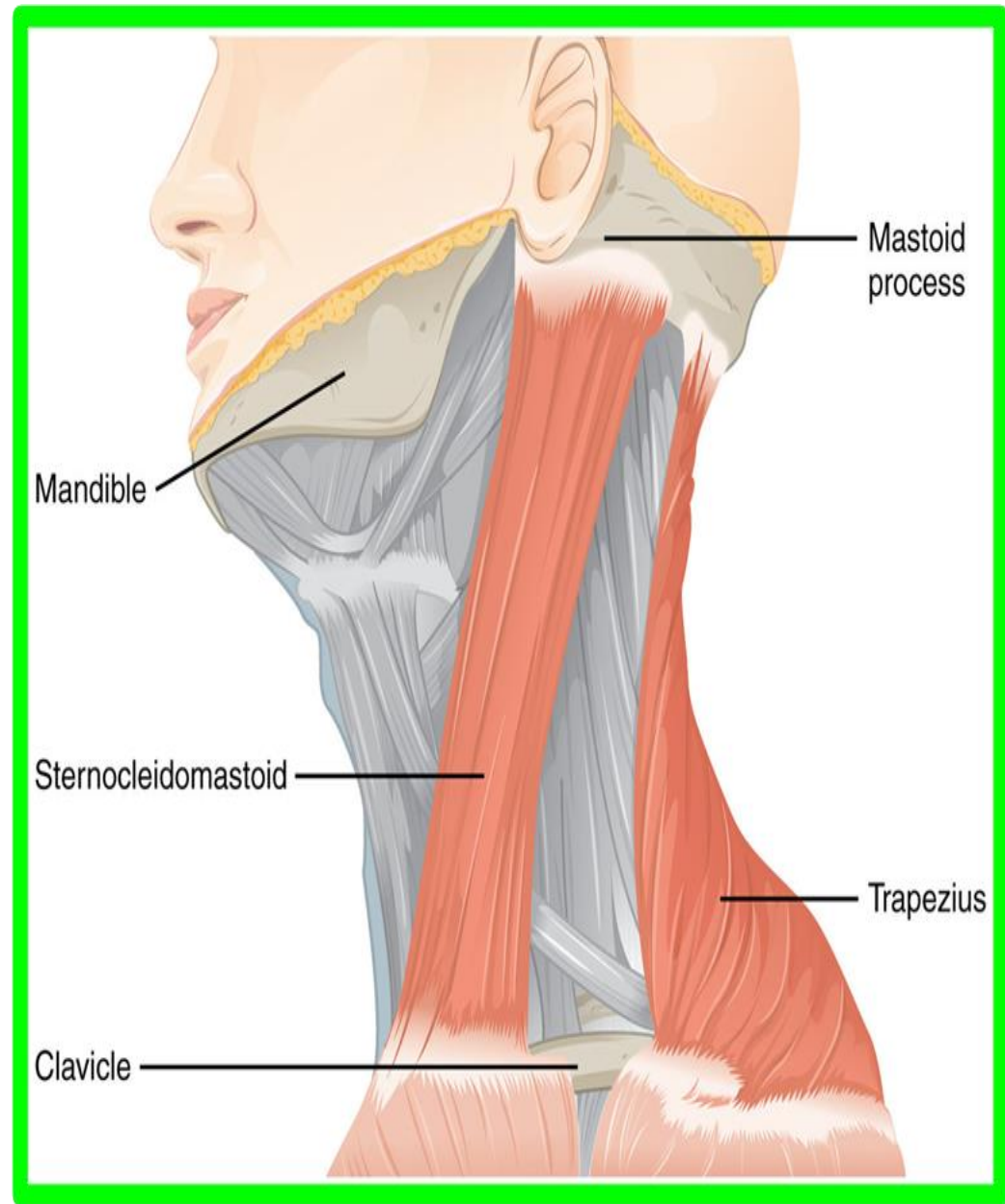


ANTERIOR TRIANGLE

BY DR.DALIA BIRAM.

- **The side of the neck is divided by the sternomastoid muscle into:**
 - 1. Anterior triangle in front of the muscle.**
 - 2. Posterior triangle behind the muscle.**

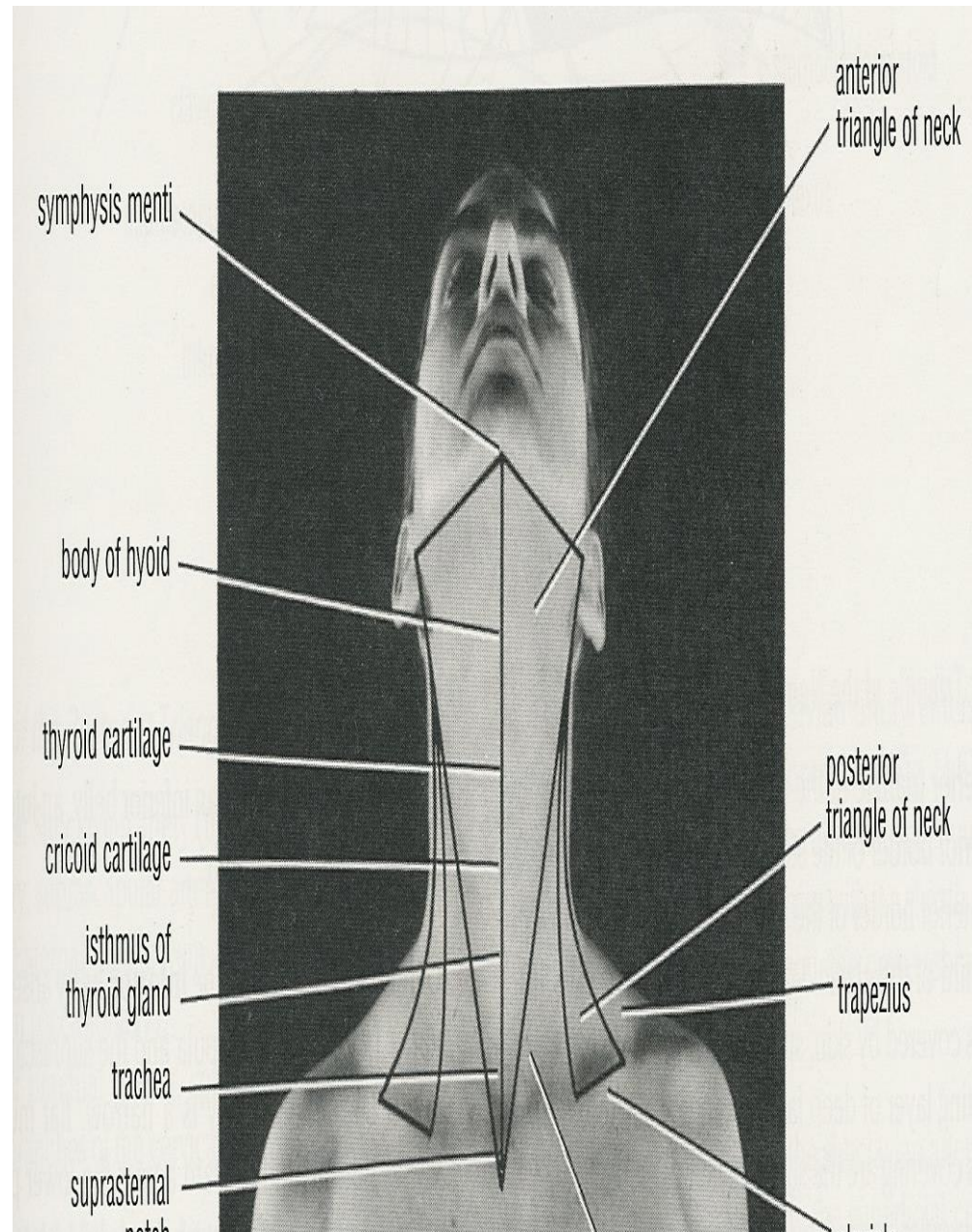


Boundaries:

Anteriorly: Midline of the neck.

Posteriorly: Anterior border of sternomastoid muscle.

Base (up): Formed by the lower border of the body of the mandible.



ANTERIOR TRIANGLE

Boundaries

- **Roof:** Skin, superficial fascia containing platysma, investing layer of deep fascia, cervical branch of facial nerve, transverse cervical nerve and anterior jugular veins.

