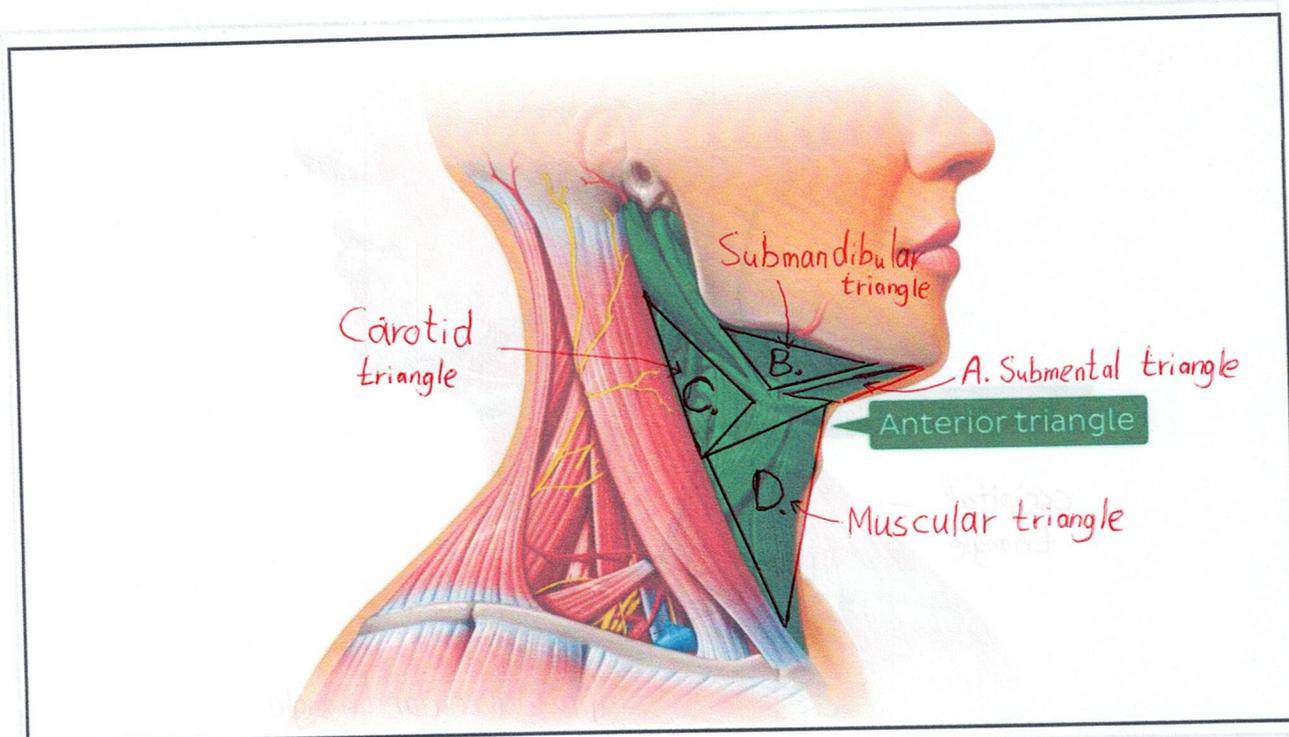


The neck is divided into two major regions by the Sternocleidomastoid (SCM) muscle: the **Anterior Triangle** and the **Posterior Triangle**. These are further subdivided into **smaller** triangles that house vital structures.

1. The Anterior Triangle

The anterior triangle is bounded by the midline of the neck (anteriorly), the anterior border of the SCM (posteriorly), and the inferior border of the mandible (superiorly).



A. Submental Triangle

Boundaries: The hyoid bone (base) and the two anterior bellies of the digastric muscles.

Contents: Submental lymph nodes and small veins that unite to form the anterior jugular vein.

B. Submandibular (Digastric) Triangle

Boundaries: Inferior border of the mandible and the anterior/posterior bellies of the digastric muscle.

Contents: The Submandibular gland (occupies most of the triangle), submandibular lymph nodes, facial artery, and facial vein.

C. Carotid Triangle

Boundaries: Superior belly of the omohyoid, posterior belly of the digastric, and the anterior border of the SCM.

