

# **MUSCULOSKELETAL SYSTEM**

## **TRIANGLES OF THE NECK**

### **Posterior triangle of the neck**

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**Sunday 8 March 2026**

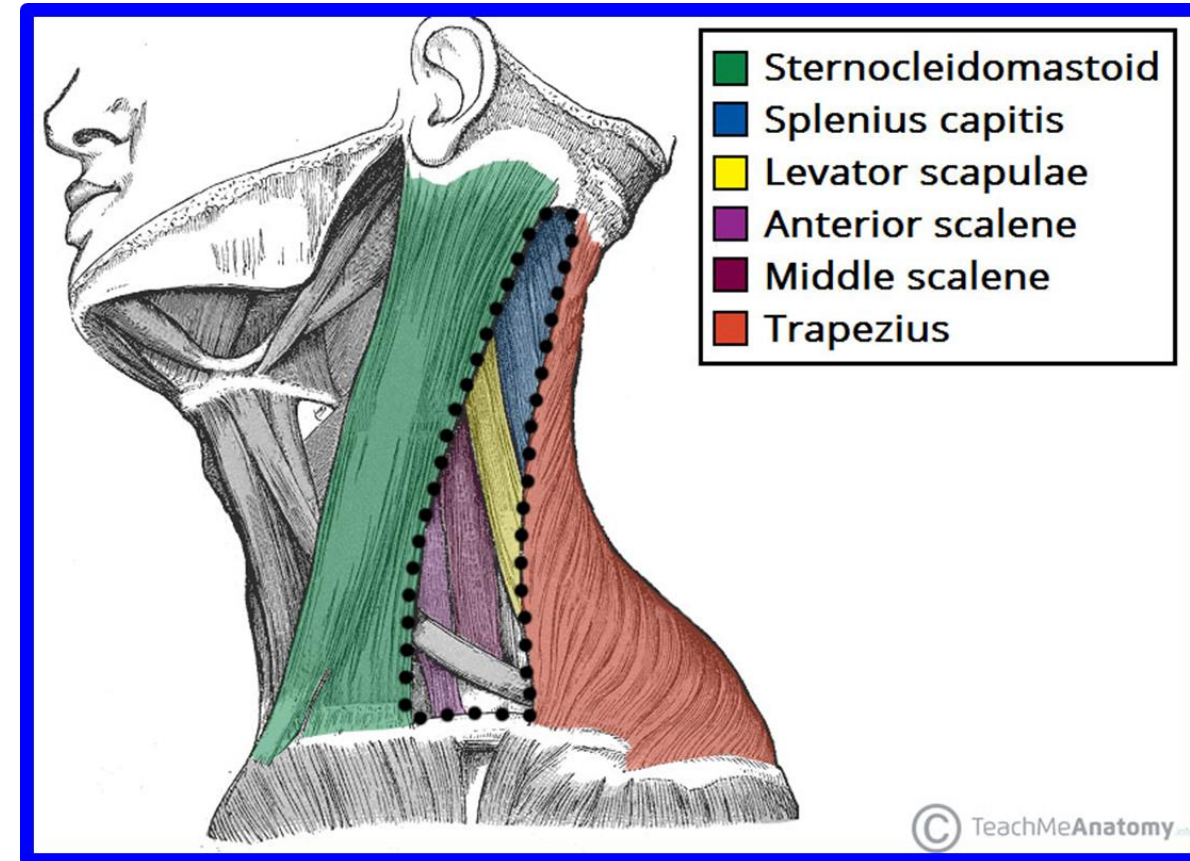
# Posterior triangle of the neck

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## \*\* Boundaries:

- ✓ **Anteriorly:** posterior border of the SCM
- ✓ **Posteriorly:** anterior border of the trapezius
- ✓ **Inferiorly:** the middle third of the clavicle
- ✓ **Apex:** where the SCM and trapezius meet on the superior nuchal line of the occipital bone



# Posterior triangle of the neck

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✓ **Roof:** 1. Skin 2. superficial fascia 3. deep fascia

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✓ **Floor:** Muscles arranged from above downward:

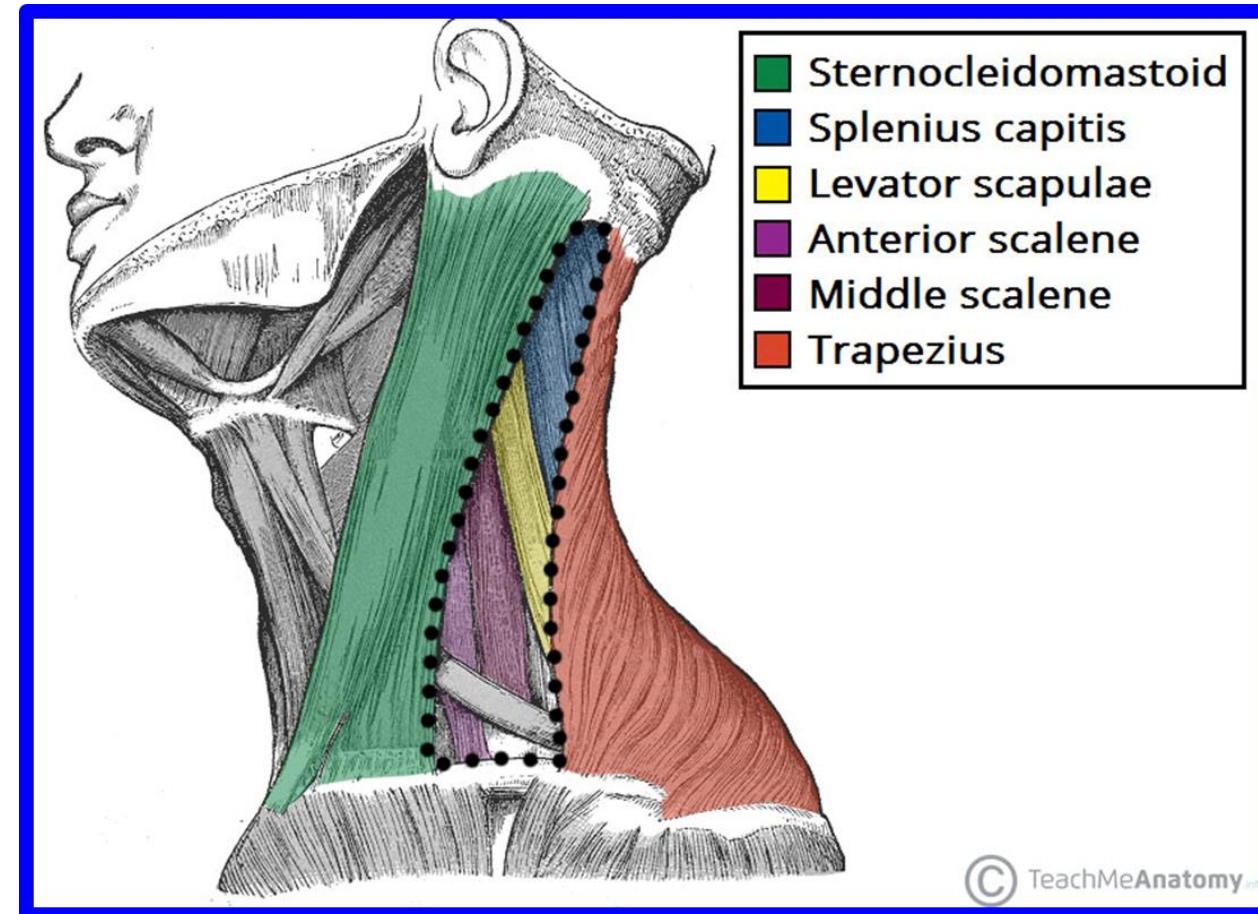
(1) splenius capitis

(2) levator scapula

(3) Middle scalene and posterior scalene

**N.B:** the superficial fascia contain:

1. Platysma muscle
2. Cut. Branches of cervical plexus
3. Ext. Jugular vein

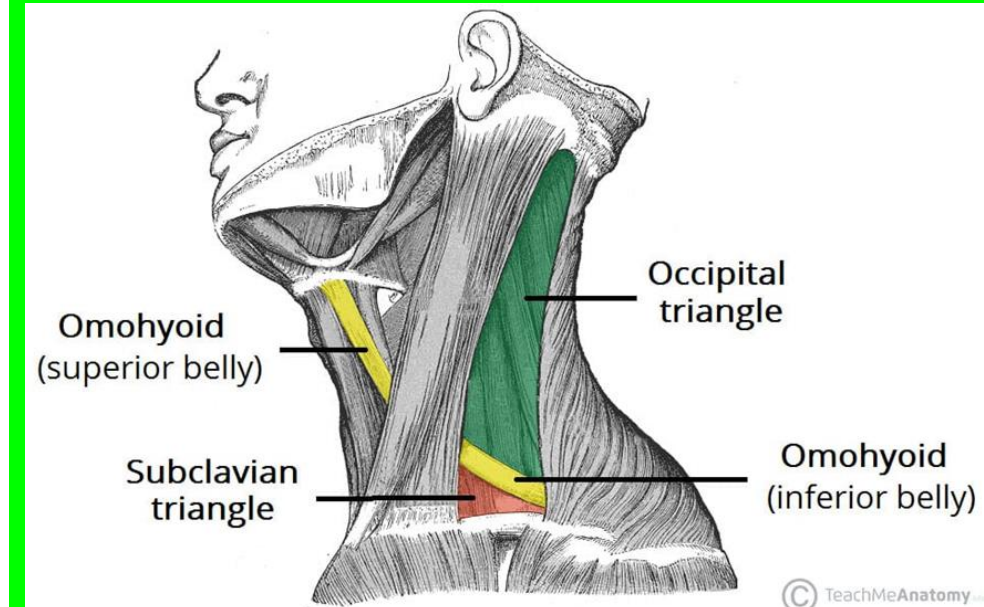
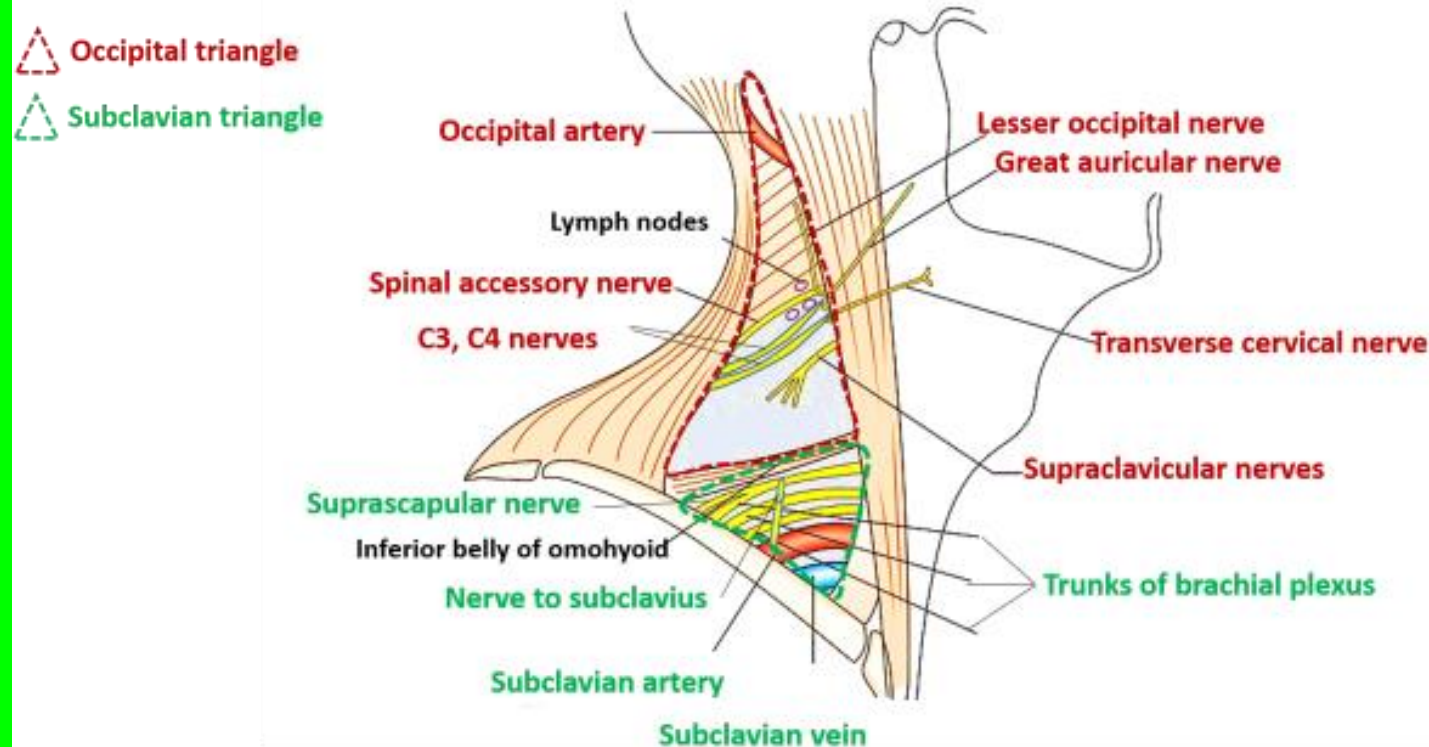


# Contents of Posterior triangle of the neck

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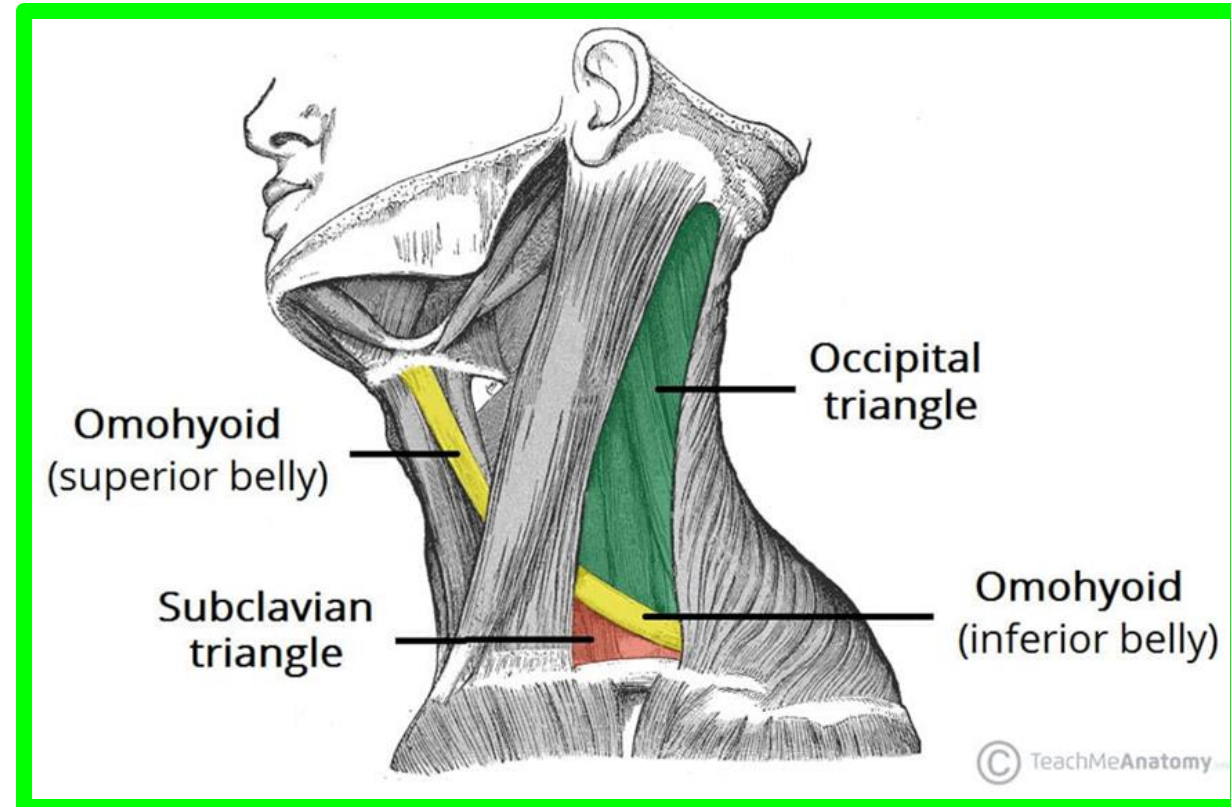
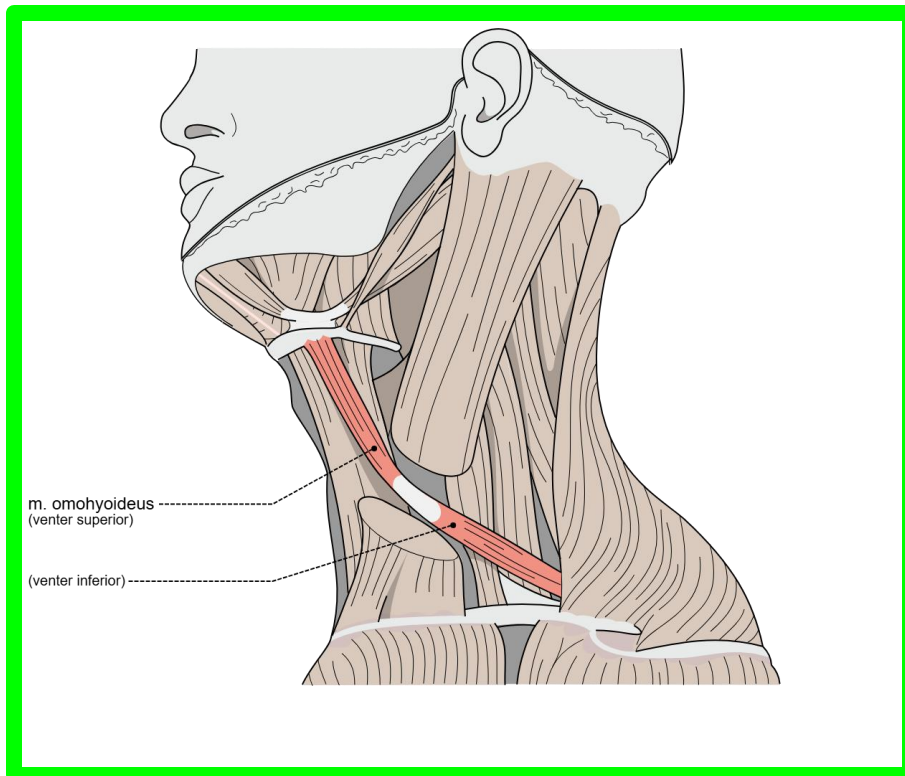
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1. One muscle: inferior belly of Omohyoid
2. Two sets of vessels : Arteries & veins
3. Three sets of nerves: Accessory N, Brachial plexus, Cervical plexus
4. Lymph nodes



# 1. inferior belly of Omohyoid

- ✓ Arises from the upper border of scapula
- ✓ Run upward & forward behind & above the clavicle crossing the triangle
- ✓ It disappear deep to sternomastoid m. to join the intermediate tendon
- ✓ It divided the triangle into **a large occipital triangle** superiorly and a **small omoclavicular triangle** inferiorly