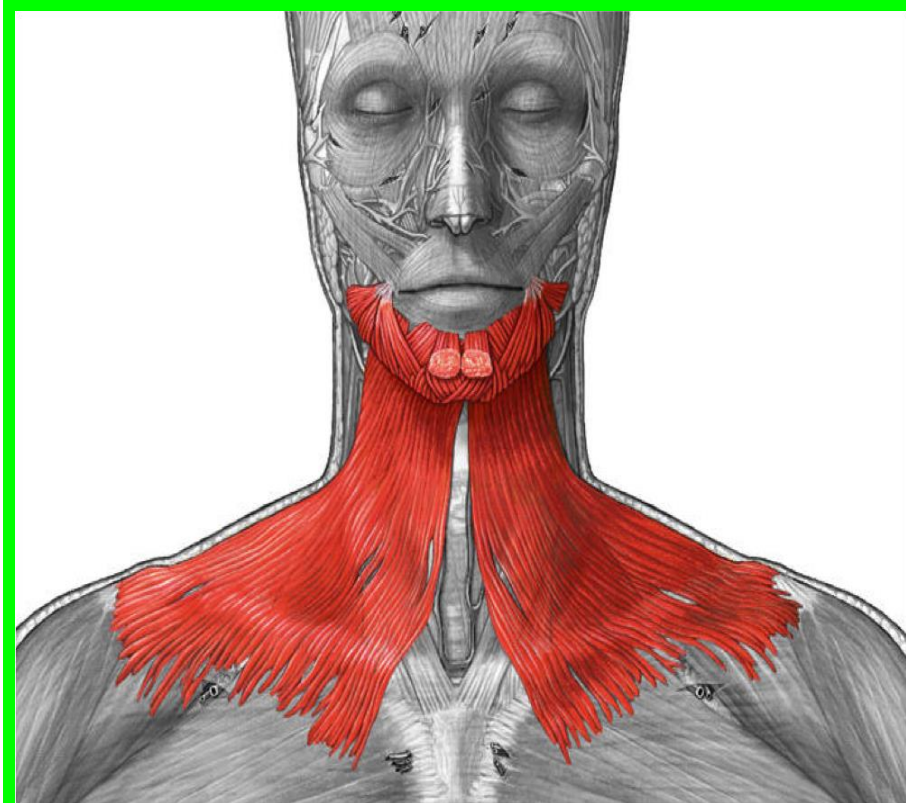
Muscle: Platysma

Origin: Deep fascia over pectoralis major and deltoid

Insertion: Body of mandible and angle of mouth

N. Supply: Facial nerve (cervical branch)

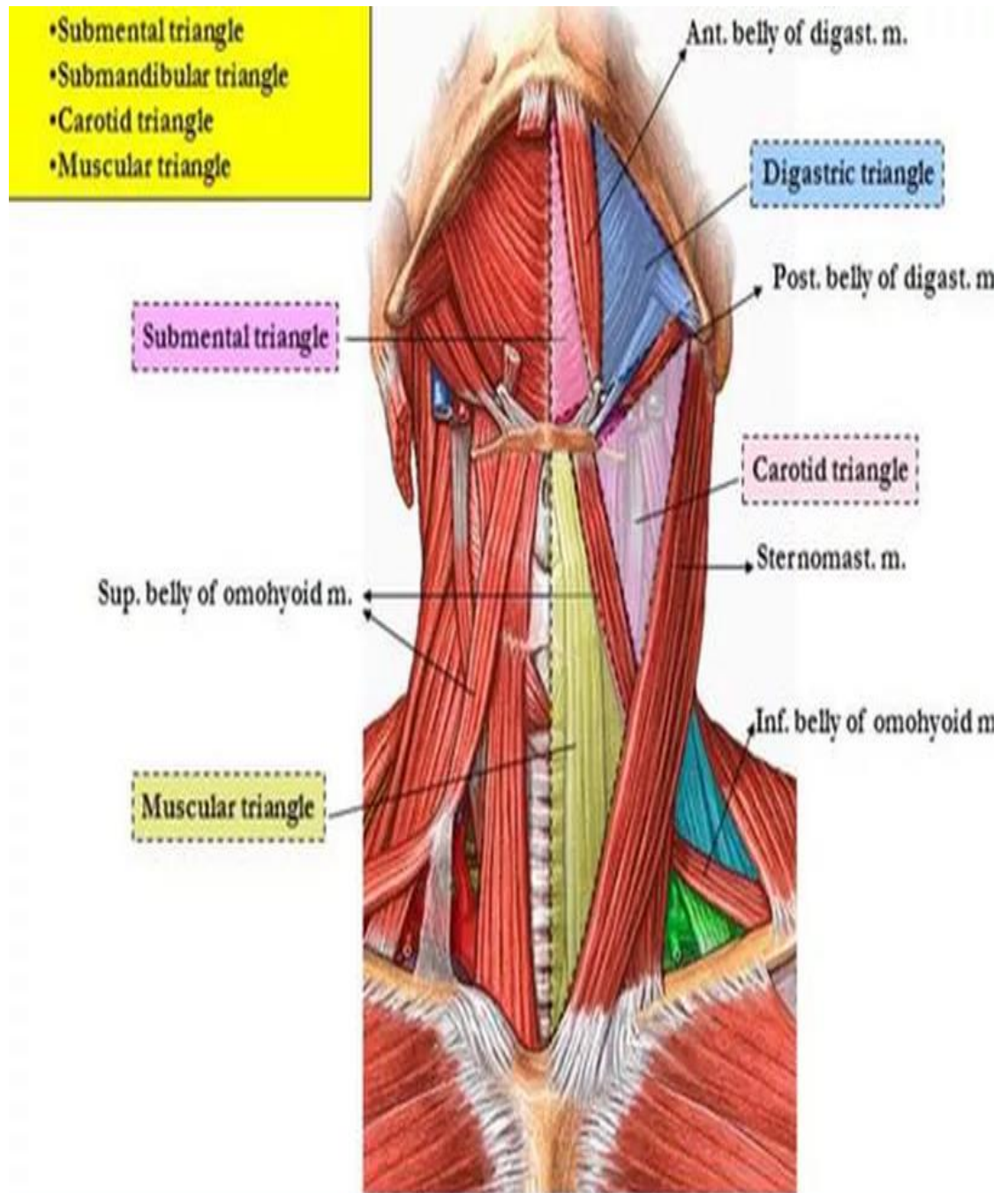
Action: Depresses mandible and angle of mouth



platysma

Divisions: The anterior and posterior bellies of digastric and the superior belly of omohyoid muscles divide the triangle into:

1. **Half** of submental triangle.
2. **Digastric triangle.**
3. **Carotid triangle.**
4. **Muscular triangle.**



Digastric muscle

Origin:

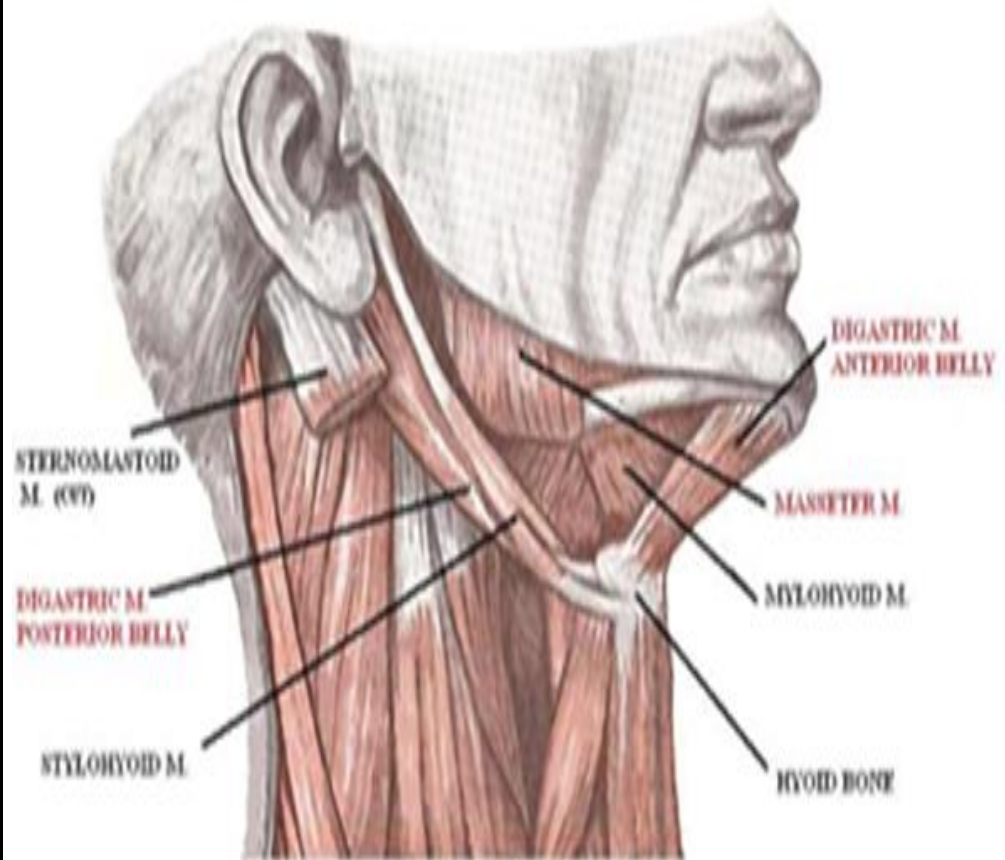
Posterior belly from the medial surface of mastoid process (mastoid notch).

Anterior belly from lower border of the body of the mandible (digastric fossa).

Insertion: to the intermediate tendon which is held in position by fibrous loop to the hyoid bone, this tendon pierces the stylohyoid muscle.

Nerve supply: posterior belly from facial nerve (with stylohyoid), anterior belly from nerve to mylohyoid from mandibular (with mylohyoid)

Action: Depression of mandible and elevation of the hyoid bone.



