

**The University of Jordan
Faculty Of Medicine**



The Neck

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Associate professor of anatomy

The background features a series of concentric, light gray circles and curved lines, some solid and some dashed, creating a ripple effect. A prominent red speech bubble is centered on the page, containing the text 'Cervical Fascia'.

Cervical Fascia

Superficial cervical fascia

This is a thin layer of subcutaneous connective tissue that contains platysma muscle

Platysma muscle

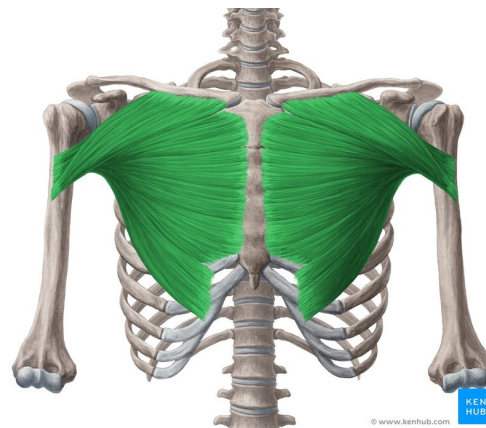
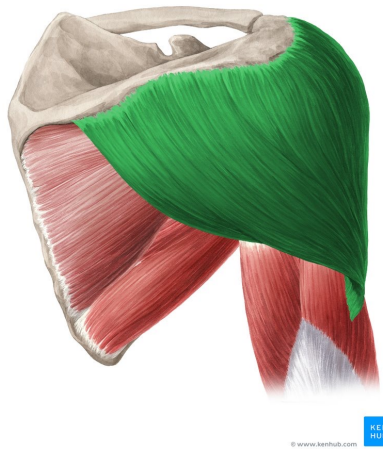
Origin : Skin and Deep fascia over pectoralis major and deltoid

Insertion : Body of mandible

Nerve supply : Cervical branch of Facial nerve

Action : Depresses mandible and angle of mouth

Know Nerve supply and action only



Read Only

- ❖ Paralysis of the platysma, resulting from injury to the cervical branch of the facial nerve causes the skin to fall away from the neck in slack folds
- ❖ When suturing wounds of the neck, surgeons carefully suture the skin and edges of the platysma. If this is not done, the skin wound will be pulled in different directions by the contracting platysma muscle, and an ugly scar may develop



https://www.linkedin.com/posts/md-abubakar-health-edu-org_paralysis-treatment-management-activity-7187118363637071872--rTC/

The Deep Cervical Fascia

It is condensed to form four defined layers :

A. Investing layer (fascia coll):

It surrounds the neck like a collar, **deep** to the skin, superficial fascia and platysma.

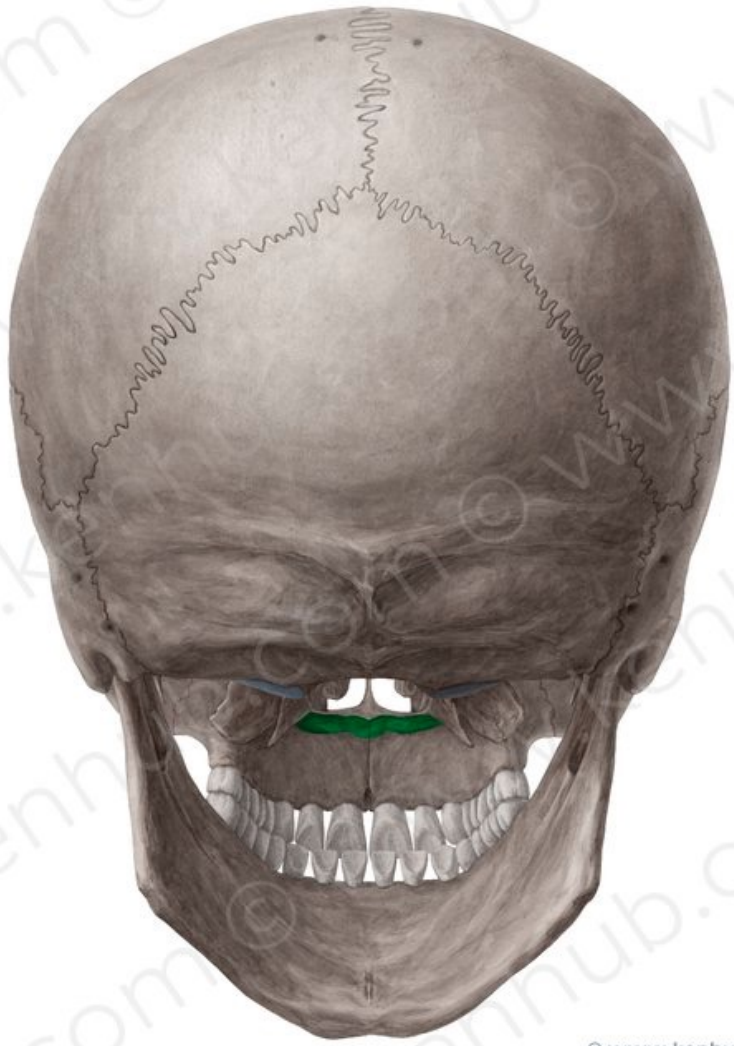
Attachment

- 1. Posteriorly :** Ligamentum nuchae and Spine of C7 vertebra.
- 2. Anteriorly :** Symphysis menti of the mandible and hyoid bone.
- 3. Superiorly :** External occipital protuberance ,Superior nuchal line ,Mastoid process and Base of the mandible.
- 4. Inferiorly :** Spine of scapula ,Acromion process ,Clavicle , Manubrium sterni

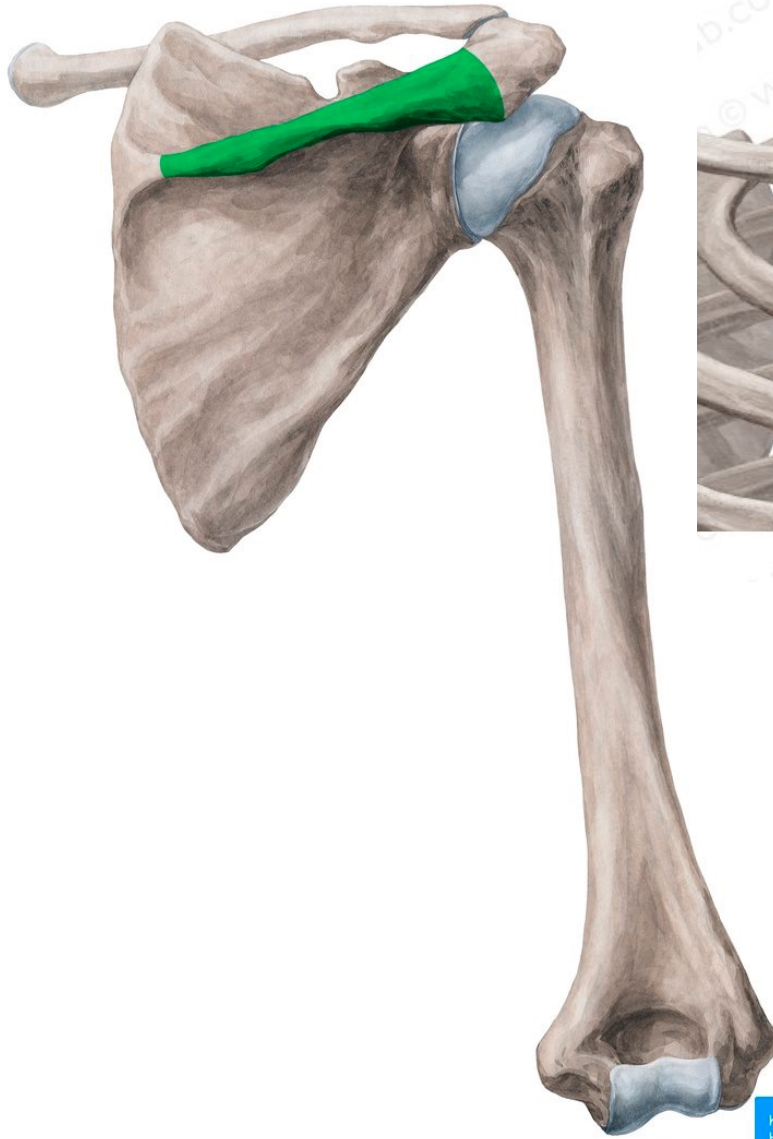
Contents : The fascia split to include the following structures

- ❖ Trapezius and sternocleidomastoid
- ❖ Parotid and submandibular glands

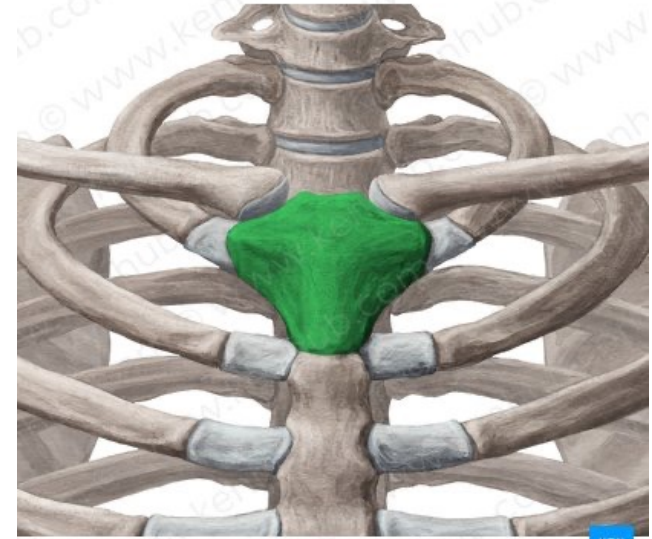




Superiorly



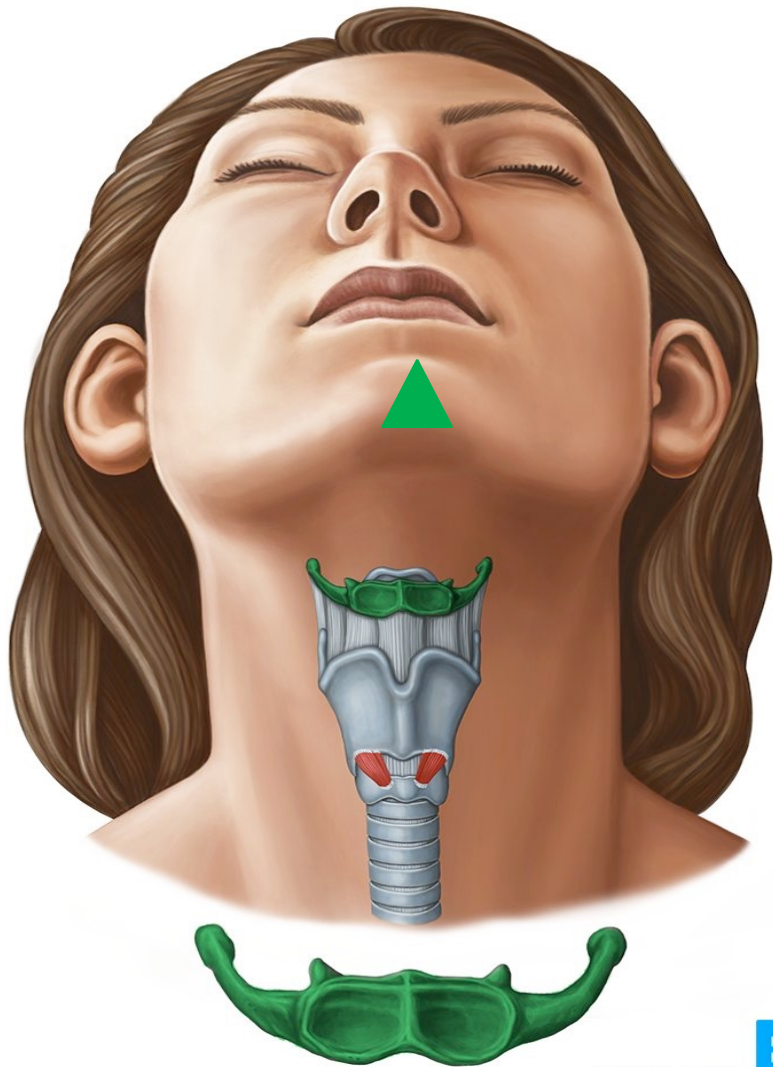
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Inferiorly



