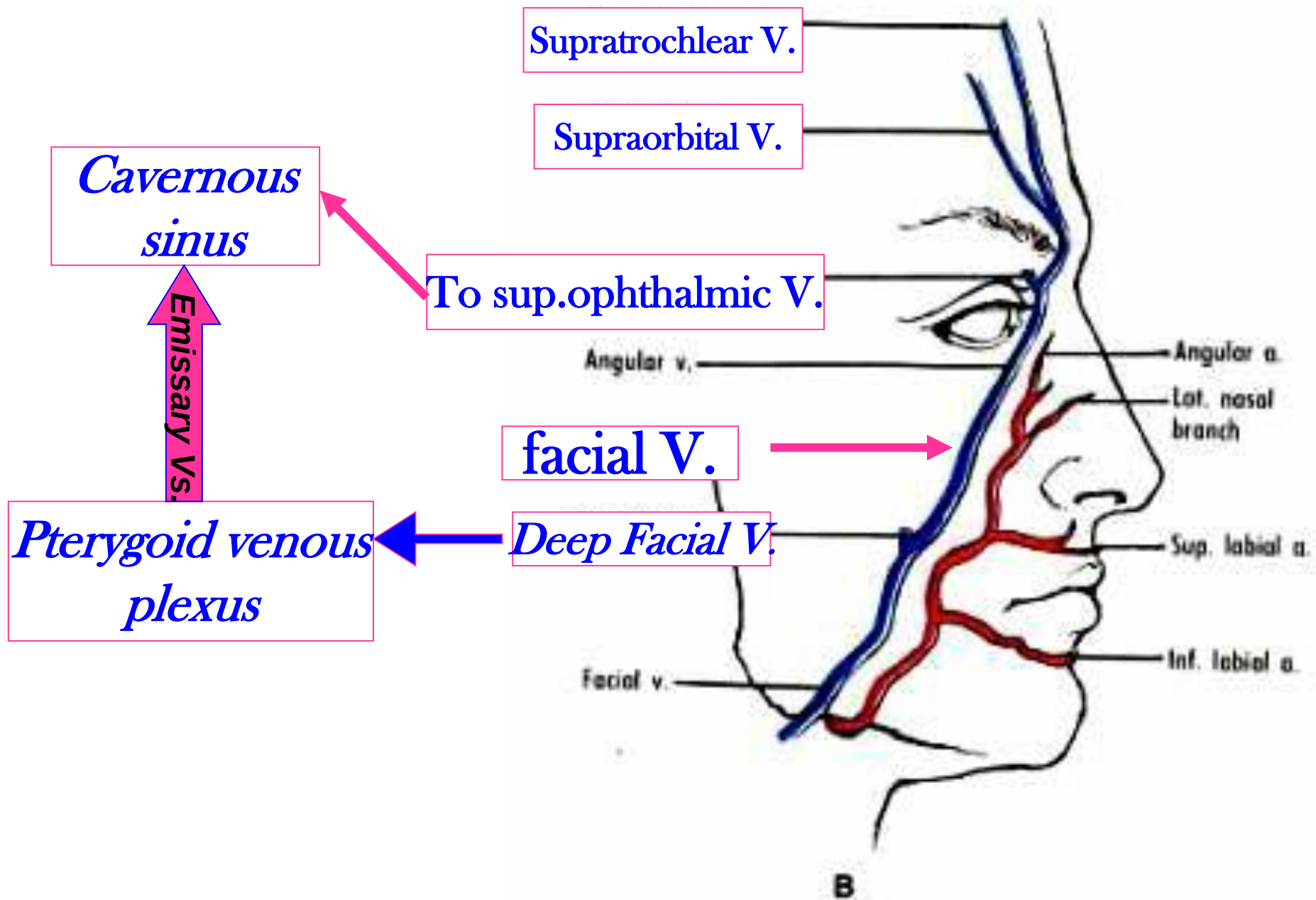
Sup. labial a.

Inf. labial a.