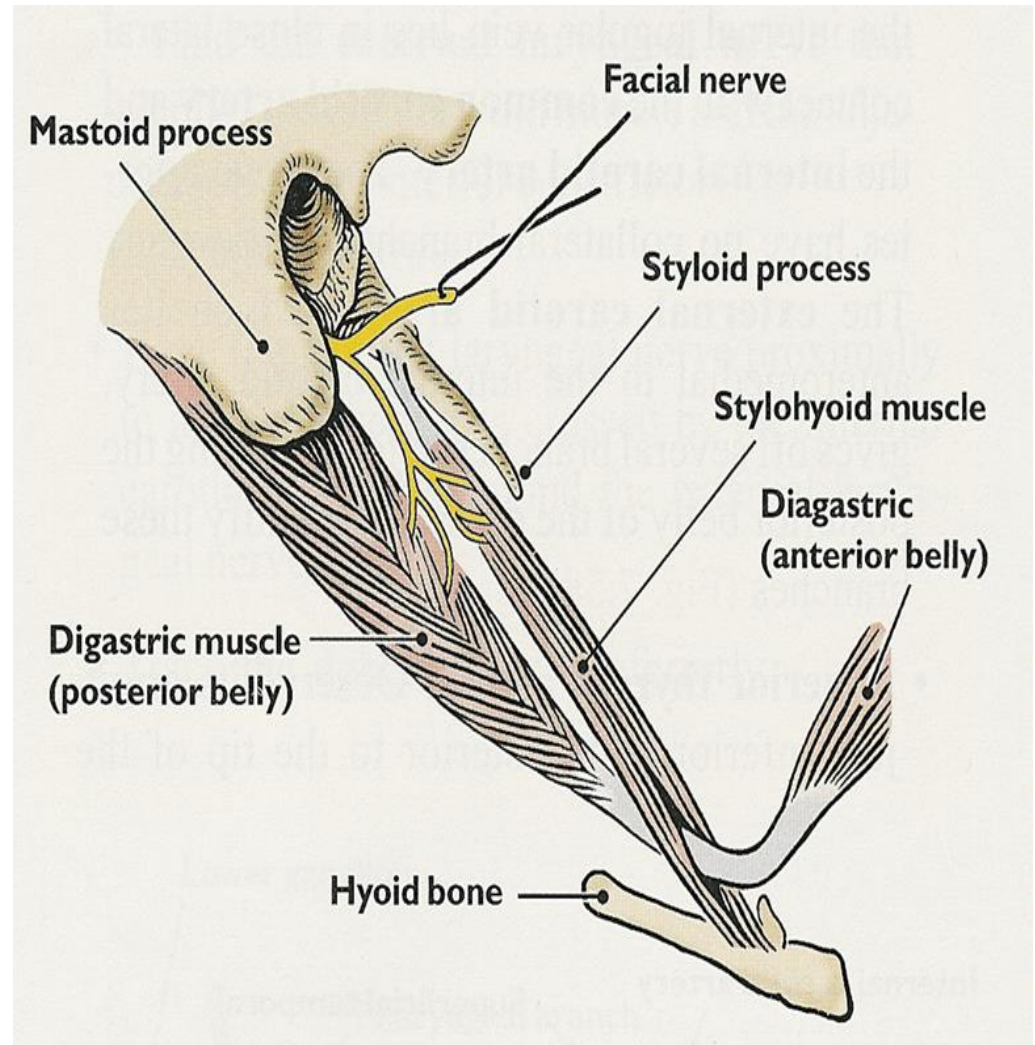
Stylohyoid muscle

Origin: Styloid process.

Insertion: at junction between body and greater horn of hyoid bone, it is pierced by the intermediate tendon of digastric muscle.

Nerve supply: Facial nerve.

Action: Elevation of the hyoid bone.



Submental Triangle

Boundaries:

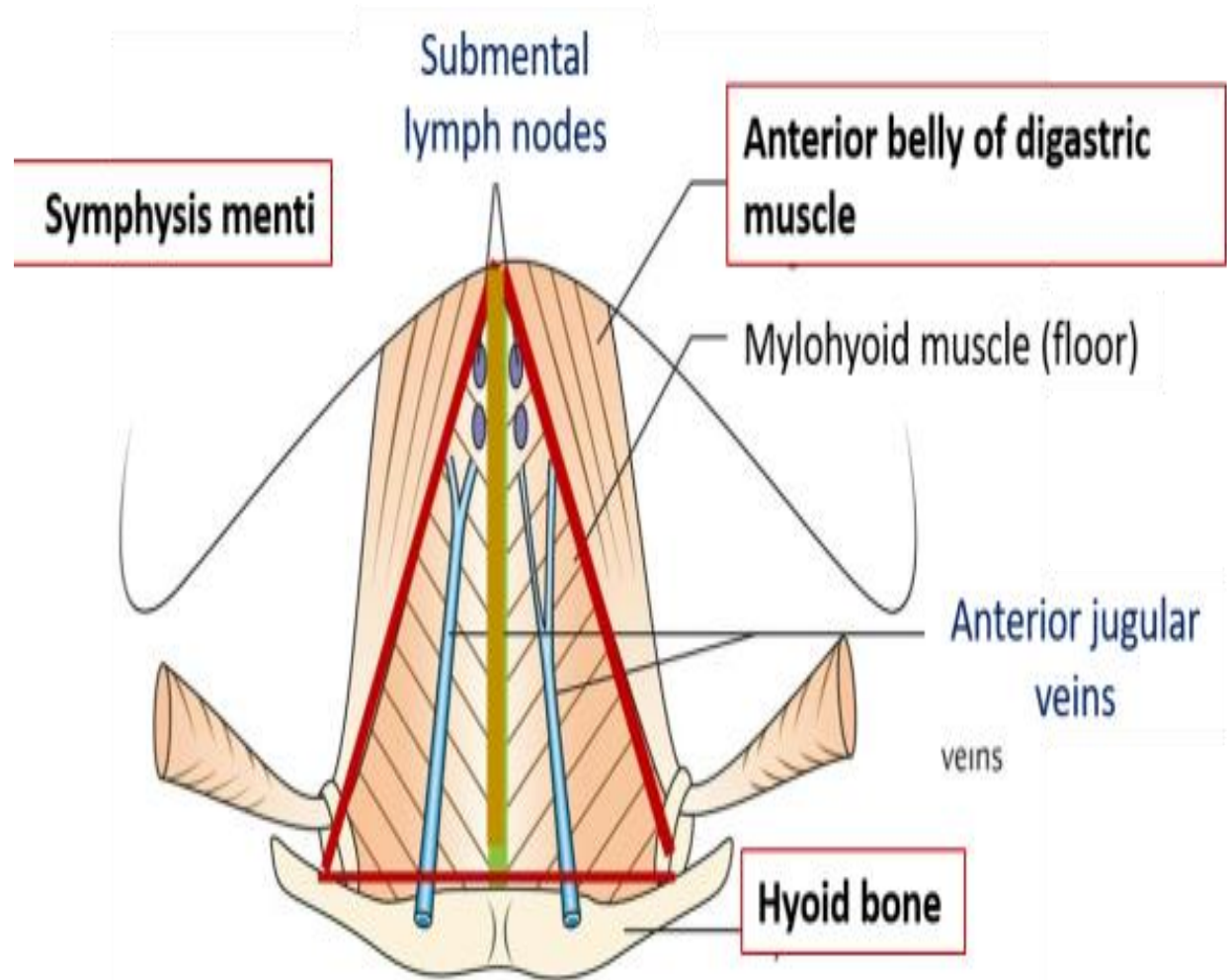
Laterally: 2 anterior belly of digastric.

Base Inferiorly: body of hyoid bone.

Floor: mylohyoid muscle.

Contents:

- 1- Submental lymph nodes.
- 2- Submental vessels.
3. nerve to mylohyoid.
- 4-beginning of anterior jugular vein



Mylohyoid muscle

Origin: Mylohyoid line of the inner surface of the mandible.

Insertion: Upper surface of the body of the hyoid bone and in the mylohyoid raphe.

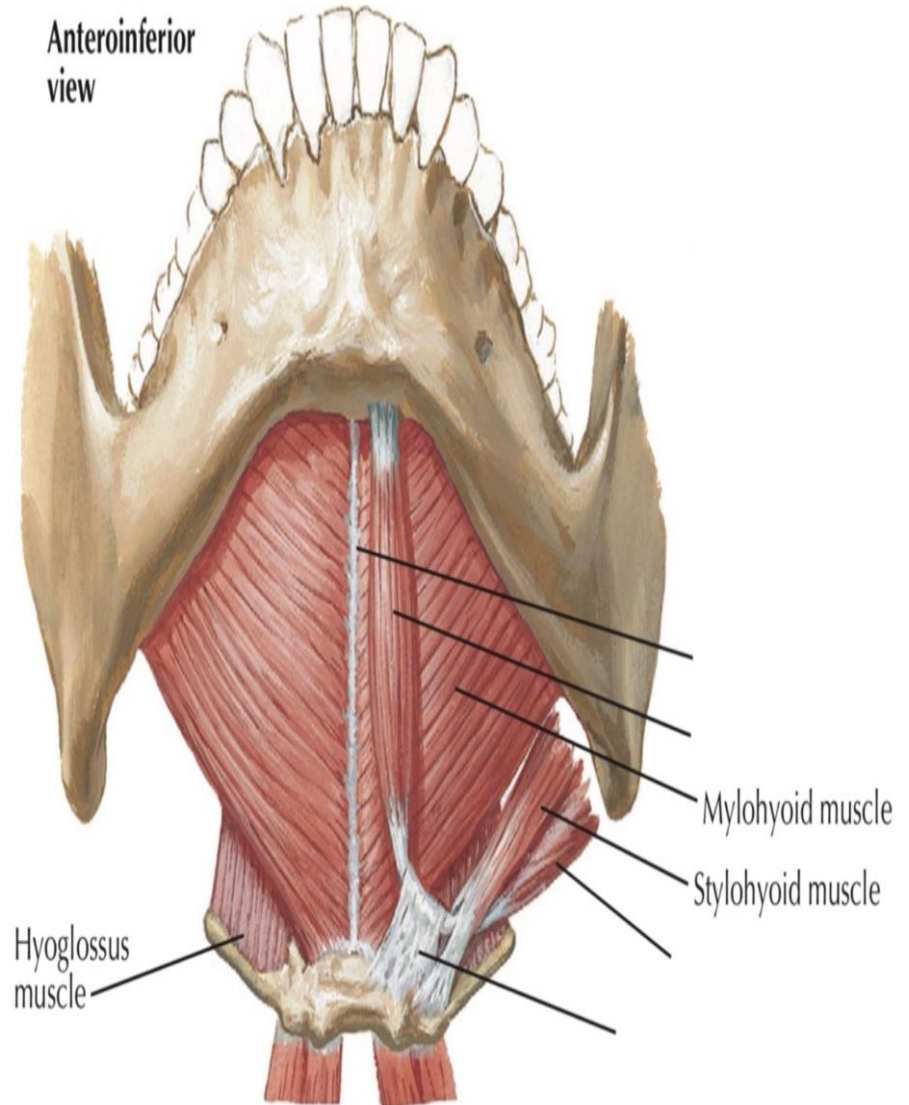
Nerve supply: Nerve to mylohyoid from posterior division of mandibular nerve.