Anteriorly

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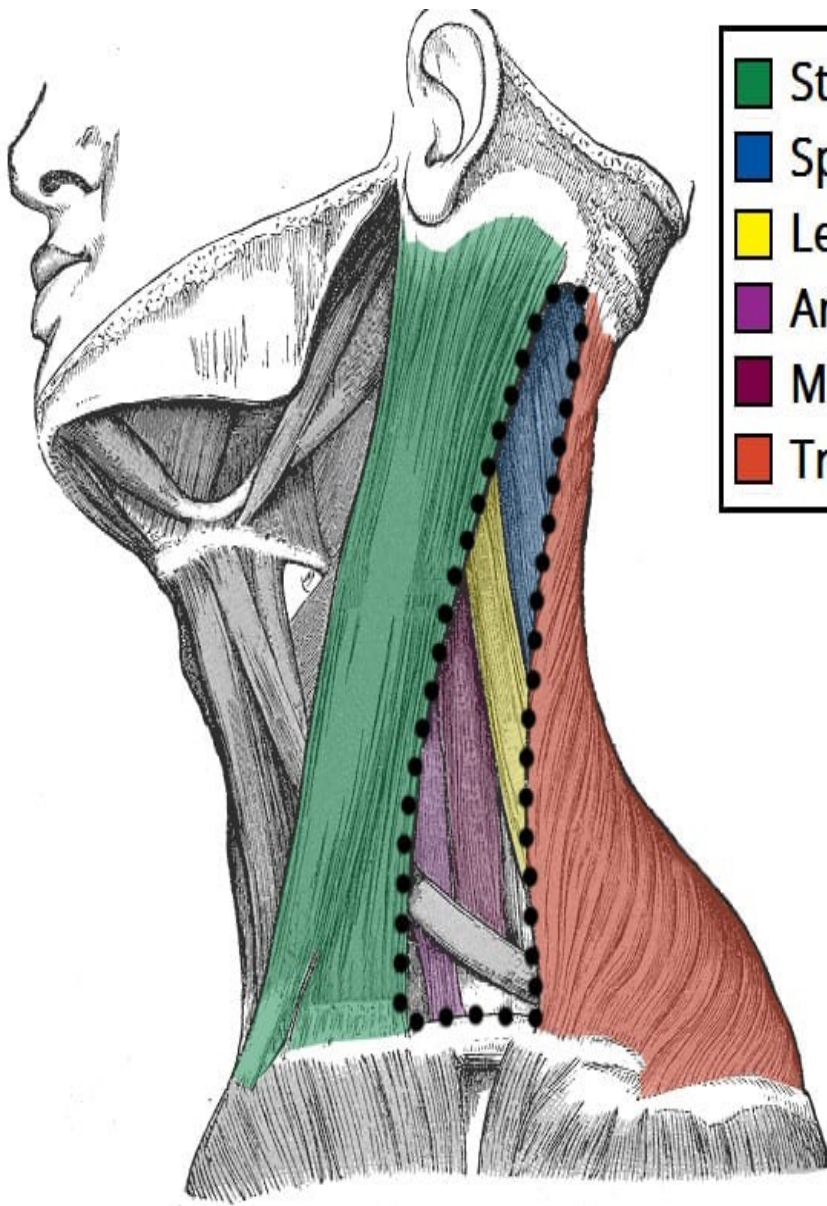


Ligamentum nuchae

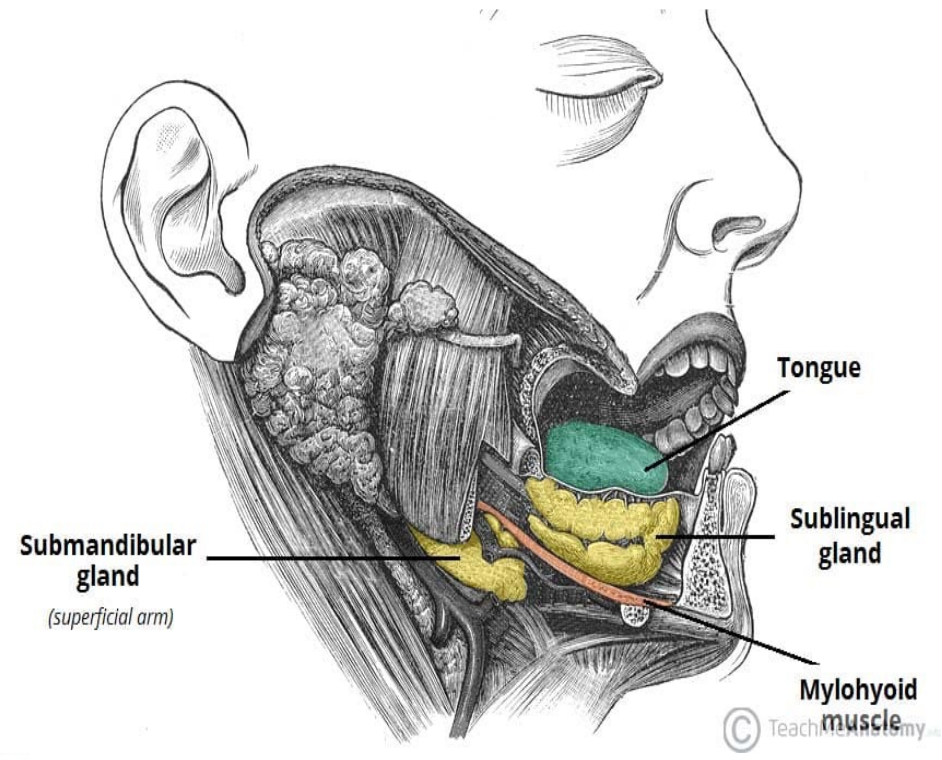
Posteriorly

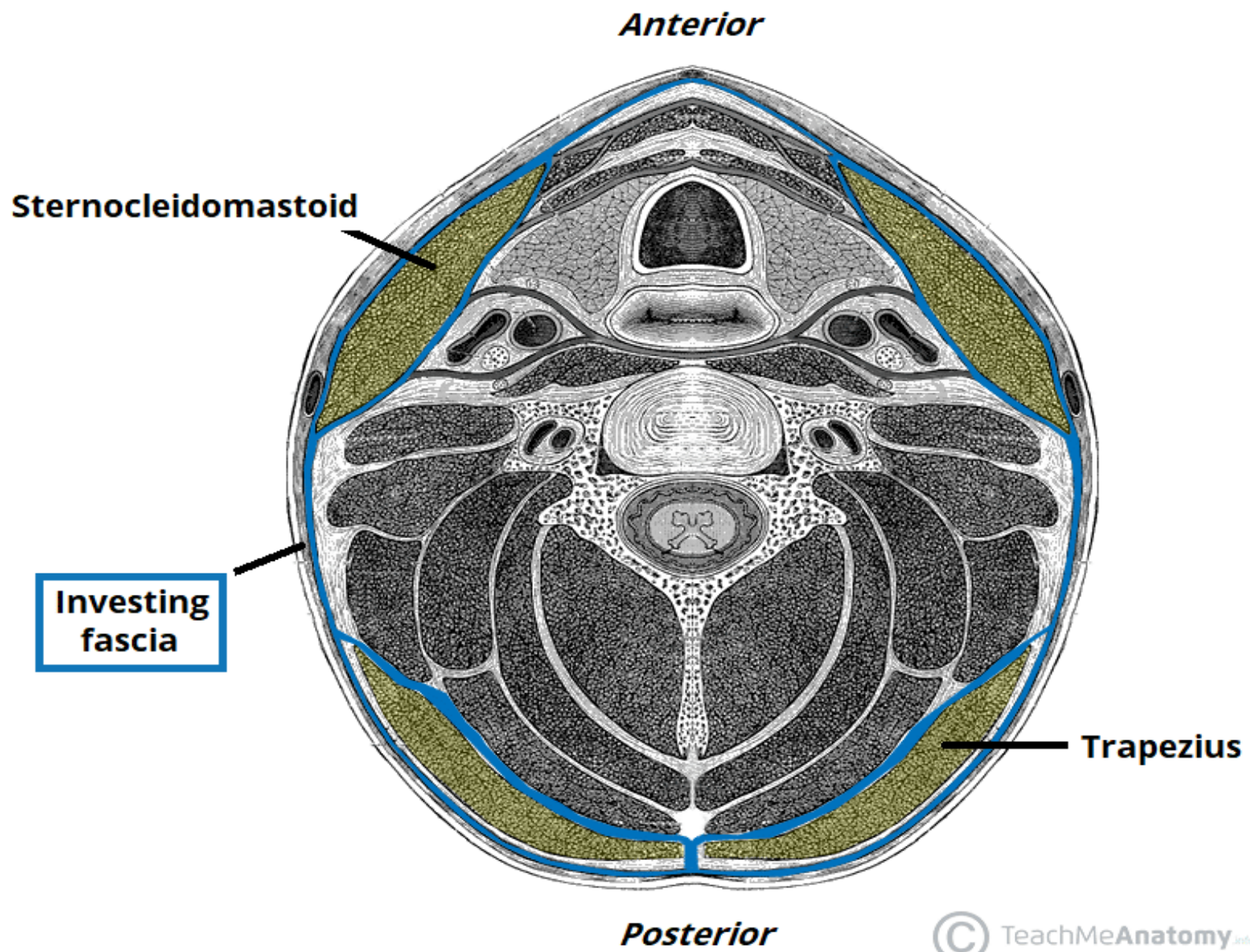
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- Sternocleidomastoid
- Splenius capitis
- Levator scapulae
- Anterior scalene
- Middle scalene
- Trapezius





B. Prevertebral fascia:

It forms a tubular sheath for the vertebral column and the muscles

It lies in front of the prevertebral muscles, *posterior* to the visceral compartment of the neck.

It forms the axillary sheath around the axillary vessels and brachial plexuses.

C. Pretracheal fascia:

It lies deep to the infrahyoid muscles anterior to the viscera of the neck.

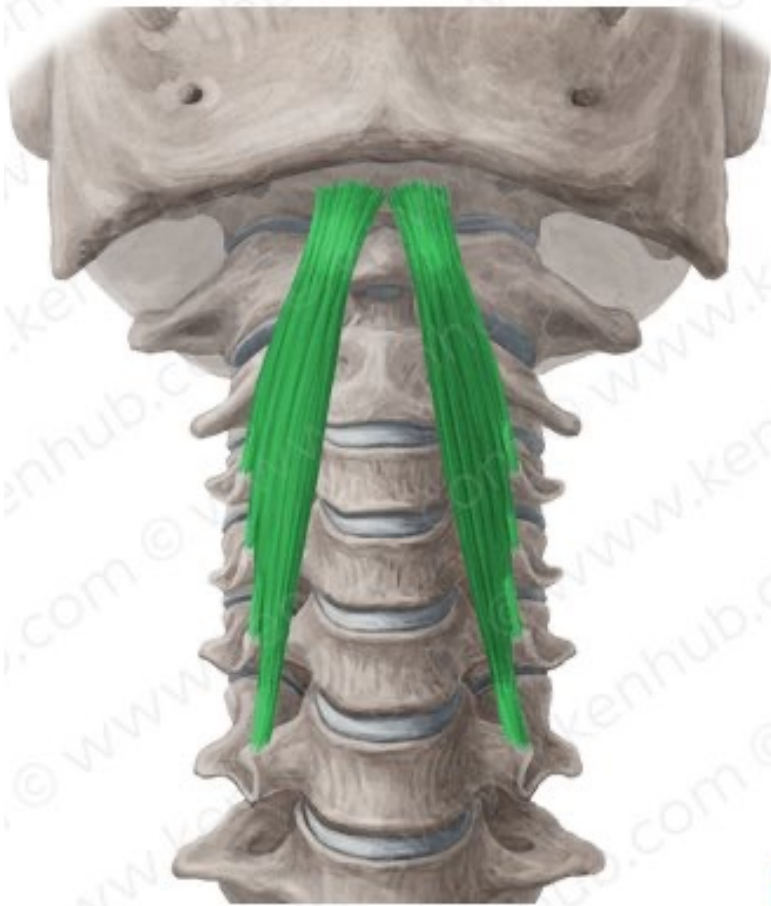
Superiorly : is attached to hyoid bone, oblique line of thyroid cartilage and cricoid cartilage

It encloses the thyroid gland.

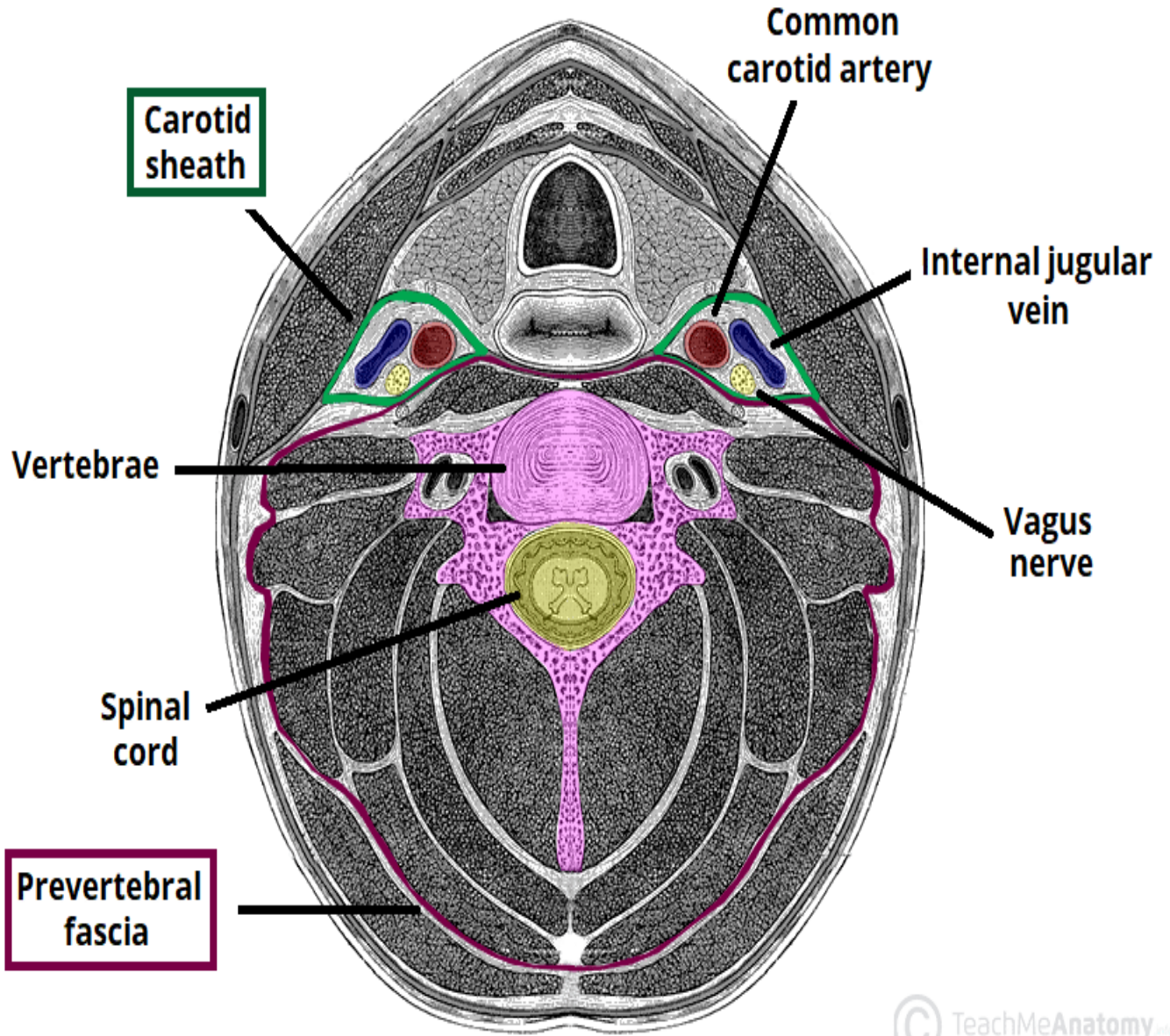
Thyroid gland move with deglutition as the gland is attached to larynx by the pretracheal fascia.

