Head & Neck Anatomy

Face

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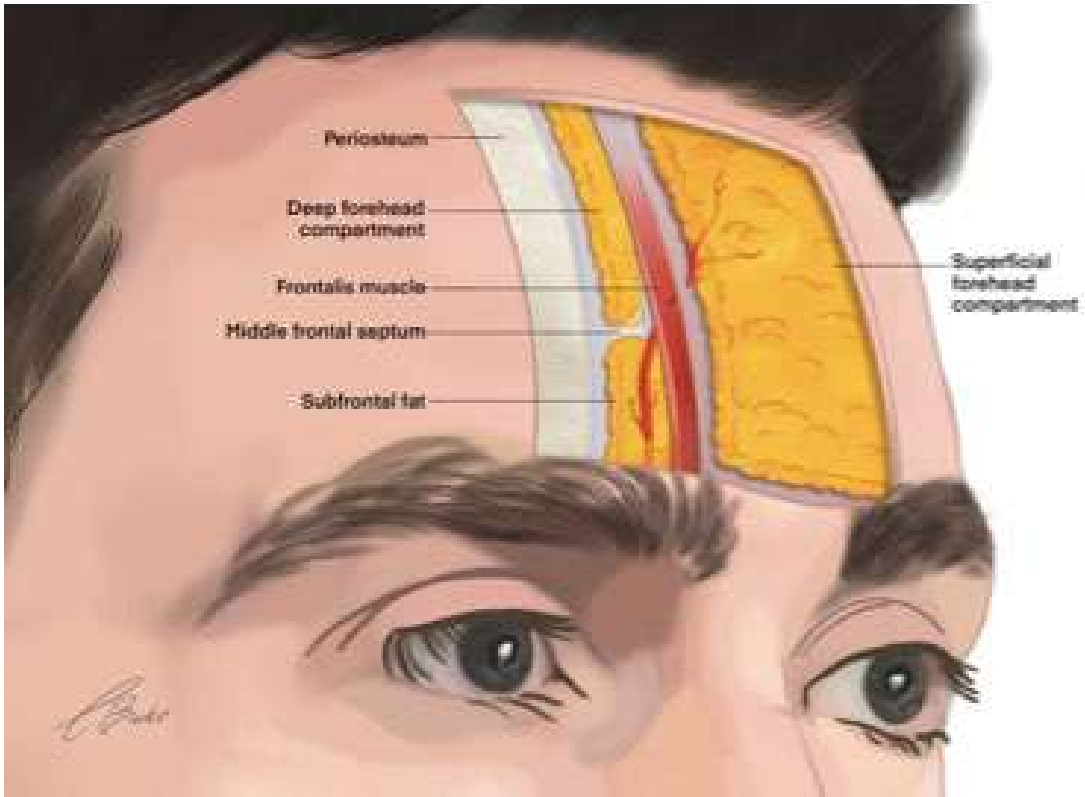
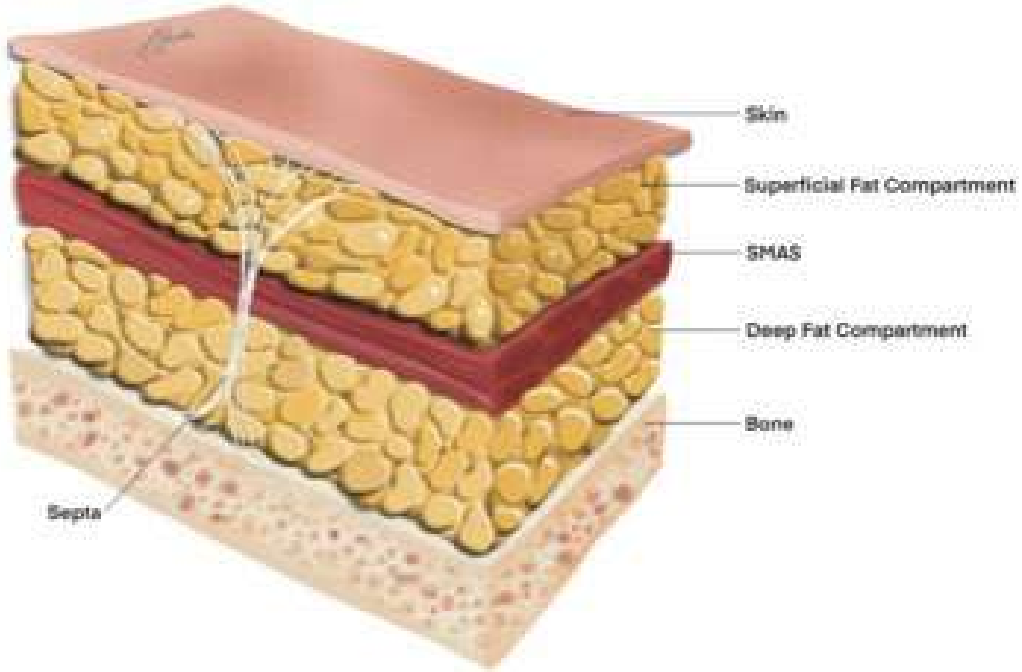
Skin of the Face

Characteristics: Thin, highly vascular, rich in glands.

Clinical: Wounds bleed profusely but heal quickly due to the excellent blood supply.