Action: the two muscles

Support tongue and floor of the mouth.

-Elevate the floor of the mouth and hyoid bone in first stage of swallowing.

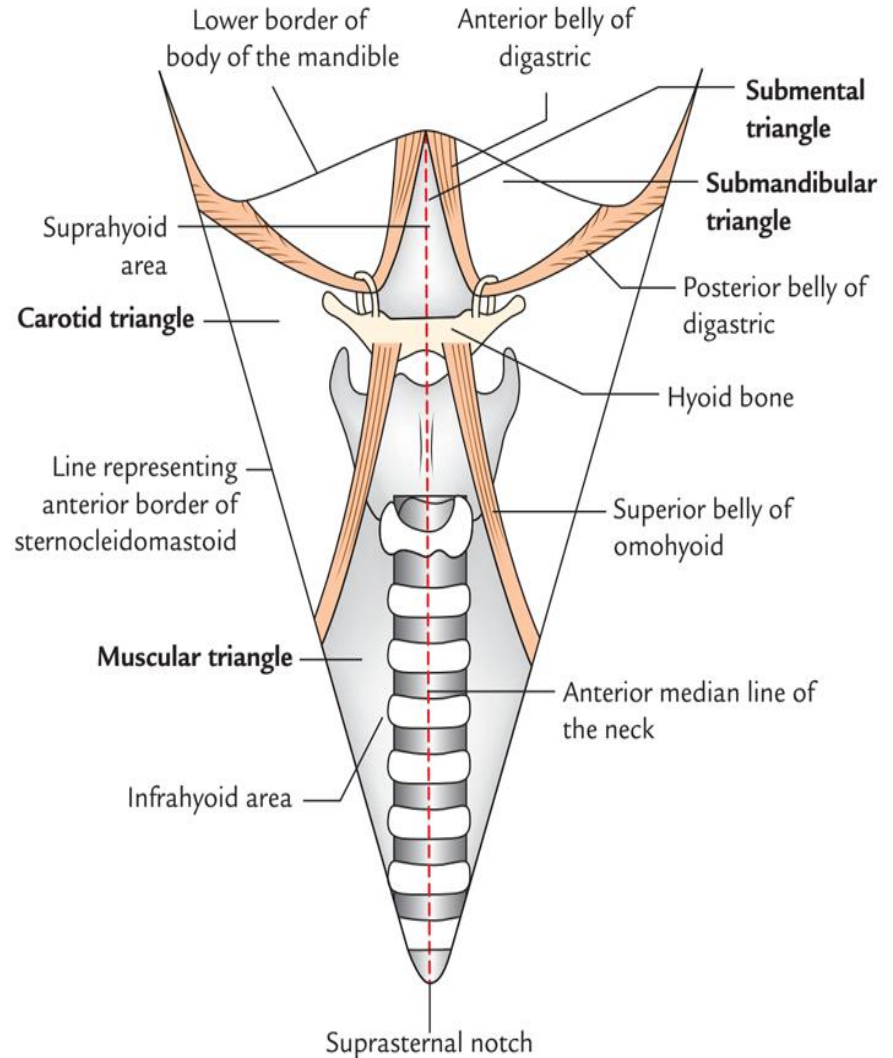
-Depress the mandible and open the mouth.



Digastric Triangle

Boundaries:

- Lower border of the mandible (base).
- Anterior and posterior bellies of digastric muscle.

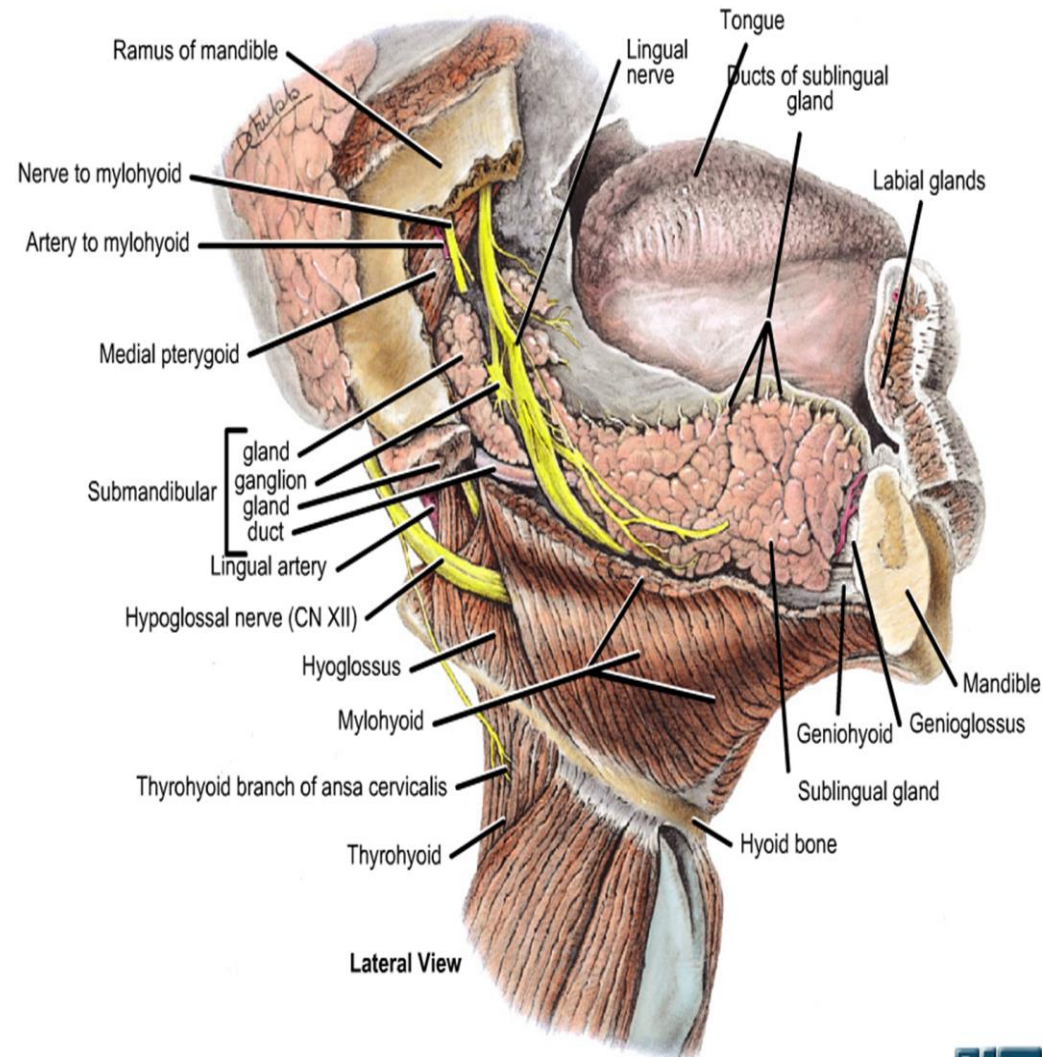


Digastric Triangle

Floor: Formed by mylohyoid and hyoglossus muscles.