Watch this video

<https://youtube.com/shorts/Oi-6iRg6NPo?feature=shared>



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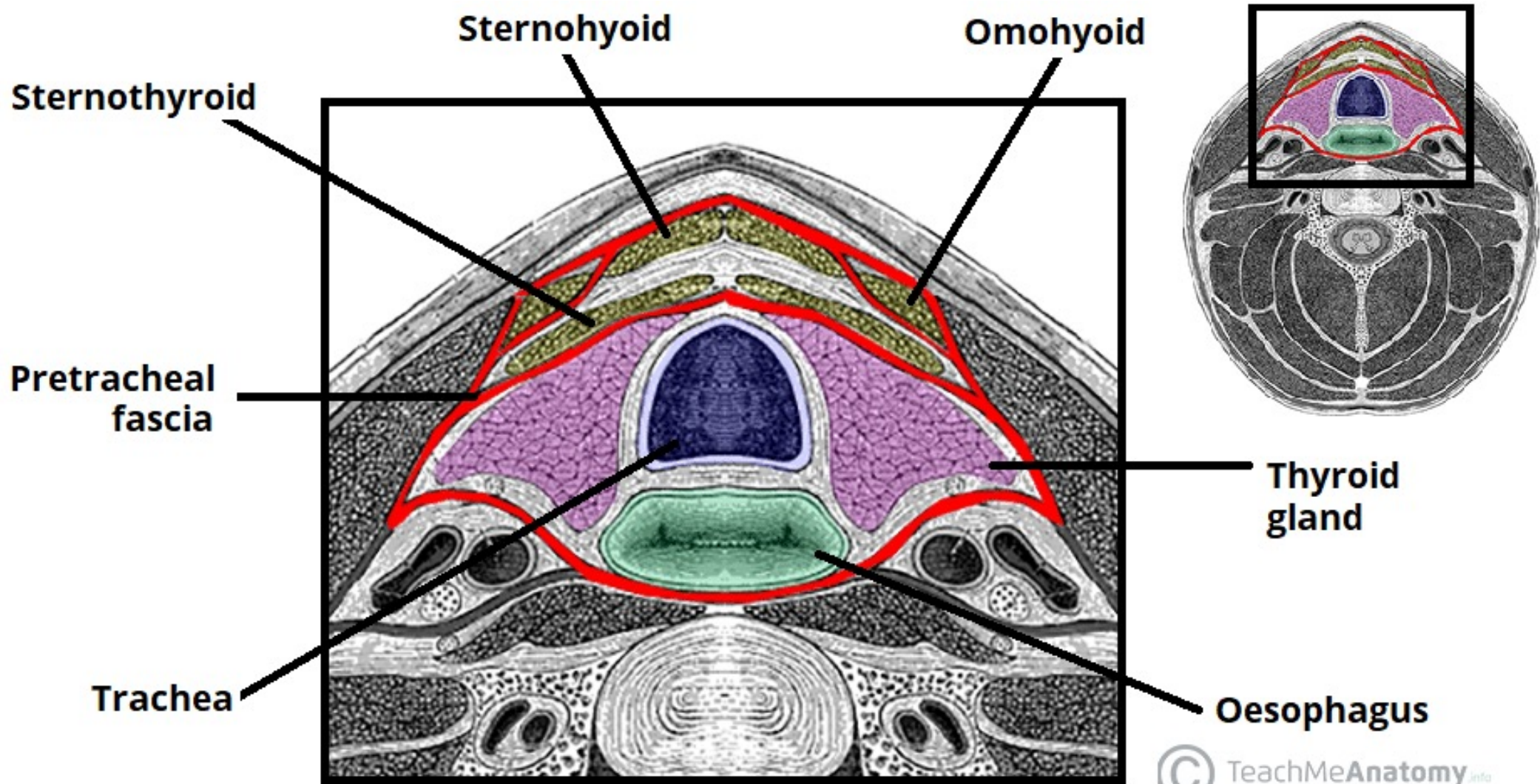


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D. Carotid sheath

It is a tubular fascial sheath on either side of the neck that extends from the cranial base to the root of the neck.

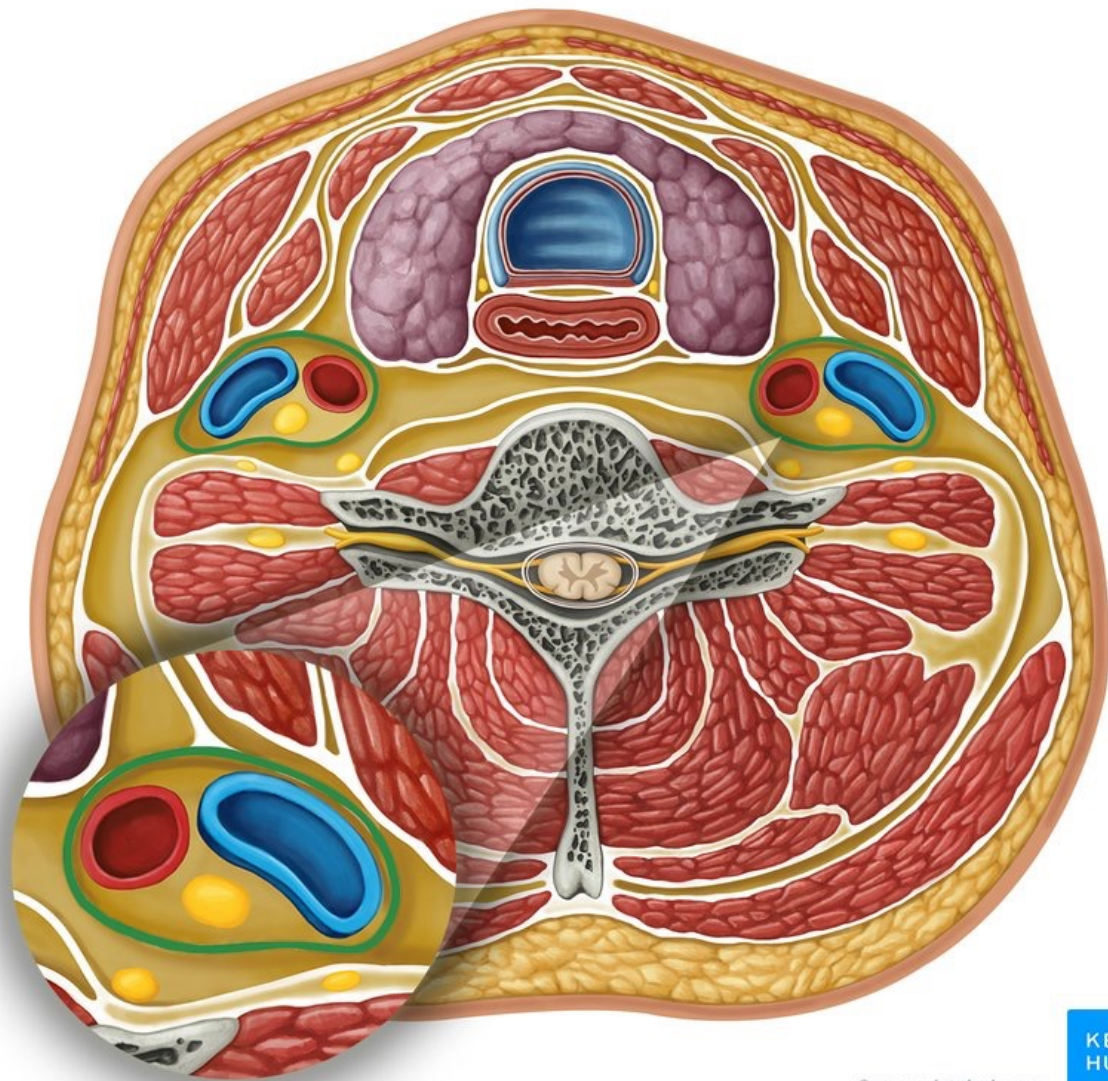
Contents:

1. Common carotid artery
2. Internal carotid artery
3. Internal jugular vein
4. Vagus nerve

Inferiorly, the carotid sheath and pretracheal fascia communicate freely with the mediastinum of the thorax

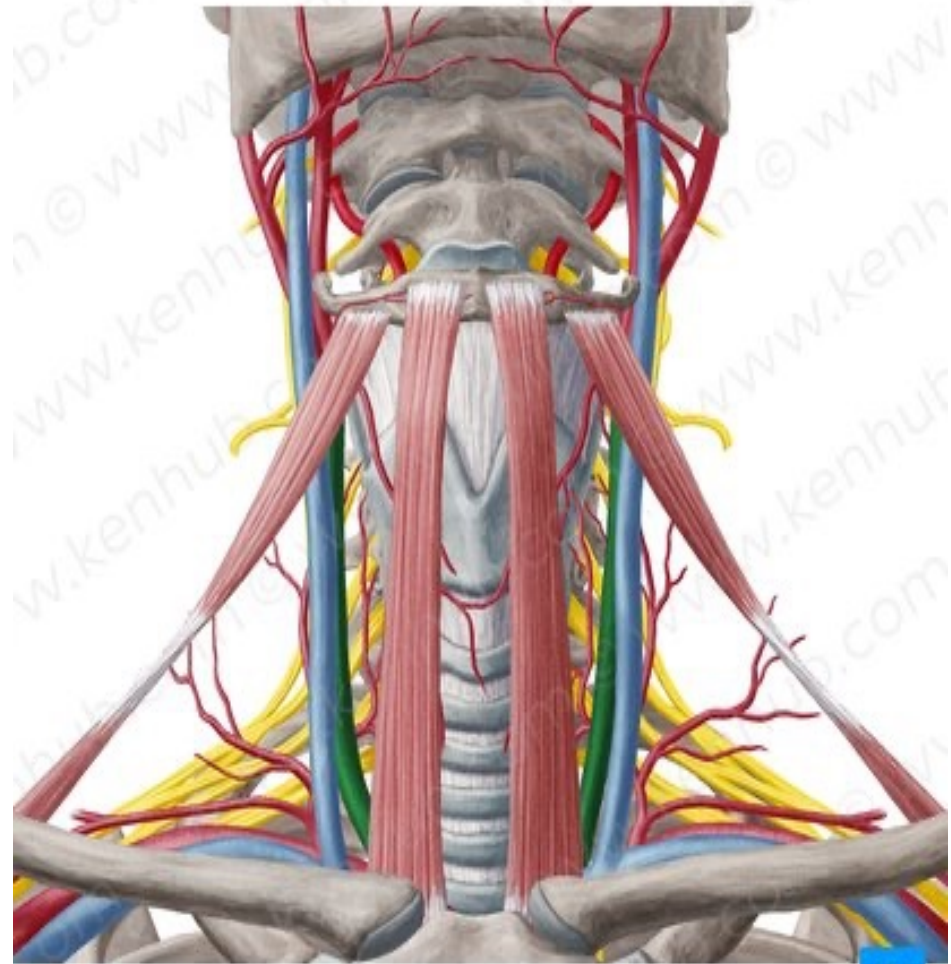
Superiorly communicate with the cranial cavity

Those communications with the mediastinum and cranial cavity represent potential pathways for the spread of infection and extravasated blood.



