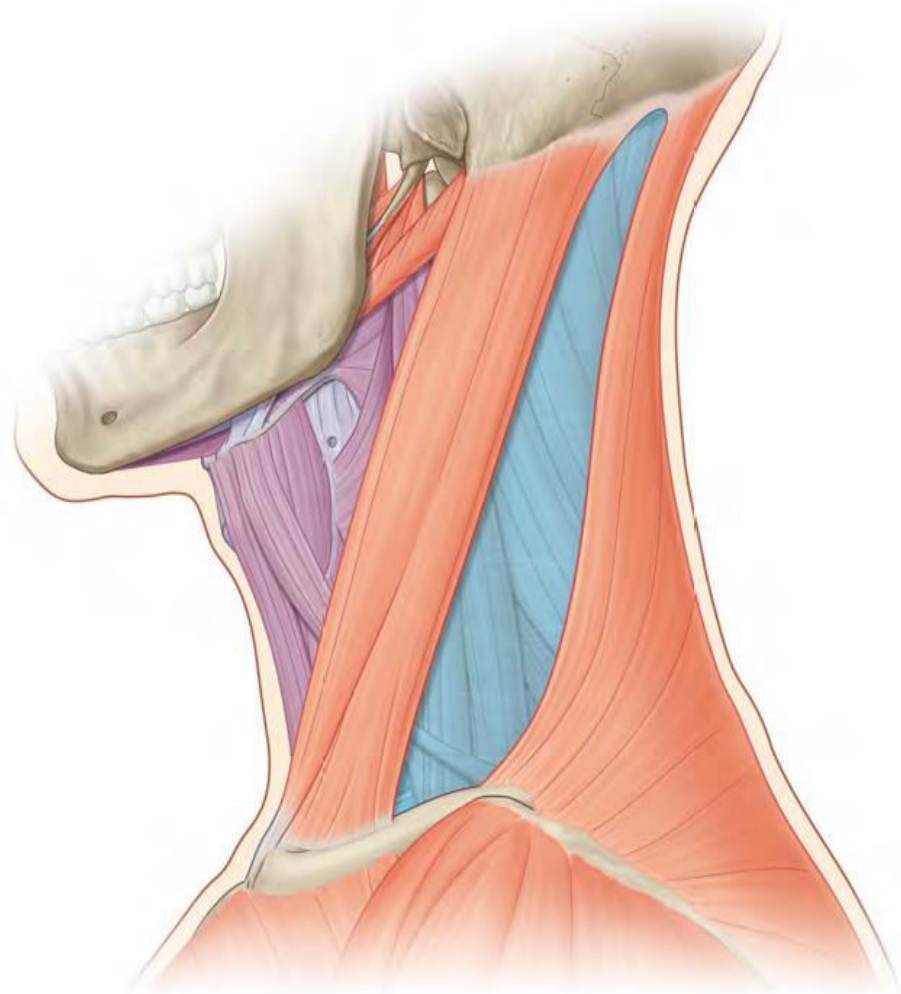


THE NECK

- ✓ The neck is more or less cylindrical region connecting the head to the trunk.
- ✓ Extends from the base of the cranium and the inferior border of the mandible to the thoracic inlet.

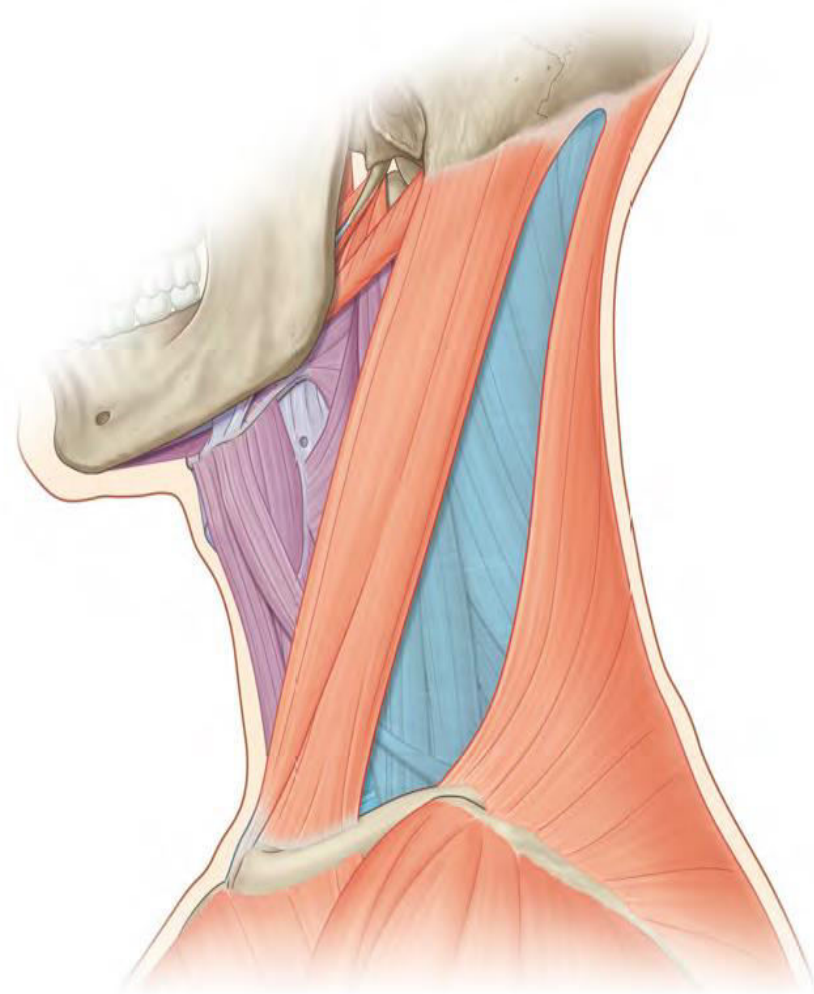


TRIANGLES OF THE NECK

Antero laterally the neck appears as a somewhat quadrilateral area, limited

- **superiorly by** the base of the mandible and a line continued from the angle of the mandible to the mastoid process.
- **inferiorly by** the upper border of the clavicle.
- **anteriorly by** the anterior median line.
- **posteriorly by** the anterior margin of trapezius.

Neck divided into anterior and posterior triangles by sternocleidomastoid muscle.