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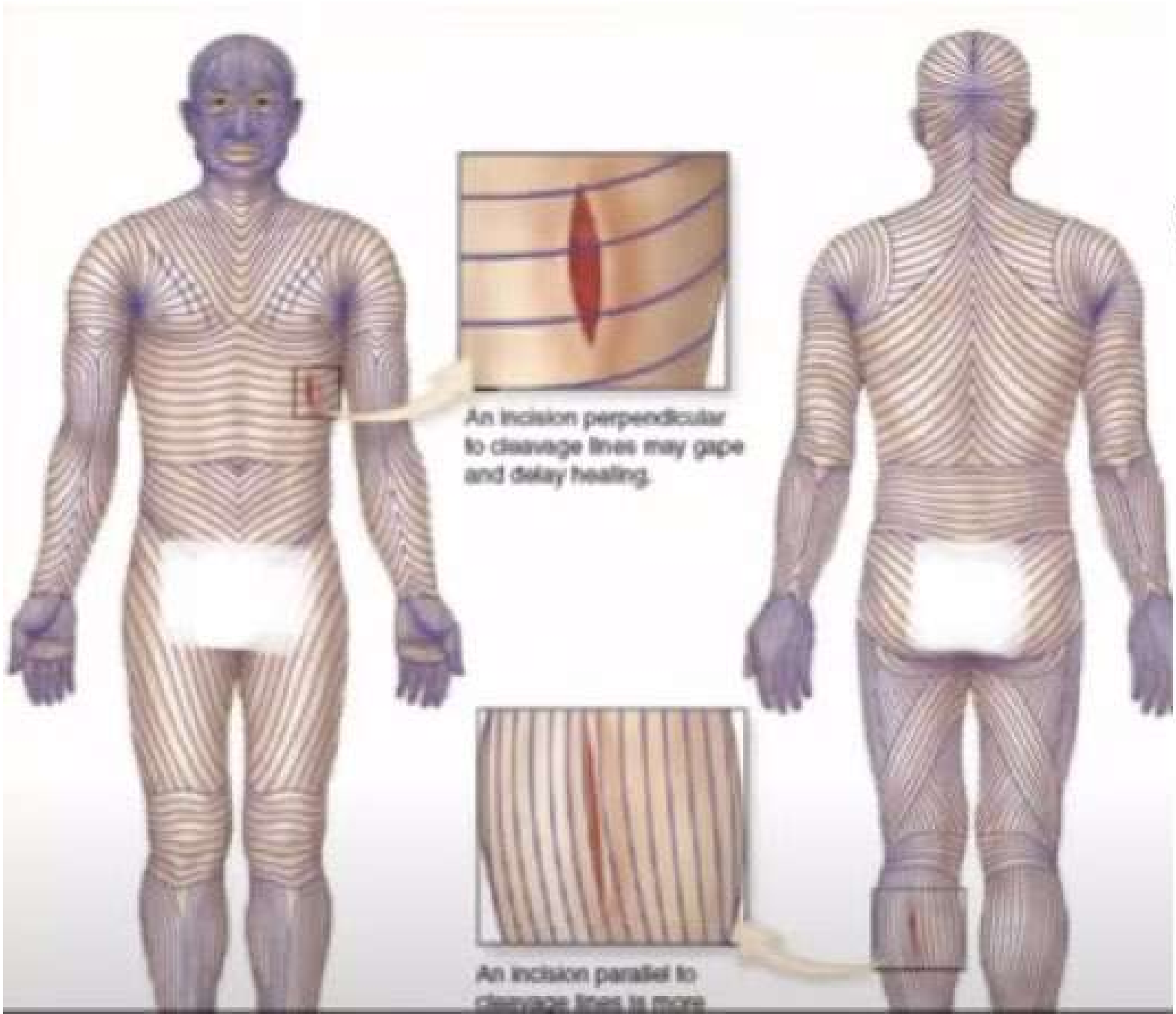
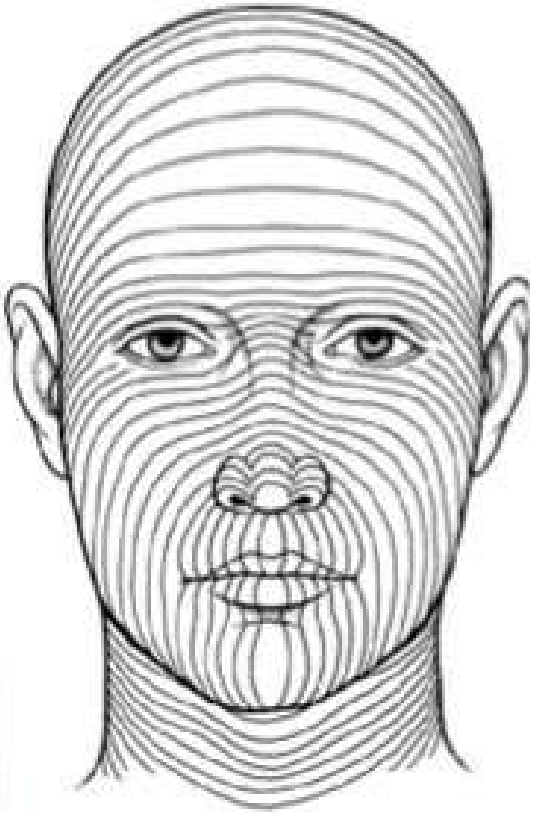
Incisions follow **Langer's lines** for minimal scarring.





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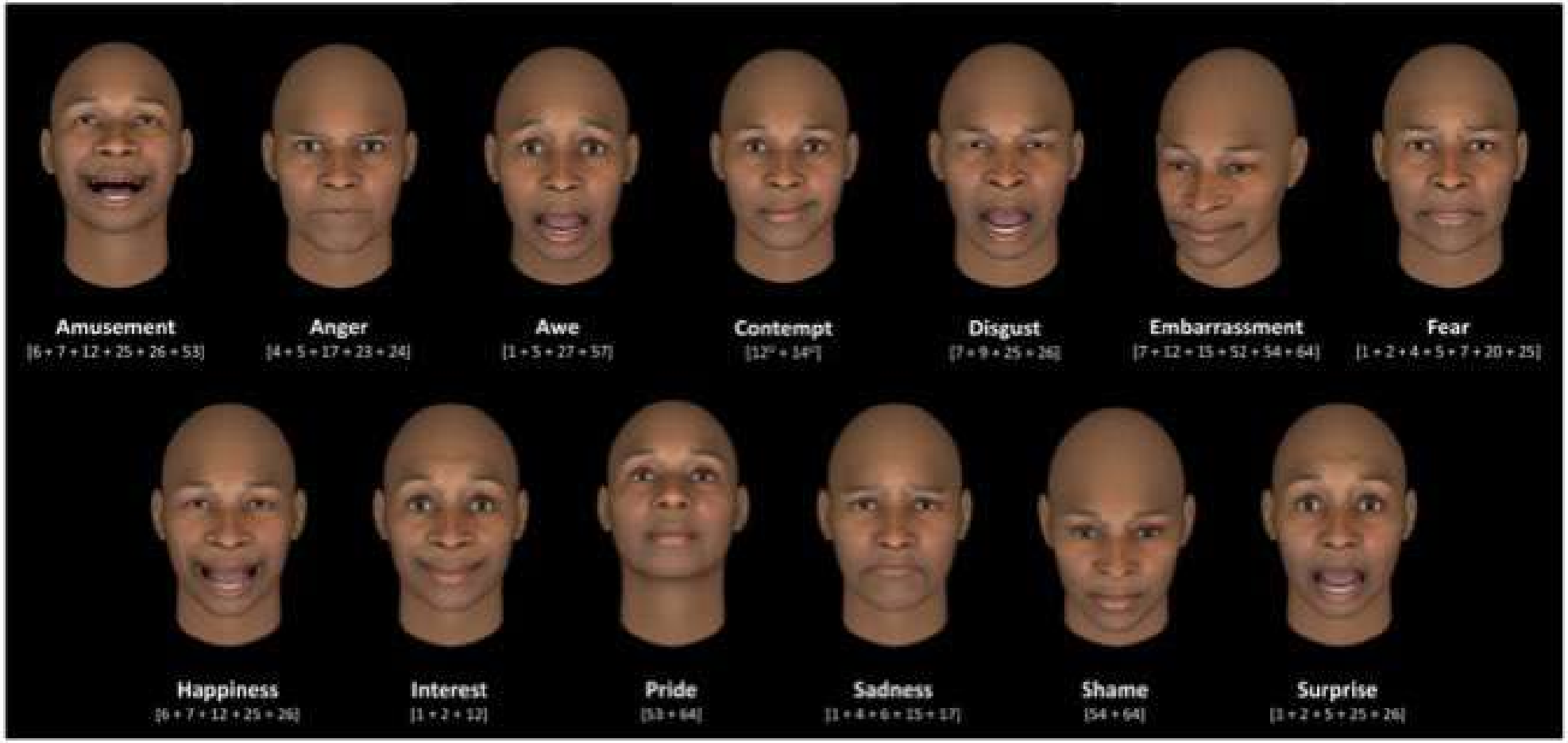
Facial expressions