B





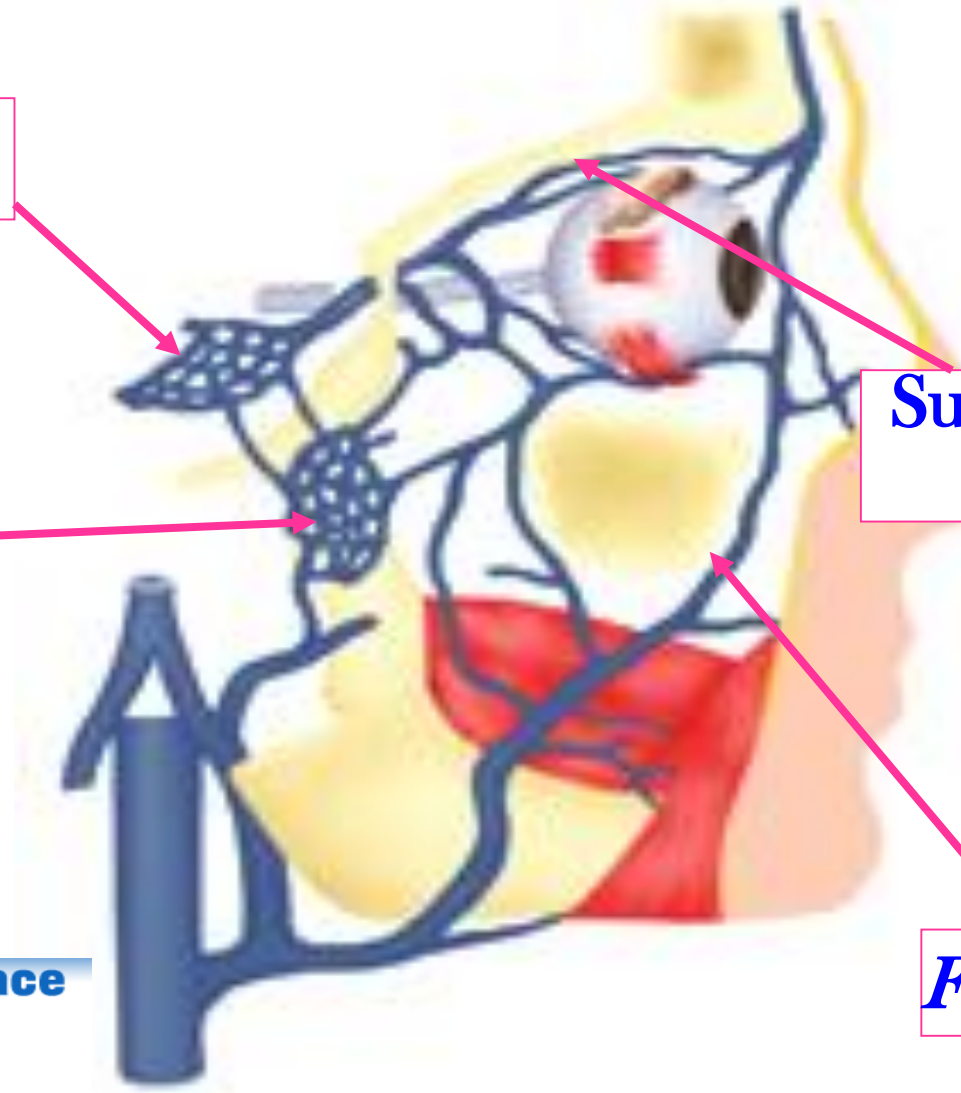


Cavernous
Sinus

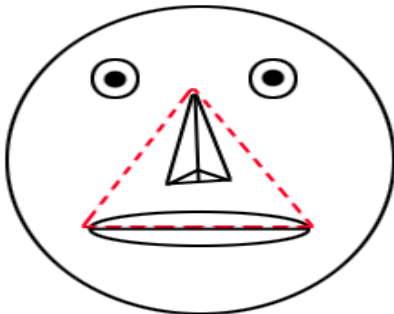
Pterygoid
Venous Plexus

Sup.Ophth.
V.

Facial V.



Dangerous area of the face



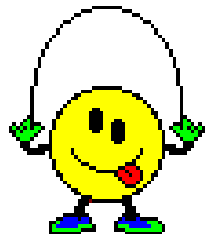
OPHTHALMIC NERVE

- Supraorbital & supratrochlear nerves.....forehead & upper eyelid.
- Lacrimal nerve...lateral part of upper eyelid
- Infratrochlear nerve...lower eyelid .
- External nasal...nose till the tip .



Maxillary nerve

- Infraorbital....palpebral & nasal &labial .
- Zygomaticofacial....skin over zygomatic bone .
- Zygomaticotemporal....skin of temple.