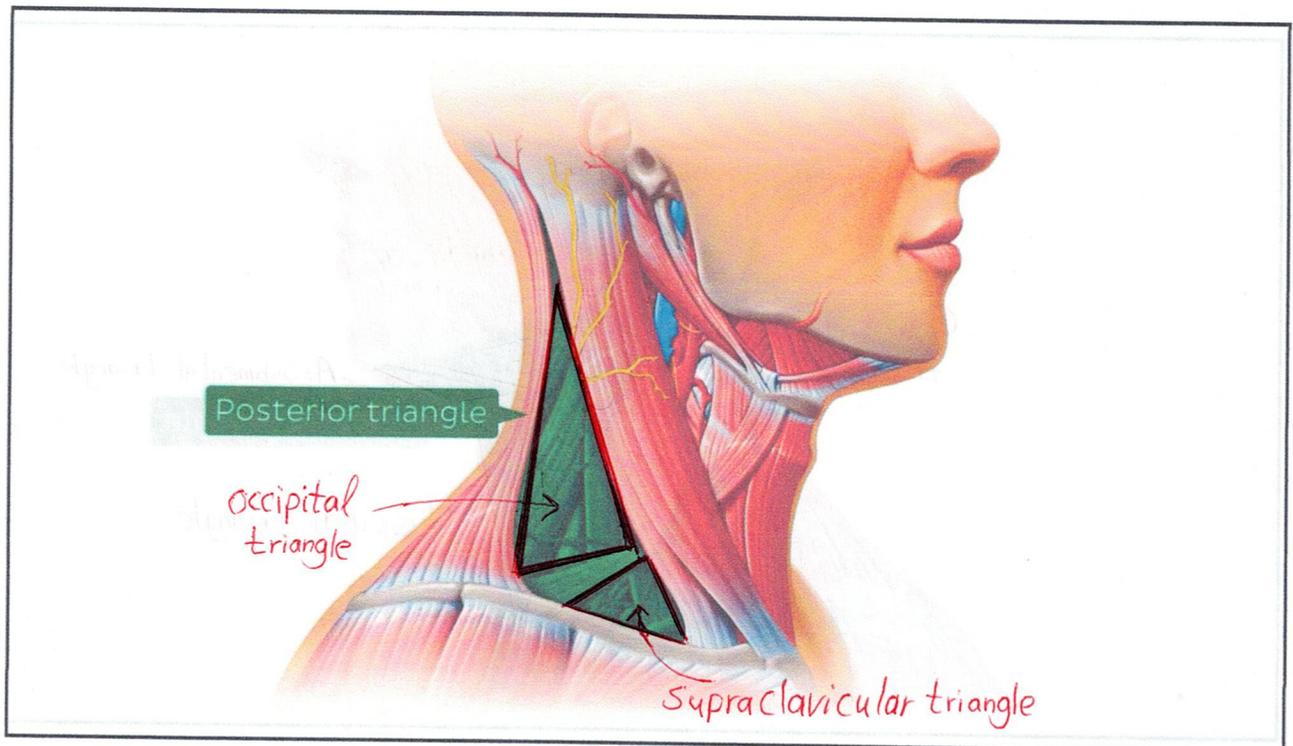
Importance: This is where the carotid pulse is most easily felt.

Contents: Carotid Sheath (Common carotid artery, Internal jugular vein, Vagus nerve), the bifurcation of the common carotid, and the Hypoglossal nerve (CN XII).

D. Muscular (Omotracheal) Triangle

Boundaries: Midline of the neck, superior belly of the omohyoid, and the anterior border of the SCM.

Contents: The Infrahyoid (strap) muscles, thyroid gland, and parathyroid glands.

2. The Posterior Triangle

Boundaries: The posterior triangle is bounded by the posterior border of the SCM, the anterior border of the Trapezius, and the middle third of the clavicle.

Floor: Formed by the Splenius capitis, Levator scapulae, and Scalene muscles.

Contents:

Spinal Accessory Nerve (CN XI): Crosses the triangle superficially (highly vulnerable to injury).

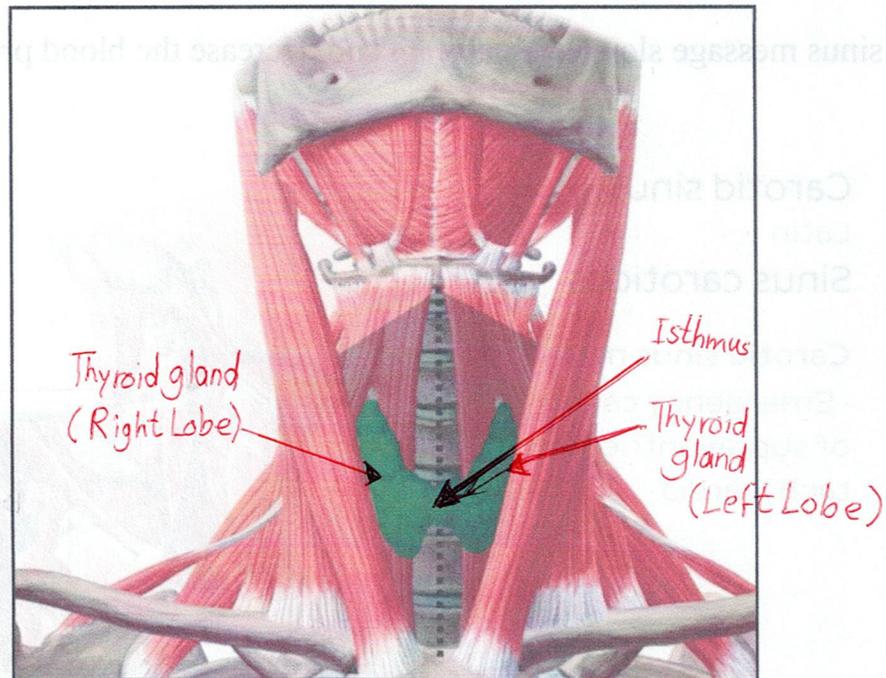
Roots/Trunks of the Brachial Plexus.