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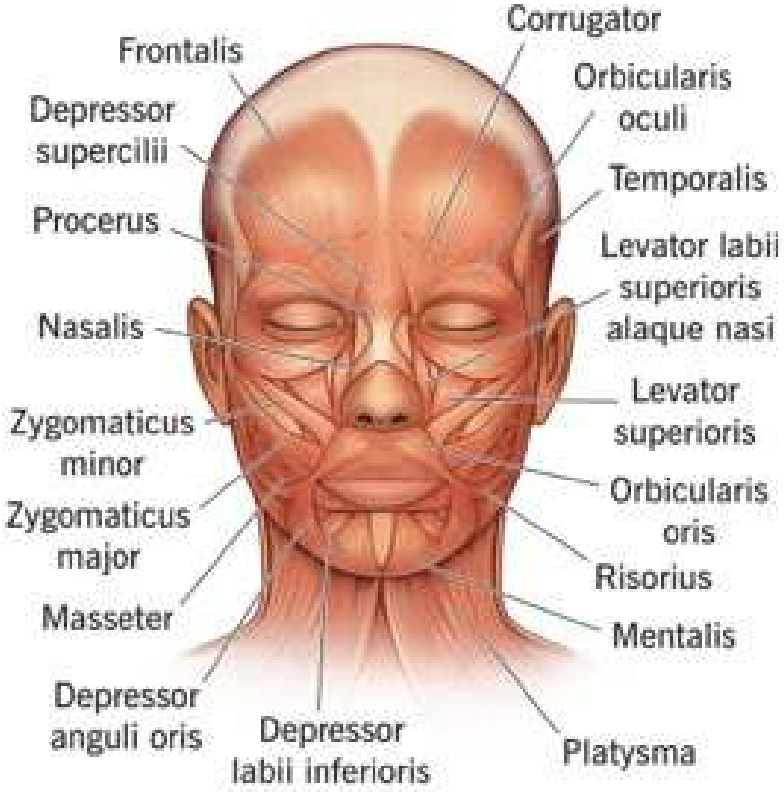
Muscles of Facial Expression

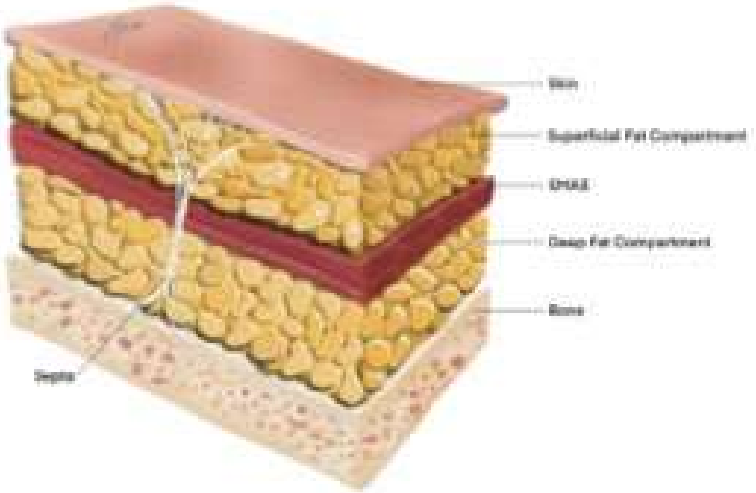
Unique Feature: Insert directly into the skin (no deep fascia).

Function: Control facial apertures and convey emotion.

Innervation: All muscles are supplied by the **Facial Nerve** (CN VII).

Example: Orbicularis Oculi (closes eye), Zygomaticus Major (smile), Buccinator (presses cheek to teeth).





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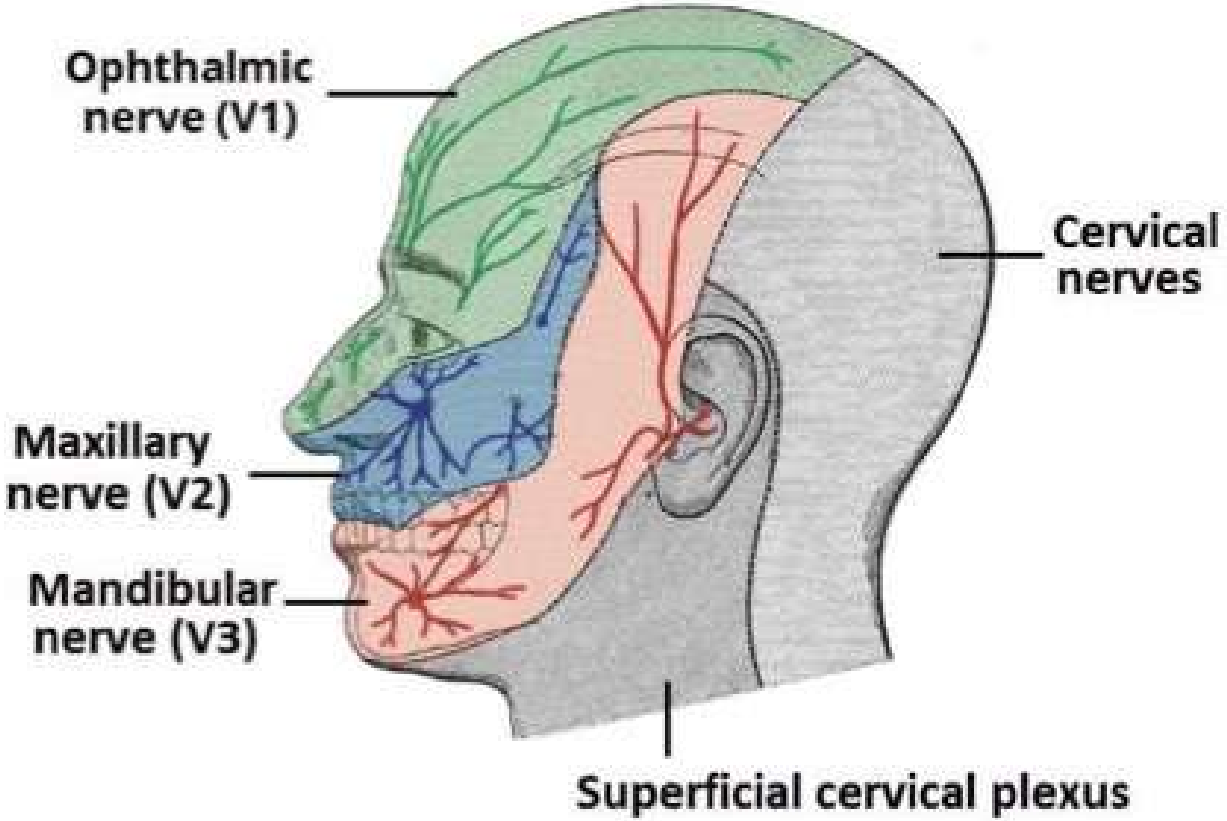
Sensory Nerves

Innervation: General sensation is supplied by the three divisions of the Trigeminal Nerve (CN V).