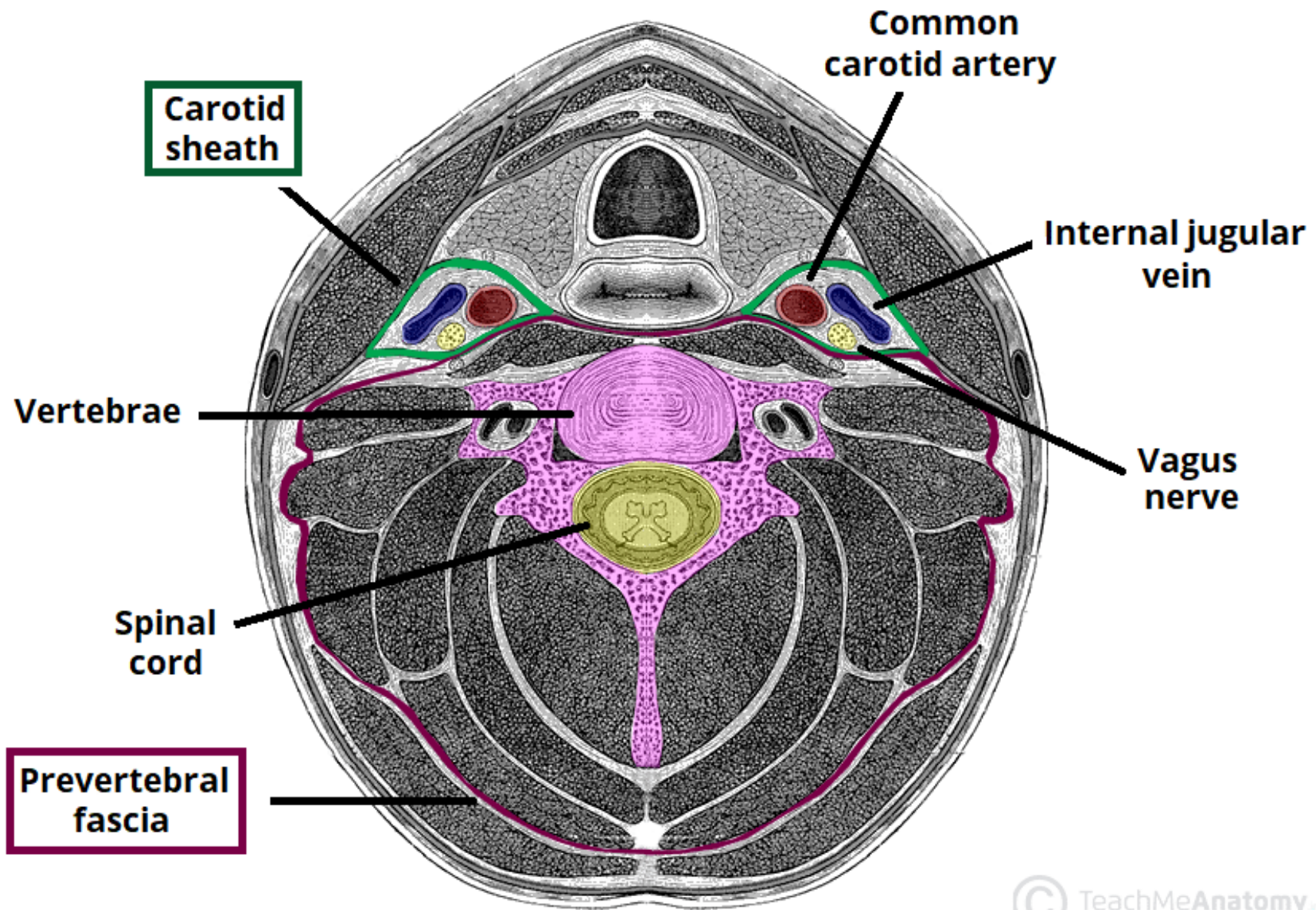
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The background features a series of concentric, curved lines in shades of gray, some solid and some dashed, creating a sense of depth and movement. A prominent red speech bubble is centered on the page, containing the title text.

Muscles of the neck

Muscles of The Neck

Suprahyoid

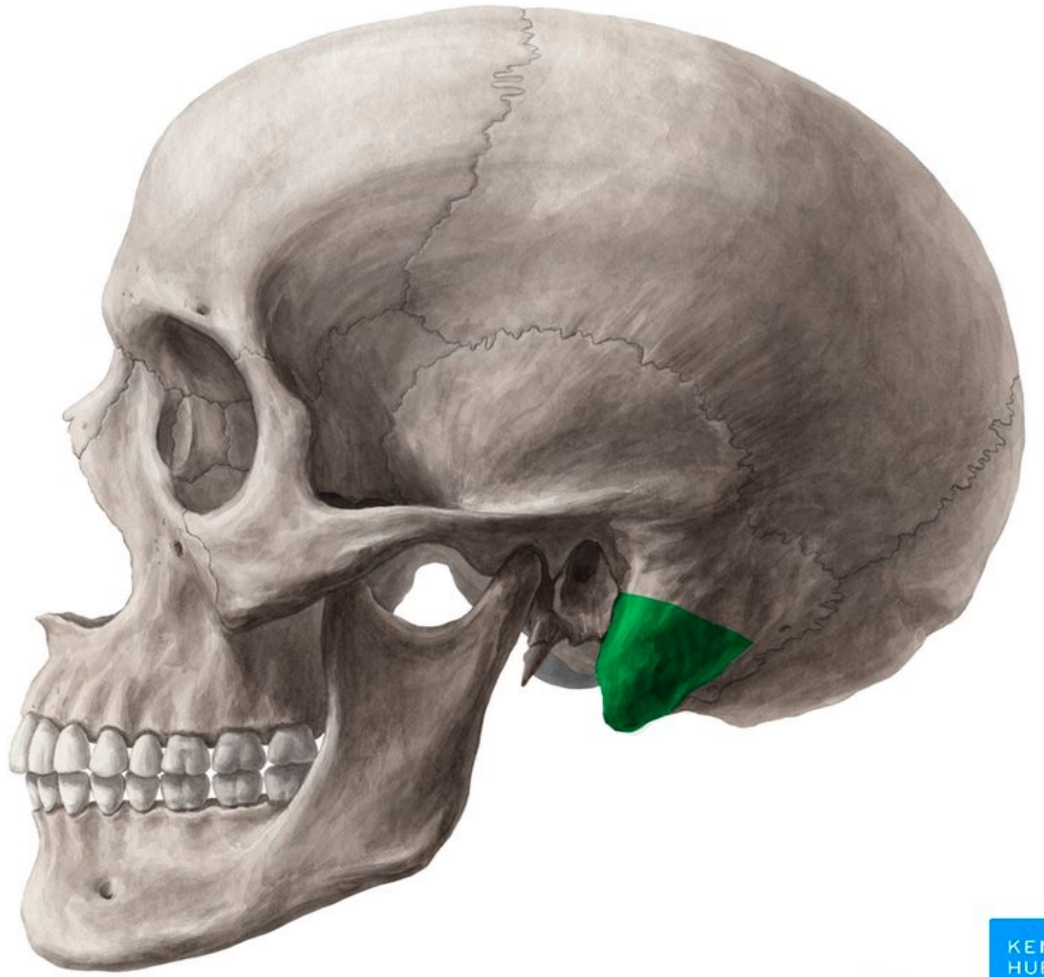
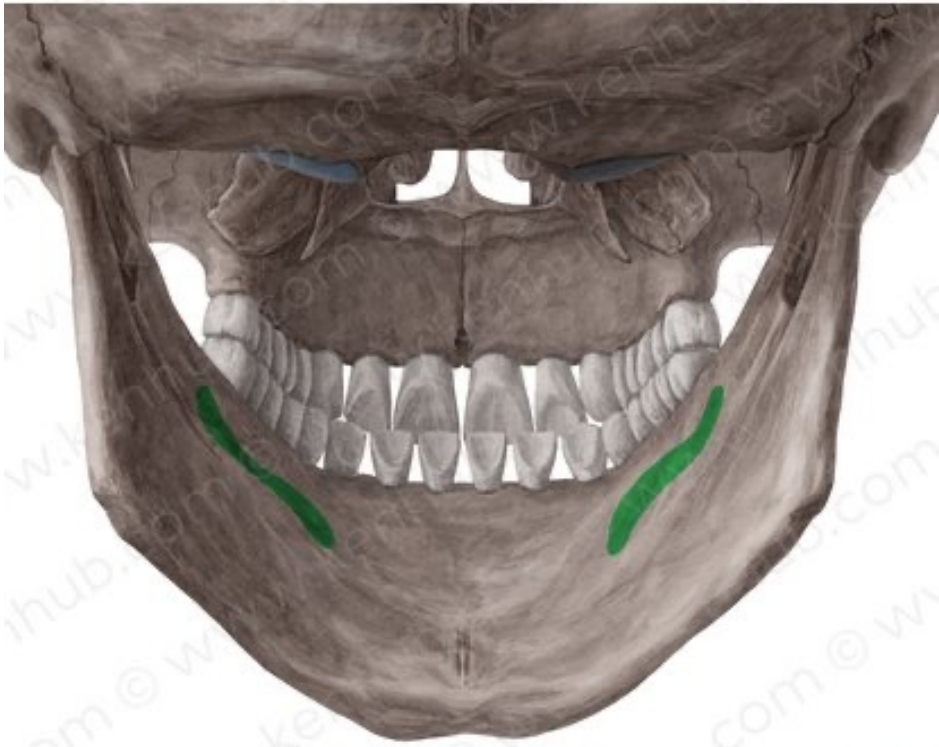
1. Mylohyoid
2. Digastric
3. Geniohyoid
4. Stylohyoid

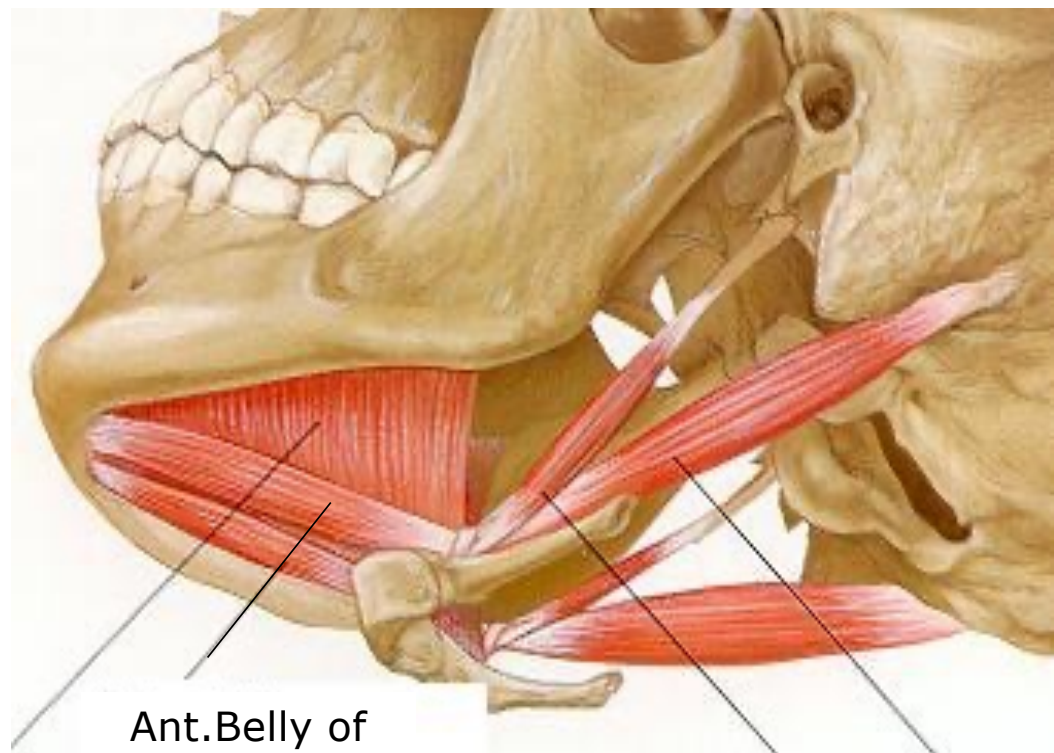
Infrahyoid

1. Sternohyoid
2. Omohyoid
3. Sternothyroid
4. Thyrohyoid

Others

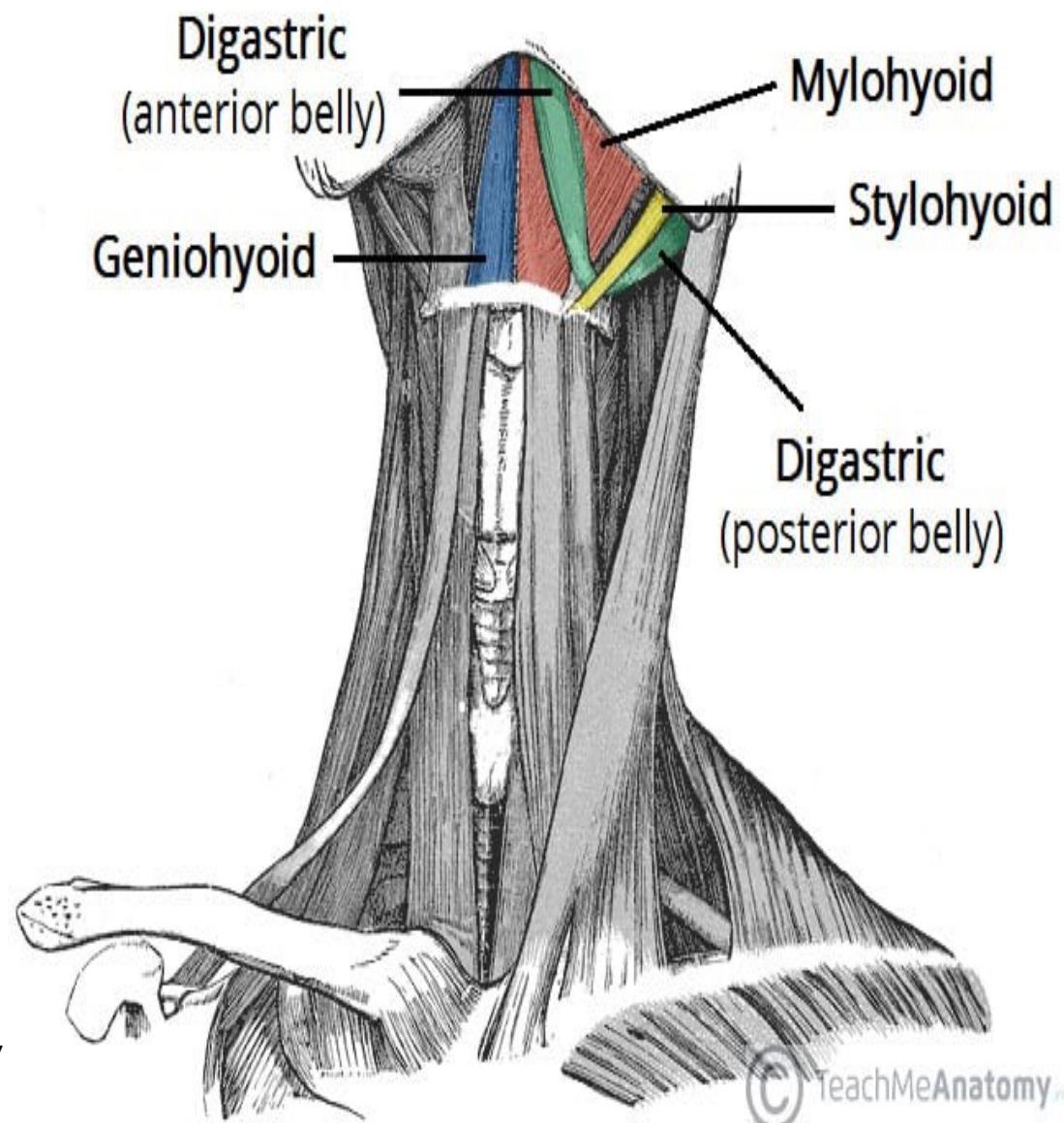
1. Platysma
2. Sternomastoid
3. Splenius Capites