Subclavian Artery (3rd part).

External Jugular Vein.

3. The Thyroid Gland

The thyroid is an endocrine gland located in the anterior neck, deep to the sternohyoid and sternothyroid muscles, at the level of vertebrae C5-T1.



Structure: Consists of Right and Left lobes connected by a central Isthmus (which typically crosses the 2nd and 3rd tracheal rings).

Blood Supply

Arterial:

Superior Thyroid Artery: The first branch of the External Carotid Artery.

Inferior Thyroid Artery: A branch of the Thyrocervical trunk (from the Subclavian artery).

Venous Drainage:

Superior and Middle Thyroid Veins: Drain into the Internal Jugular Vein.

Inferior Thyroid Vein: Drains into the Brachiocephalic Veins.

Nerve Supply

The gland is primarily supplied by nerves derived from the **Cervical Sympathetic Ganglia** (Superior, Middle, and Inferior).

4-Clinical Notes

The Recurrent Laryngeal Nerve (a branch of the Vagus) runs in the tracheoesophageal groove, immediately posterior to the thyroid gland. Damage to this nerve during surgery results in hoarseness.

Carotid sinus massage slow the heart rate and decrease the blood pressure.

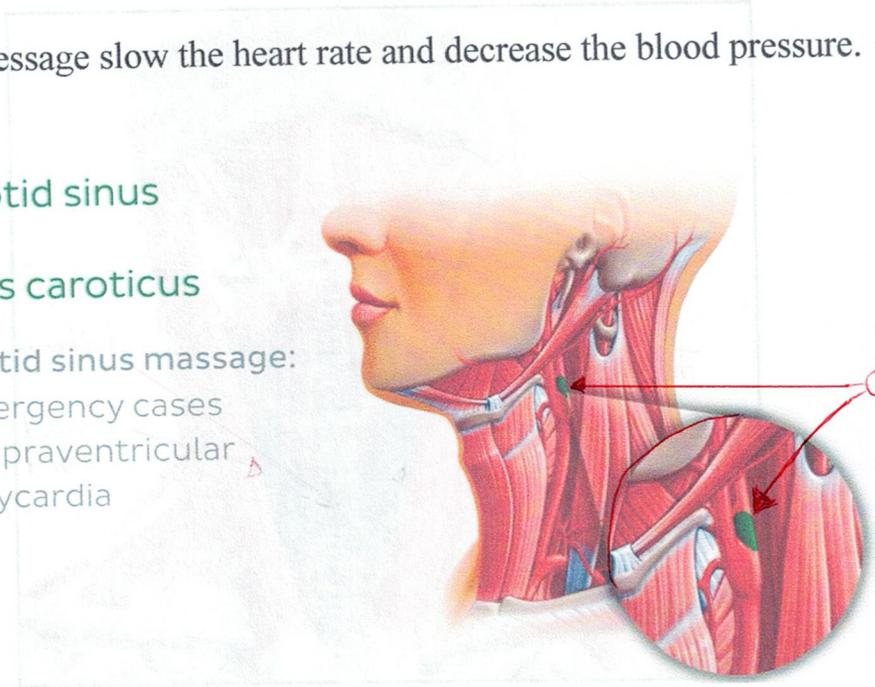
Carotid sinus

Latin

Sinus caroticus

Carotid sinus massage:

- Emergency cases of supraventricular tachycardia

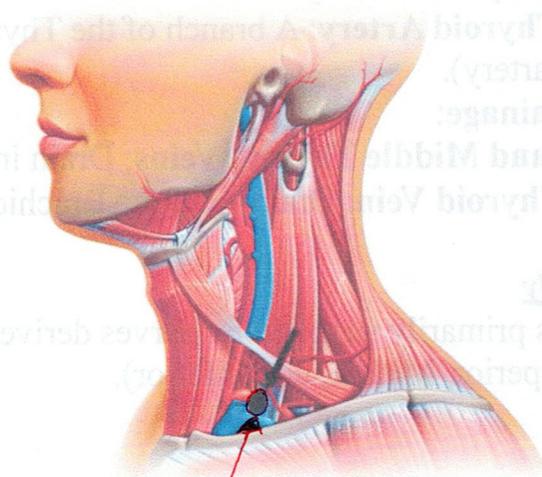


Virchow's lymph nodes: drains lymph from much of the body, in particular the abdominal cavity.

Virchow's node

Troisier's sign

- Indication of presence of advanced abdominal cancer, commonly gastric or pancreatic cancer



Enlarged Virchow's Lymph Nodes