Ophthalmic (V1): Forehead, upper eyelid.

Maxillary (V2): Cheek, lower eyelid, upper lip.

Mandibular (V3): Lower lip, chin, temple.



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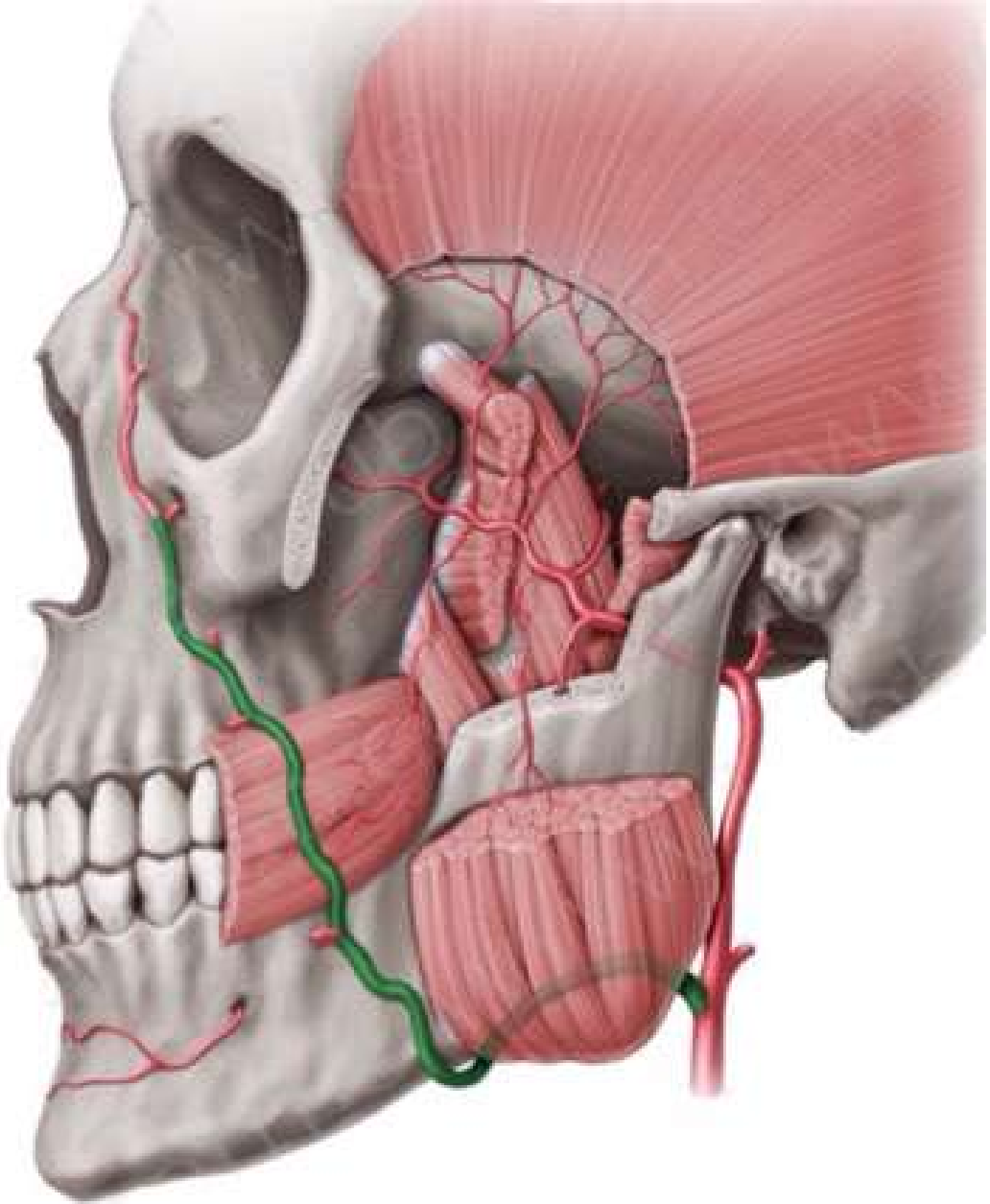
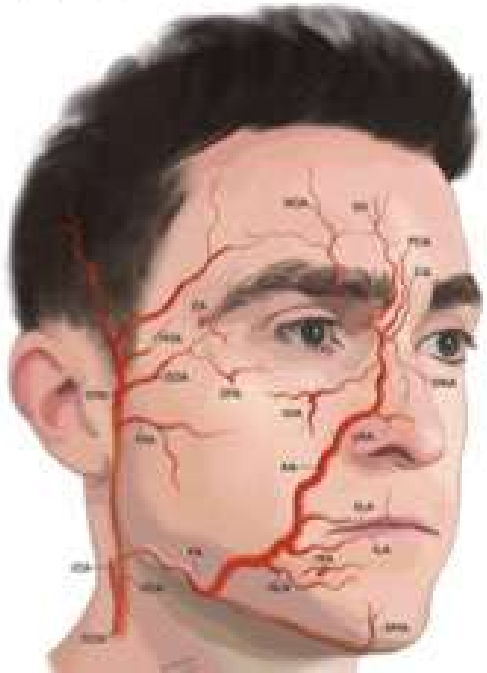
Arterial Supply

Main Artery: Facial Artery (branch of External Carotid Artery).

Course: Crosses the mandible, runs tortuously to the medial corner of the eye.

Terminal: Ends as the Angular Artery, anastomosing with the Ophthalmic Artery (from Internal Carotid).