Mandibular nerve

- Mental.....lower lip&chin
- Buccal....skin over buccinator .
- Auriculotemporal...skin over auricle&temple .





MCQ

*MCQ.1-Pulse felt in front of auricle
against the zygomatic arch is that of:-*

- a.Facial A.*
- b.Transverse facial A.*
- c.Zygomatico facial A.*
- d.Superficial temporal A.*
- e.Infraorbital A.*



MCQ.2.Nerve supply of skin of forehead includes:-

a.Auriculotemporal nerve.

b.Infraorbital nerve.

c.Supra-orbital nerve

d.Supratrochlear nerve.

e. © and (d)



Ophthalmic n



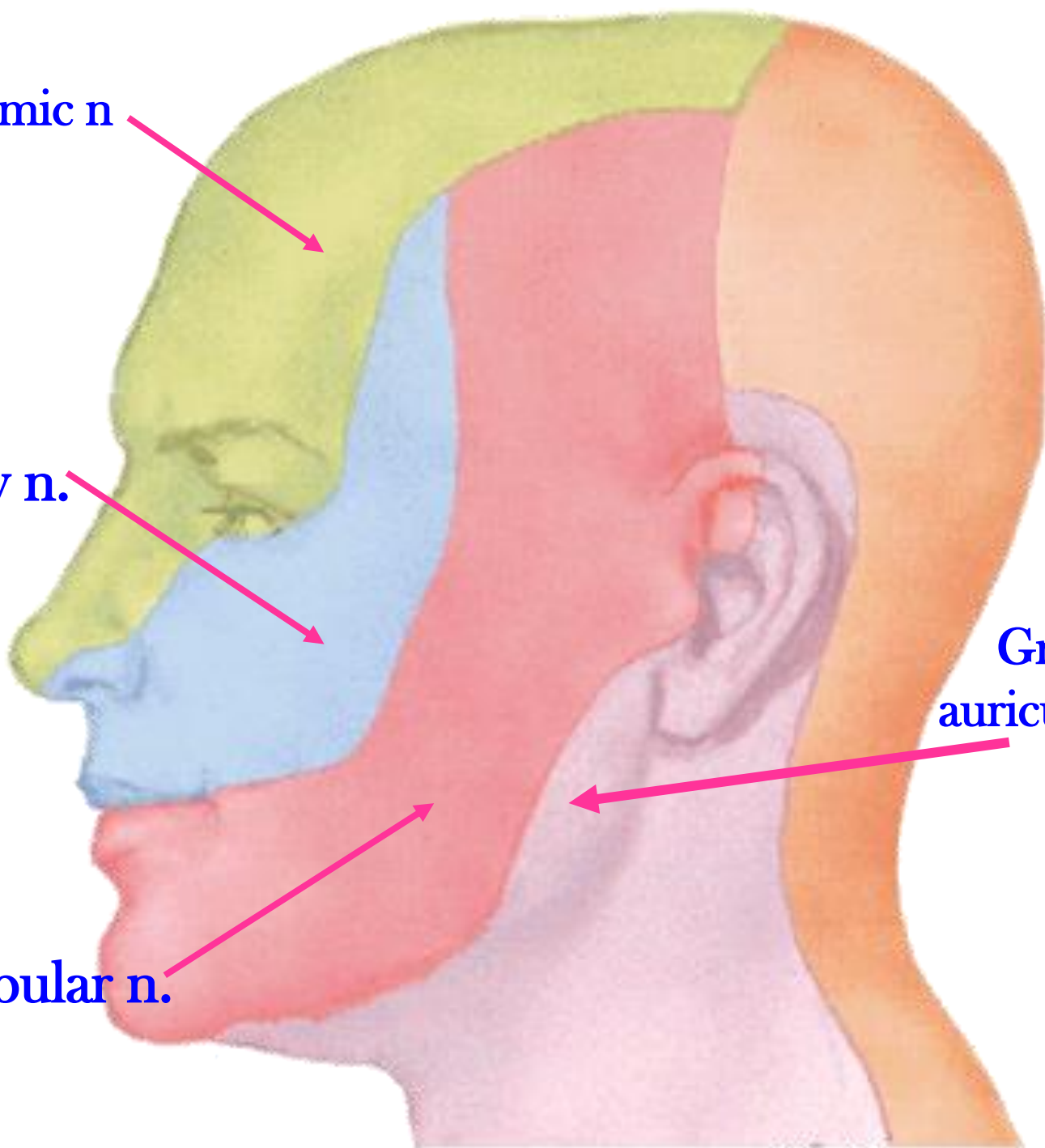
Maxillary n.