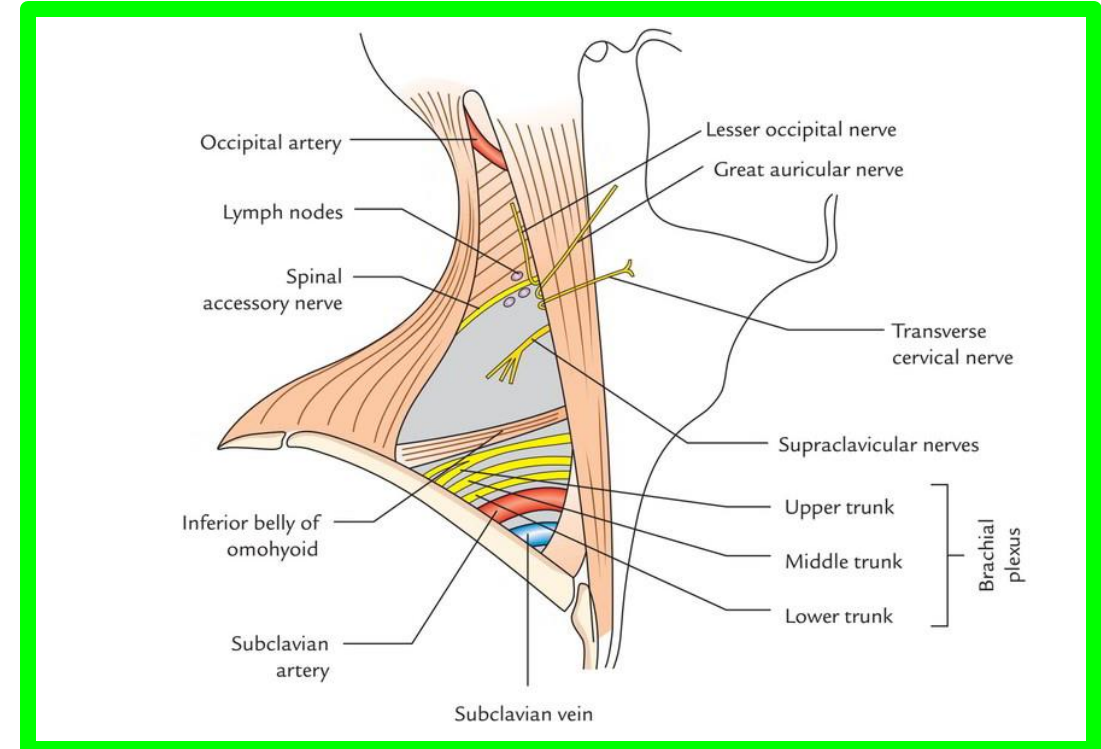
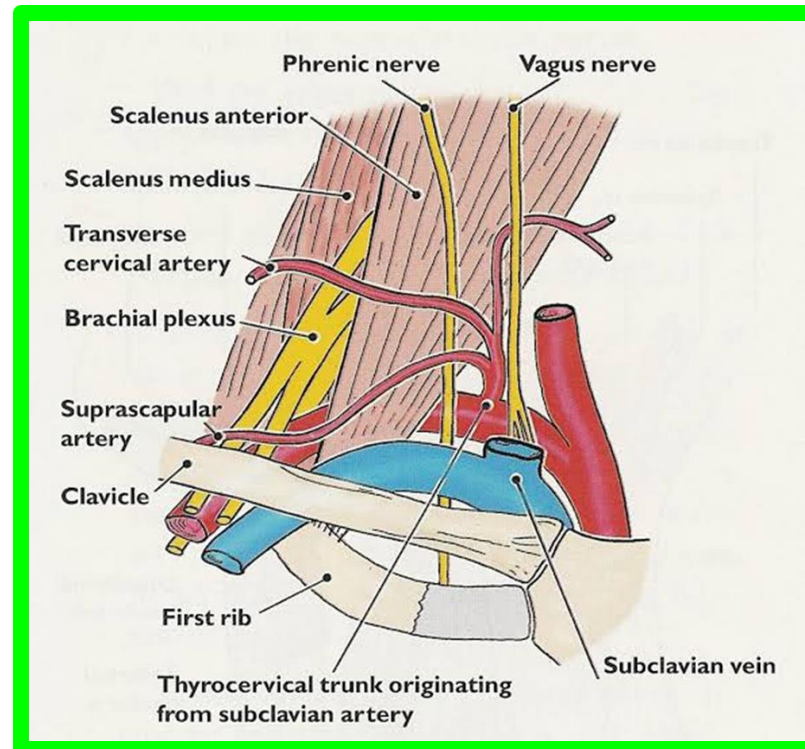
## 2. Arteries of posterior Triangle

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### \*\* 1. Third part of the subclavian artery

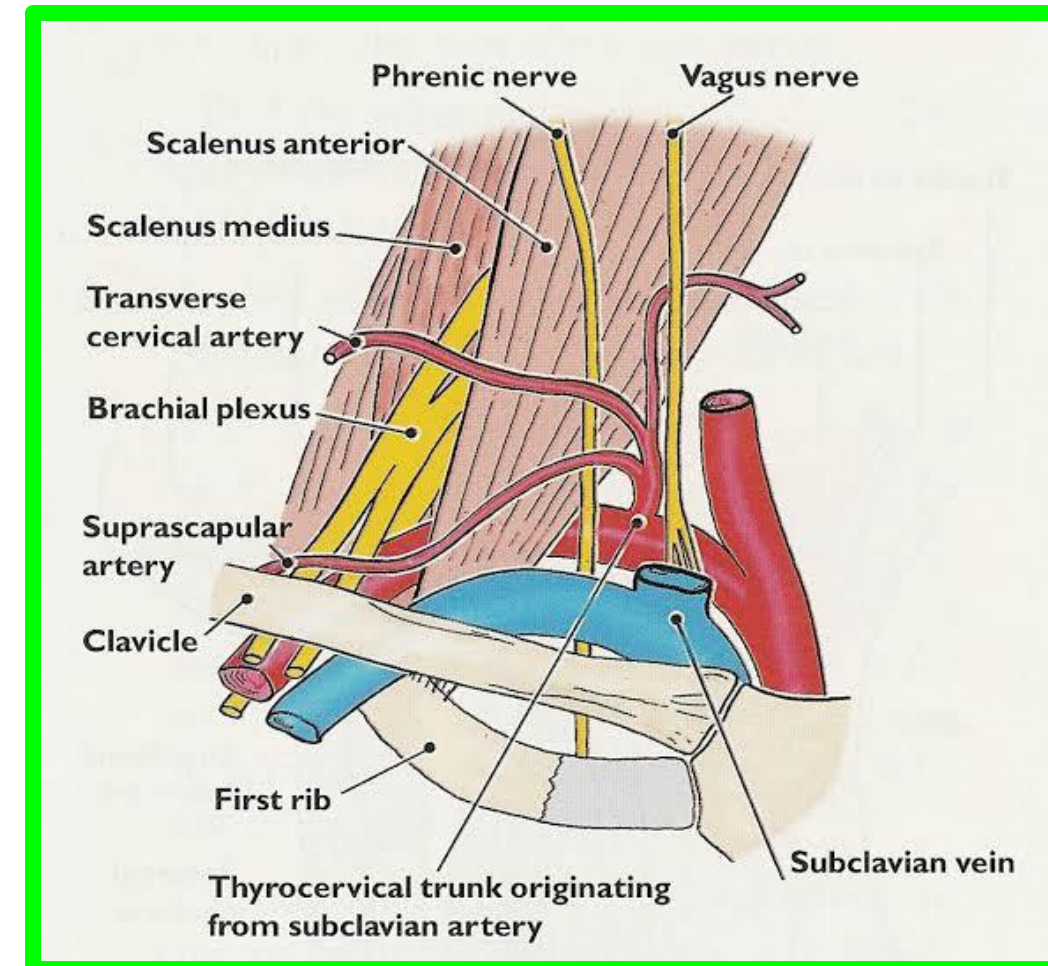
- ✓ Lies in the lower part of the posterior triangle close to the **lower trunk of brachial plexus**
- ✓ It extends from the lat. border of ant. scalenus muscle to the outer border of 1<sup>st</sup> rib where it continues as **axillary artery**



## 2. Arteries of posterior Triangle

### \*\* 2. Suprascapular artery

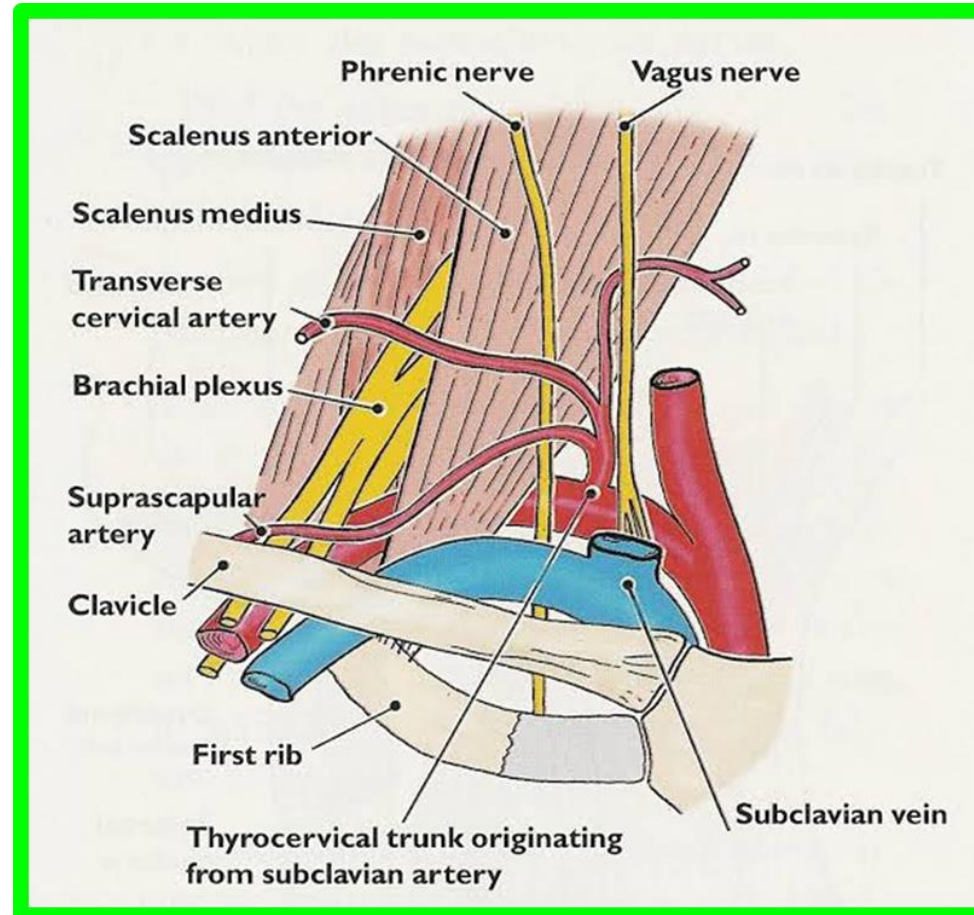
- ✓ It is a branch of **thyrocervical trunk** of the first part of the **subclavian artery**
- ✓ It reach the triangle in front of the anterior Scalenus m.
- ✓ Pass latterly in the posterior triangle then descend behind the clavicle to share in the anastomosis around the scapula.