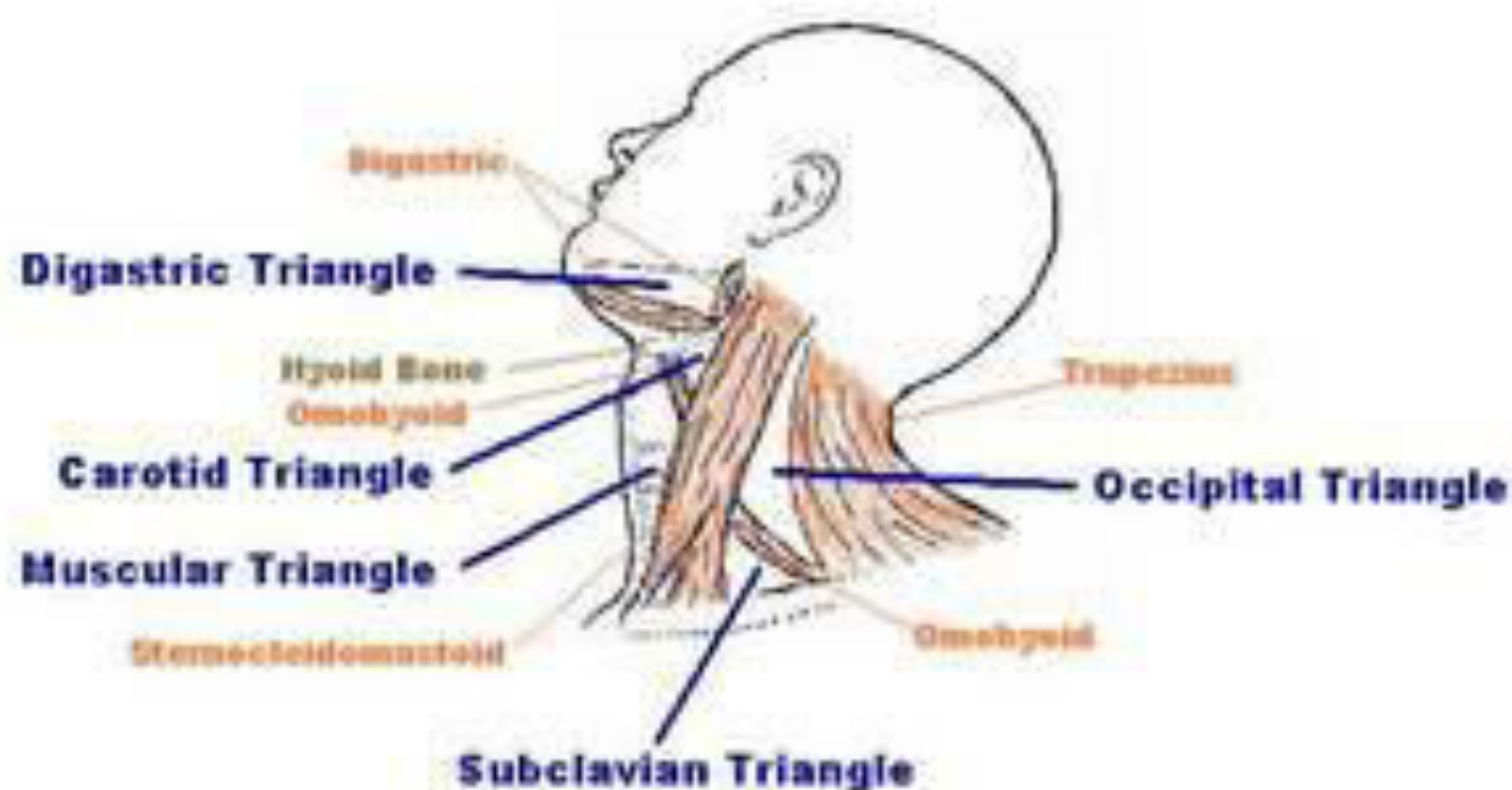
ANTERIOR TRIANGLE OF THE NECK

Boundaries :

- ❖ **Medially**-The anterior median line of the neck.
- ❖ **Laterally** - the anterior margin of sternocleidomastoid.
- ❖ **Superiorly**- base of the mandible and a line joining the angle of the mandible to the mastoid process.

Subdivision : Subdivided into **digastric, submental, muscular and carotid triangles** .

CERVICAL TRIANGLES

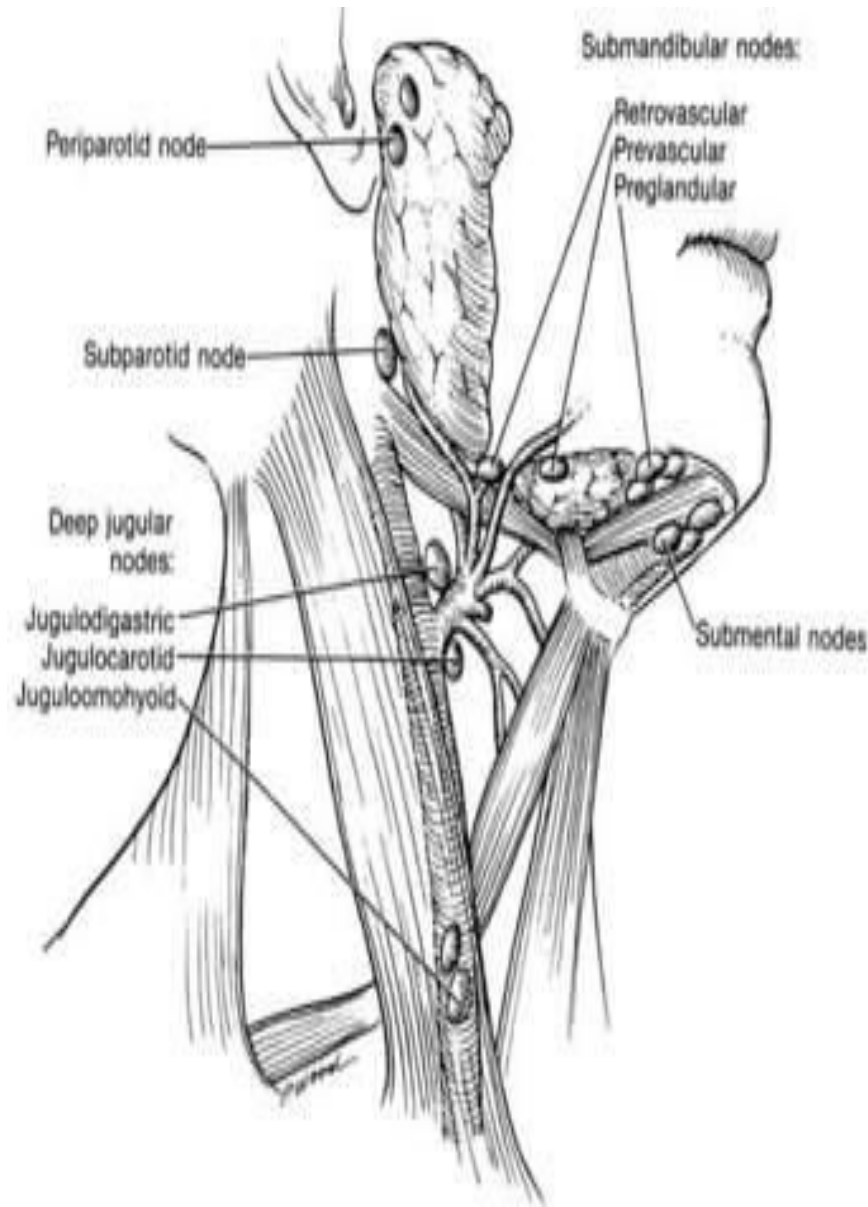


ANTERIOR TRIANGLE OF THE NECK

Digastric triangle

Boundaries :

- **anteroinferiorly**– anterior belly of the digastric.
- **Posteroinferiorly**- posterior belly of the digastric and the stylohyoid.
- **Superiorly or base**- by the base of the mandible and its projection to the mastoid process.
- **Roof** – is formed by the skin, superficial fascia, platysma and deep fascia.
- **Floor**- is formed by mylohyoid muscles anteriorly and by the hyoglossus posteriorly.



Digastric triangle(Contents)

Anterior part:

1.Structures superficial to mylohyoid are-

Submandibular salivary gland, facial vein,
Submandibular lymph nodes, facial artery, submental
artery, mylohyoid nerve and vessels.

2.Strutures superficial to the hyoglossus-

Submandibular salivary gland, intermediate tendon of the
digastric and the stylohyoid , The hypoglossal nerve.

Posterior part:

Lower part of the parotid gland, external carotid artery, carotid sheath
containing ICA, IJV and VN.

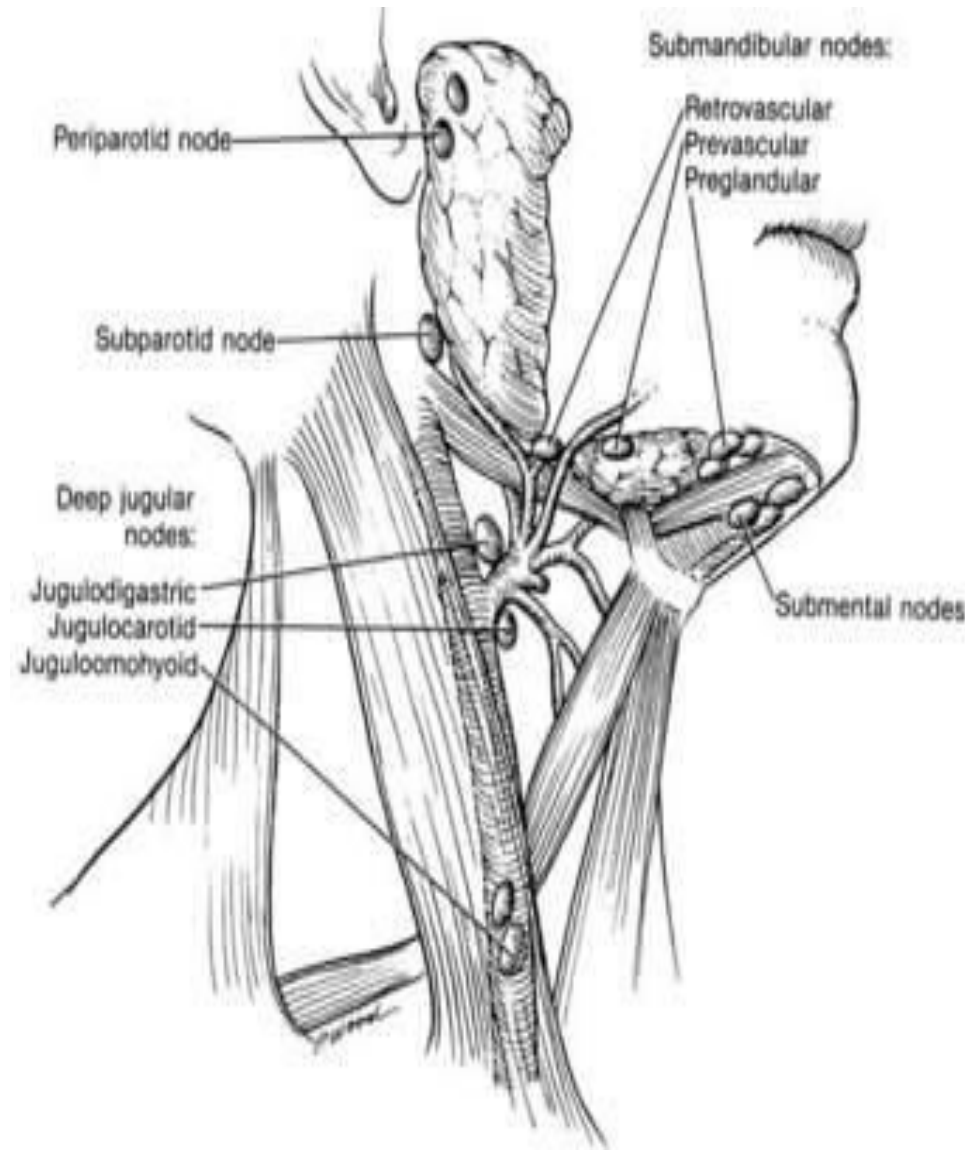
Submental triangle

Is a median triangle.