Contents:

- Submandibular salivary gland and duct.
- Submandibular lymph node.
- Submandibular ganglion
- Facial artery and anterior facial vein and mylohyoid vessels.
- hypoglossal nerve and nerve to mylohyoid and lingual nerve



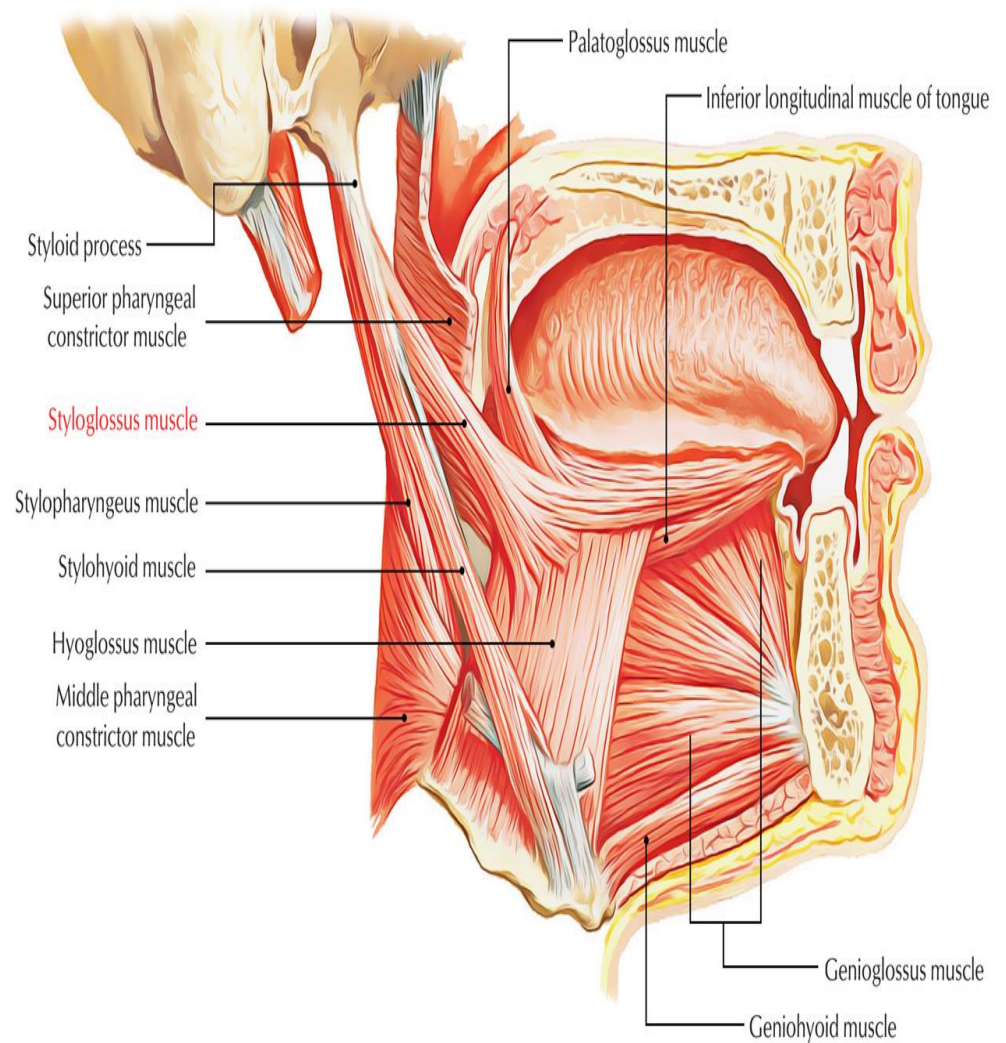
Hyoglossus muscle

Origin: Upper border of the body and greater horn of the hyoid bone.

Insertion: at the side of the tongue mixing with other lingual muscles.

Nerve supply:
Hypoglossal nerve.

Action: Depression of the tongue.



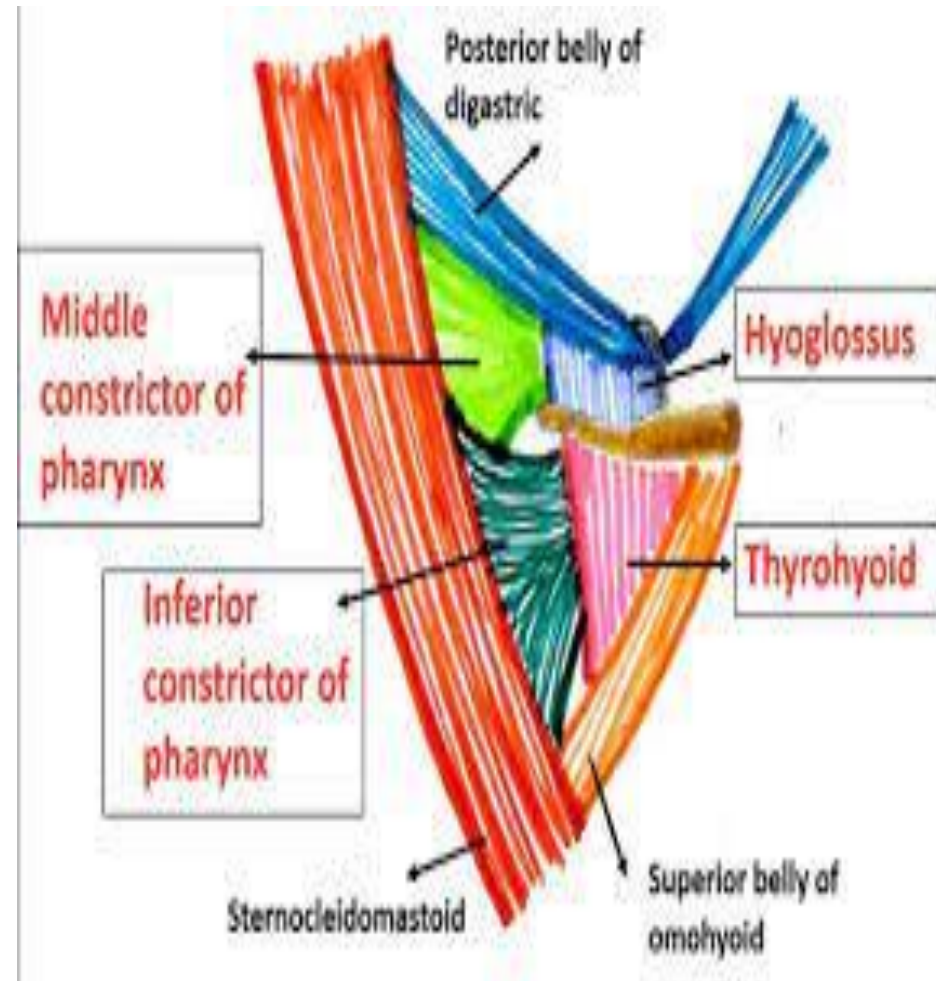
Carotid Triangle

Boundaries:

- Anterior border of sternomastoid (posteriorly).
- Posterior belly of digastric muscle (superiorly).
- Superior belly of omohyoid(inferiorly).

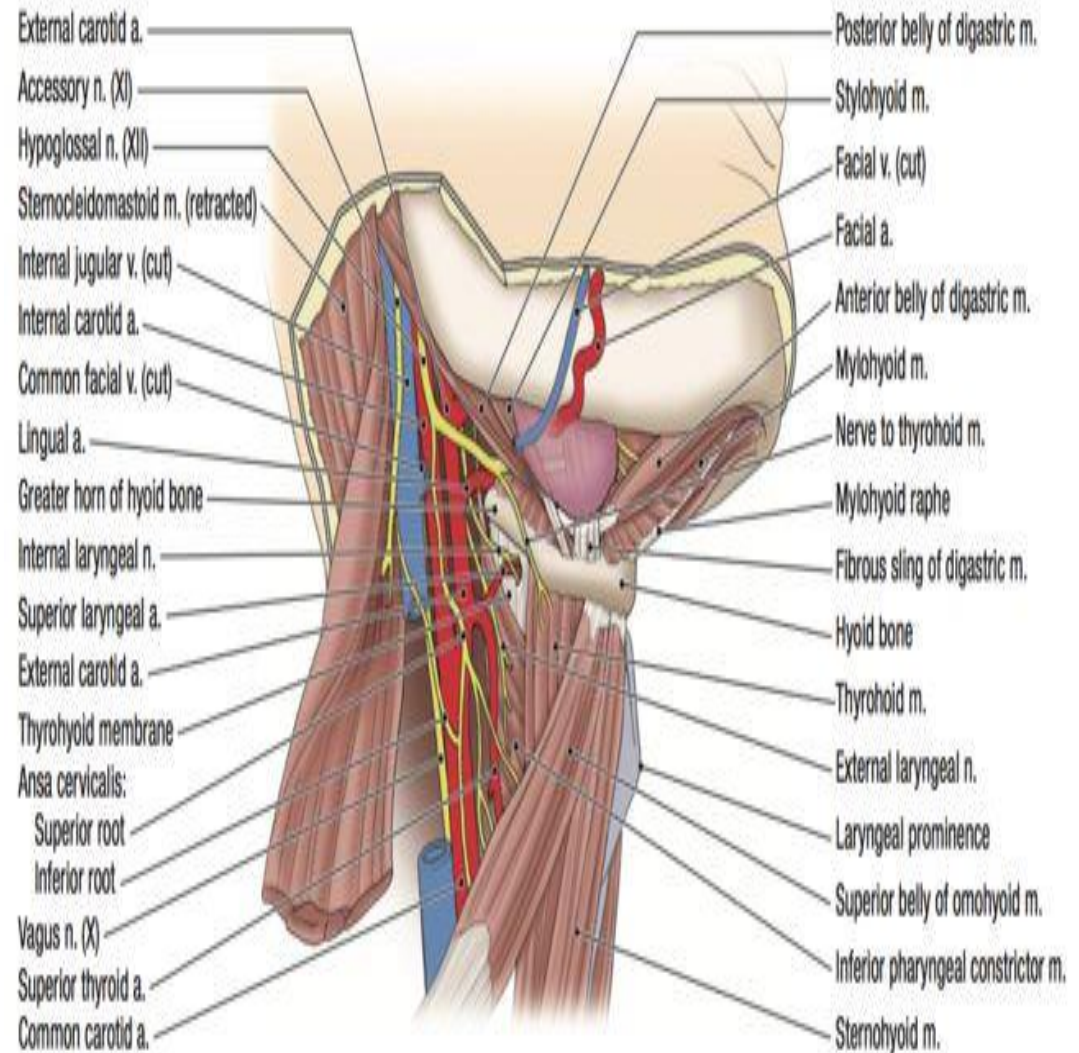
Floor:

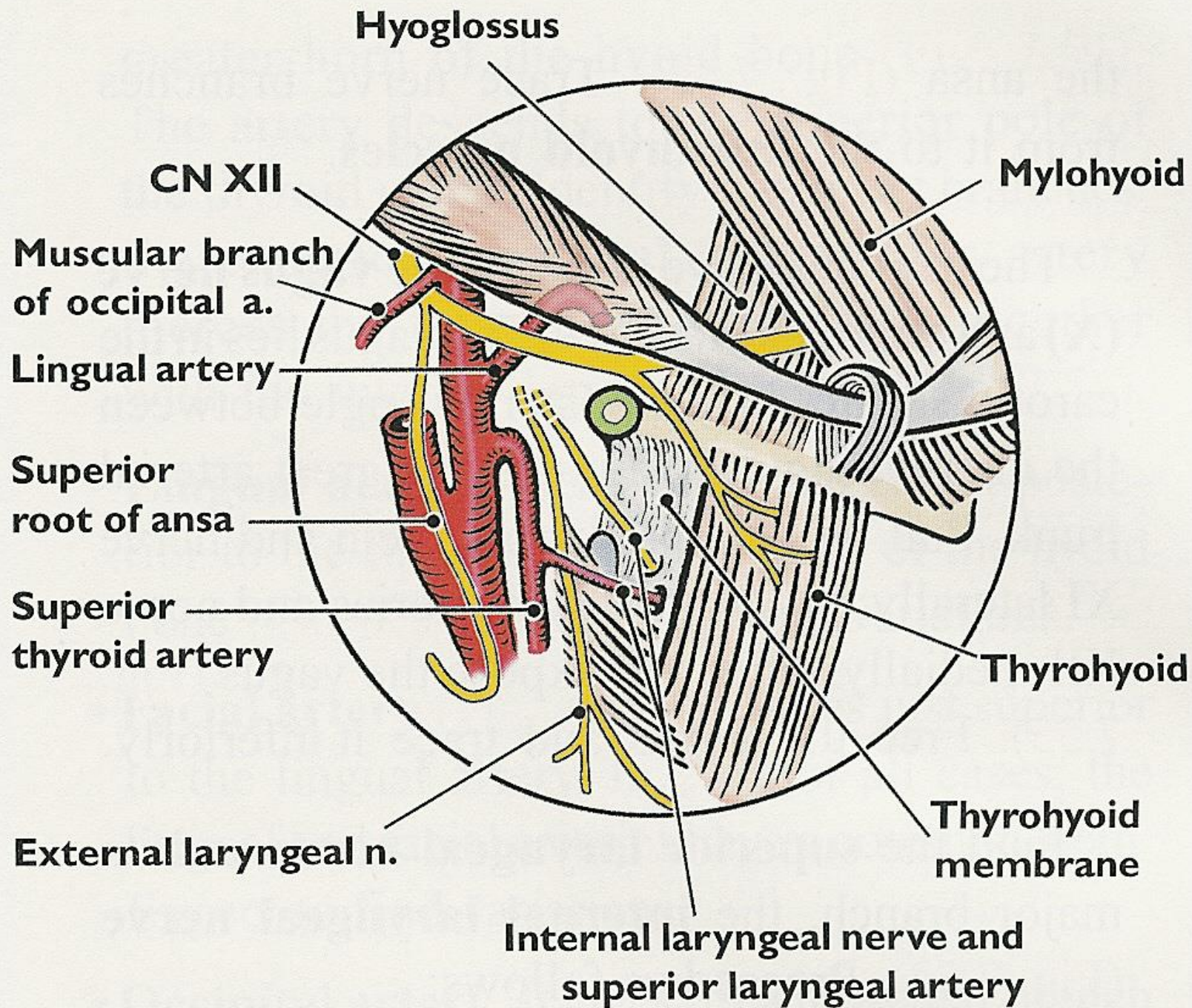
- Formed by hyoglossus, thyrohyoid, anteriorly and middle and inferior constrictors muscles of the pharynx posteriorly.



Contents:

1. Carotid sheath and its contents (common carotid artery, internal carotid artery, internal jugular vein and vagus nerve)
2. External carotid artery with its branches.
3. Sympathetic trunk.
4. Upper and lower deep cervical lymph nodes.
5. Last three cranial nerves (X, XI, XII).
6. Ansa cervicalis.





Muscular Triangle

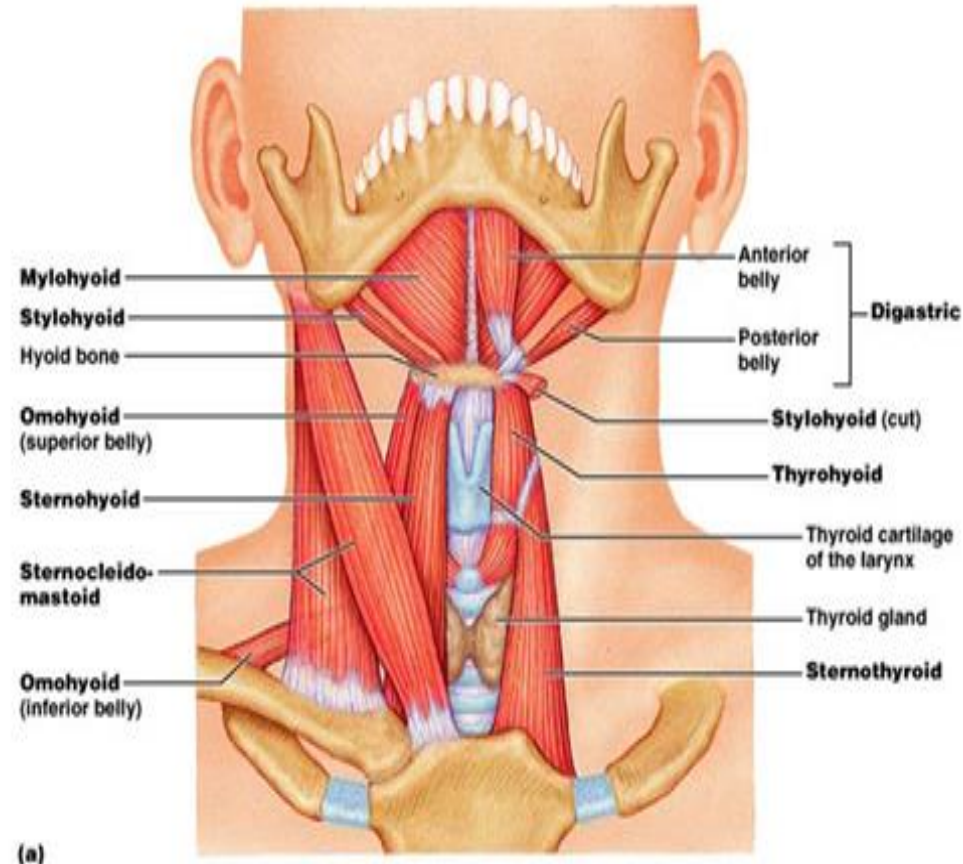
Boundaries:

- Superior belly of omohyoid.
- Anterior border of sternomastoid .
- Midline of the neck.

Floor:

Sternohyoid and sternothyroid muscles.

Deep to them; thyroid gland, larynx, trachea.