Ant. Belly of Digastric

Stylohyoid Post. Belly Digastric



Digastric (anterior belly)

Mylohyoid

Stylohyoid

Geniohyoid

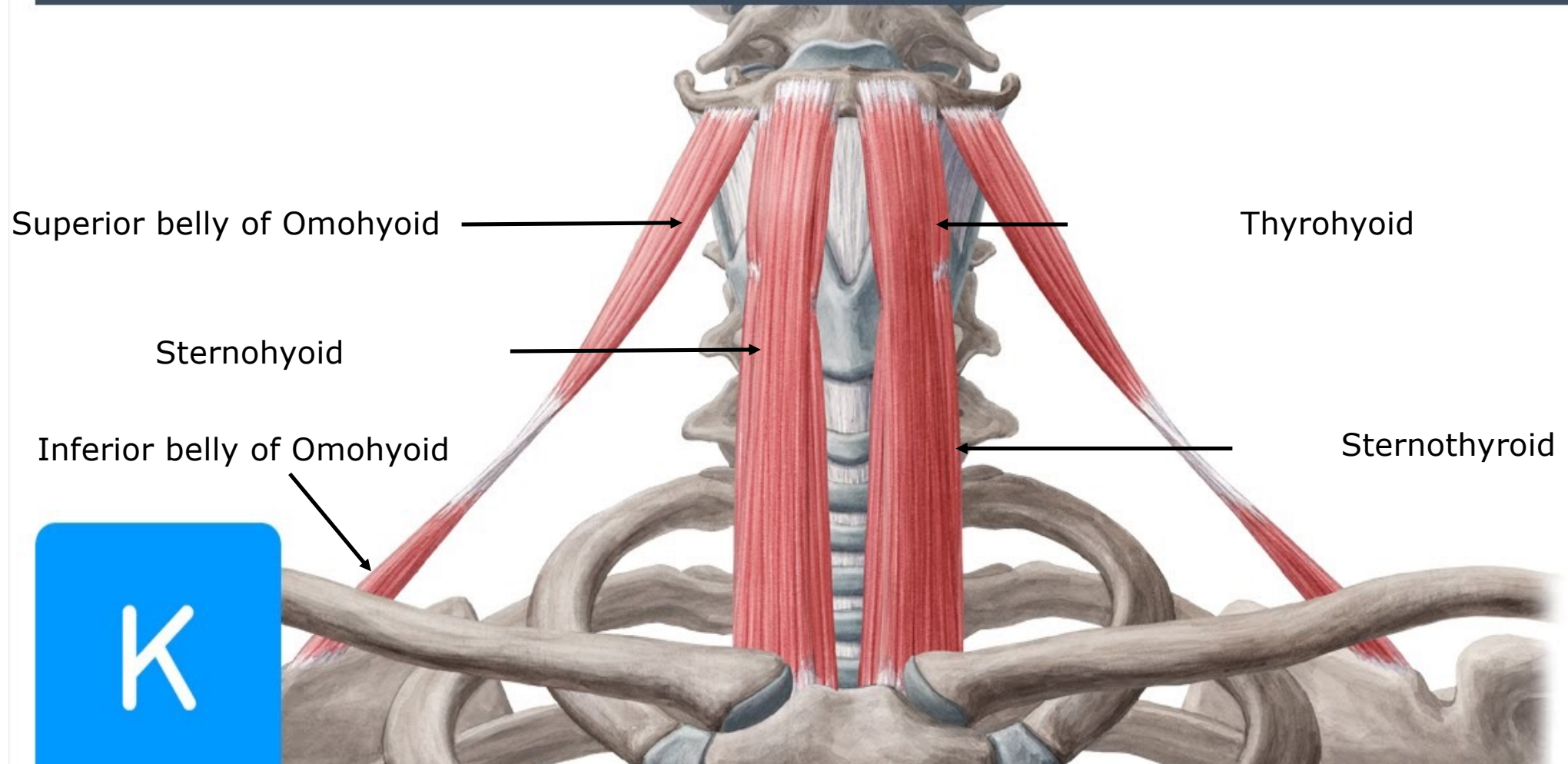
Digastric (posterior belly)

Supra hyoid Muscles

Know Nerve supply and action only

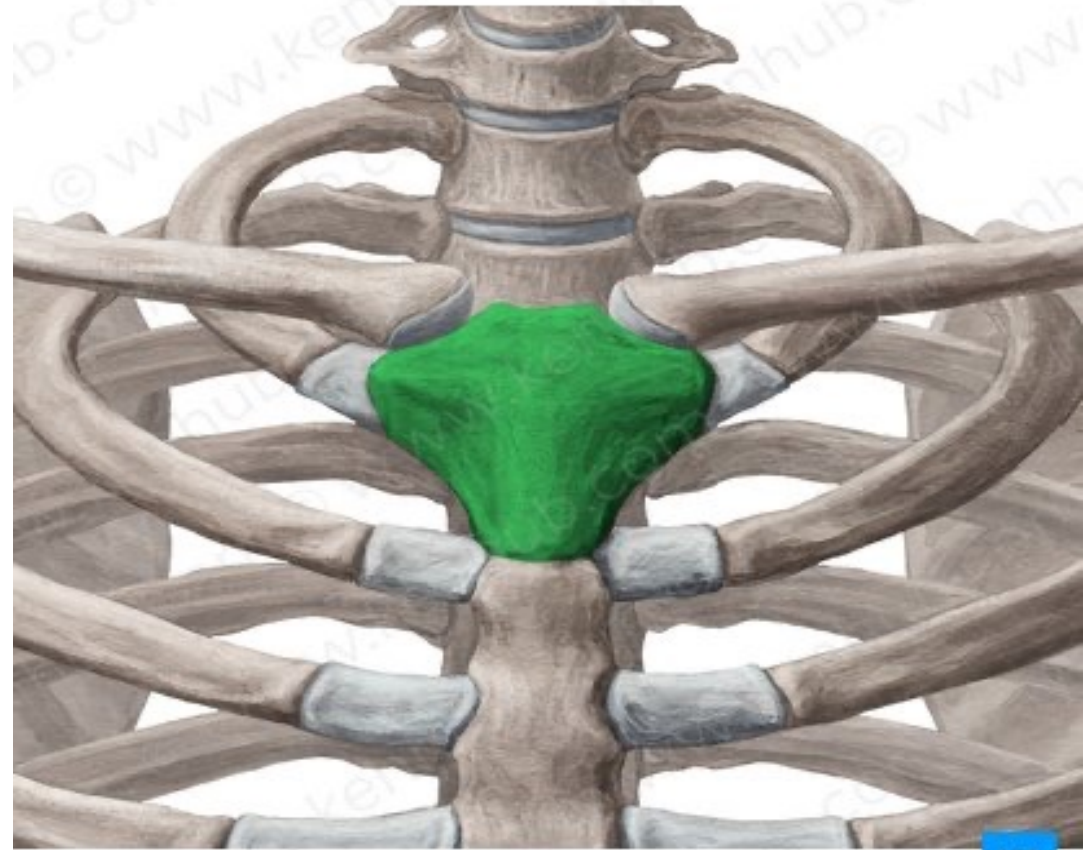
Muscle	Origin	Insertion	Nerve Supply	Action
Mylohyoid	Mylohyoid line of body of mandible	Body of hyoid bone	Nerve to mylohyoid (Mandibular N)	1-Elevates hyoid bone <u>If Hyoid bone is fixed</u> 2-Depress mandible
Anterior belly of Digastric	Digastric fossa of the mandible	Intermediate tendon is held to hyoid bone		
Posterior belly of Digastric	Mastoid process		Facial nerve	
Stylohyoid	Styloid process	Body of hyoid bone	1st cervical nerve <u>Through</u> Hypoglossal nerve	
Geniohyoid	Inferior genial tubercle of mandible			

Infrahyoid Muscles





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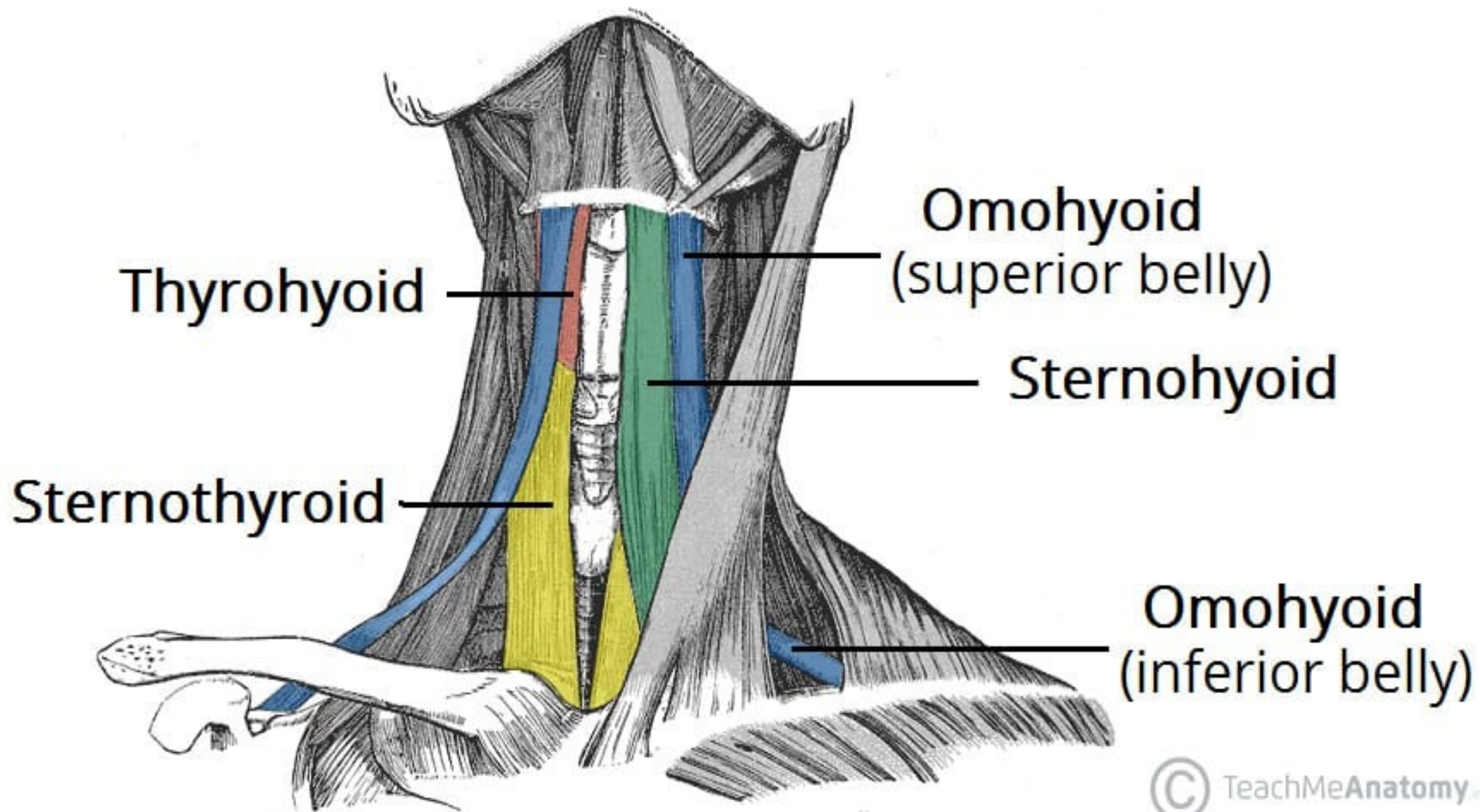
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Infrahyoid Muscles

Know Nerve supply and action only

Muscle	Origin	Insertion	Nerve Supply	Action
Sternohyoid	Manubrium sterni	Body of hyoid bone	Ansa cervicalis; C1,2, and 3	<u>Depresses hyoid bone</u>
Sternothyroid	Manubrium sterni	Oblique line of thyroid cartilage		Depresses <u>larynx</u>
Omohyoid Inferior belly	Upper margin of scapula	Intermediate tendon is held to clavicle		<u>Depresses hyoid bone</u>
Omohyoid Superior belly	Lower border of body of hyoid bone			
Thyrohyoid	Oblique line of thyroid cartilage	Body of hyoid bone		