Boundaries:

- On each side- the anterior belly of both digastric muscles.
- Apex – lower border of symphysis menti.
- Base- body of the hyoid bone.
- Floor- formed by both mylohyoid muscles.

Contains: 3 to 4 submental lymph nodes and small veins that unite to form the anterior jugular vein.

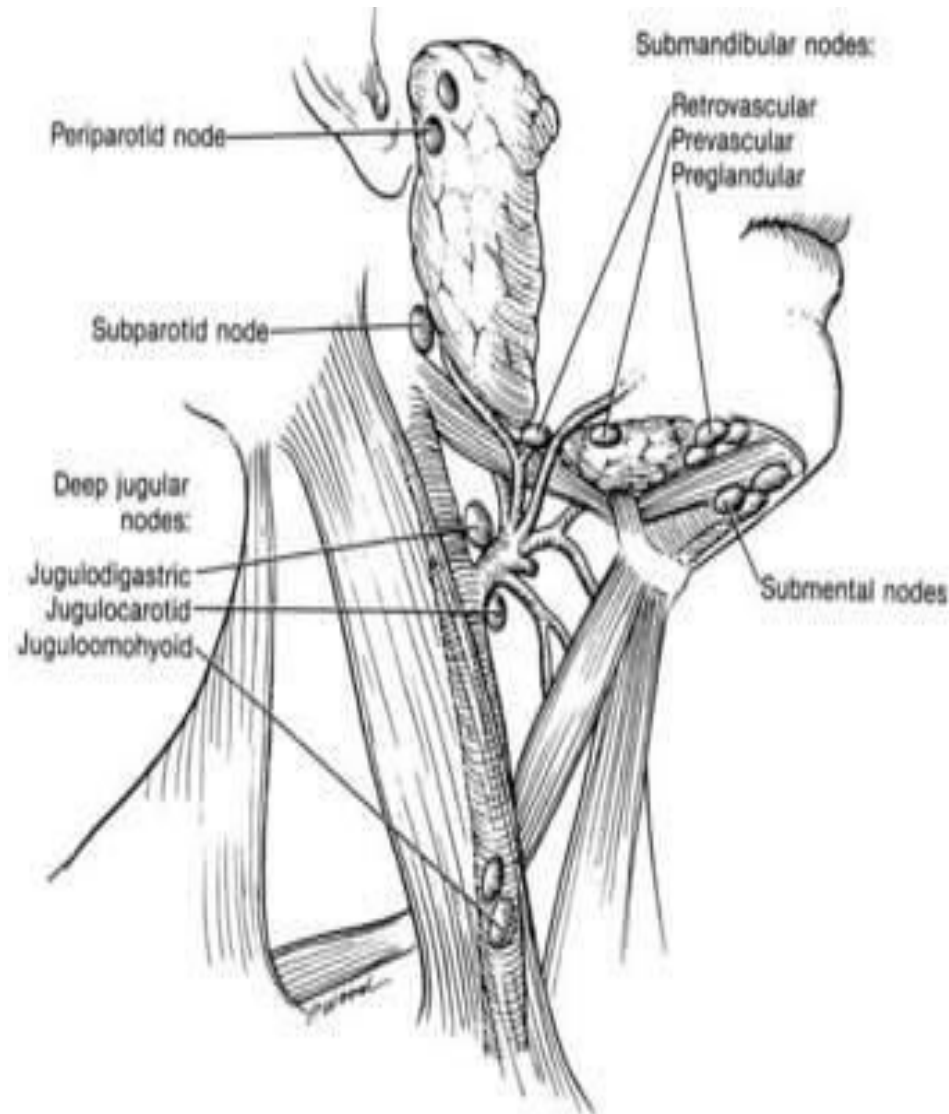


Muscular triangle

Boundaries :

- ✓ **Anteriorly** by- the median line of the neck from the hyoid bone to the sternum.
- ✓ **Inferoposteriorly** by- the anterior margin of sternocleidomastoid.
- ✓ **Posterosuperiorly** by- the superior belly of omohyoid.

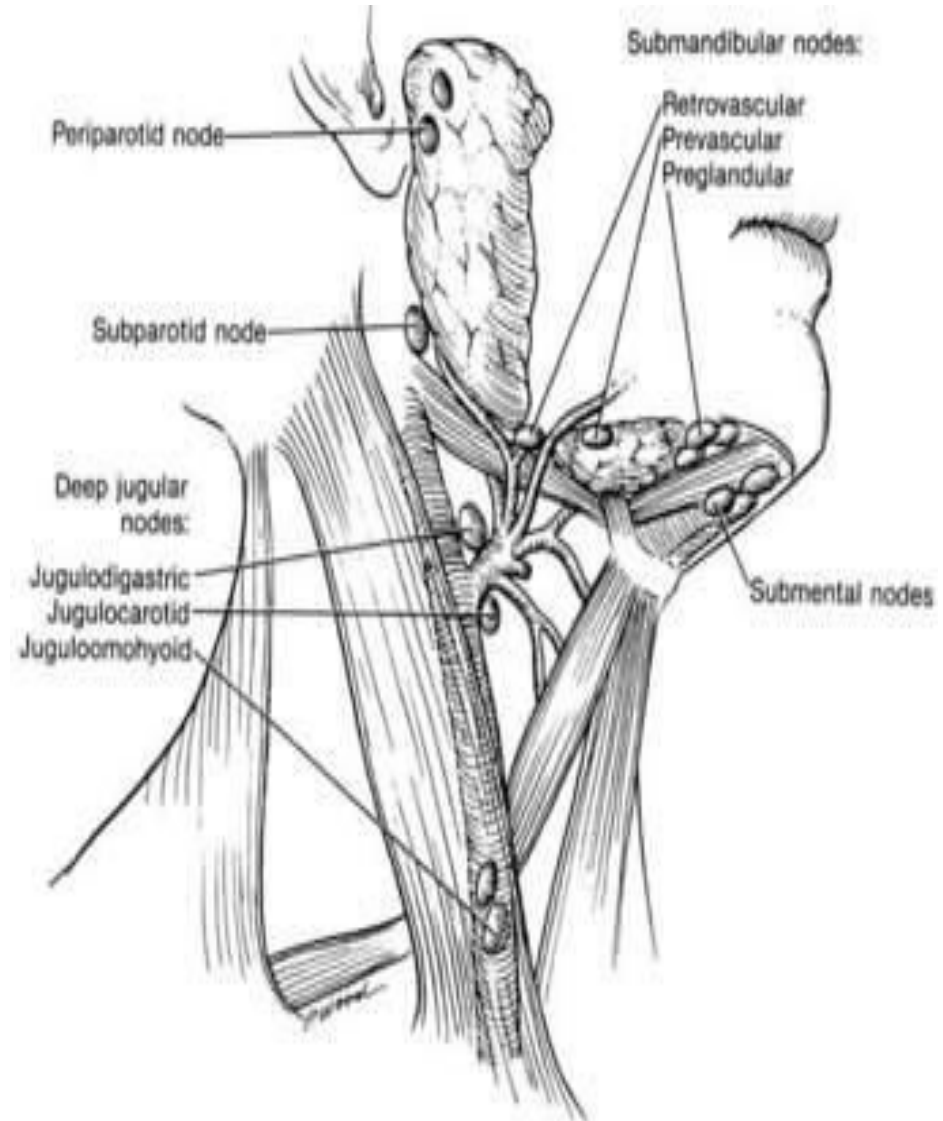
Contains: no significant structure. Beneath its floor lie thyroid gland, larynx, trachea and oesophagus.



Carotid triangle

Boundaries:

- **Posteriorly by-** the anterior border of the sternocleidomastoid,
- **Antero inferiorly by-** the superior belly of omohyoid.
- **Superiorly by-** the stylohyoid and the posterior belly of digastric.