## 2. Arteries of posterior Triangle

### \*\* 3. Transverse cervical artery

- ✓ It is another branch of **thyrocervical trunk** which pass above the suprascapular artery to reach the posterior triangle.

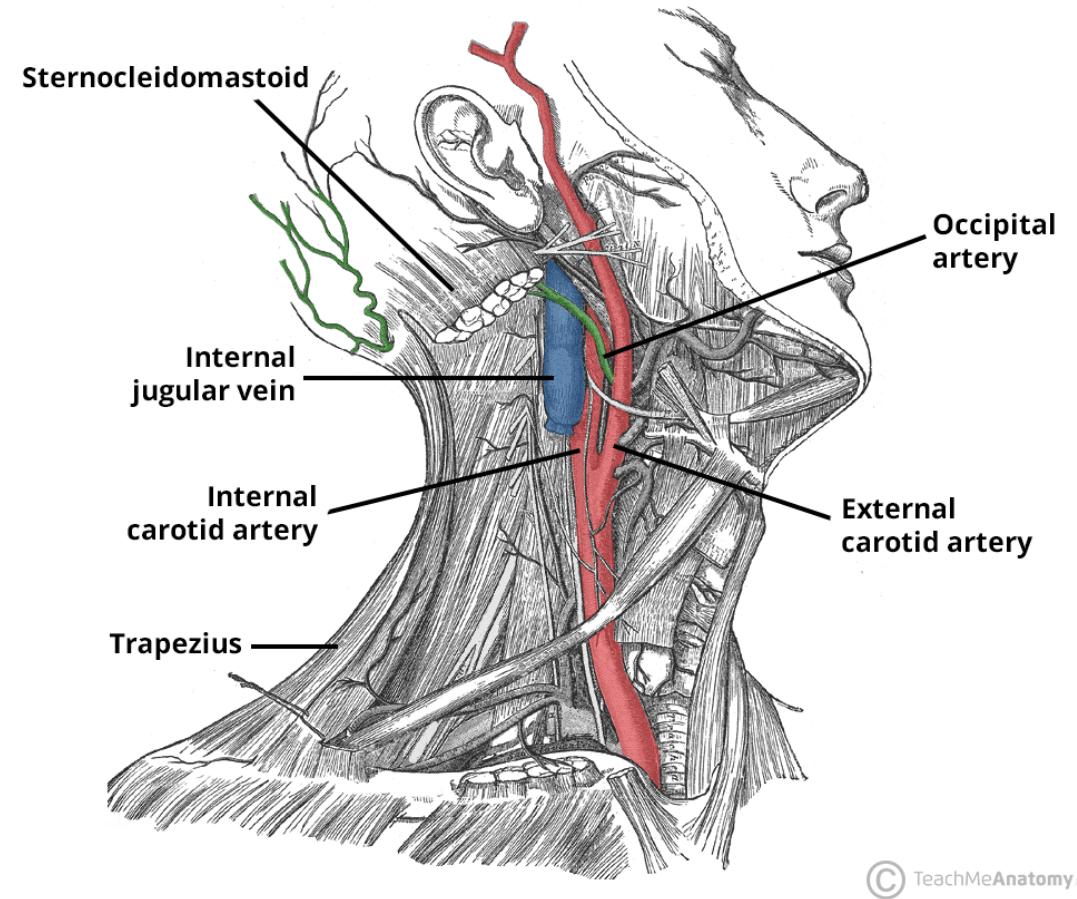
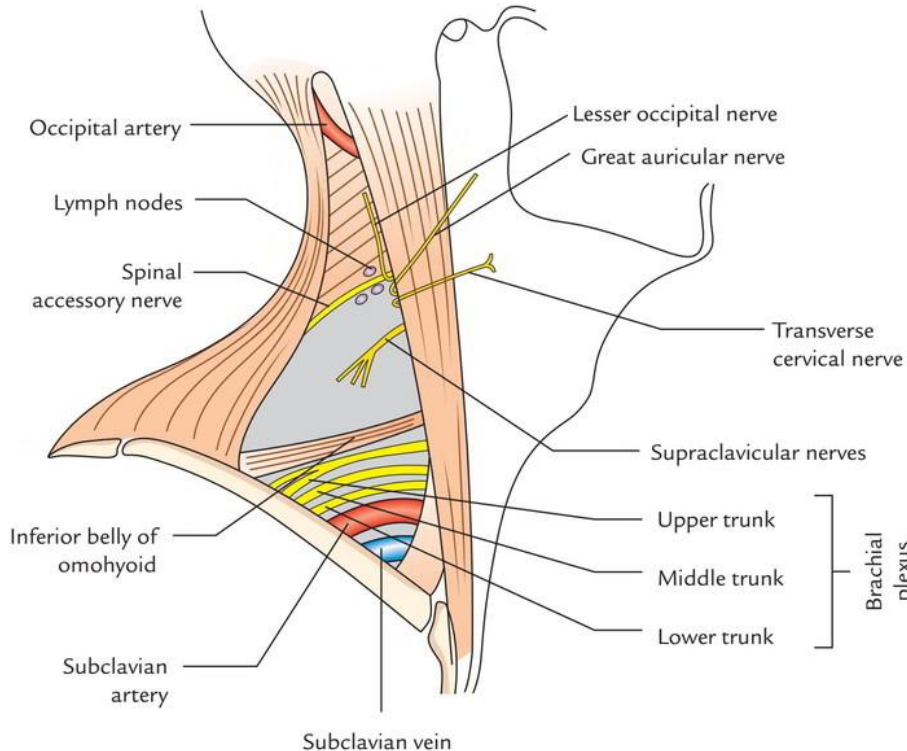


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## 2. Arteries of posterior Triangle

### \*\* 4. 3<sup>rd</sup> part of occipital artery

- ✓ Its branch of **External carotid artery**
- ✓ Cross the apex of posterior triangle
- ✓ Disappear deep to the trapezius muscle