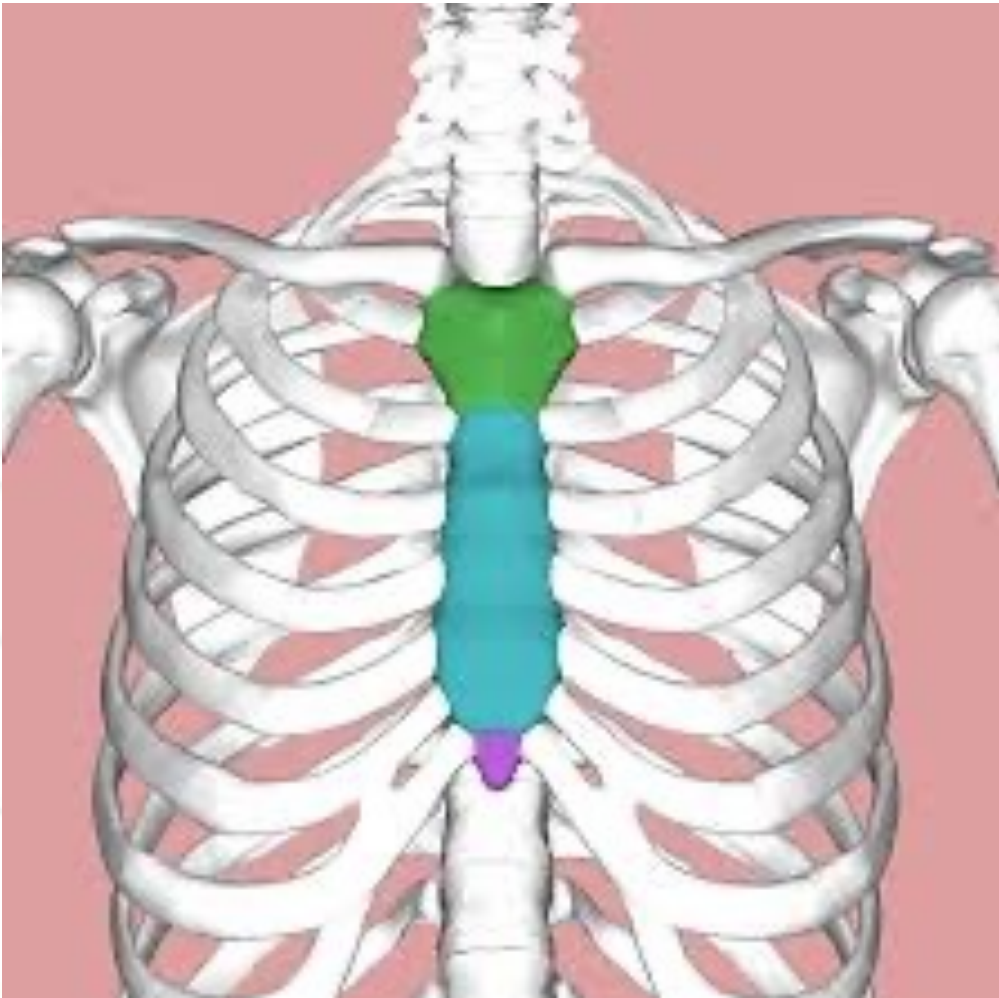
Thyrohyoid

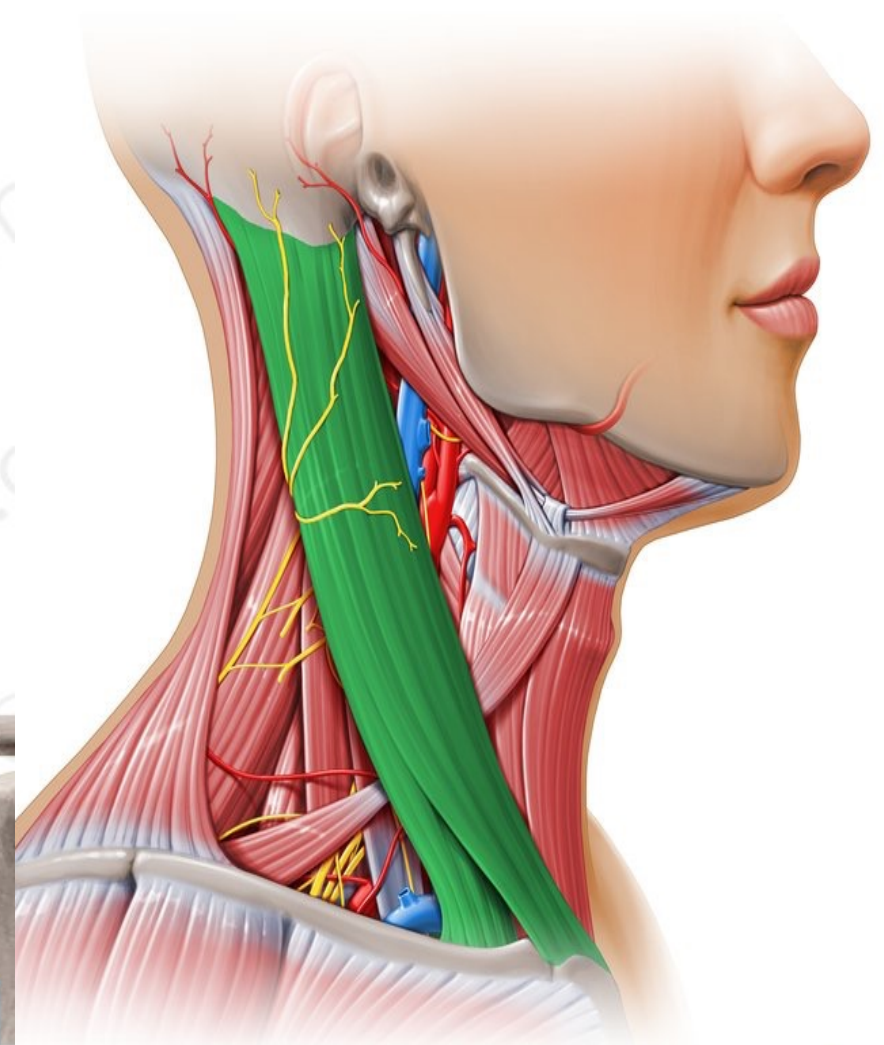
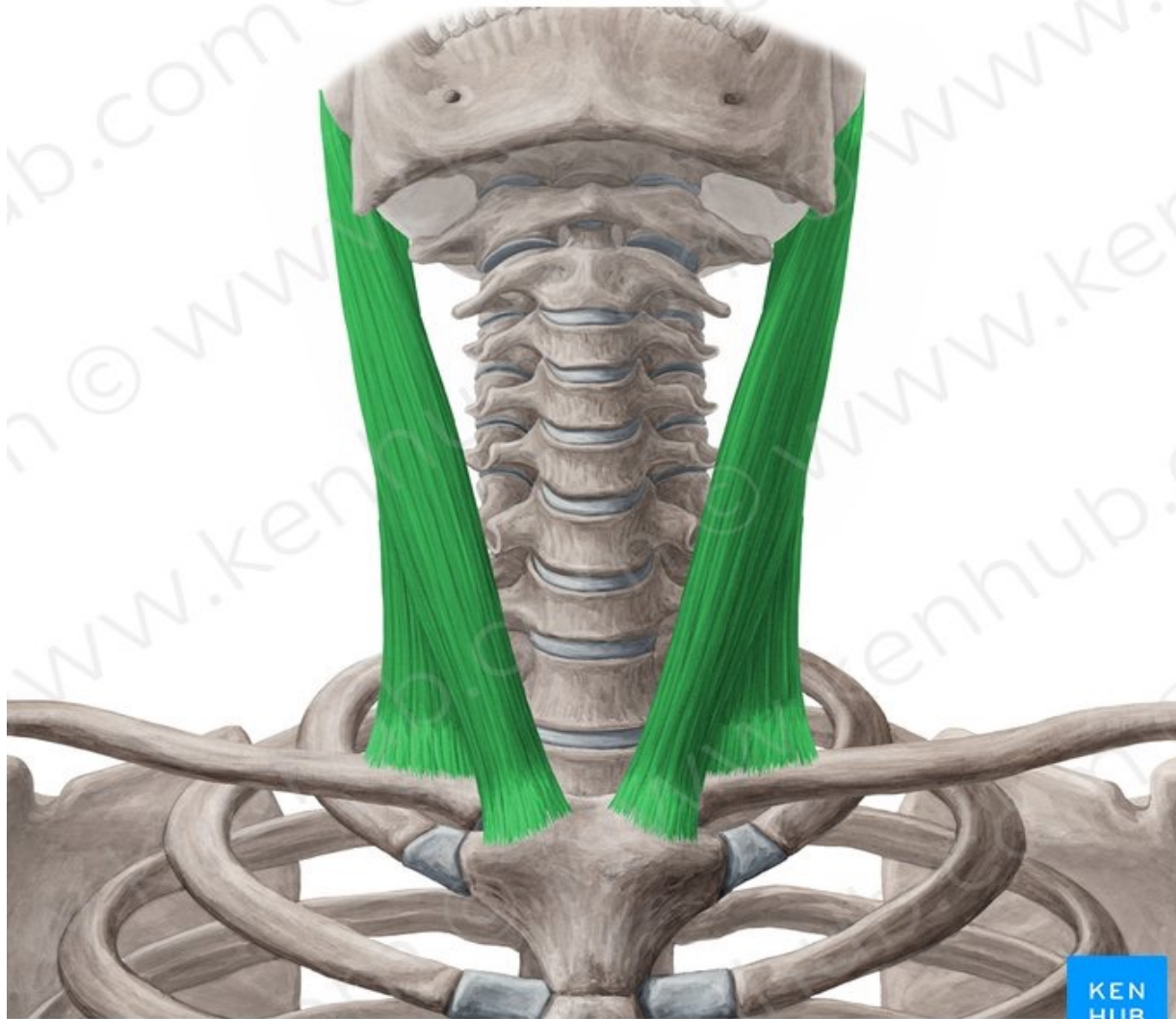
Omohyoid
(superior belly)

Sternohyoid

Sternothyroid

Omohyoid
(inferior belly)