Carotid triangle (Contents)

A) Arteries—

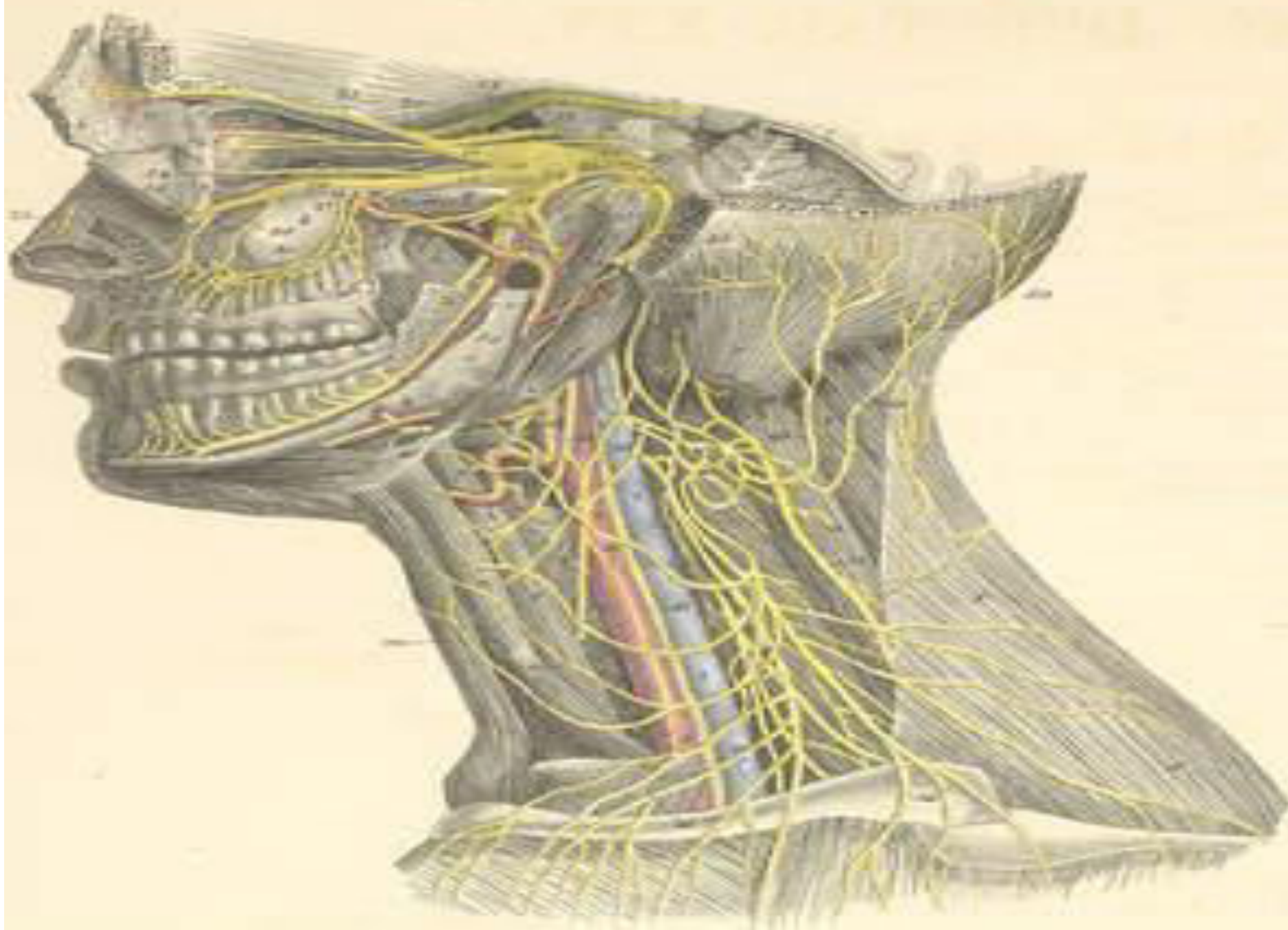
1. Common carotid artery and its two terminal branches- internal and external carotid arteries.
2. The following branches of ext. carotid artery are encountered in carotid triangle- superior thyroid art, lingual art, facial art, occipital art and ascending pharyngeal arteries.

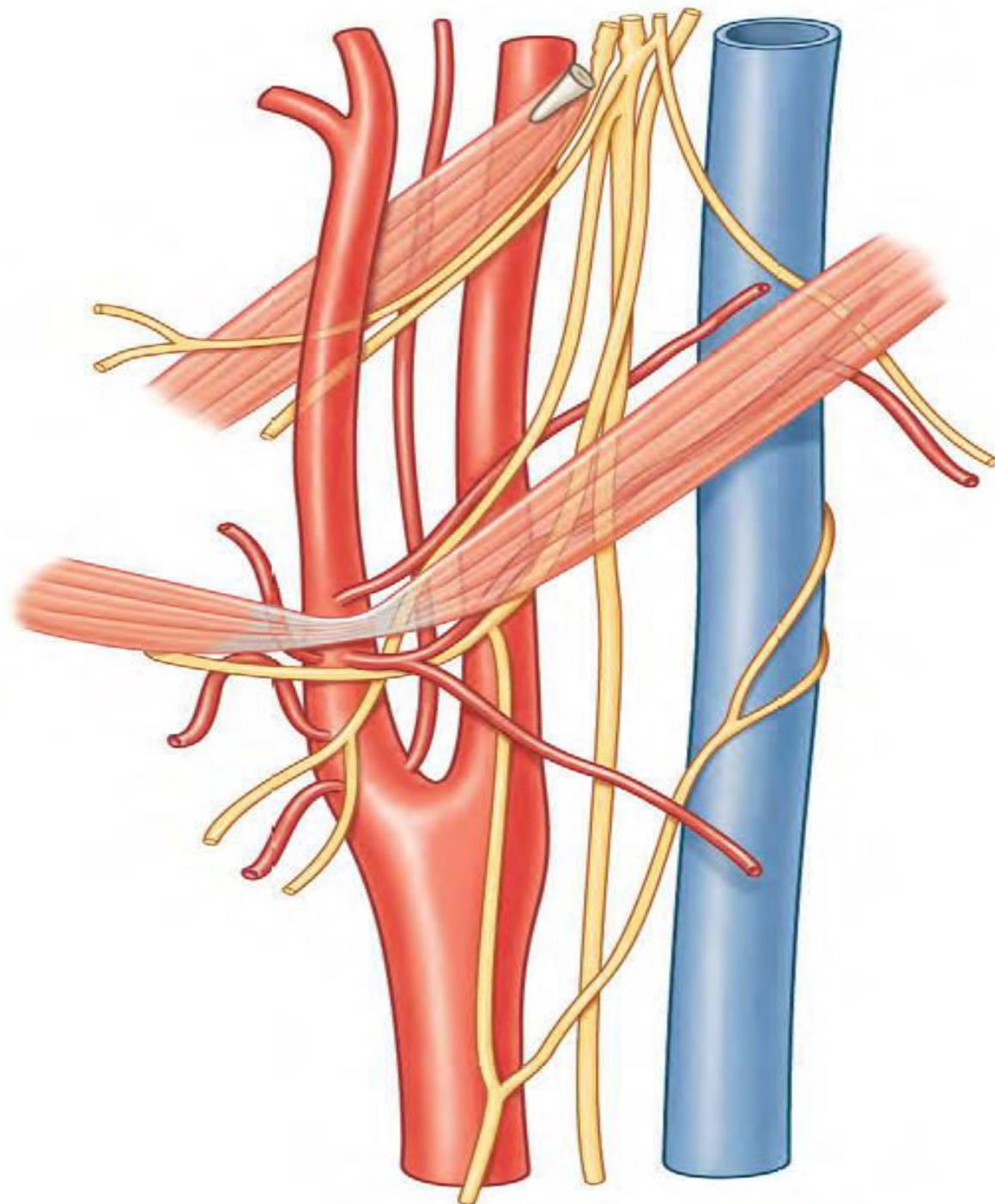
B) Veins-1. Internal jugular vein. 2. the following tributaries of the IJV- sup. Thyroid, lingual, common facial pharyngeal and occipital veins.