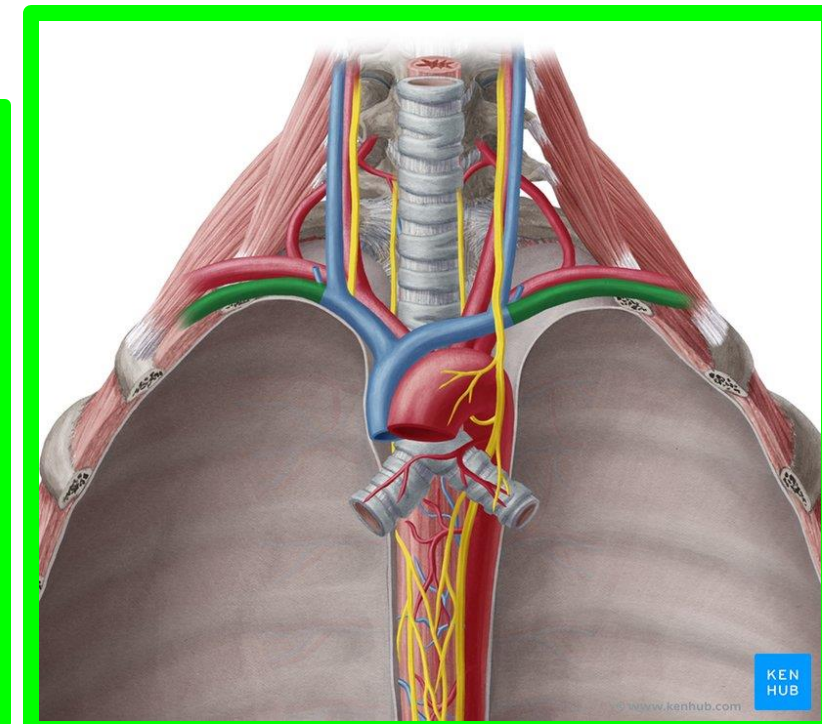
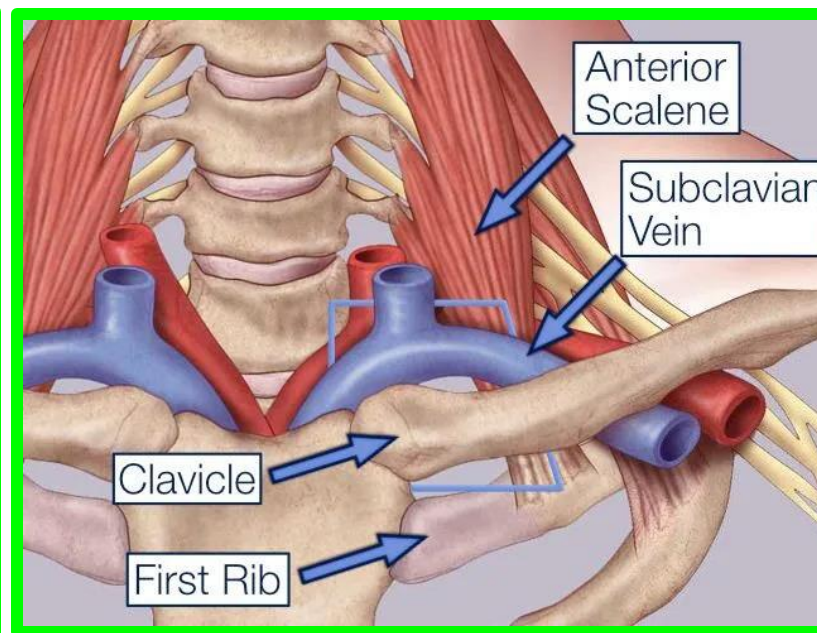
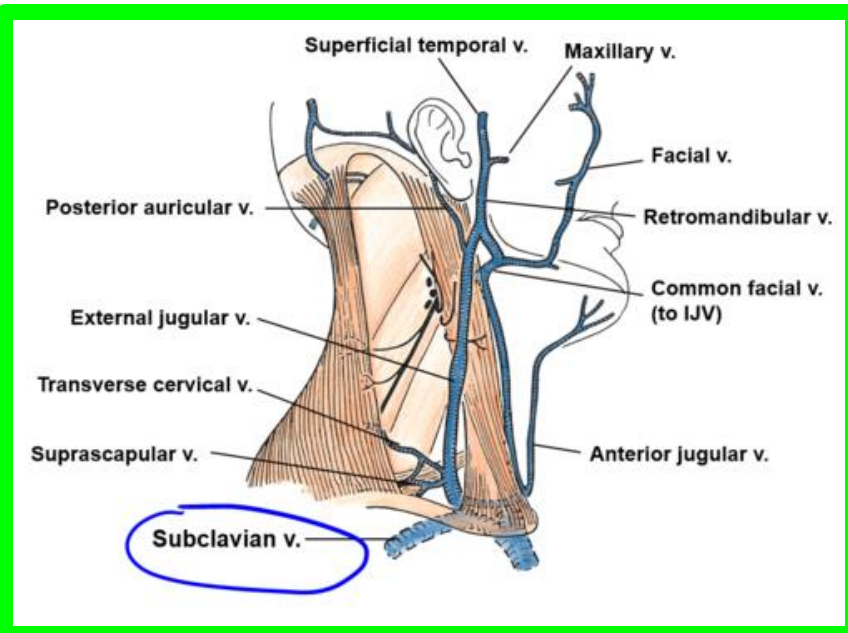
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# 3. Veins of the posterior Triangle

## \*\* 1. Subclavian vein

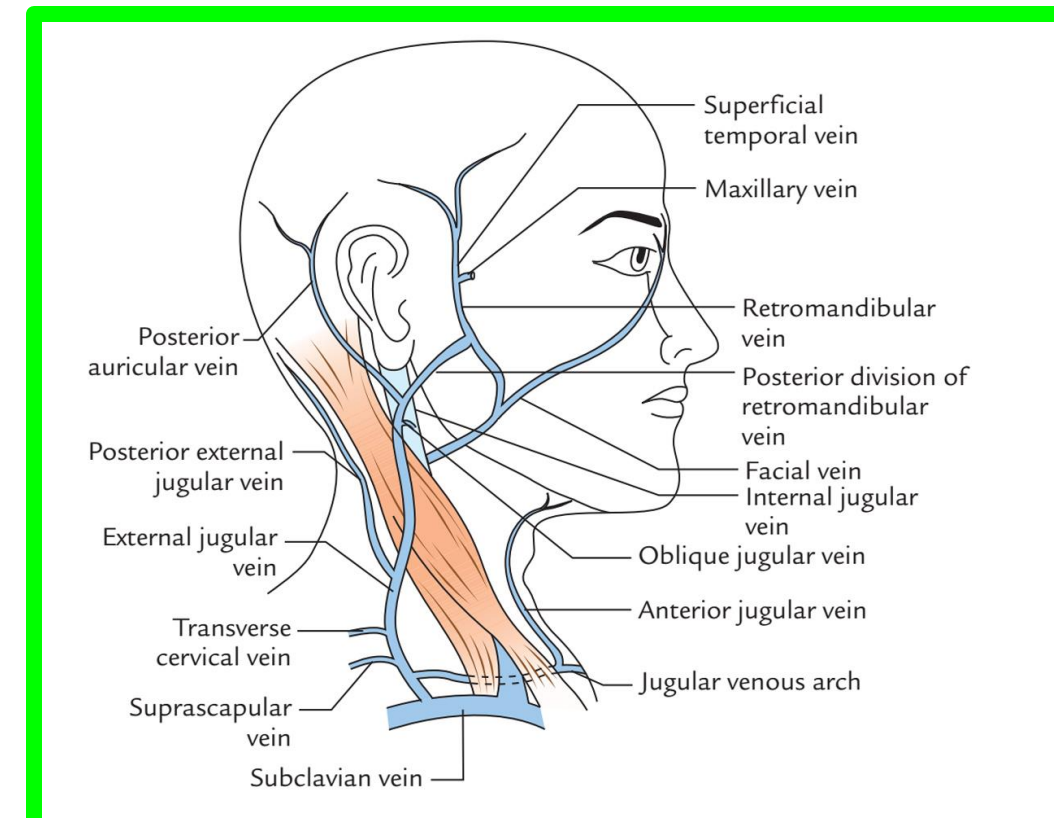
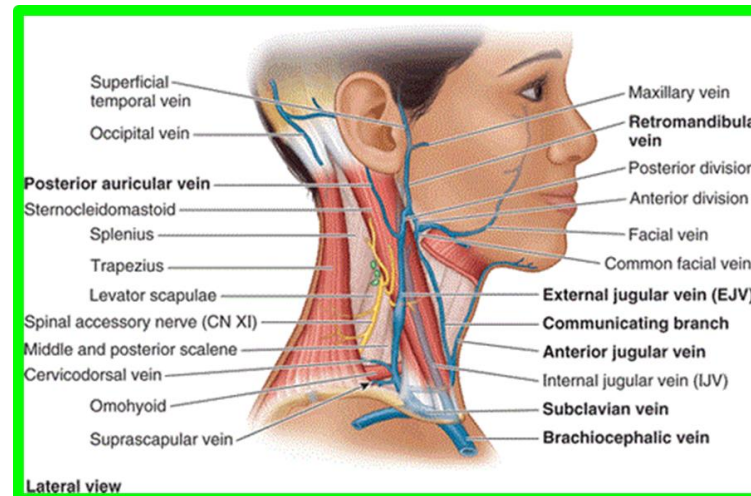
- ✓ It lies in the most lower part of post. Triangle mostly behind the clavicle
- ✓ Begin at the **outer border of 1<sup>st</sup> rib** as continuation of **axillary vein**
- ✓ Crosses the upper surface of **1<sup>st</sup> rib** in front of **Scalenus m.** which separates it from **subclavian artery**
- ✓ End behind medial end of clavicle by joining **I.J.V** to form the **innominate vein**
- ✓ It has only one tributary: **External jugular vein**



### 3. Veins of the posterior Triangle

#### \*\* 2. External jugular vein

- ✓ It descends in the superficial fascia to a point above the **clavicle** where it pierce the deep fascia of the roof of posterior triangle
- ✓ It descends in front of **brachial plexus** to open into **the subclavian vein**
- ✓ It has 3 tributaries:
  1. Anterior jugular vein
  2. Transverse cervical vein
  3. Suprascapular vein