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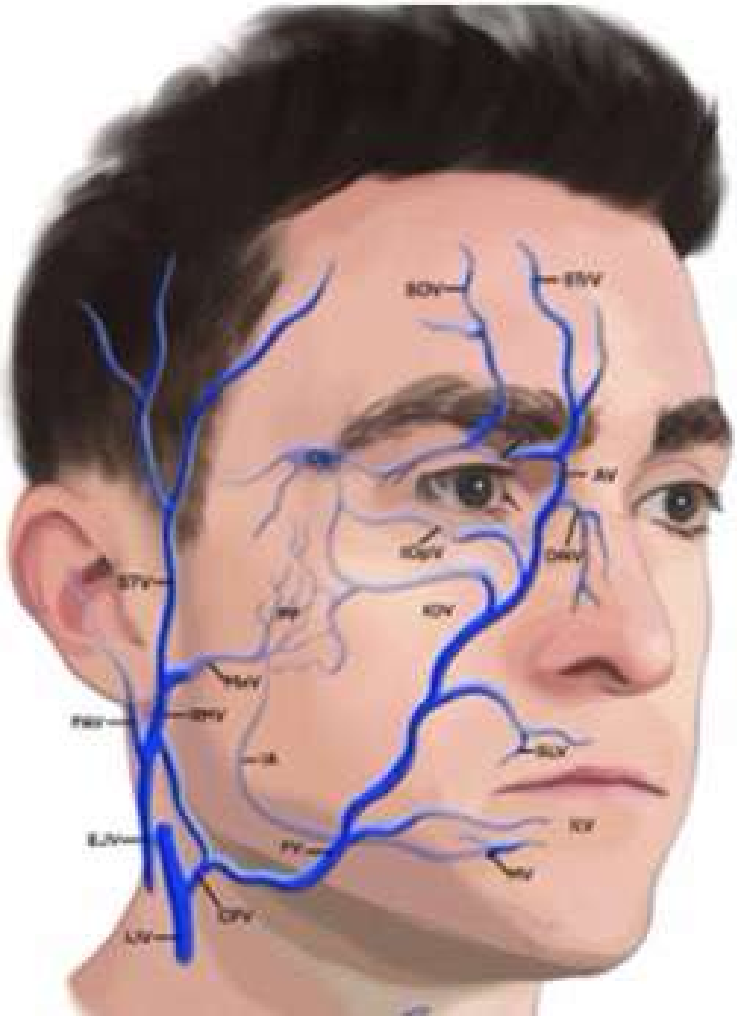
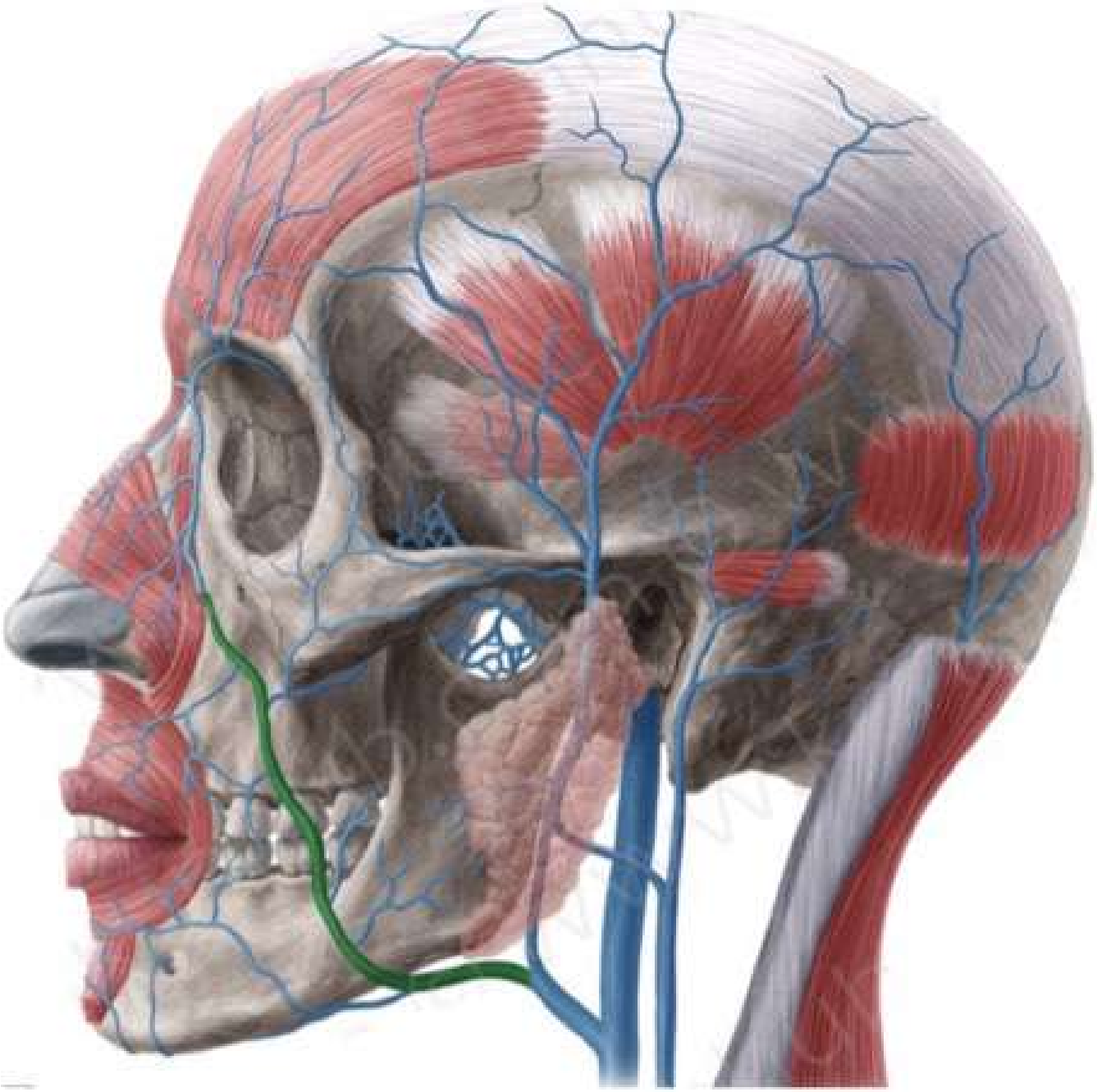
Venous Drainage

* **Main Vein**: Facial Vein, drains into the Internal Jugular Vein (IJV).