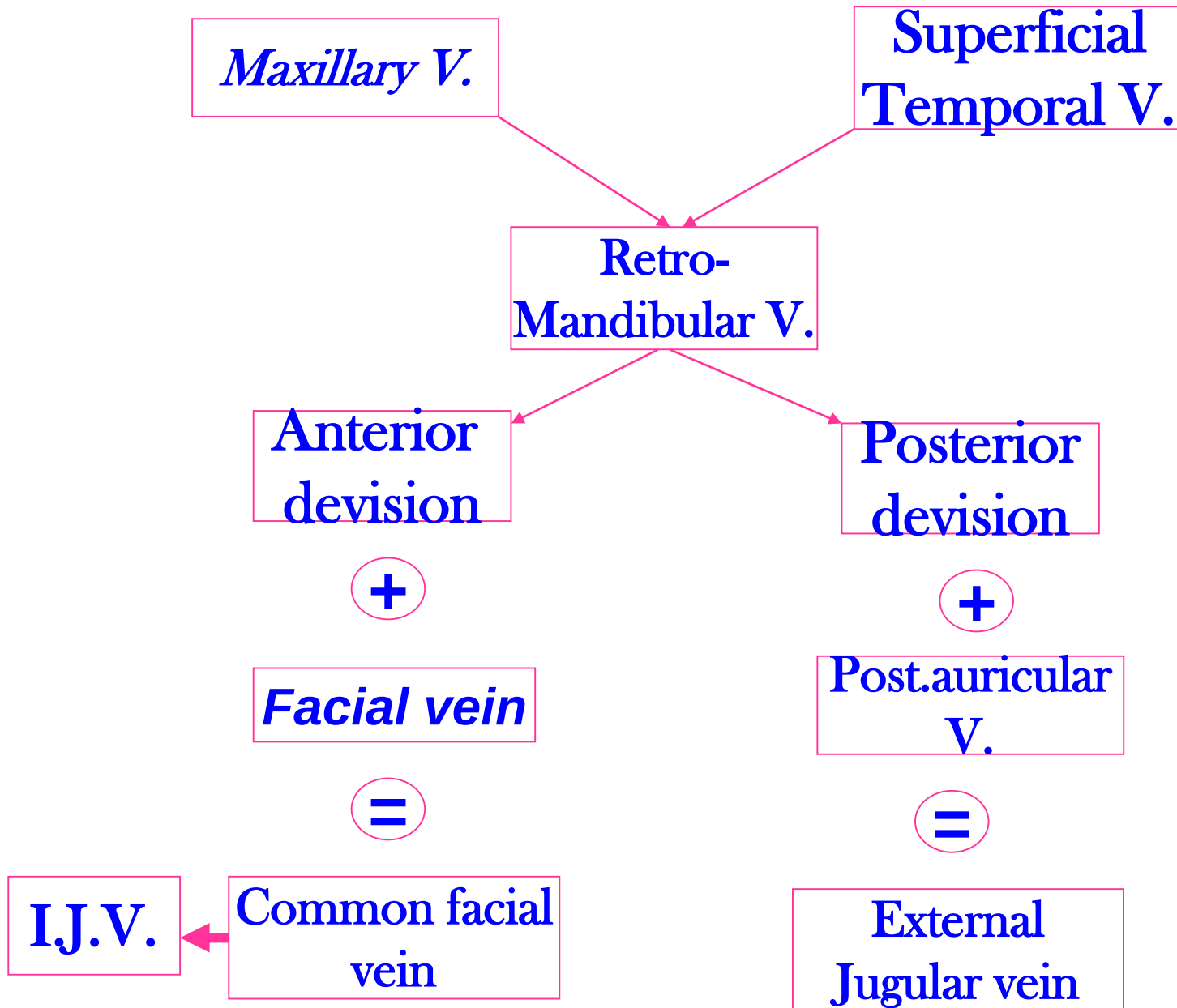


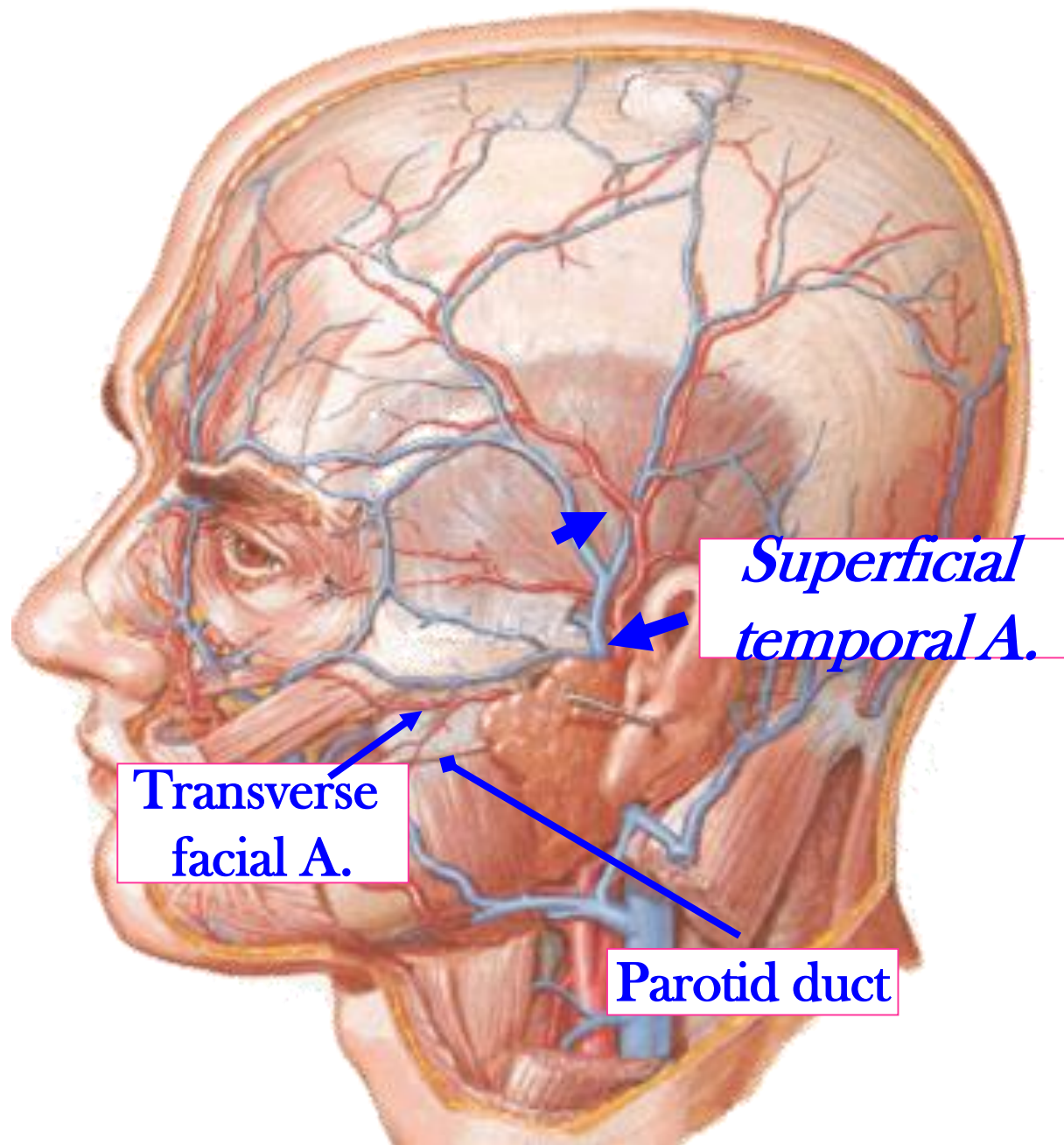
Mandibular n.



Great
auricular n.







*Superficial
temporal A.*

Transverse
facial A.