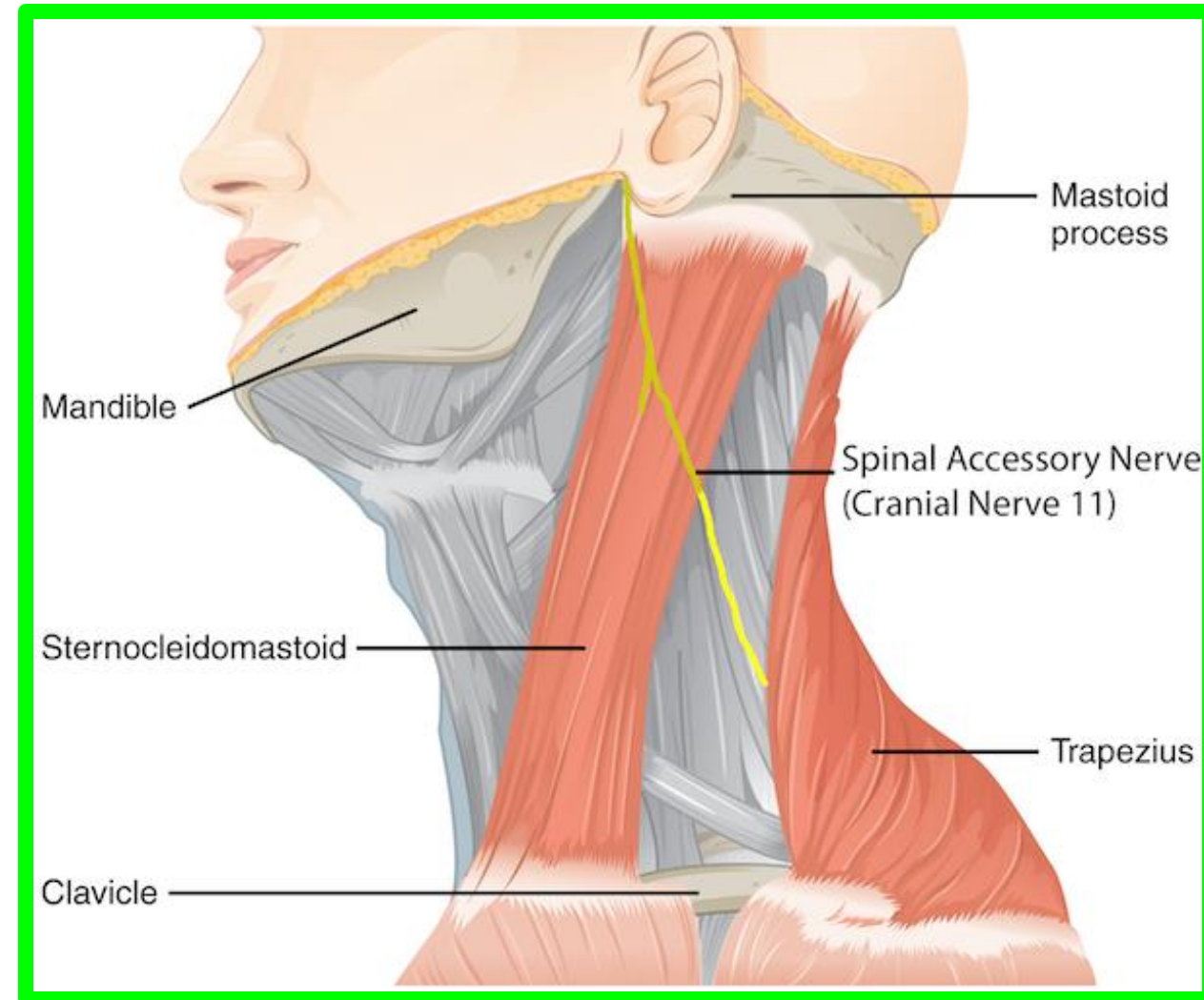


## 4. Nerves of the posterior Triangle

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### \*\* 1. Spinal accessory nerve

- ✓ It appears at the middle of the posterior border of the sternomastoid m.
- ✓ It crosses the posterior triangle over the levator scapulae being adherent to the fascial roof of the triangle
- ✓ It disappears deep to the anterior border of the trapezius m about **5 cm** above the **clavicle**
- ✓ It supplies both **sternomastoid** & **trapezius muscles**



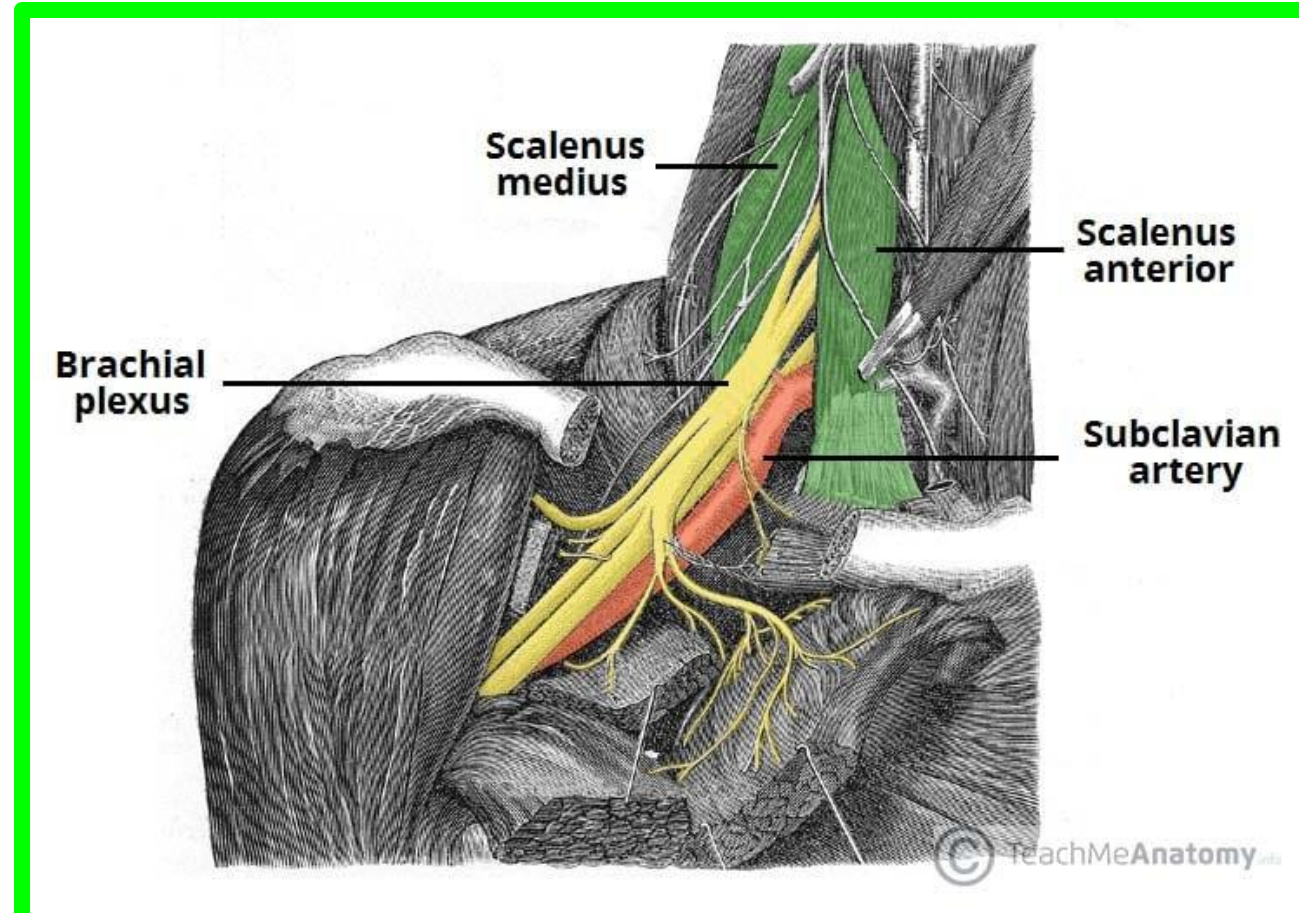
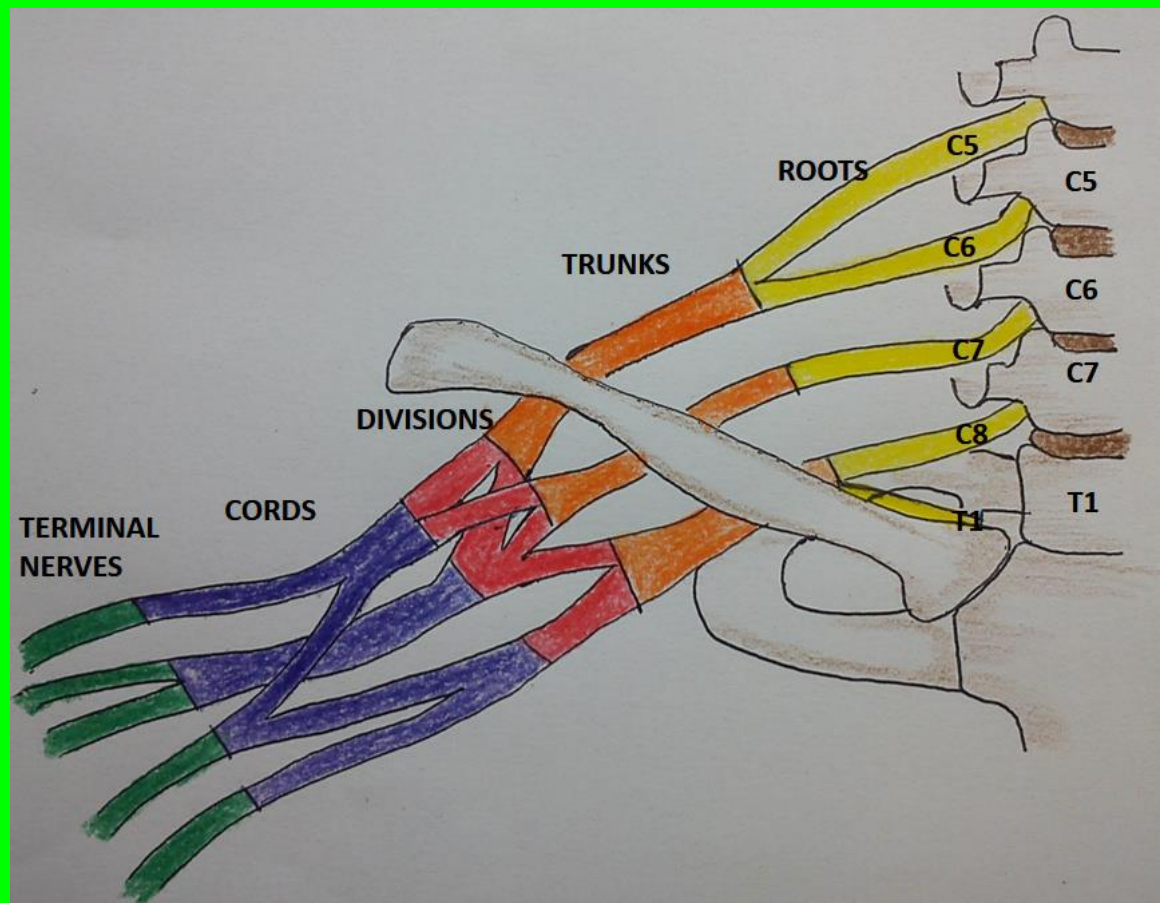
## 4. Nerves of the posterior Triangle