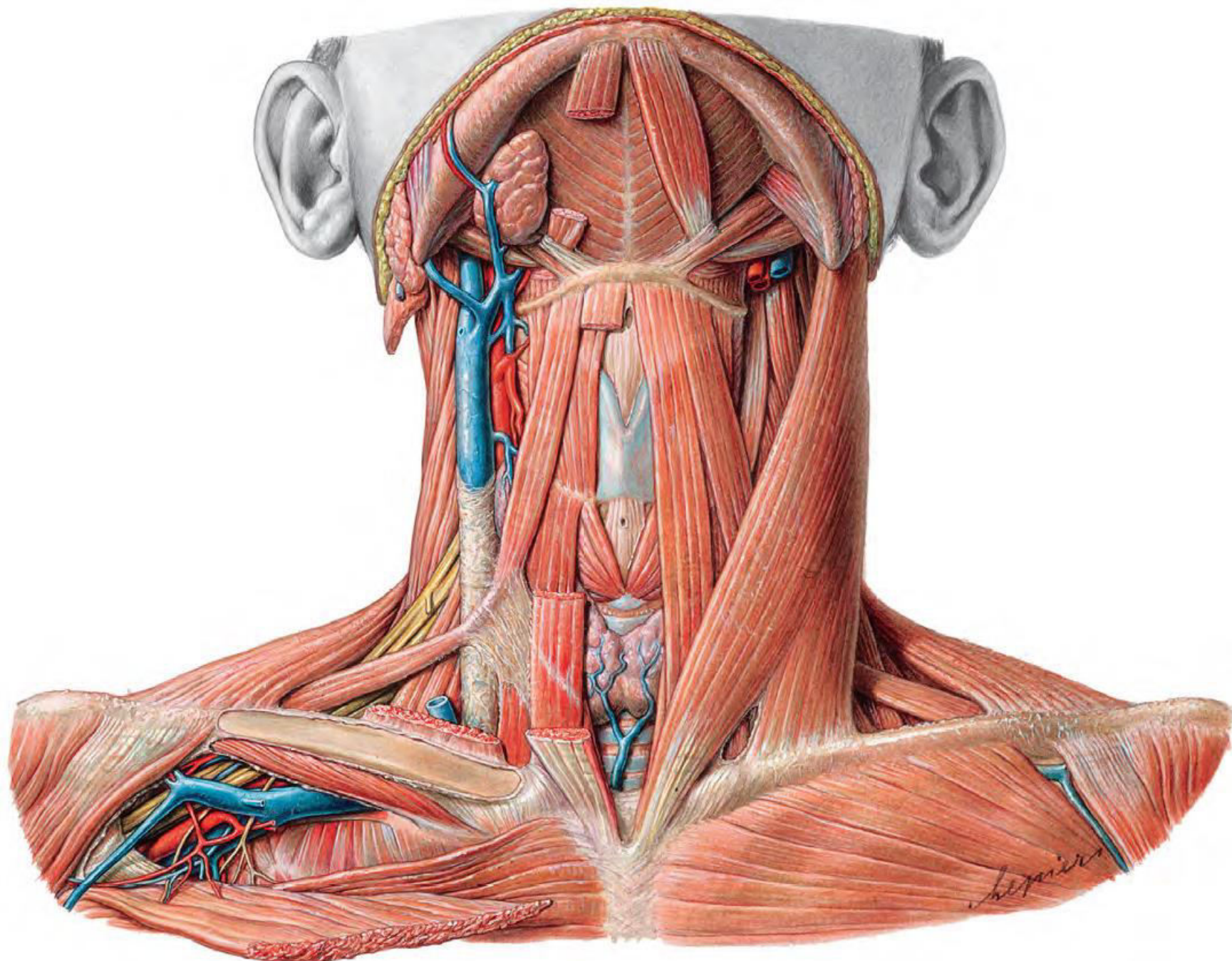
C) Nerves – 1. Vagus nerve. 2. loop of hypoglossal nerve. 3. spinal part of accessory nerve. 4. cervical part of the sympathetic trunk.

D) Other structures – apex of the parotid gland, a chain of deep cervical nodes.

Fig. 3.



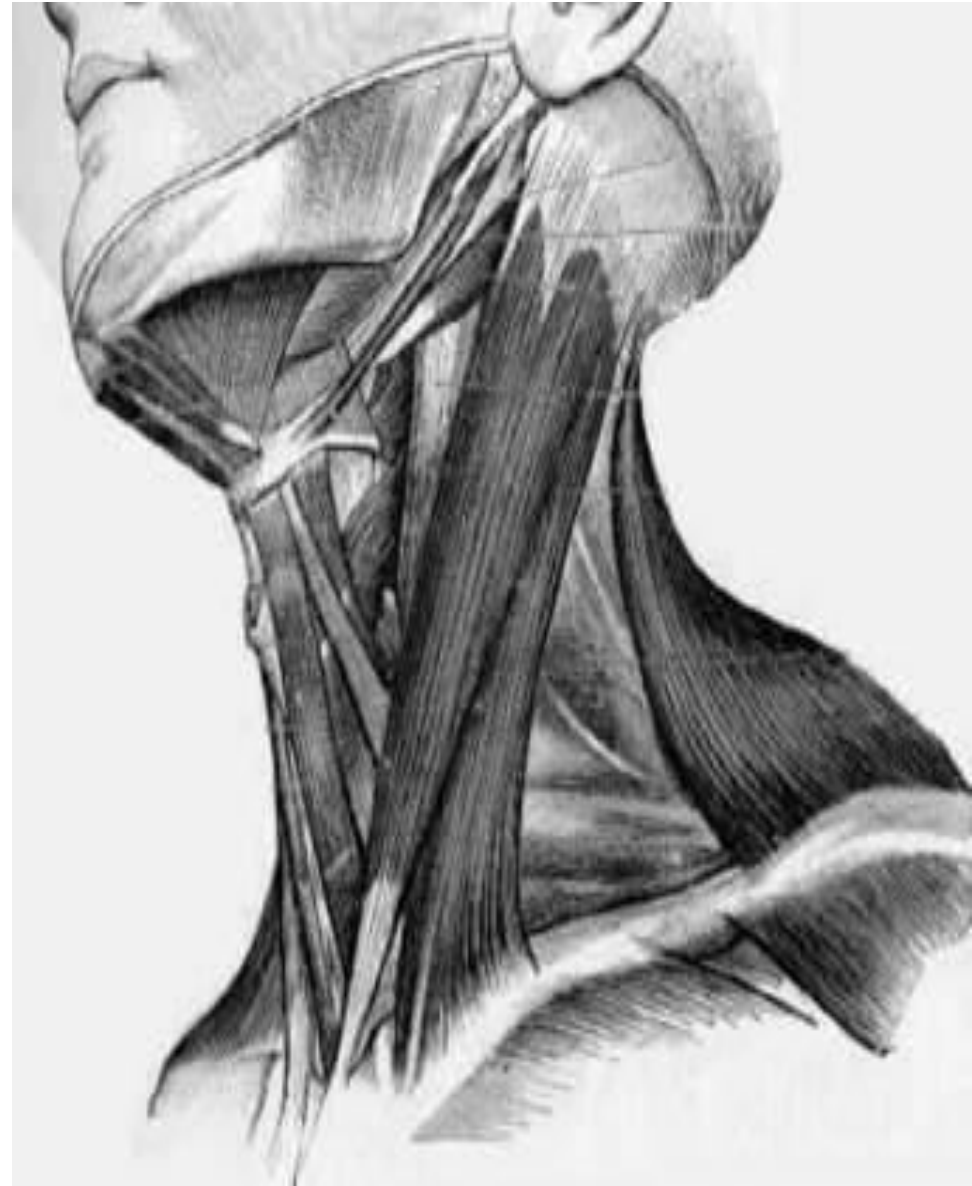




POSTERIOR TRIANGLE OF THE NECK

The posterior triangle is limited

- ✓ **Anteriorly by** the posterior edge of Sternocleidomastoid.
- ✓ **Posteriorly by** the anterior edge of trapezius, and inferiorly by the middle third of the clavicle .
- ✓ **Its apex** is between the attachments of sternocleidomastoid and trapezius to the occiput and is often blunted.



POSTERIOR TRIANGLE OF THE NECK

- ✓ **The roof** - formed by the investing layer of the deep cervical fascia.
- ✓ **The floor** - formed by the prevertebral fascia overlying splenius capitis, levator scapulae and the scalene muscles.

Contents : includes fat, lymph nodes , spinal accessory nerve, cutaneous branches of the cervical plexus, inferior belly of omohyoid, branches of the thyrocervical trunk (transverse cervical and suprascapular arteries), the third part of the subclavian artery, and the external jugular vein.

Occipital triangle

The occipital triangle constitutes the upper and larger part of the posterior triangle.

Bounded

In front- by the post. border of sternocleidomastoid.

Behind- by the ant. Border of trapezius.

Below – by the inferior belly of omohyoid.

Floor formed -

(from above down), by splenius capitis, levator scapulae, and scaleni medius and posterior; semispinalis capitis.