Parotid duct

facial vein

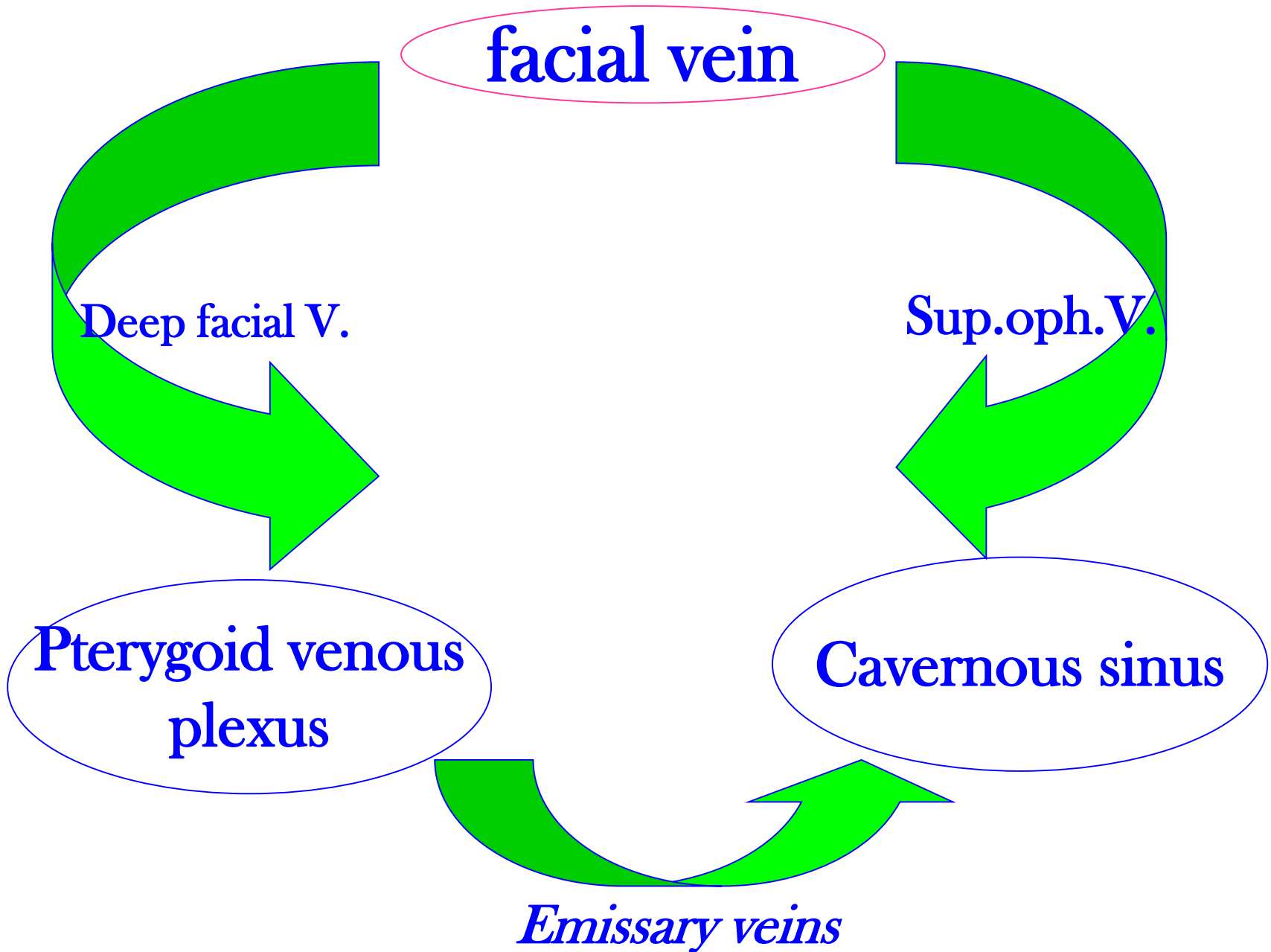
Sup.oph.V.

Deep facial V.