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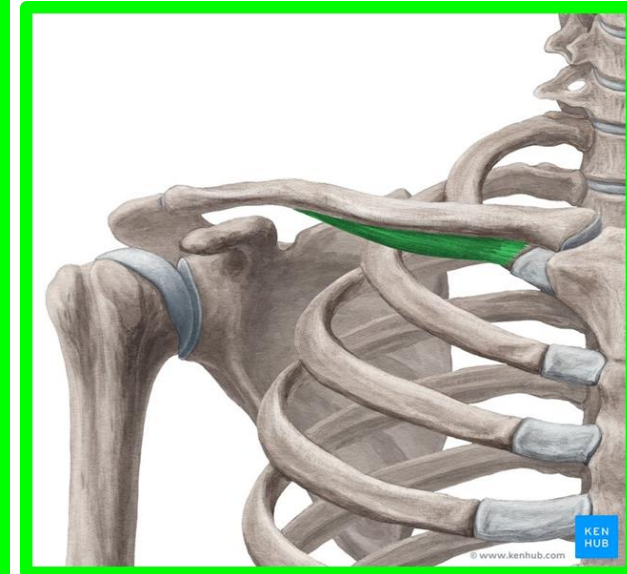
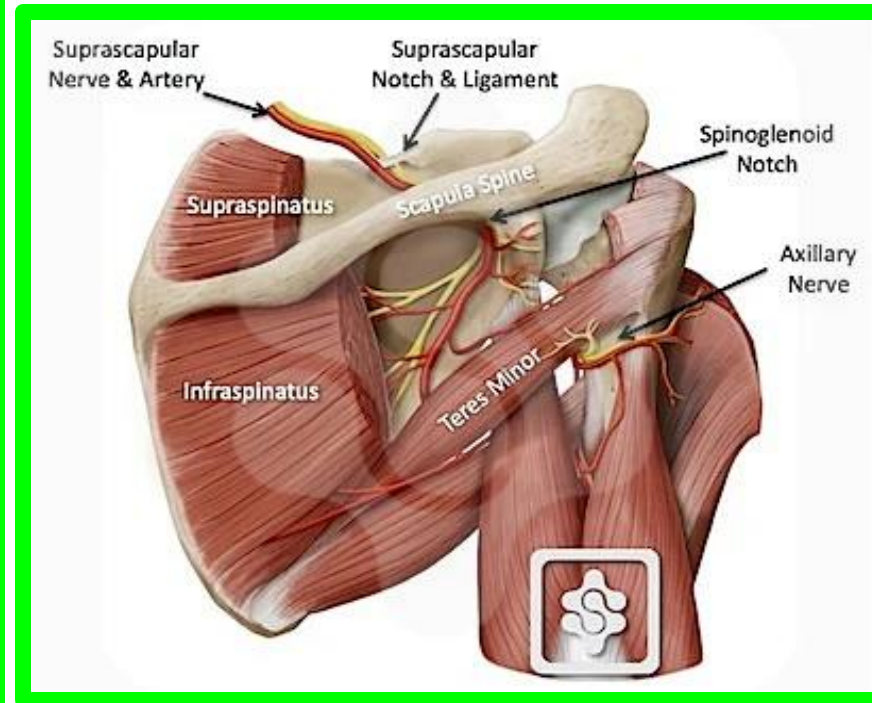
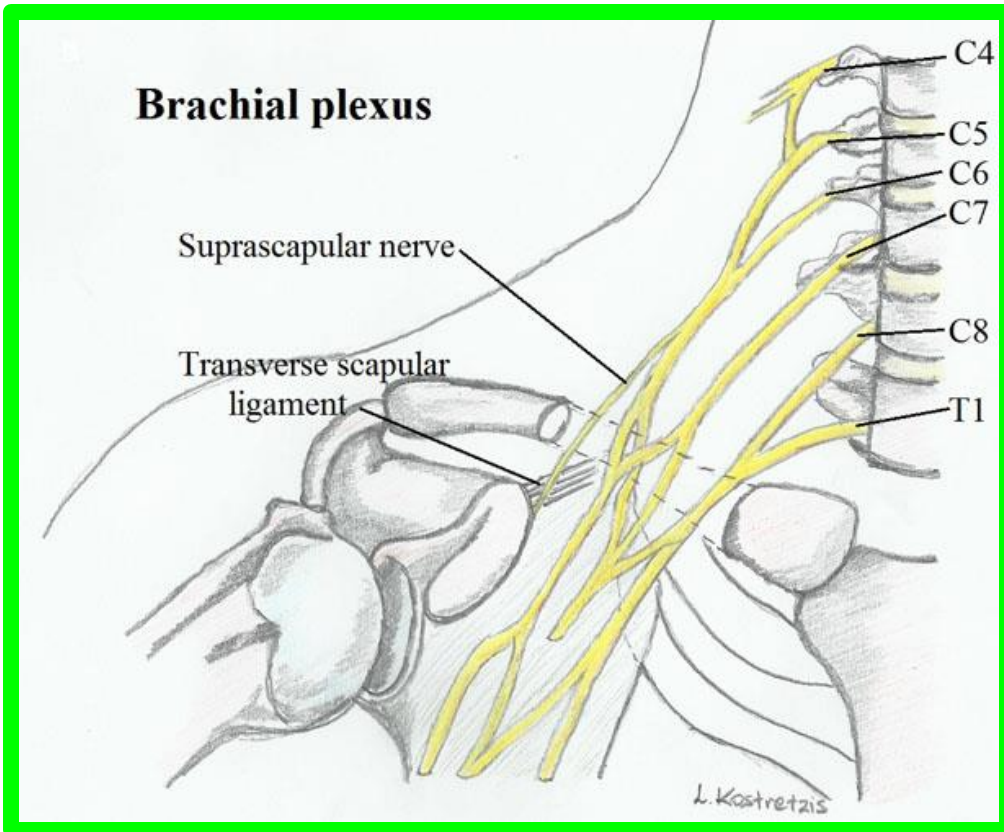
### \*\* 2. Brachial plexus

- ✓ Only the roots & trunks of the plexus appear in posterior triangle bet. **Scalenus ant**, & **Scalenus medius** above & behind the **subclavian artery**



## 4. Nerves of the posterior Triangle

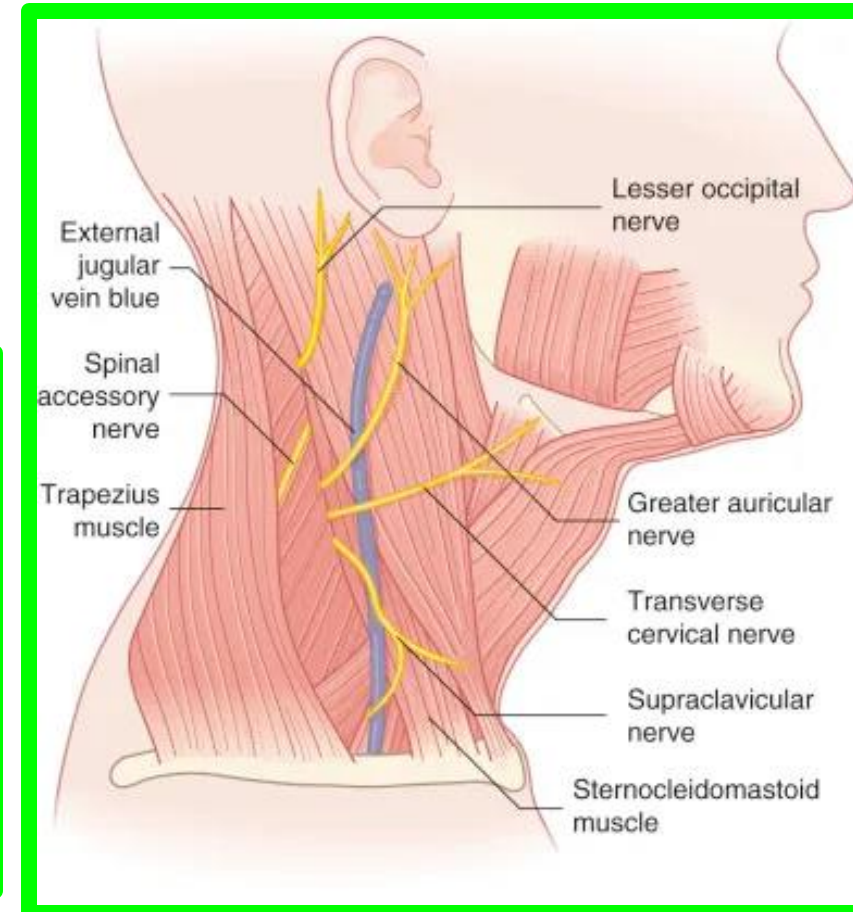
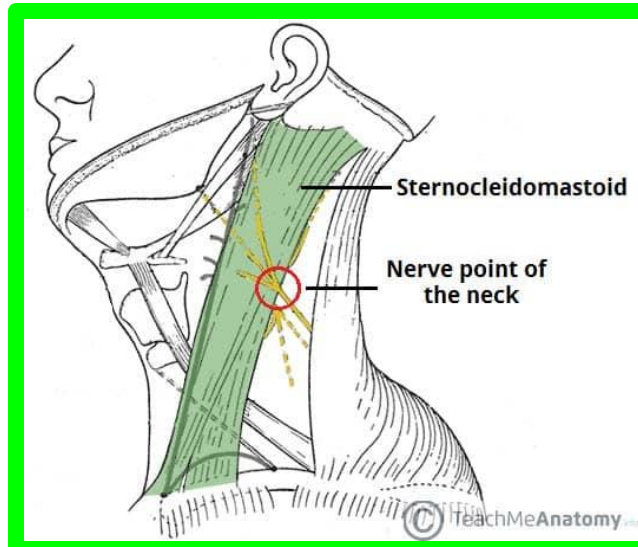
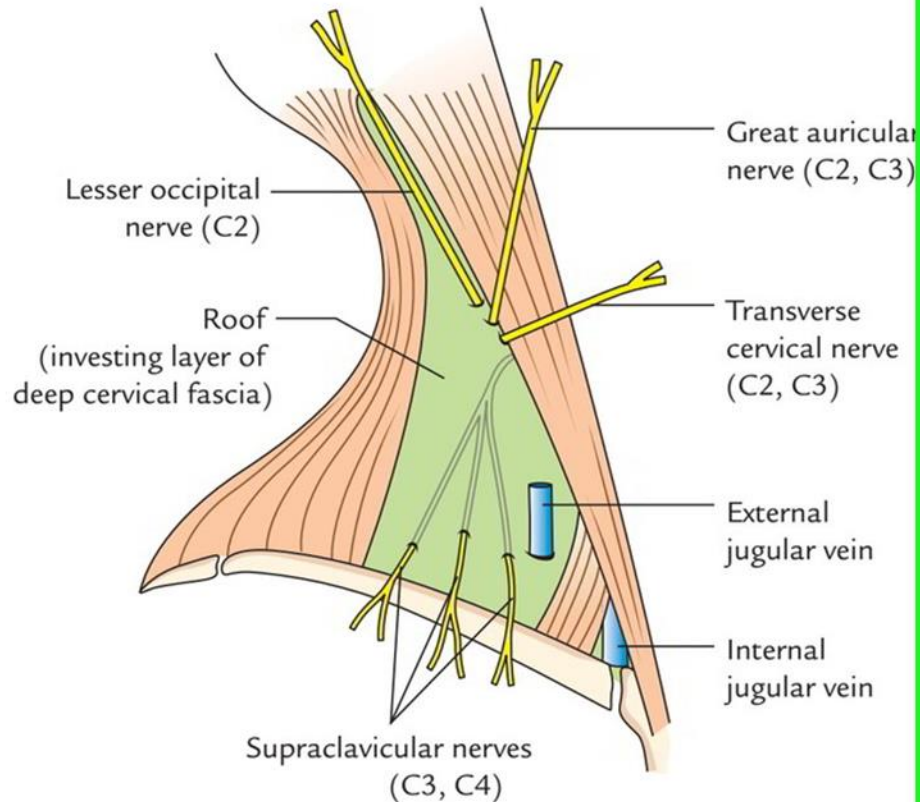
- ✓ The upper trunk gives two branches: 1. Suprascapular nerve 2. nerve to subclavus m.