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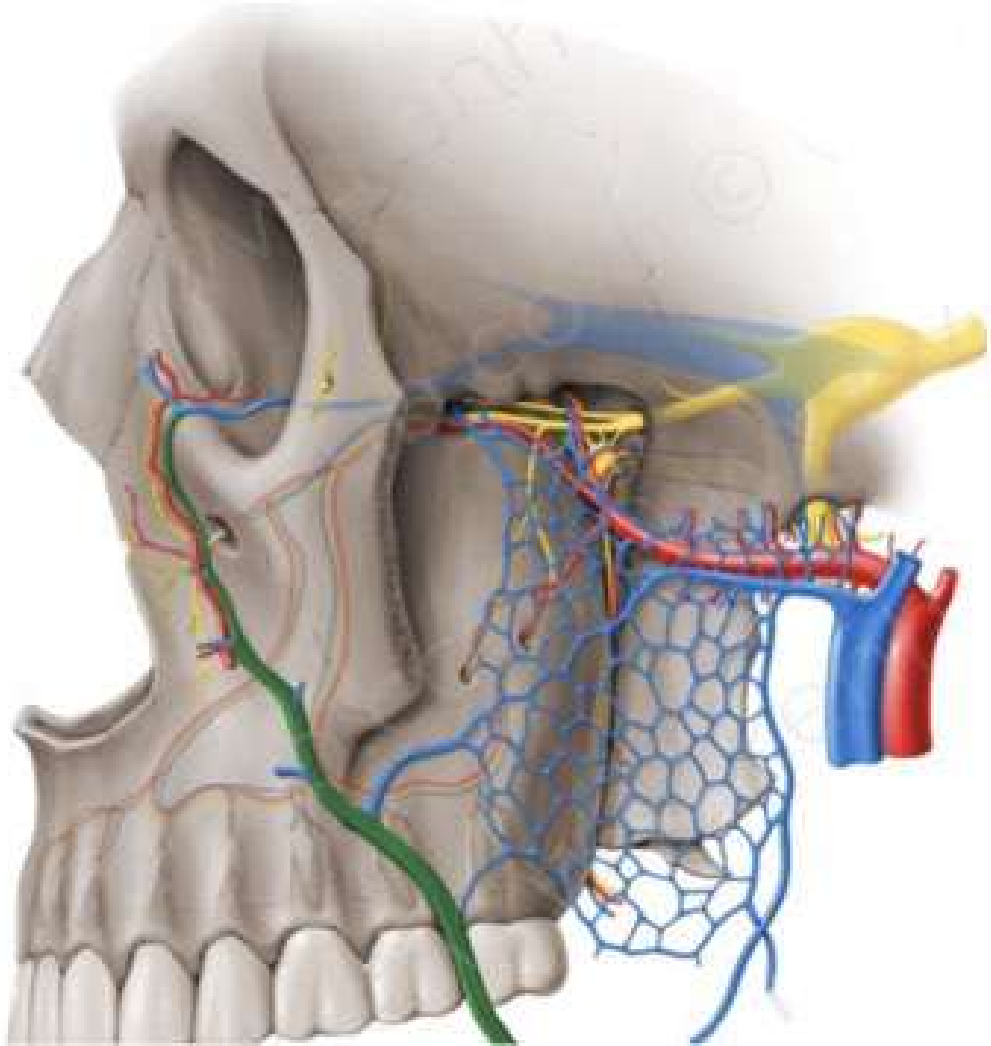
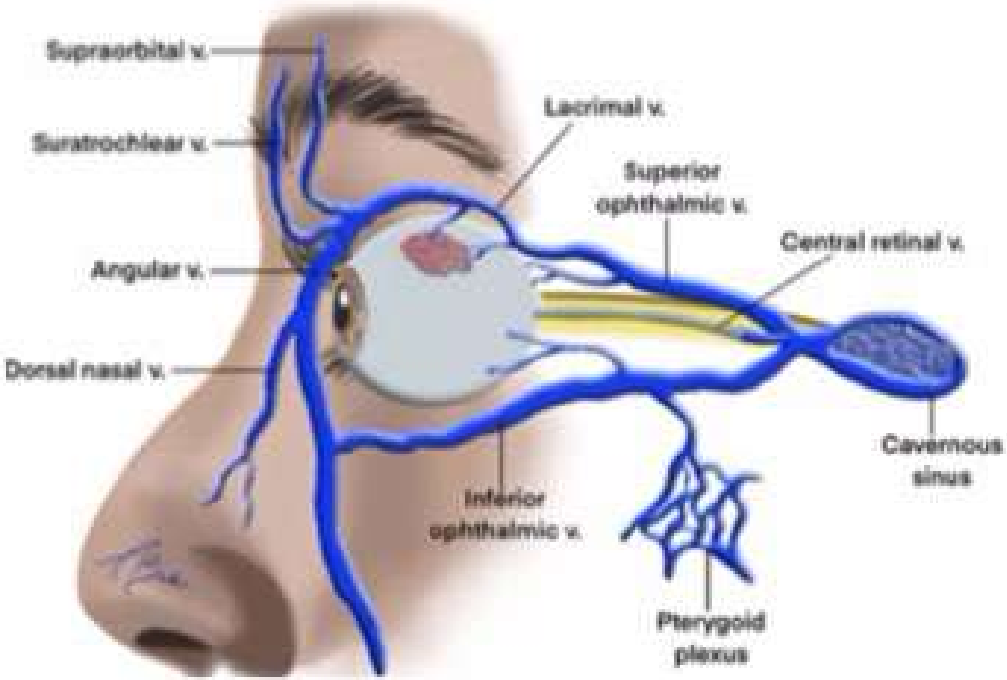
Clinical Significance: Danger Triangle of the Face (bridge of nose to corners of mouth).

Veins here connect to the Cavernous Sinus (via the Ophthalmic Vein). Infections can spread cranially, potentially causing **Cavernous Sinus Thrombosis**.





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Lymphatic Drainage

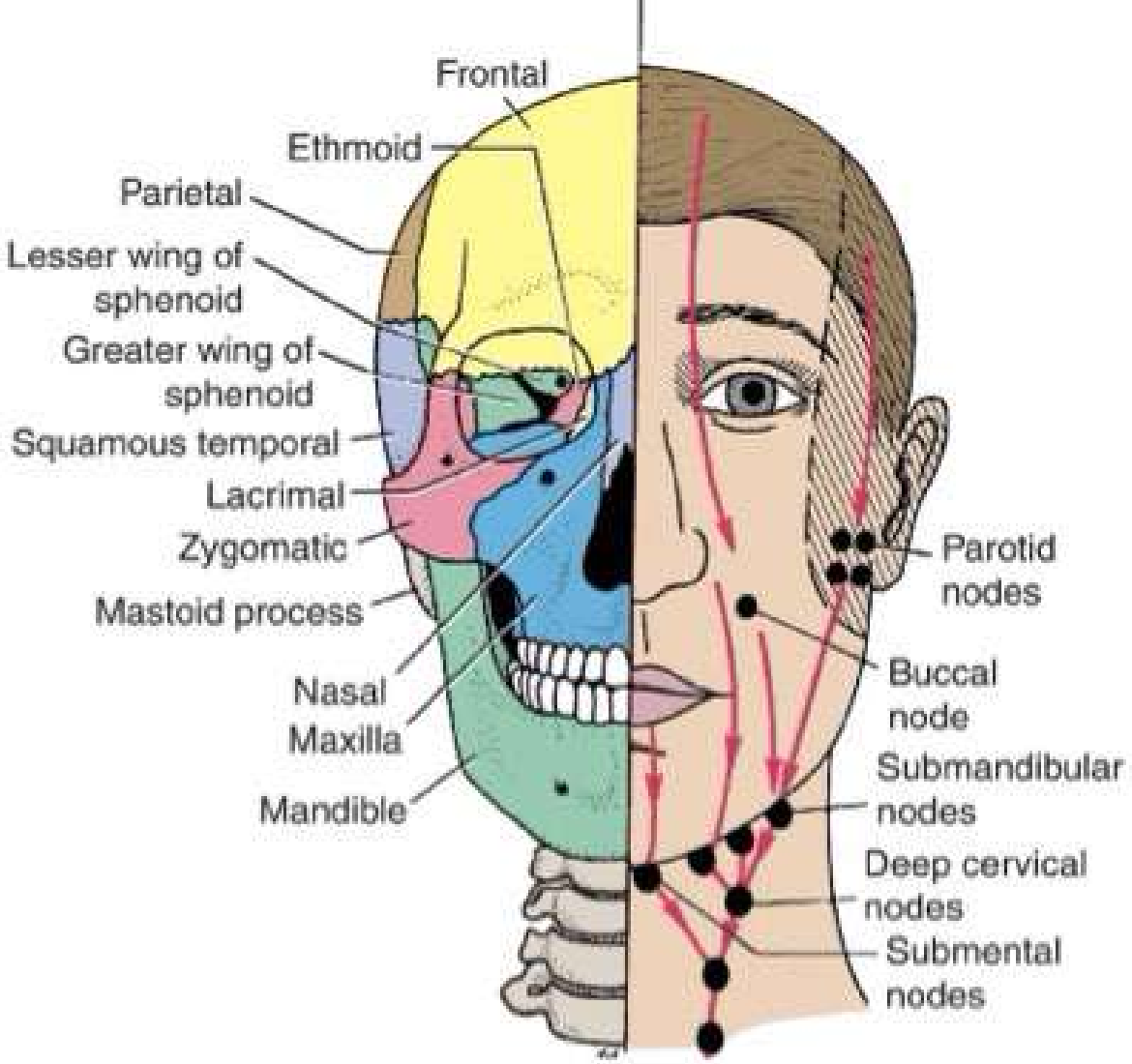
Drainage of the face goes to nodes at the head/neck border:

Submental Nodes: Chin, center of lower lip.

Submandibular Nodes: Upper lip, most of the cheek/ nose.

Pre-Auricular (Parotid) Nodes: Lateral eyelids, temple.

Final Destination: All drain into the Deep Cervical Nodes



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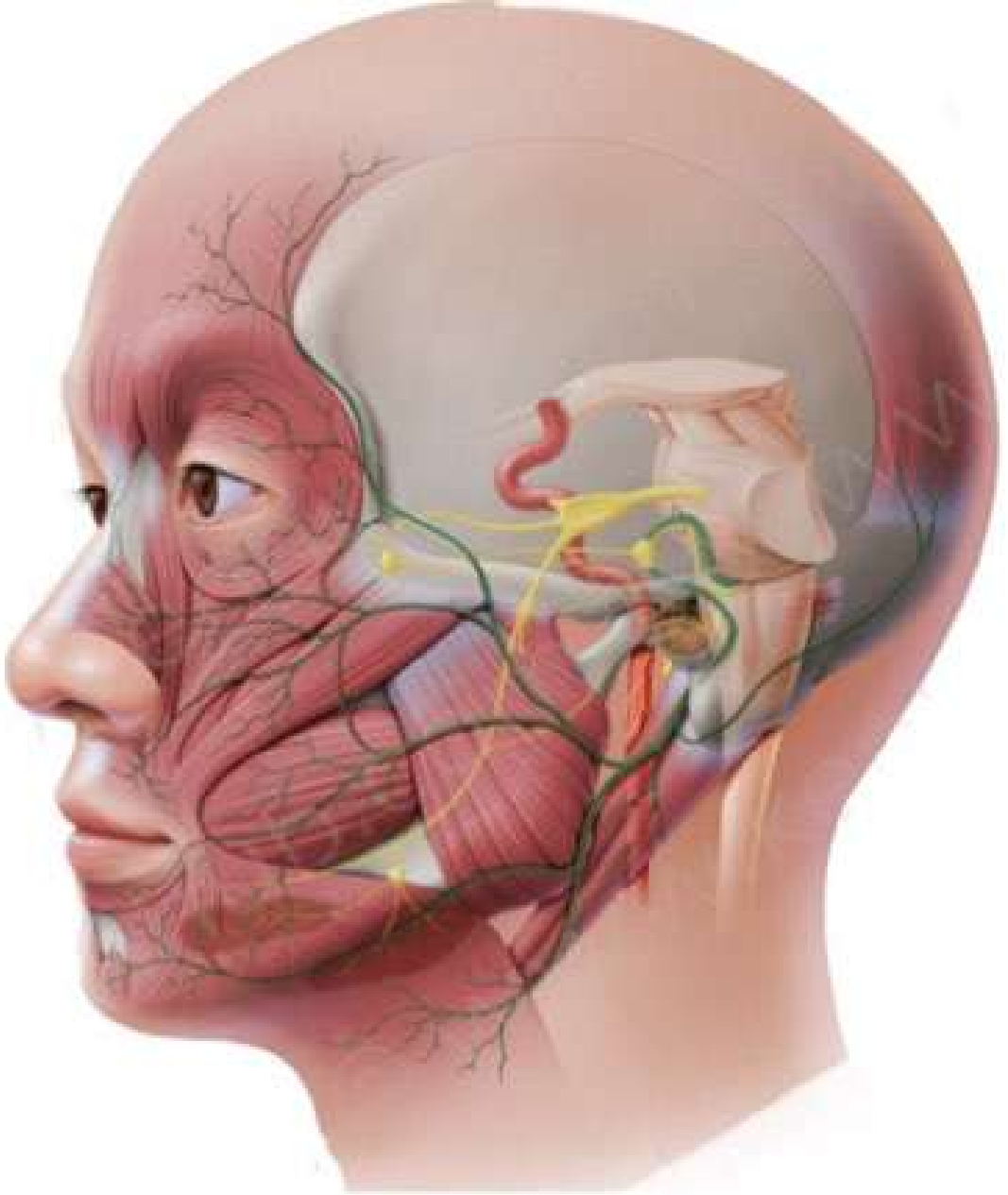
Facial Nerve (CN VII)

Type: Primarily Motor (facial expression), but also carries Taste (anterior 2/3 of tongue) and Parasympathetic (glands).