Pterygoid venous
plexus

Cavernous sinus

Emissary veins



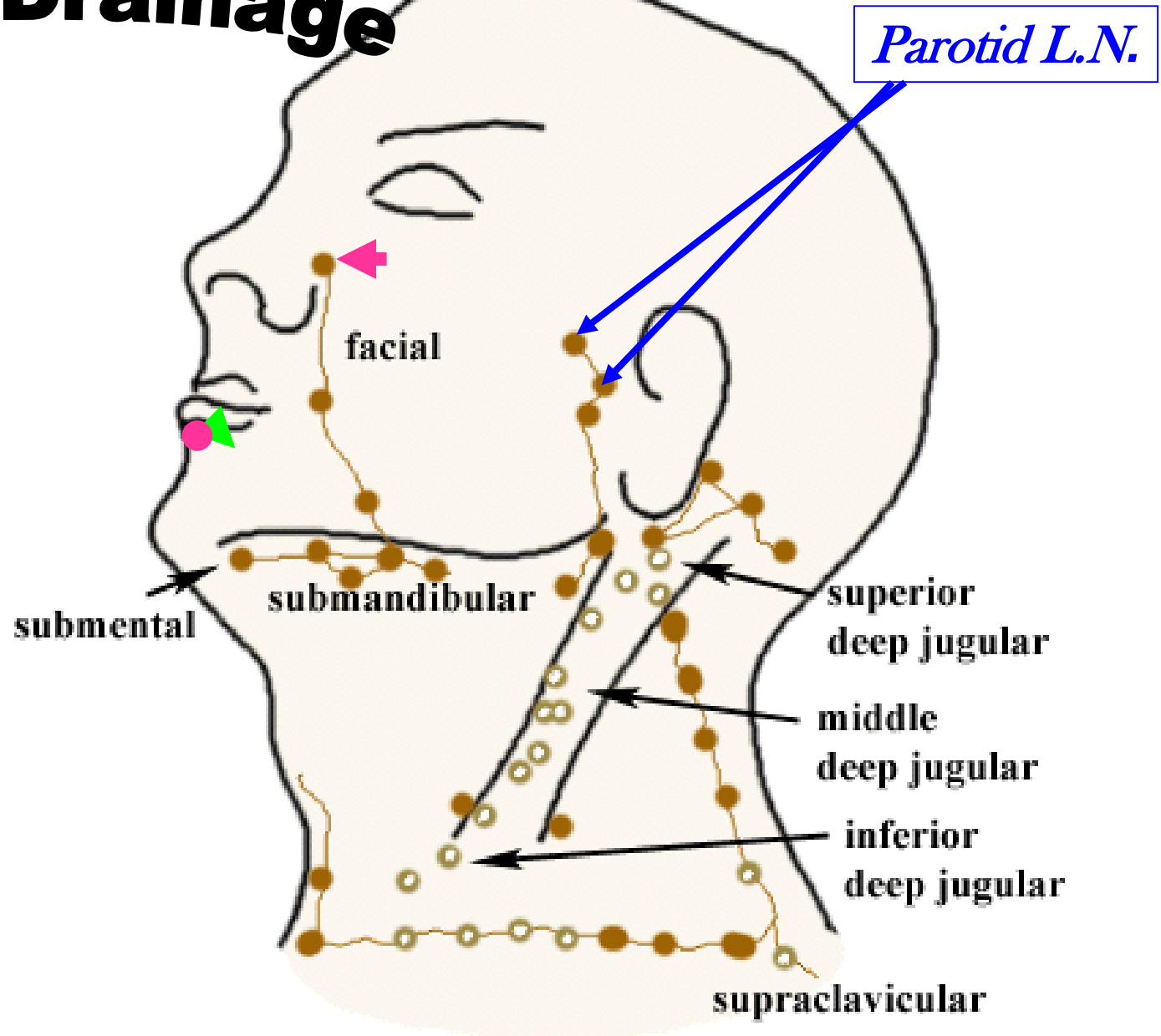


**Dangerous area of
the face**



www.free-smiley-faces.de

Lymph Drainage



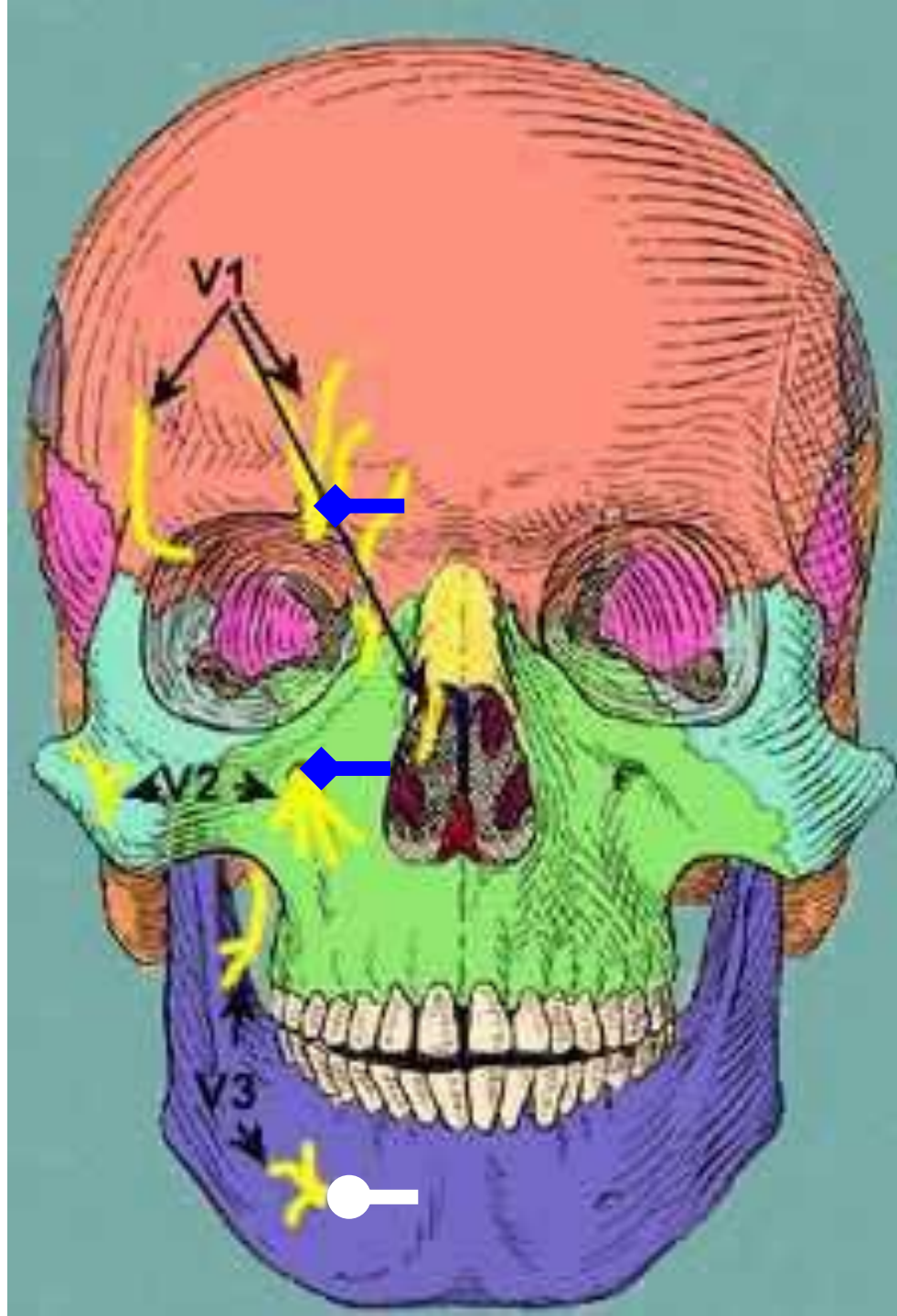
Lymph drainage of the face

- Lat.part of the face.....parotid lymph nodes .
- Medial part of the face...submandibular lymph nodes .
- Central part of lower lip & chin.....submental lymph nodes .

Supra-orbital nerve

Infra-orbital nerve

Mental nerve



A

Zygomaticofacial artery and vein

Zygomaticotemporal artery and vein

Supratrochlear artery and vein

Supra-orbital artery and vein

Angular artery and vein

Lat.Nasal Vs.

Sup.Labial Vs.

Inf.Labial Vs.

Facial A.

Facial V.

External carotid artery

Transverse facial artery and vein

Transverse facial Vs.

superficial temporal Vs.