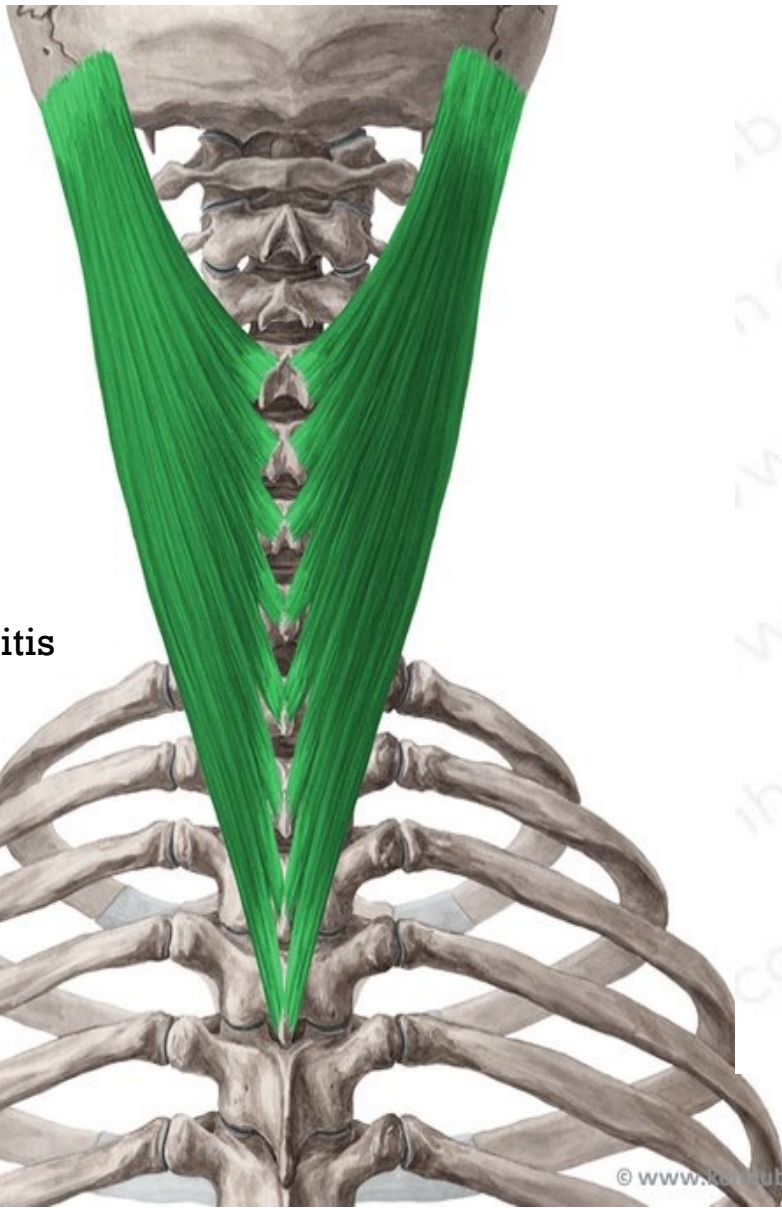
Sternocleidomastoid

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Splenius Capitis



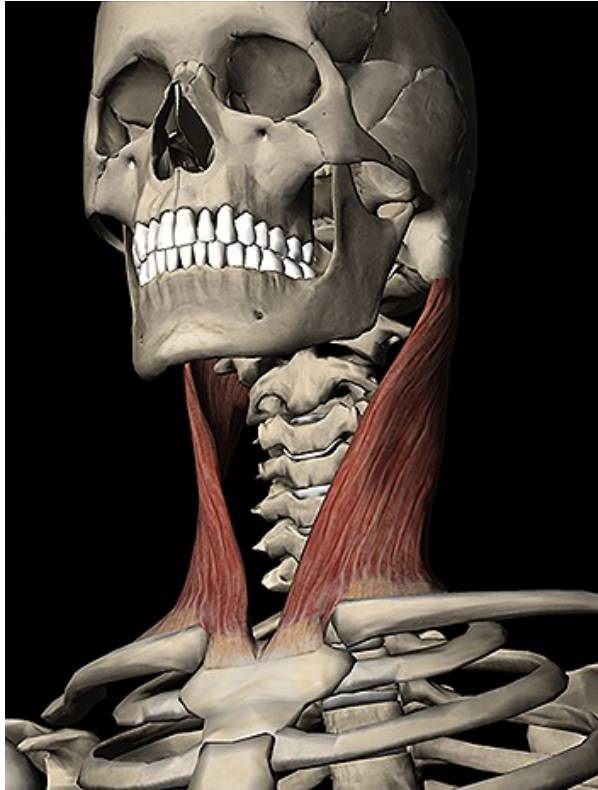
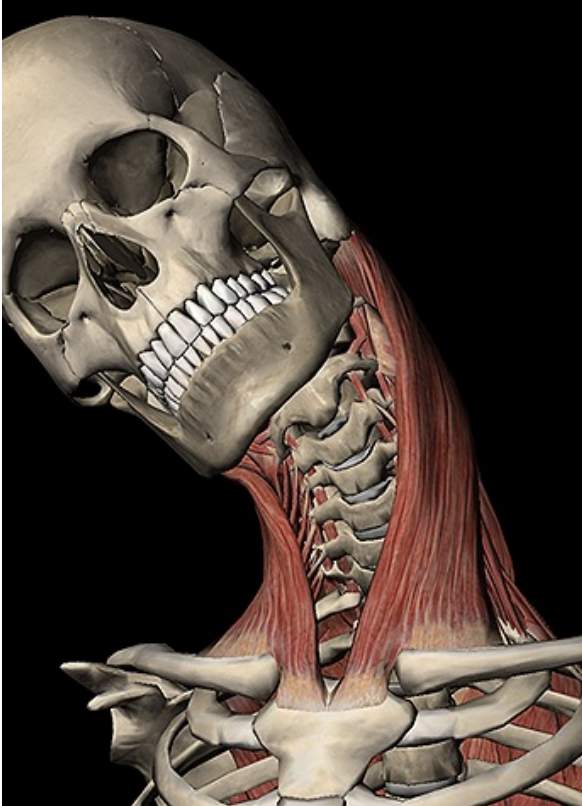
Know Nerve supply and action only

Muscle	Origin	Insertion	Nerve Supply	Action
Platysma	Deep fascia over pectoralis major and deltoid	Body of mandible and angle of mouth	Cervical branch of Facial nerve	Depresses mandible and angle of mouth
Sternocleidomastoid	<ul style="list-style-type: none"> Manubrium sterni medial third of clavicle 	<ul style="list-style-type: none"> Mastoid process Lateral 1/3 of superior nuchal line 	-Motor by Spinal part of accessory nerve	<ul style="list-style-type: none"> -Right & left flex neck -one muscle rotates face to opposite side
Splenius Capitis	<ul style="list-style-type: none"> ligamentum nuchae C7-T3/4 spines 	<ul style="list-style-type: none"> Mastoid process superior nuchal line 	Dorsal Rami of cervical nerves (C2-C3)	<ul style="list-style-type: none"> -Right & left muscles extend the neck -Turns the face to the same side

Action of Sternomastoid



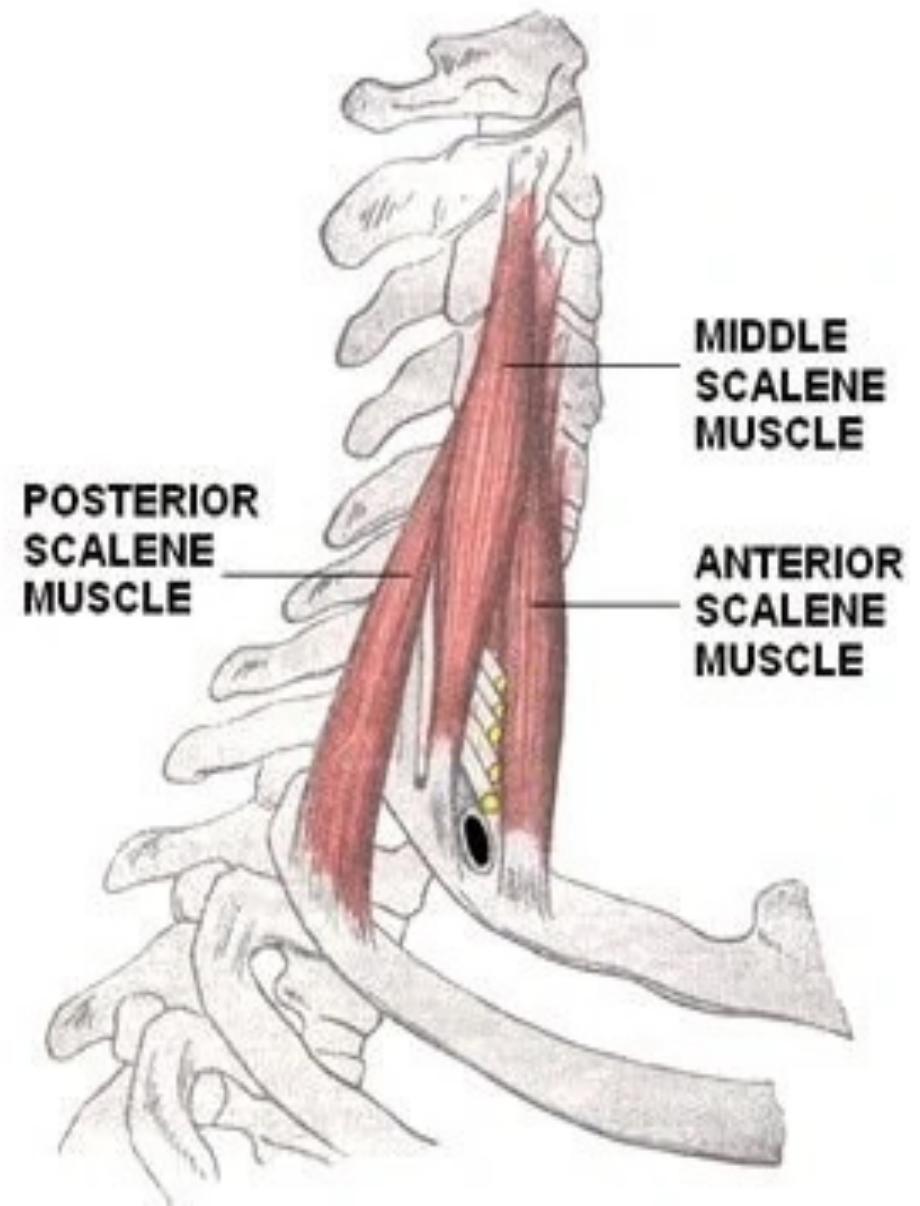
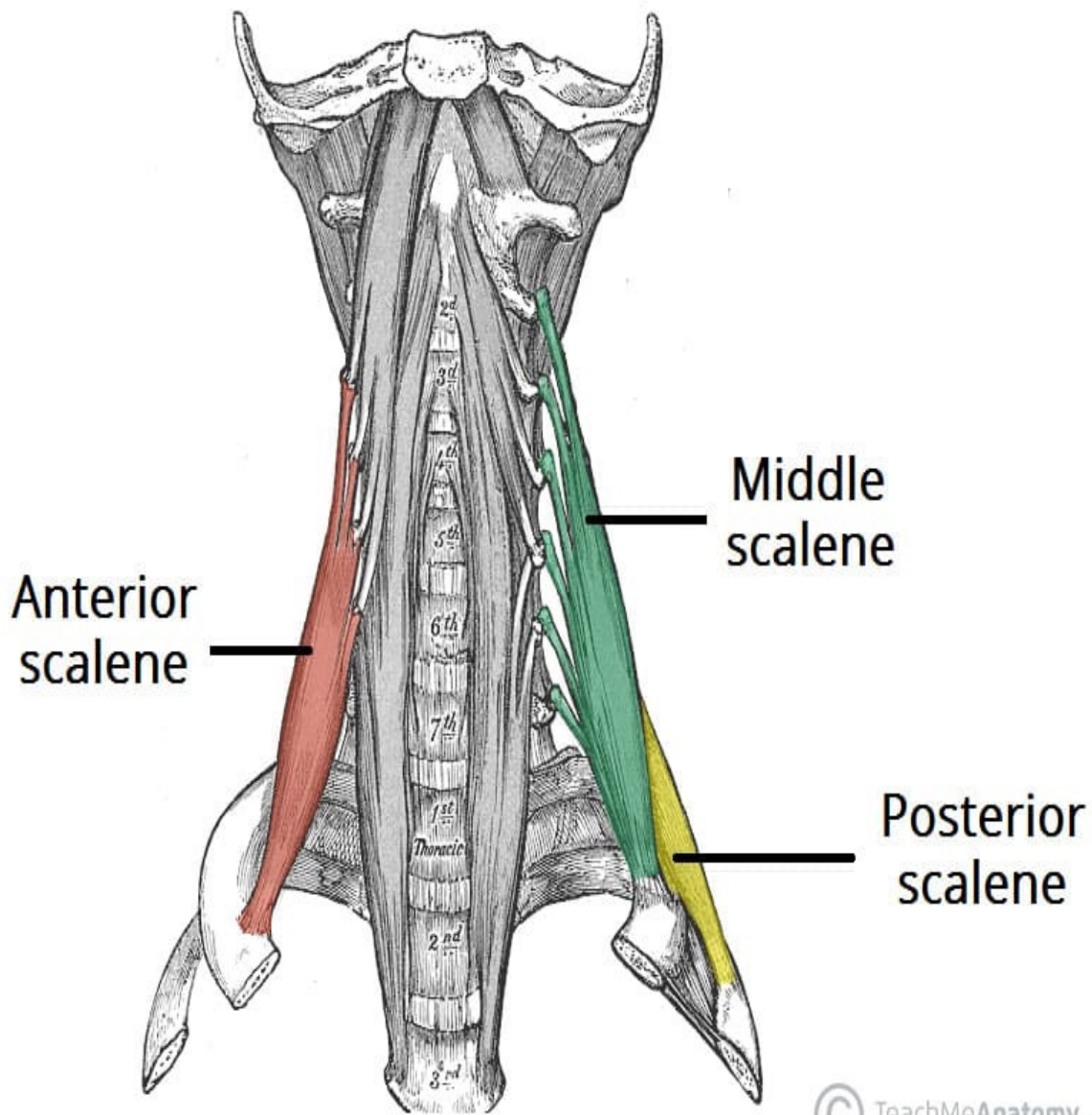
Flex neck

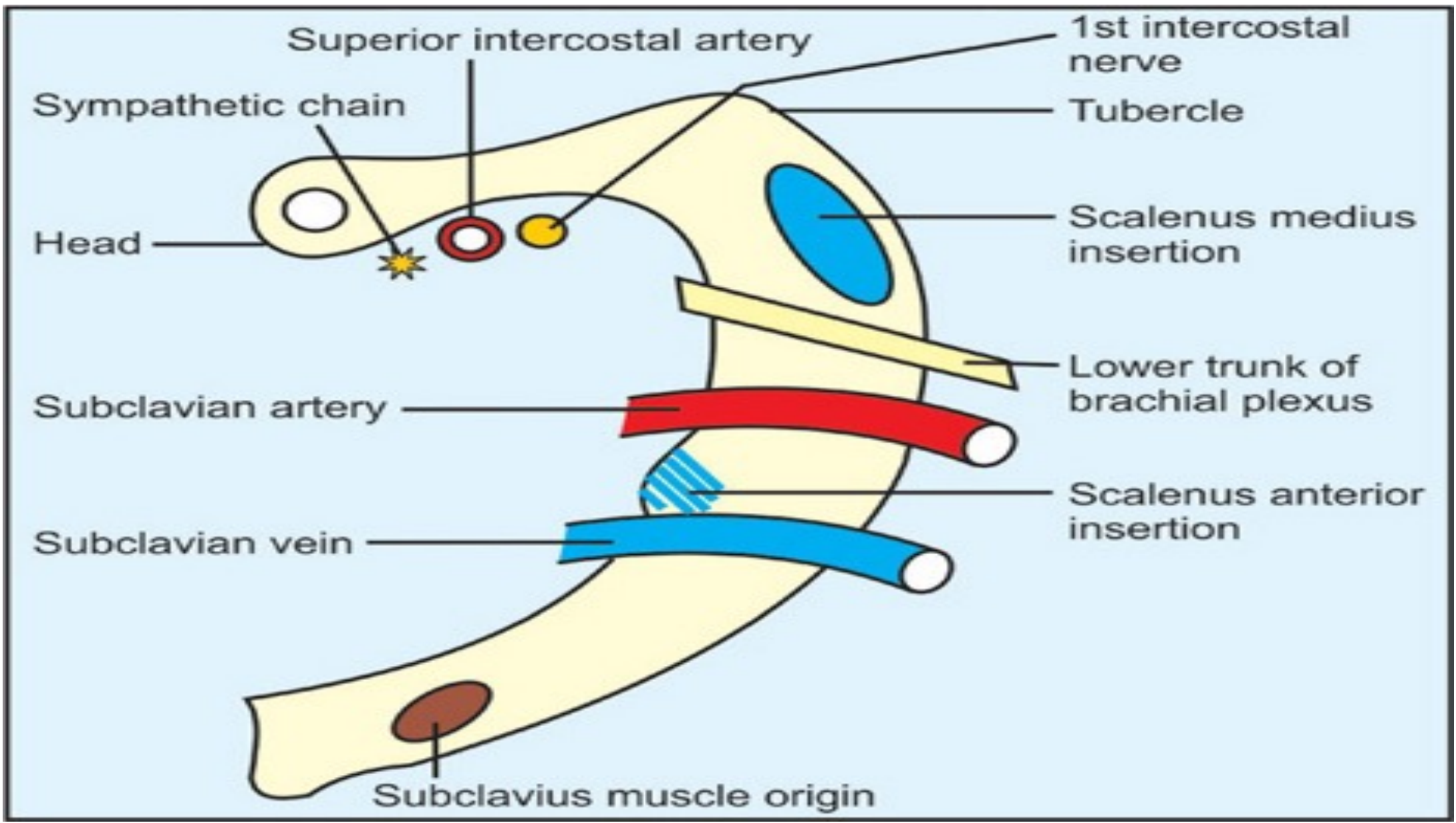


Torticollis

Abnormal twisting of the neck with painful spasms of the neck muscles







Scalene Muscles

There are three scalene muscles (Scalenus anterior , Scalenus medius , Scalenus Posterior)

1. Scalenus anterior muscle:

Origin : anterior tubercles of transverse process of C 3-6 .