Course: Exits skull at the Stylomastoid Foramen



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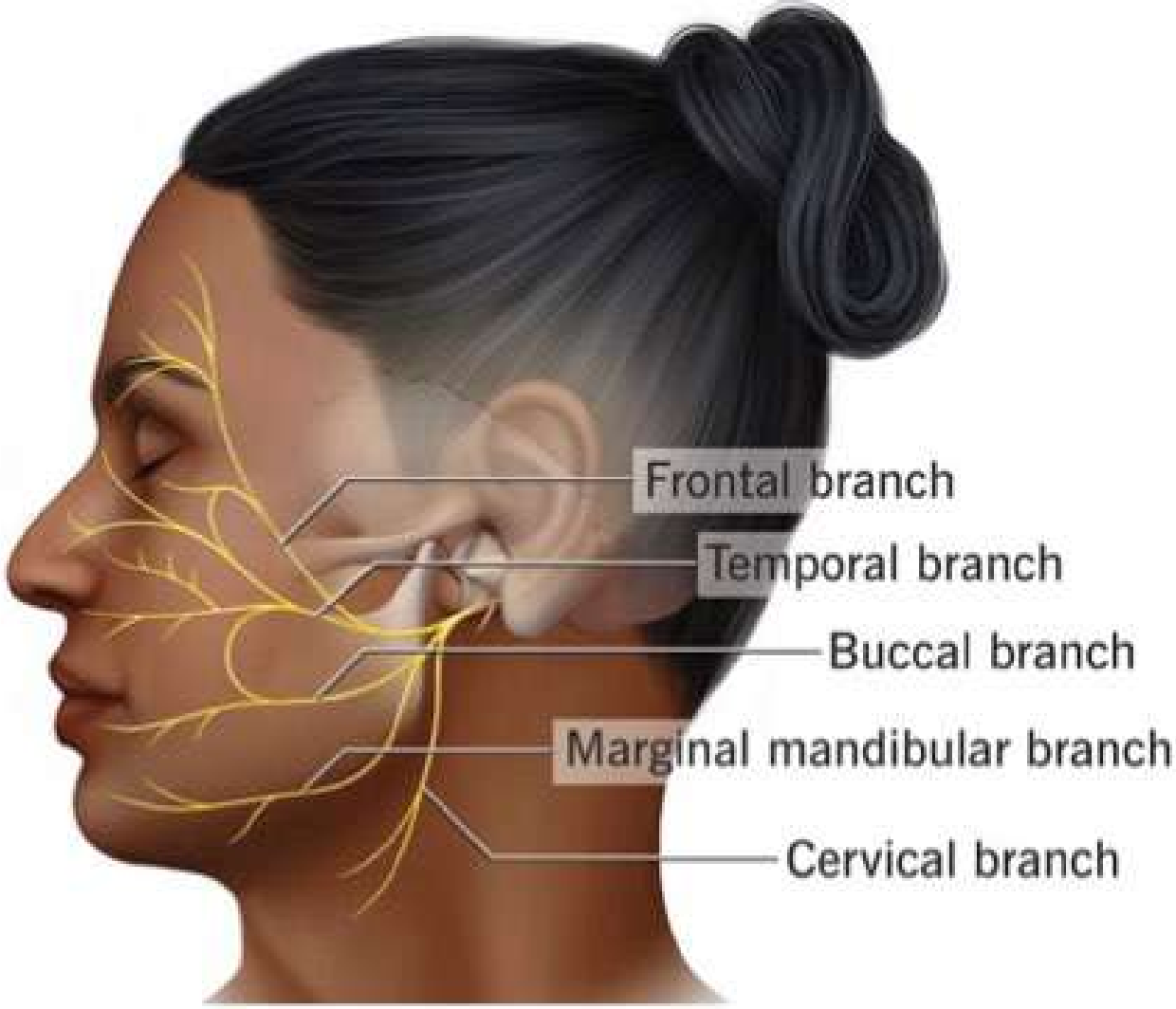
Facial nerve then runs through the **Parotid** gland, and divides into 5 terminal branches:

- Temporal
- Zygomatic
- Buccal
- Marginal Mandibular
- Cervical



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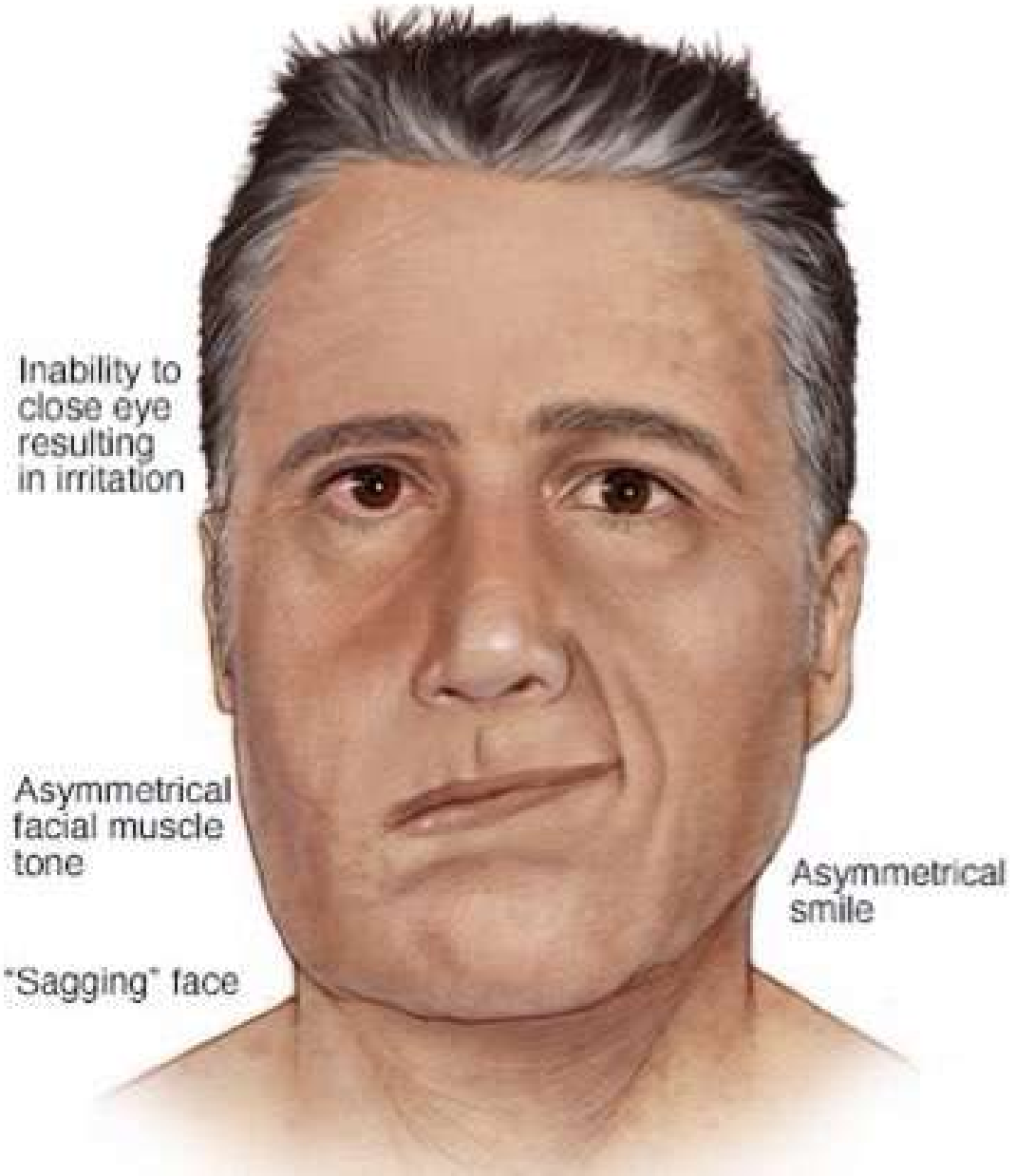
Clinical: Bell's Palsy is acute, unilateral paralysis of these muscles, causing facial droop and inability to close the eye on the affected side.

Location of facial nerve



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Summary

The face is characterized by **highly vascular** skin and muscles of facial expression. Motor control comes entirely from the **Facial Nerve**, damage causes **Bell's Palsy**. Sensation is supplied by the three divisions of the **Trigeminal Nerve**.

Arterial supply is primarily from the **Facial Artery**. Venous drainage via the **Facial Vein** poses a clinical risk in the Danger Triangle of the Face, due to connections with the **Cavernous Sinus**. Lymph drains to the Submental, Submandibular, and Pre-Auricular nodes.

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