Tragus

Posterior auricular vein

Posterior auricular artery

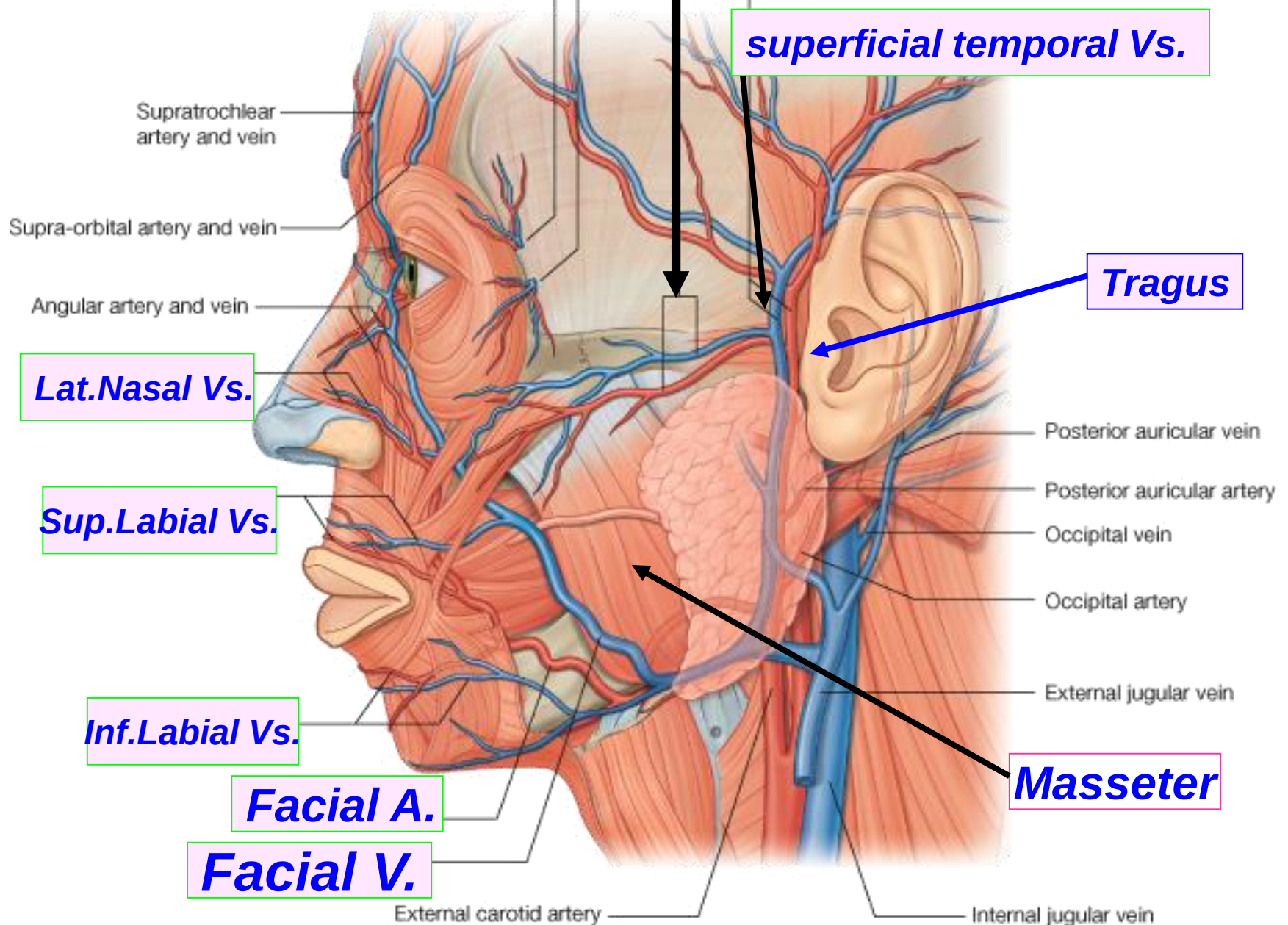
Occipital vein

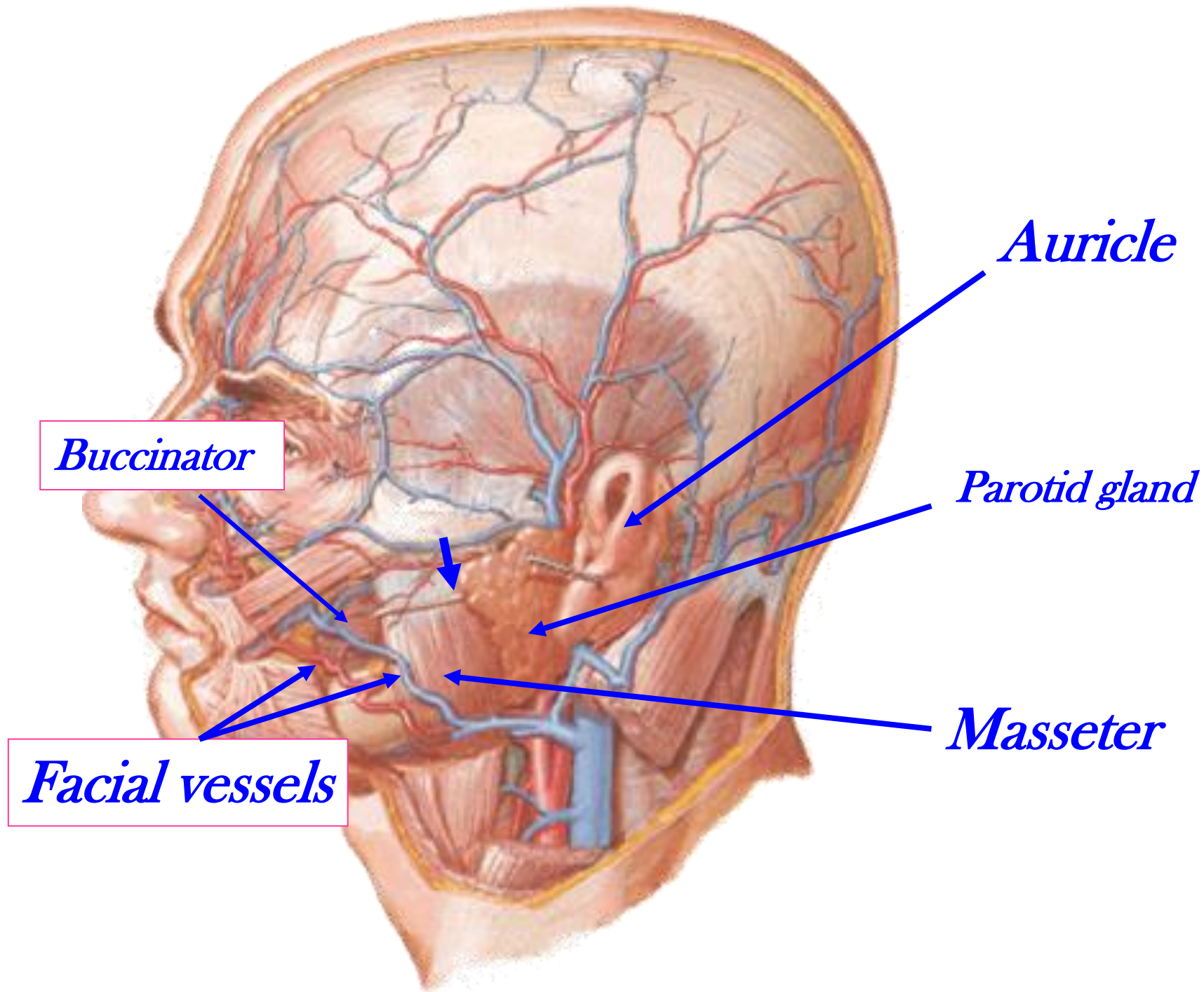
Occipital artery

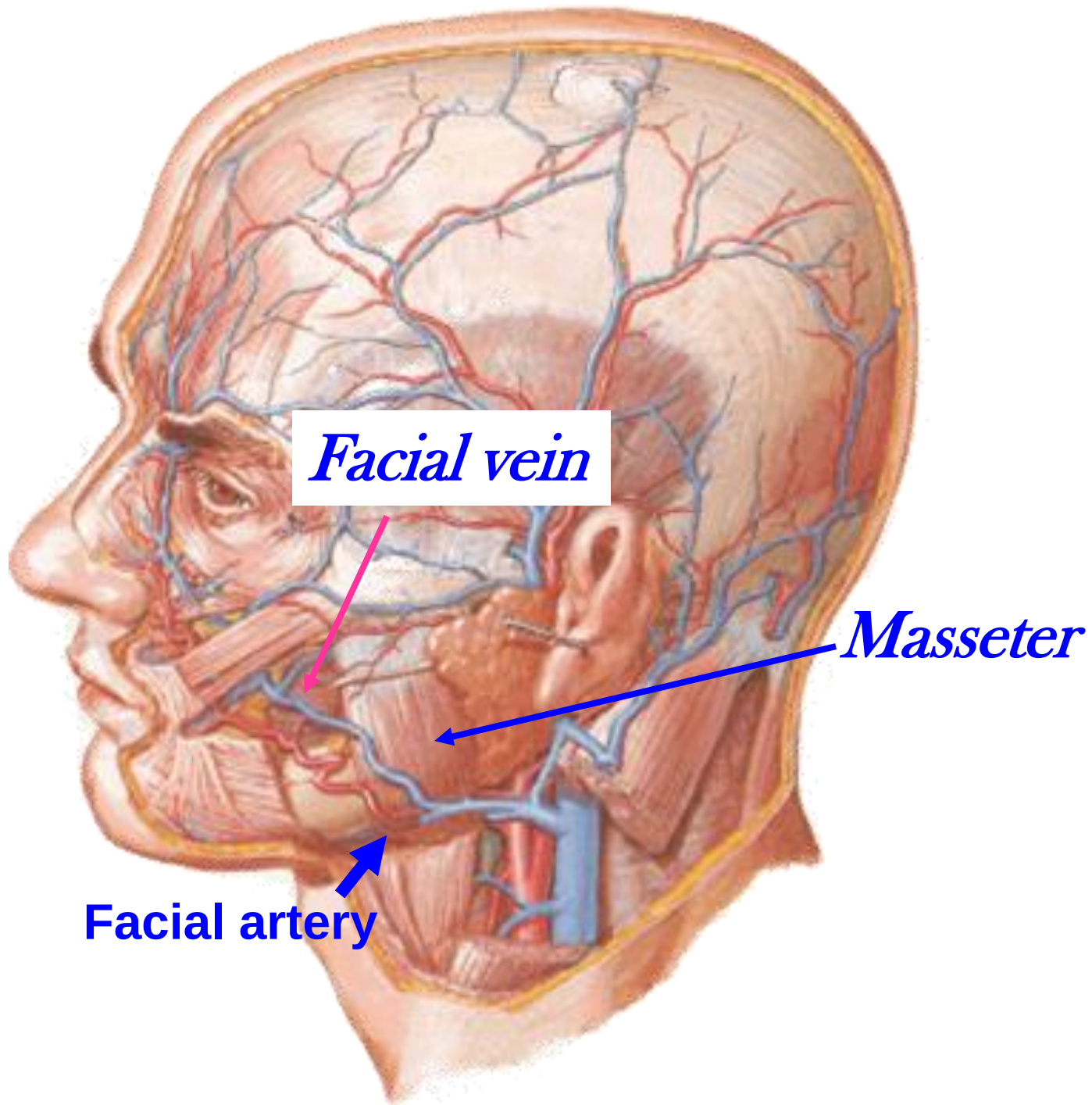
External jugular vein

Masseter

Internal jugular vein







Buccinator

7th nerve-

- Accessory muscle of mastication
- Outer aspect of maxilla and mandible
- Action**
- Preventing accumulation of food in vestibule
- Blowing trumpet