# 4. Nerves of the posterior Triangle

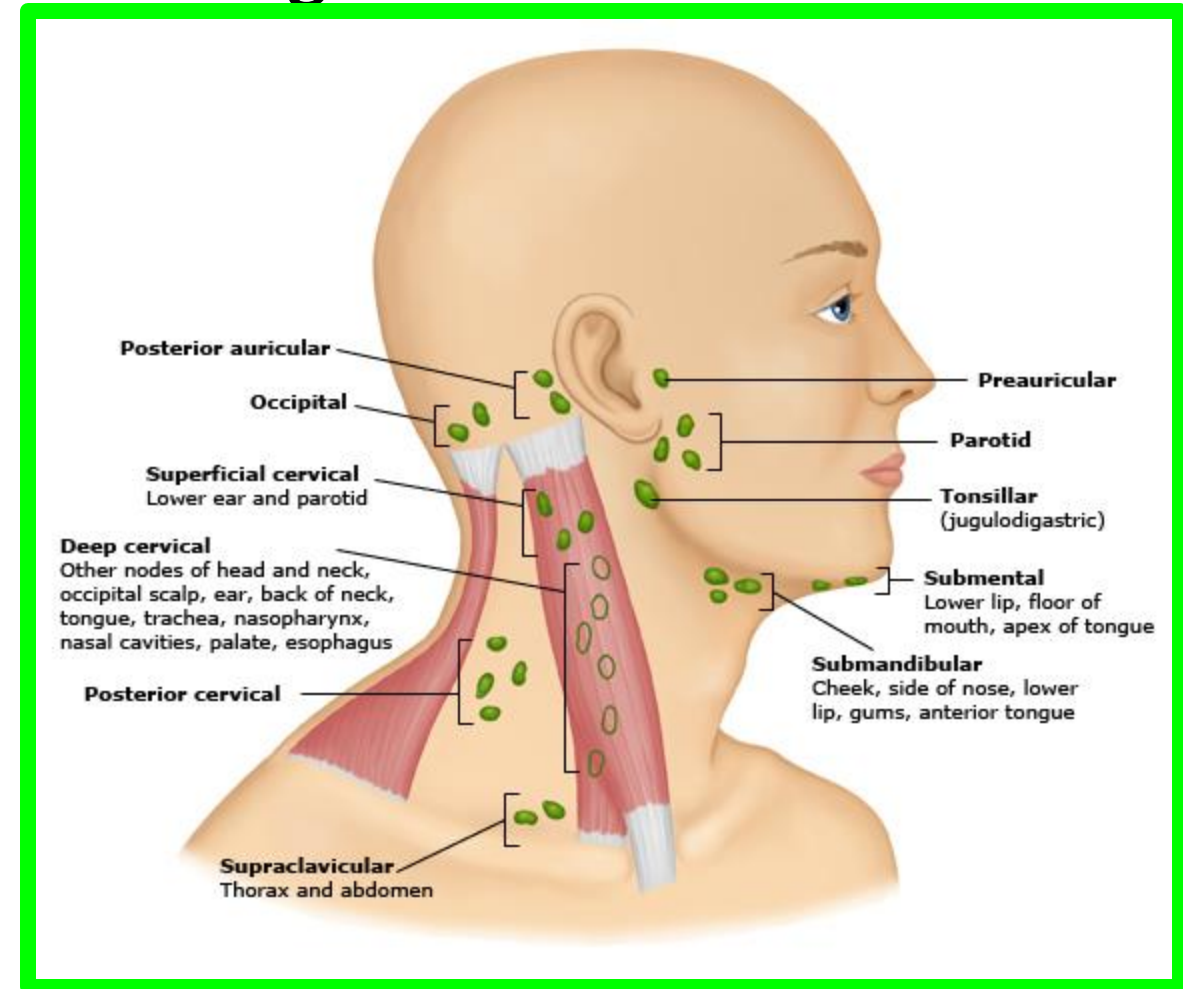
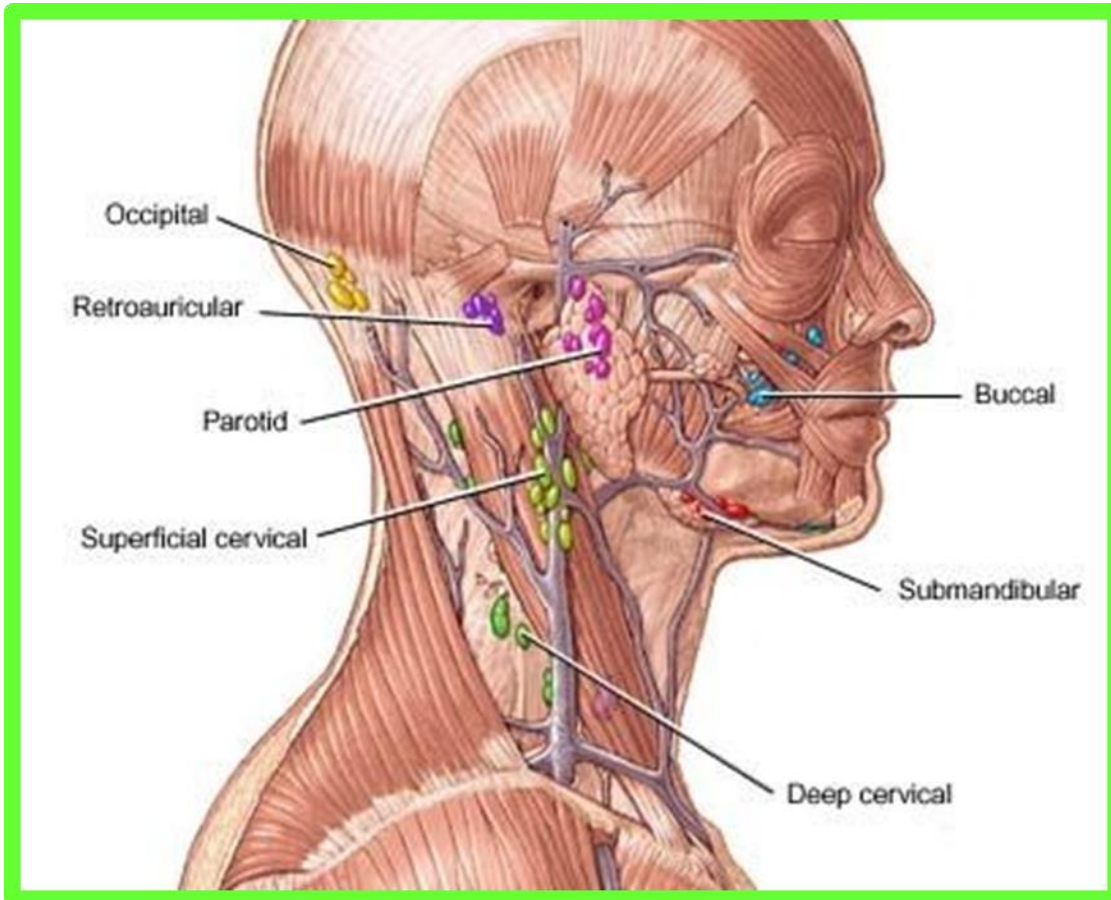
## \*\* 3. Cervical plexus

✓ They are 4 branches appear in the posterior triangle about the middle of posterior border of sternomastoid m. (**Nerve point**)



## 5. Lymph nodes of the posterior Triangle

- ✓ **Occipital lymph nodes:** at the apex of the triangle alongside the **occipital A.**
- ✓ **Subclavian lymph nodes:** at the base of the triangle on the **subclavian A.**



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