Insertion: scalene tubercle on inner border of 1st rib.

Nerve supply: anterior rami of C 4,5,6

Action:

- Bilateral contraction , neck flexion
- Unilateral contraction , neck lateral flexion (ipsilateral),
- Elevate 1st rib.

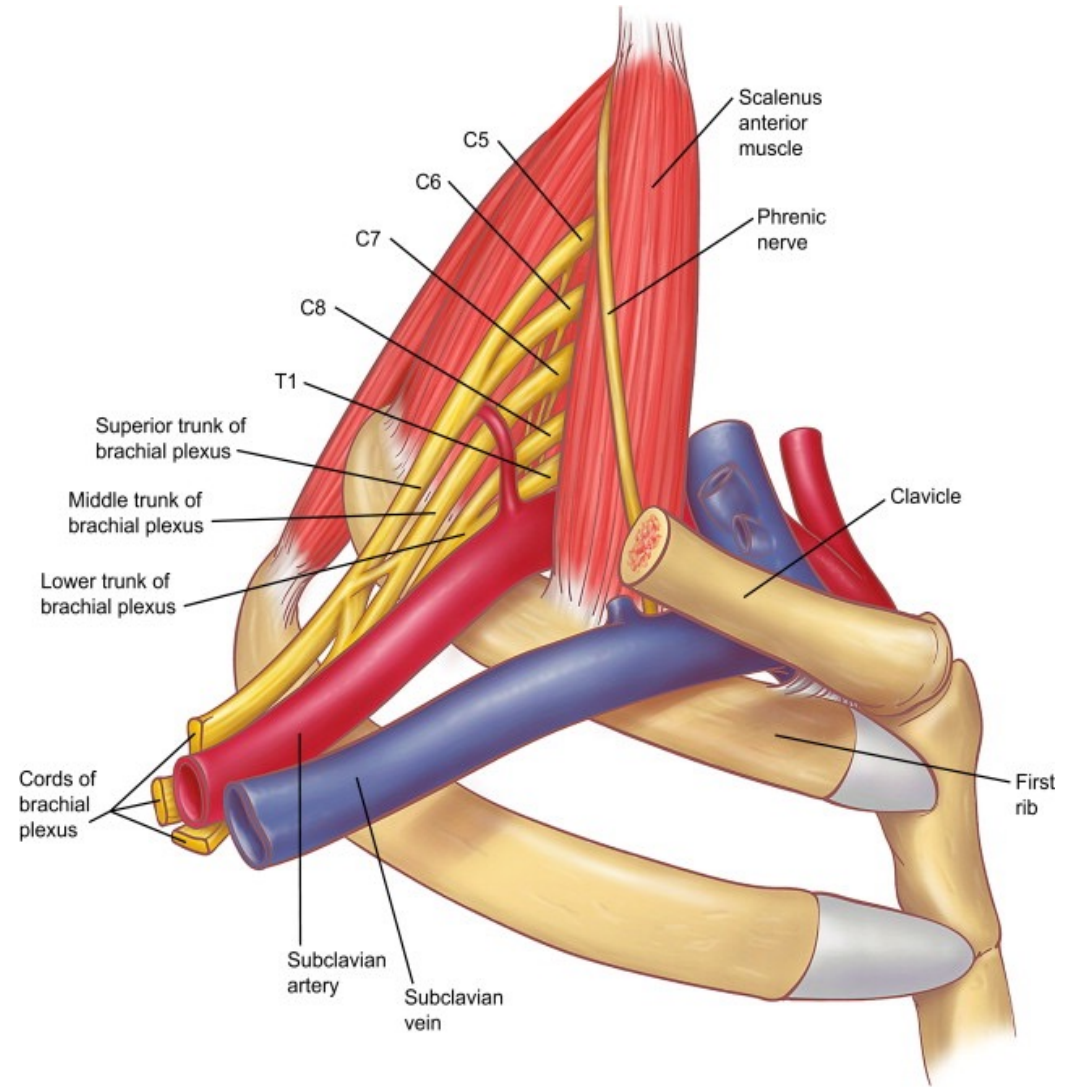
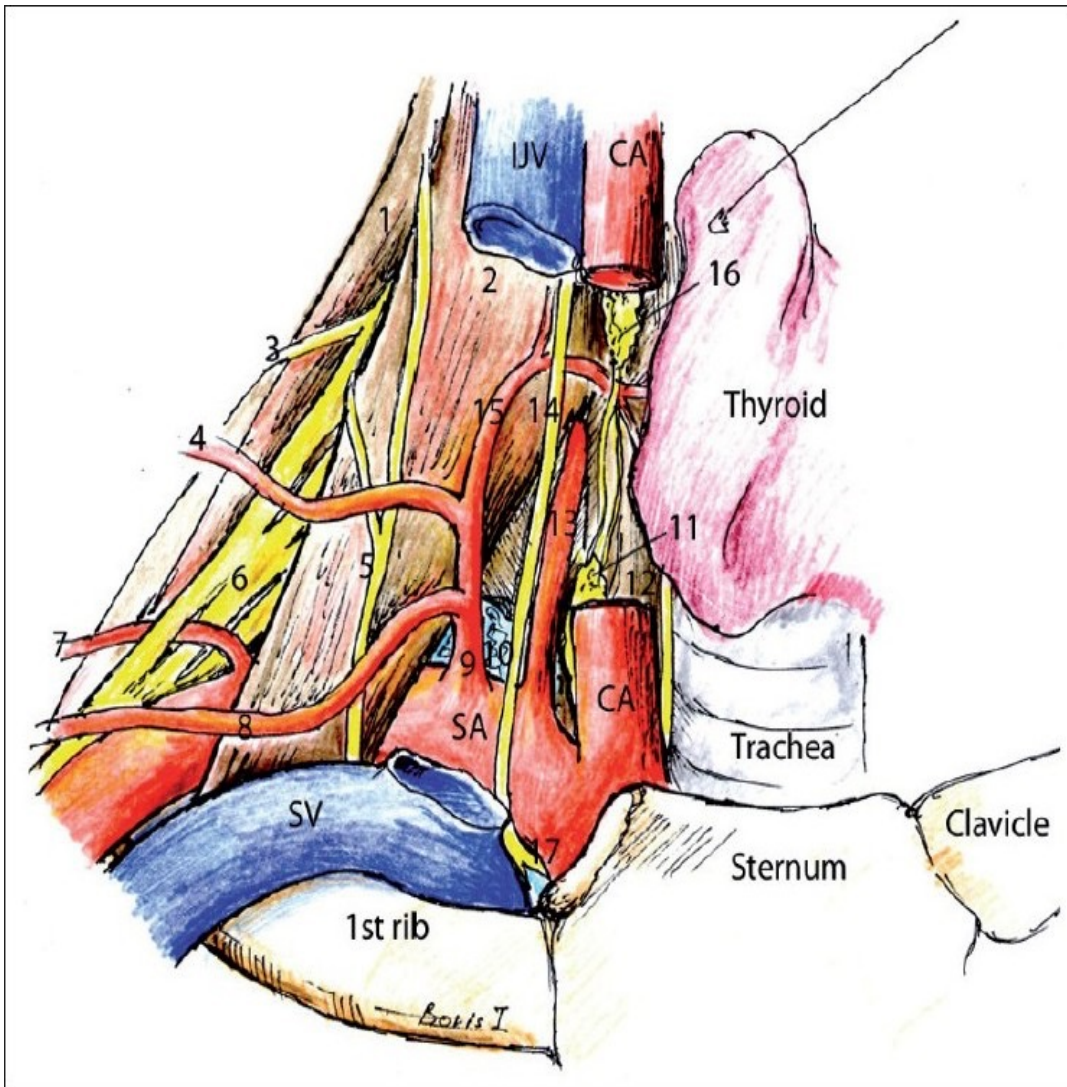
Main relations :

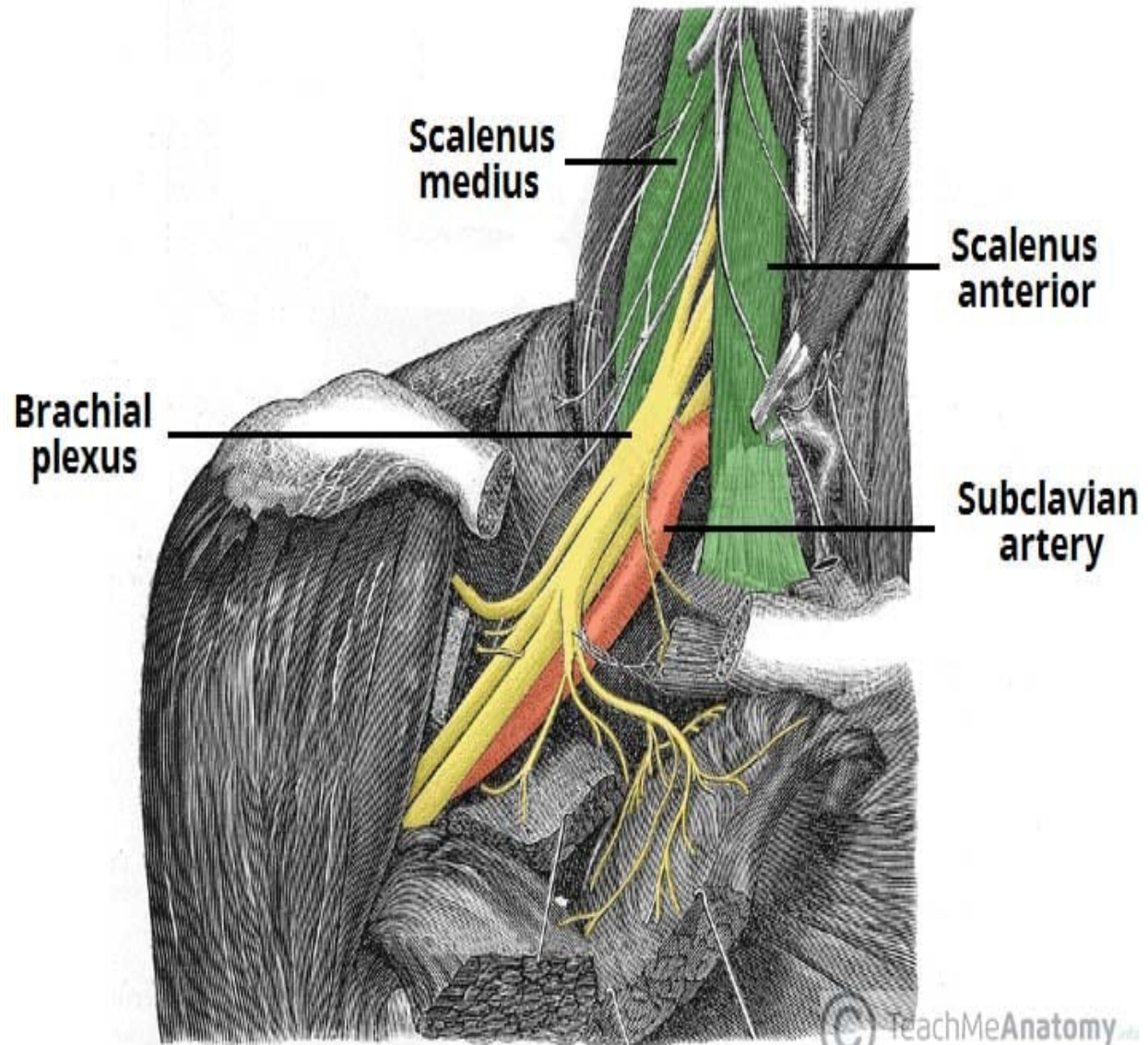
a) Anteriorly: phrenic nerve , internal jugular vein, subclavian vein

b) Posteriorly: Roots of brachial plexus, 2nd part of subclavian artery & scalenus medius.

c) Medially: 1st part of subclavian artery and its branches ,

d) Laterally: Trunks of brachial plexus, 3rd part of subclavian artery.





Thank
you

The image features the words "Thank you" written in a black, elegant cursive script. The text is set against a white background and is surrounded by various teal-colored decorative elements. These include several leaves of different shapes and sizes, some with visible veins, and small, simple star or plus symbols. The overall composition is balanced and aesthetically pleasing, with the teal elements framing the central text.