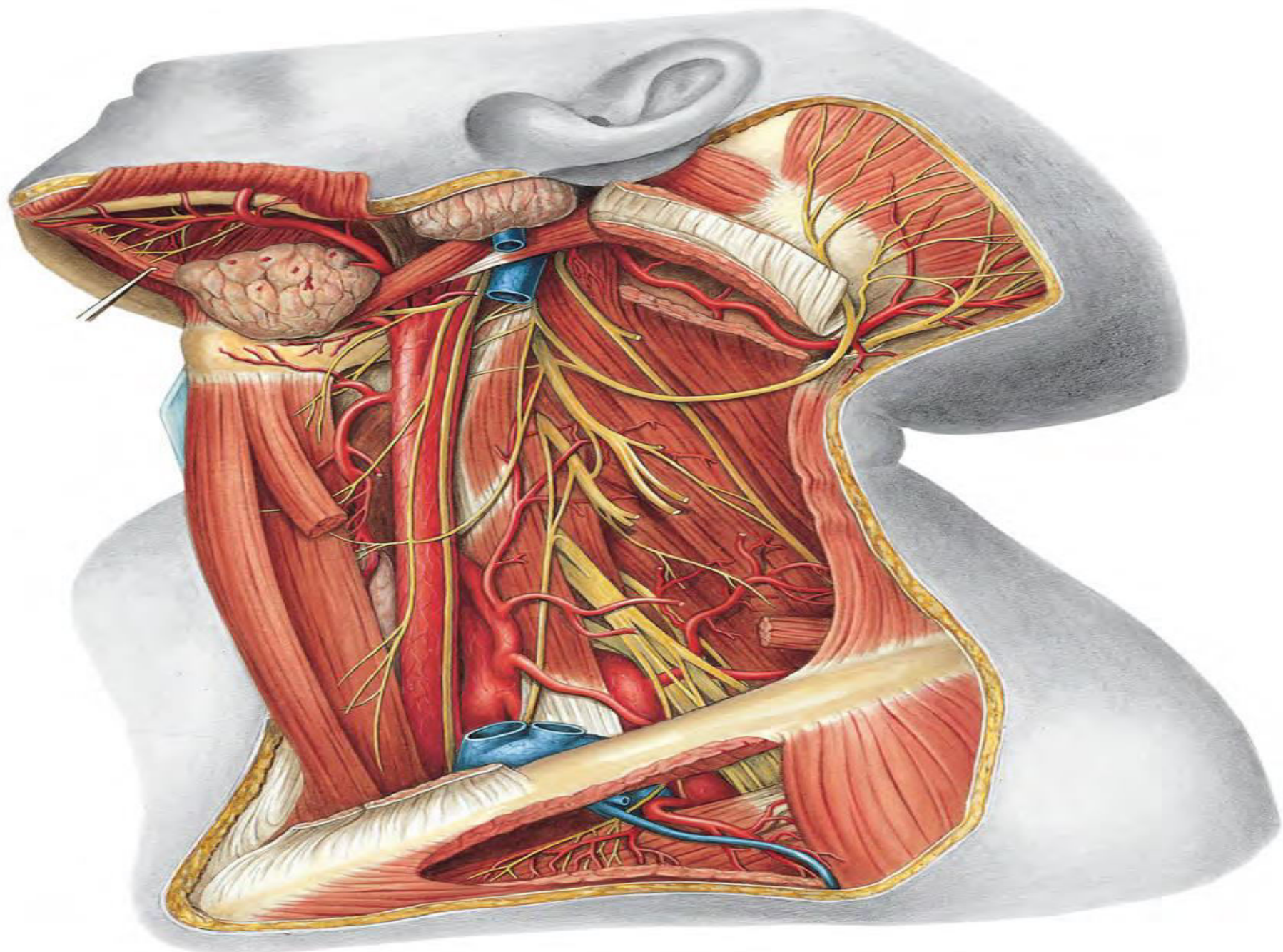


Occipital triangle

Contents :

1. Spinal part of accessory nerve.
2. The 3rd and 4th cervical nerves.
3. Dorsal scapular nerve.
4. Four cutaneous branches of the cervical plexus.
5. Upper trunk of the brachial plexus.
6. Superficial cervical artery.





Supraclavicular triangle

The supraclavicular triangle is the lower and smaller division of the posterior triangle.

Boundaries:

Above- inferior belly of omohyoid.

Below – middle 3rd of the clavicle.

Infront – lower part of the posterior border of the sternomastoid.

Floor- formed by the first rib, scalenus medius and the first slip of serratus anterior.

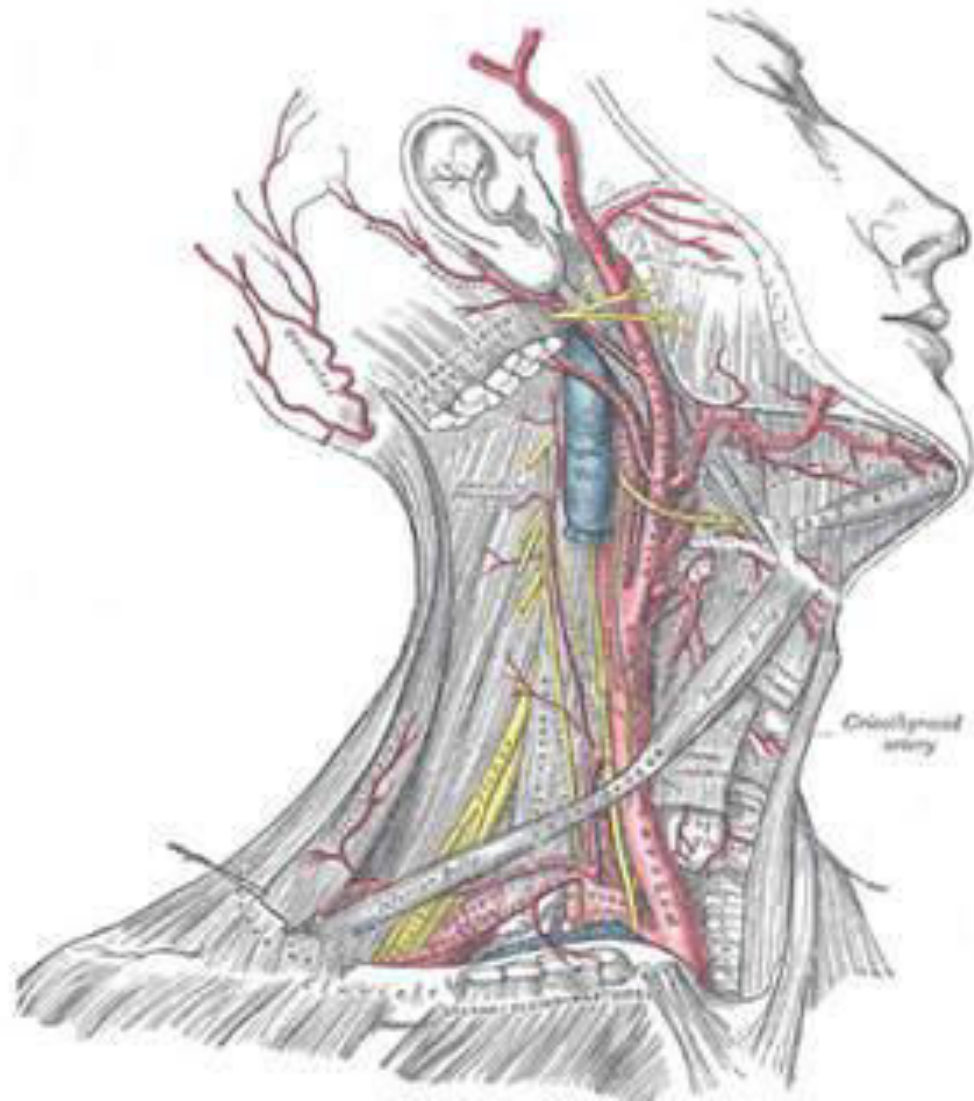
Roof - covered by skin, superficial and deep fasciae and platysma .



Supraclavicular triangle

Contents:

1. Third part of the subclavian artery.
2. Subclavian vein.
3. Terminal part of the external jugular vein.
4. Trunks of the brachial plexus.
5. Superficial cervical, suprascapular and dorsal scapular arteries.
6. postero-inferior group of deep cervical lymph nodes.



Cervical fascia

➤ **SUPERFICIAL CERVICAL FASCIA.**

➤ **DEEP CERVICAL FASCIA**

- The superficial cervical fascia is usually a thin lamina covering platysma and is hardly demonstrable as a separate layer.
- It may, contain considerable amounts of adipose tissue, especially in females.

DEEP CERVICAL FASCIA

- The deep cervical fascia or fascia colli invests the muscles of the neck and fills up the interval between muscles, vessels and cervical viscera.
- The deep cervical fascia possess 3 layers from outside inwards-
 - Investing layer
 - Pretracheal fascia and
 - Prevertebral fascia.