Muscular Triangle

Contents:

Infrahyoid muscles(strap muscles) are arranged in two layers:

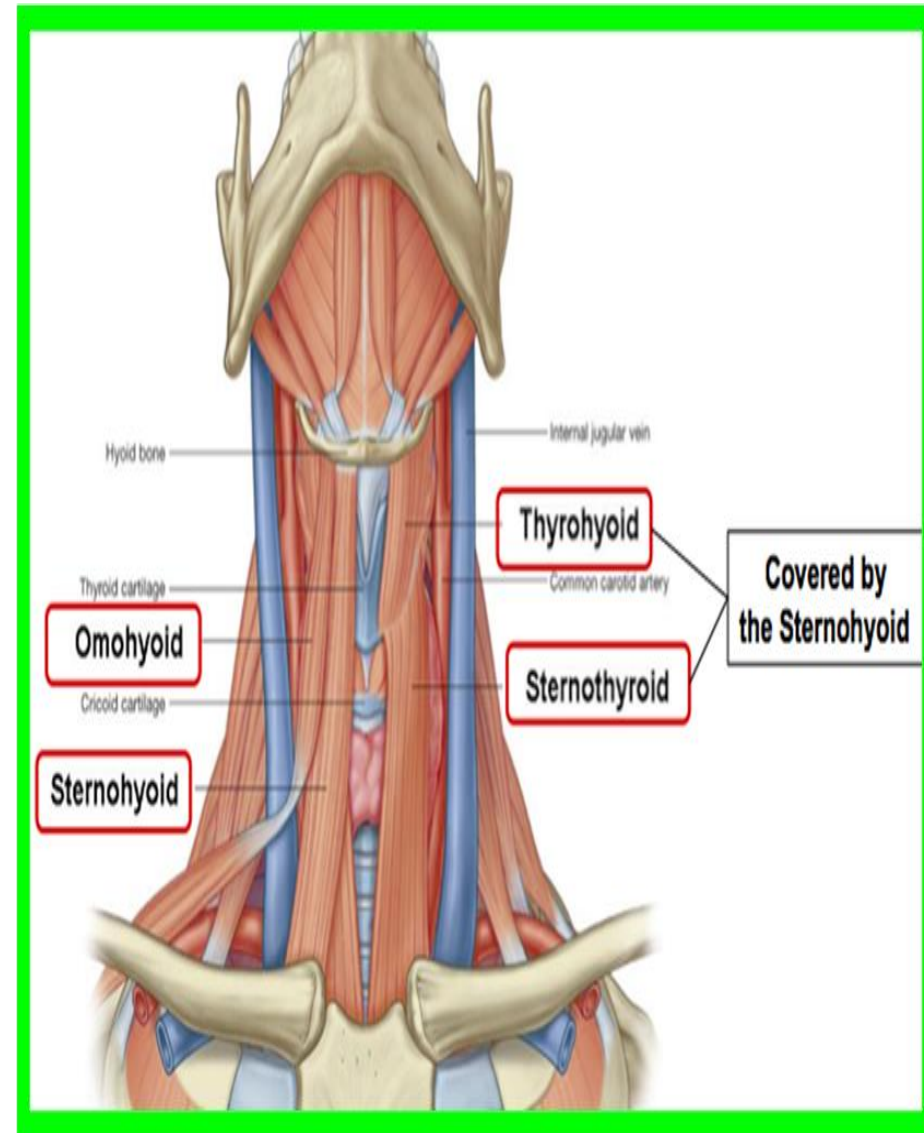
1-The superficial layer formed of the superior belly of omohyoid laterally and sternohyoid muscle medially.

2-Deep layer formed of thyrohyoid & sternothyroid muscles.

- All infrahyoid muscles supplied by ansa cervicalis (C1, C2&C3) except thyrohyoid muscle (supplied by C1 only).

3-These muscles cover the thyroid gland

4- pretracheal and prelaryngeal lymph nodes



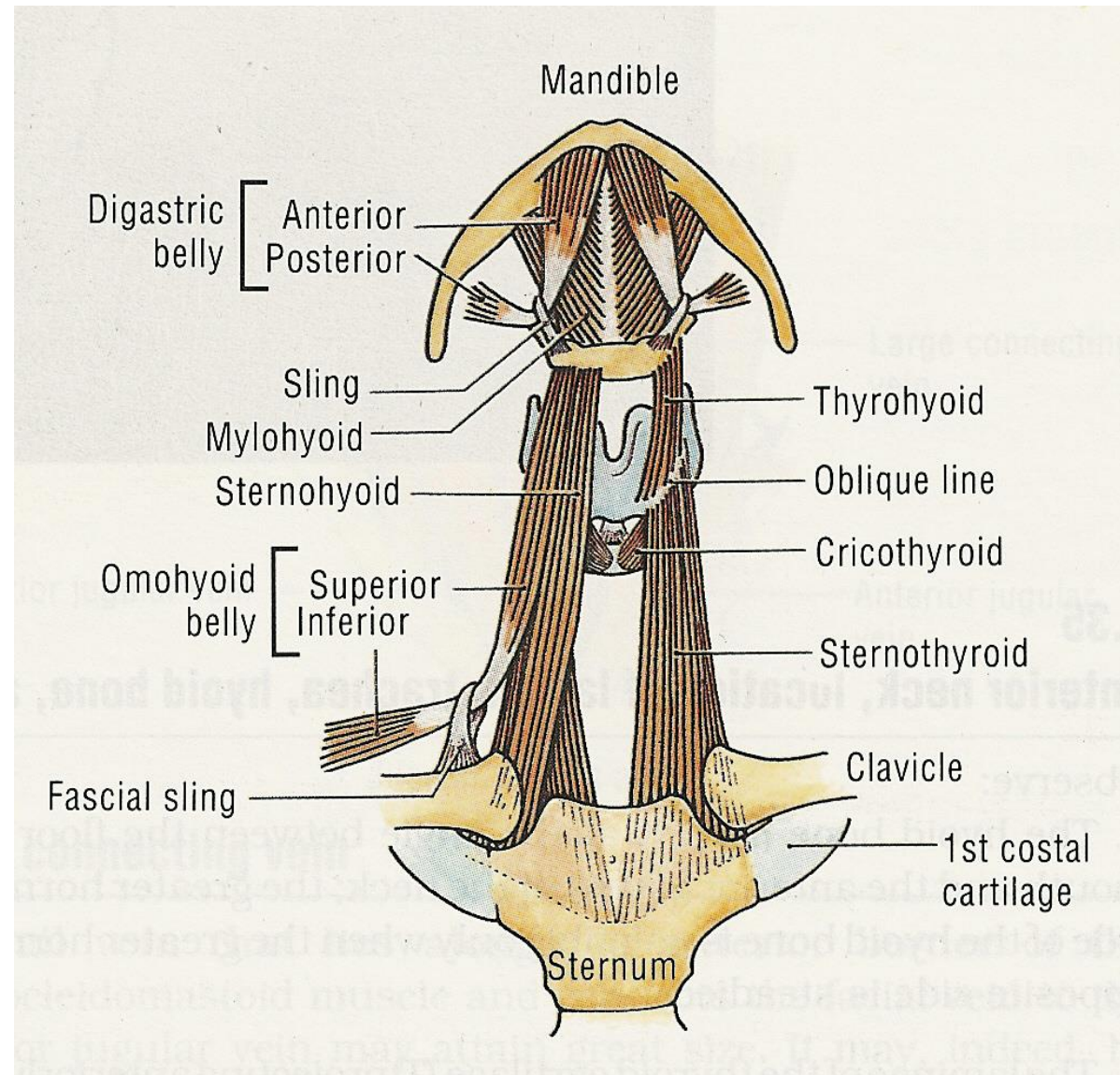
Sternohyoid muscle

Origin: Posterior surface of upper part of manubrium sterni and back of medial part of the clavicle.

Insertion: lower border of the body of hyoid bone.

Nerve supply: Ansa cervicalis.

Action: Depression of the hyoid bone.



Omohyoid

Inferior belly

Origin: margin of suprascapular notch and suprascapular ligament

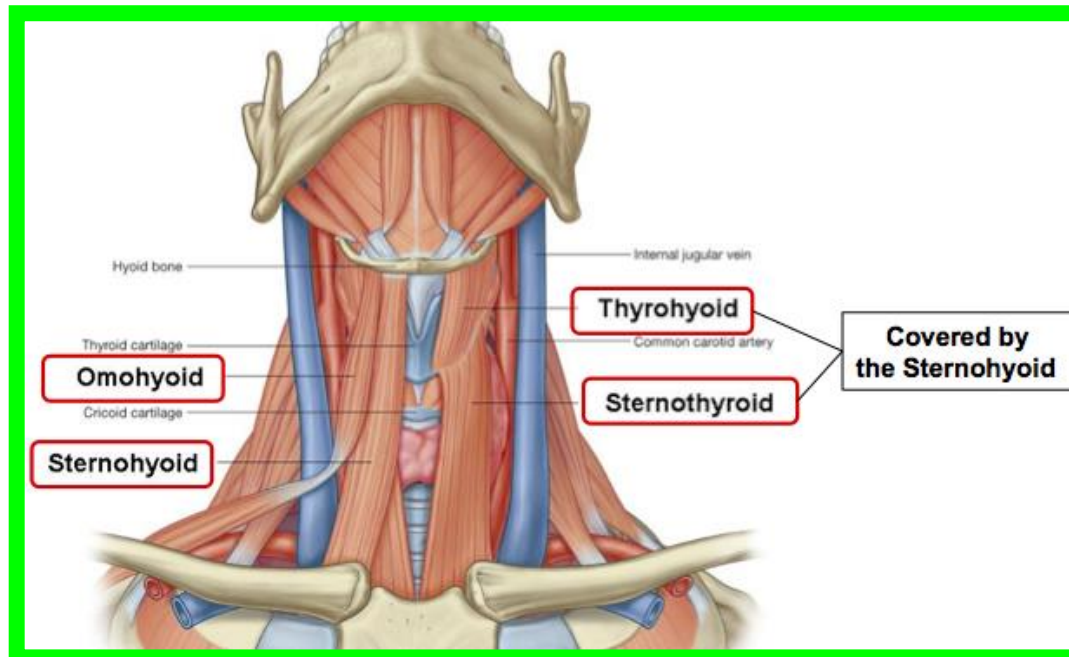
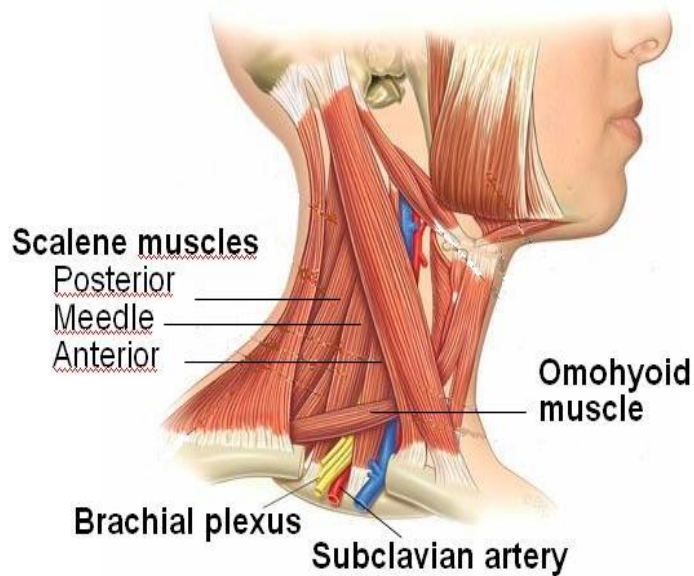
Superior belly