Investing layer

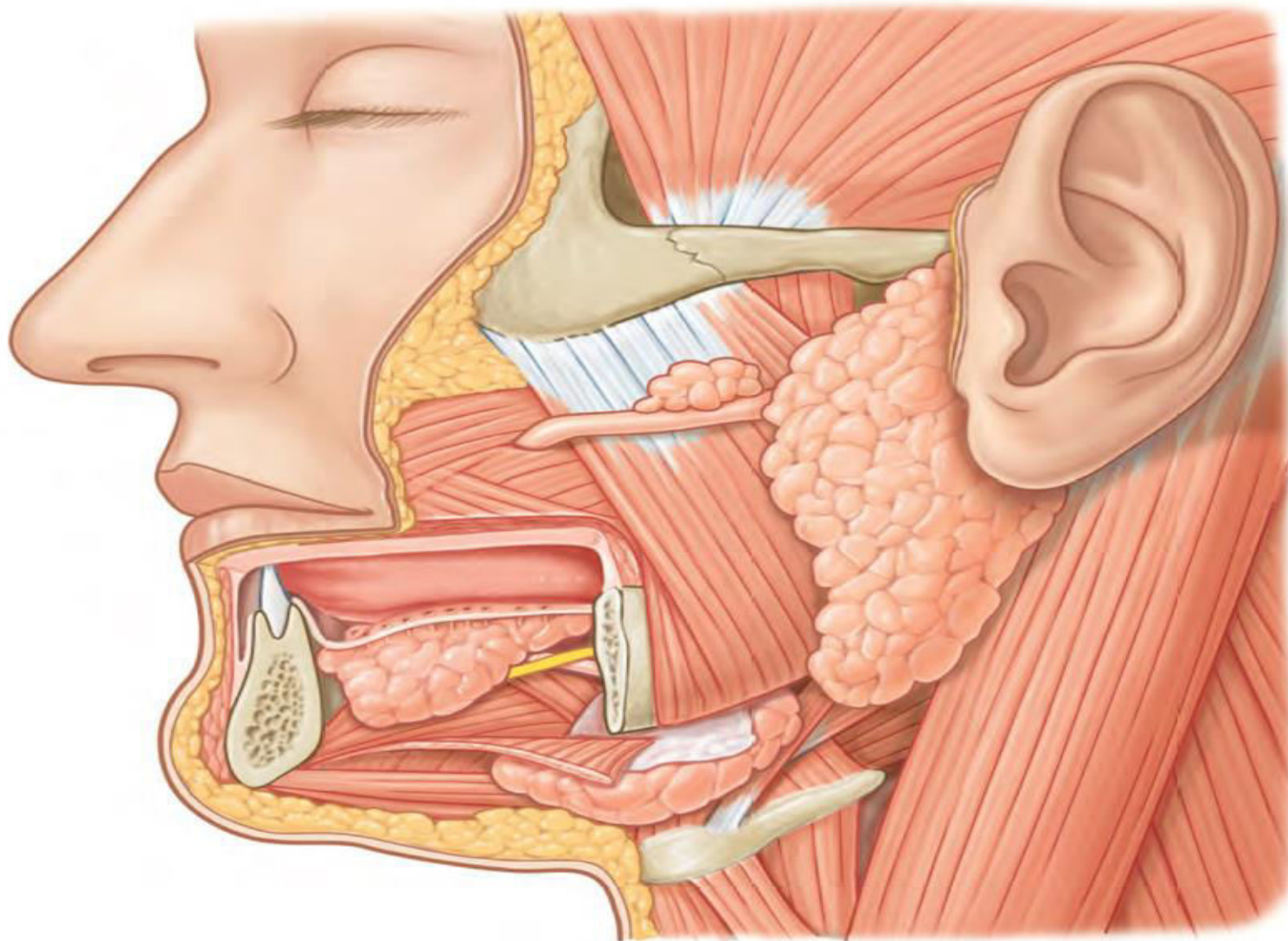
Attachments :

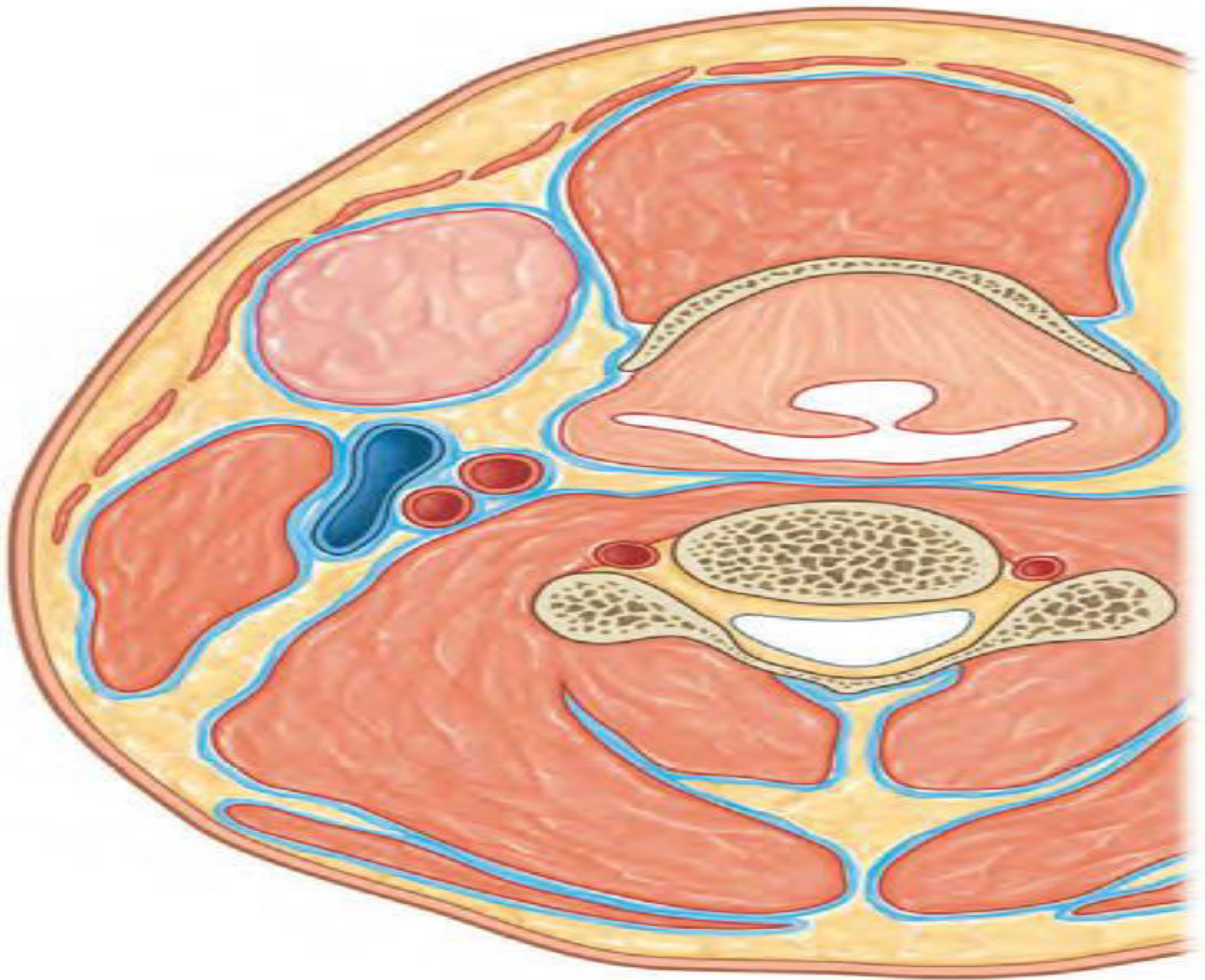
- **Behind** – ligamentum nuchae and the seventh cervical spine.
- **In front** – continuous with the similar fascia of opposite side across the middle line and is attached to the hyoid bone.
- **Above (from behind forwards)**- external occipital protuberance and superior nuchal line, mastoid part of temporal bone, cartilagenous part of external acoustic meatus, lower margin of the zygomatic arch and lower border of the body of the mandible.
- **Below (from behind forwards)**- spine and acromial process of scapula, upper surface of the clavicle and suprasternal notch of manubrium sterni.