Origin: Lower border of body of hyoid bone

Insertion: Intermediate tendon is held to clavicle by fascial sling

N. Supply: Ansa cervicalis; C1, 2, and 3

Action: Depresses hyoid bone



Muscle: Sternothyroid

Origin: Manubrium sterni

Insertion: Oblique line of thyroid cartilage

N. Supply: Ansa cervicalis; C1, 2, and 3

Action: Depresses larynx

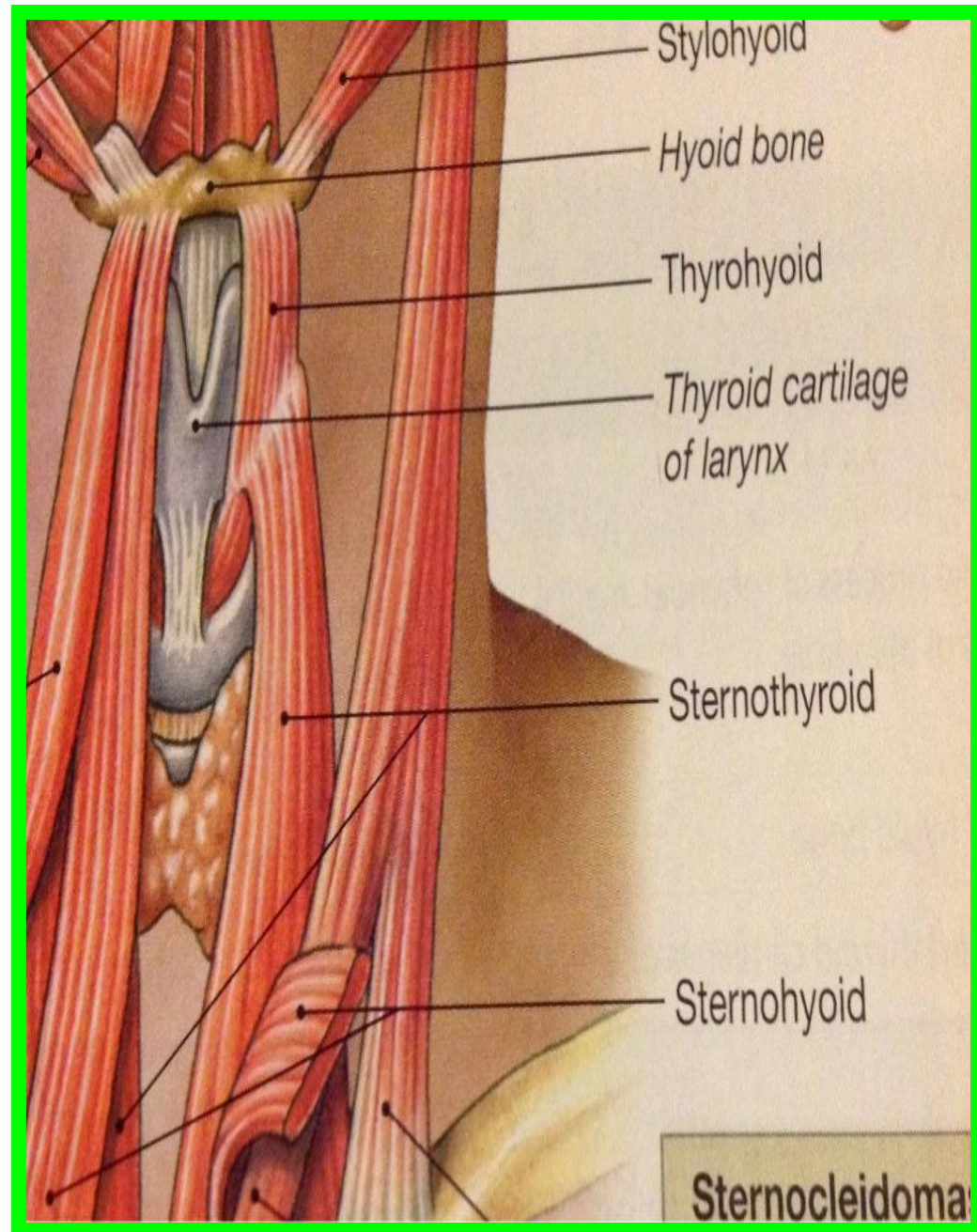
Muscle: Thyrohyoid

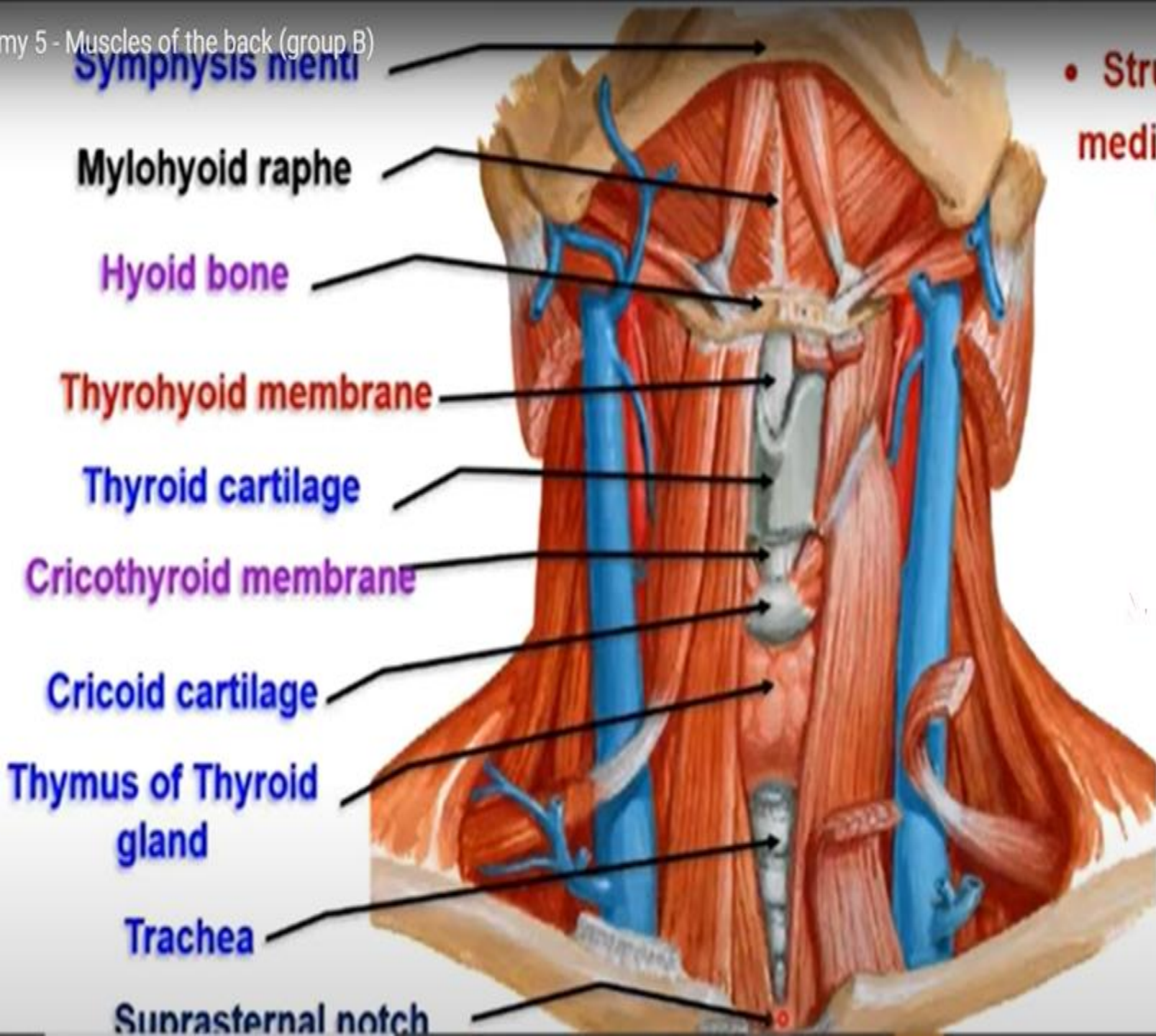
Origin: Oblique line of thyroid cartilage

Insertion: Lower border of body of hyoid bone

N. Supply: 1st cervical nerve

Action: Depresses hyoid bone or elevates larynx





THANK YOU