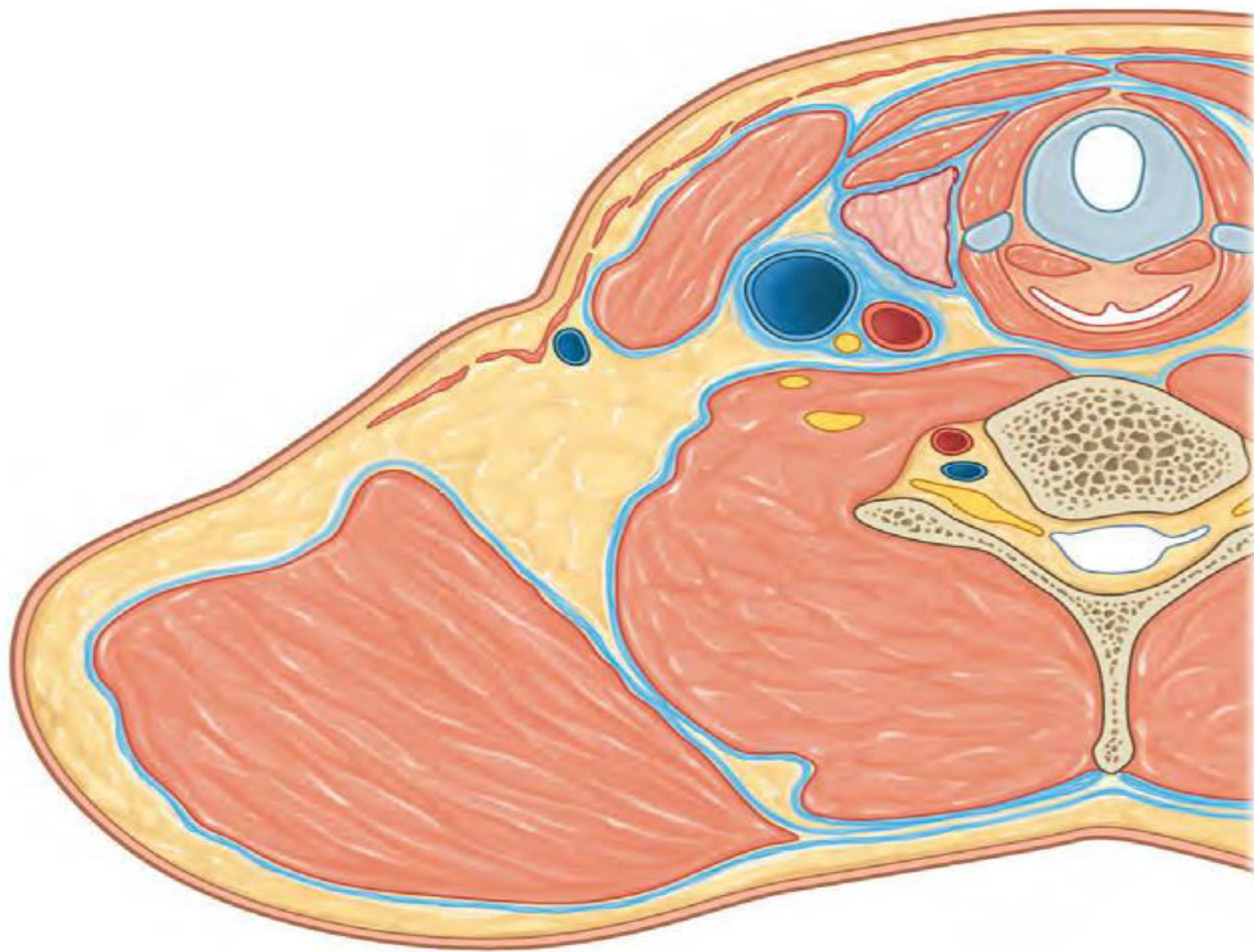
Investing layer (cont.)

Other features:

- The investing layer of deep cervical fascia splits to enclose-
 - a) **Muscles**- trapezius and sternocleidomastoid.
 - b) **Salivary glands**- parotid and submandibular.
 - c) **Spaces**- suprasternal and supraclavicular.
- Also forms pulleys to blind the tendons of the digastric and omohyoid muscles.







Pretracheal fascia

- The pretracheal layer of the deep cervical fascia is very thin.
- It provides fascial sheaths for the thyroid gland, larynx, pharynx, trachea, oesophagus and the infrahyoid strap muscles.
- **Superiorly**- it is attached to the hyoid bone.
- **Inferiorly**- it continues into the superior mediastinum along the great vessels and merges with the fibrous pericardium.
- **Laterally**- it merges with the investing layer of deep cervical fascia and with the carotid sheath.

Prevertebral fascia

- Lies in front of the prevertebral muscles and forms the floor of the posterior triangle of the neck.

Attachments and relations:

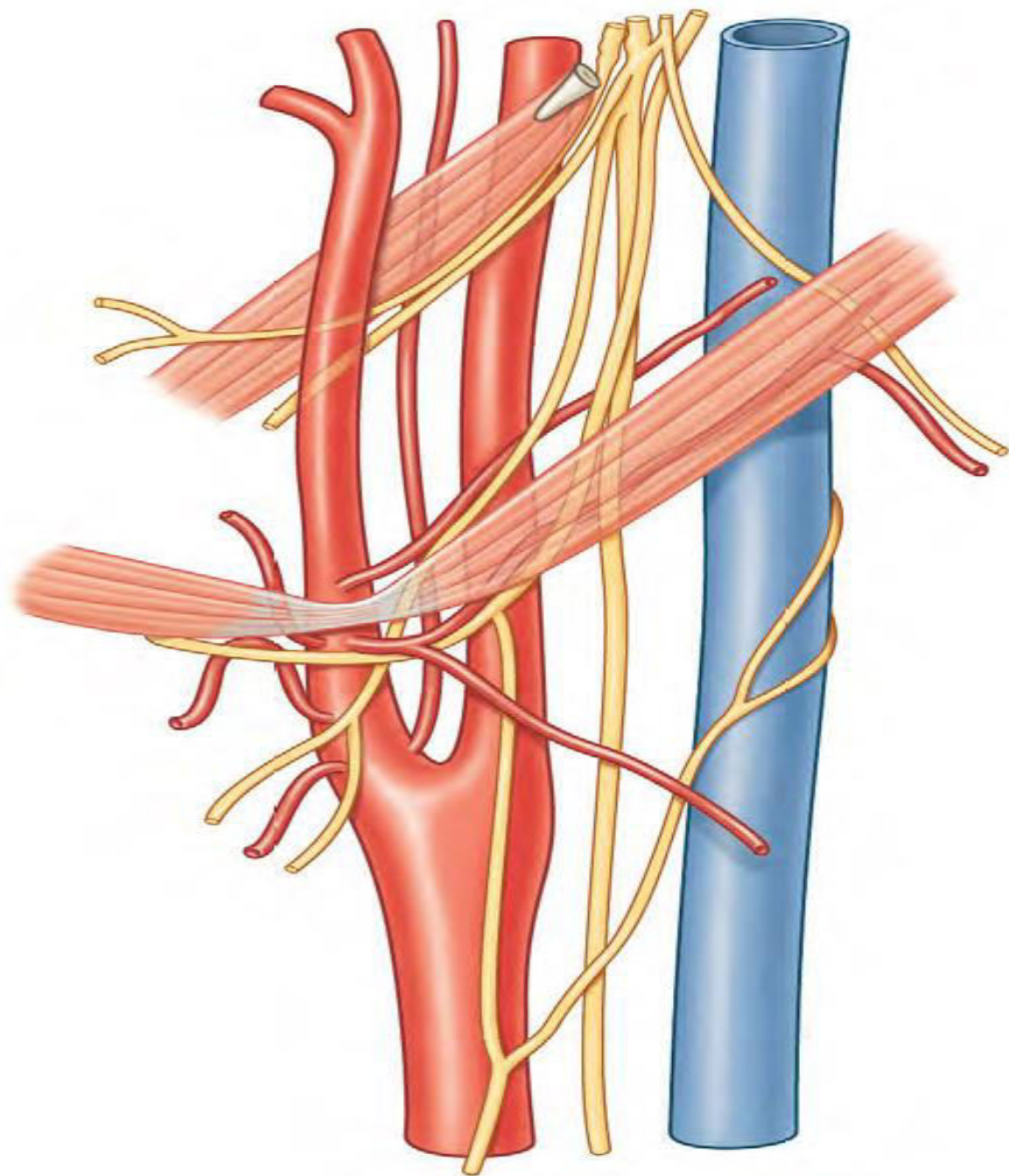
- **Superiorly**- attached to the base of the skull.
- **Inferiorly**- extends to the superior mediastinum where it is attached to the anterior longitudinal ligament and to the body of the 4th thoracic vertebra.
- **Anteriorly** – separated from the pharynx and buccopharyngeal fascia by the retropharyngeal space containing loose areolar tissue.
- **Laterally** – is lost deep to the trapezius.

Carotid sheath

- The carotid sheath is a condensation of deep cervical fascia around the common and internal carotid arteries, the internal jugular vein, the vagus nerve.
- It is thicker around the arteries than the vein.
- Peripherally the carotid sheath is connected to adjacent fascial layers by loose areolar tissue.

Relations :

- a) the ansa cervicalis lies embedded in the anterior wall of the carotid sheath.
- b) the cervical sympathetic chain lies behind the sheath, plastered to the prevertebral fascia.
- c) the sheath is overlapped by the anterior border of the sternocleidomastoid and is fused to the first three layers of deep cervical fascia.



THANKS