

**The University of Jordan  
Faculty Of Medicine**



# **Blood vessels of the neck**

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## I-Arteries

### 1-Subclavian Artery

#### Origin:

- ❖ The right subclavian artery arises from the brachiocephalic artery
- ❖ The left artery arises from the arch of aorta.
- ❖ Both arteries enter the neck behind the sternoclavicular joints.

#### Parts:

The scalenus anterior muscle divides the artery into 3 parts;

- ❖ **1st part** (Pre-scalene part) medial to scalenus anterior
- ❖ **2nd part** (Retro-scalene part ) deep to scalenus anterior
- ❖ **3rd part** (Post-scalene part ) lateral to scalenus anterior

#### End :

At the outer border of 1st rib to become the axillary artery

## Branches:

### a) From 1st part :

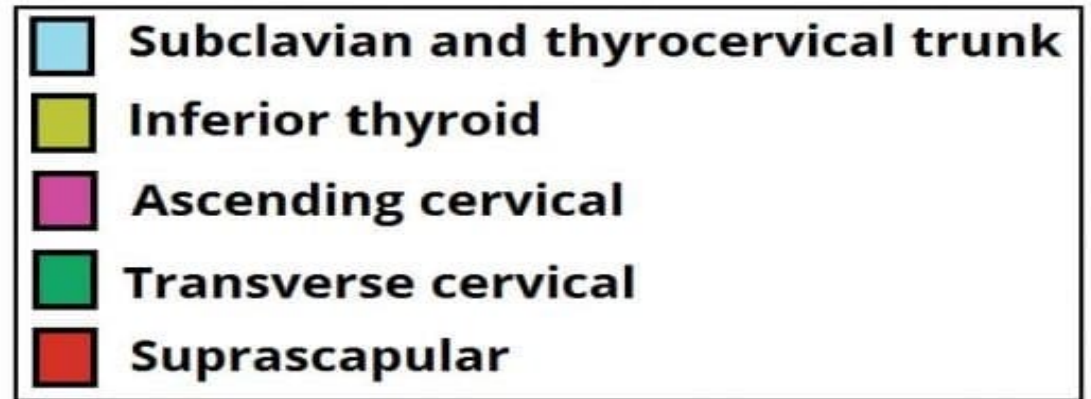
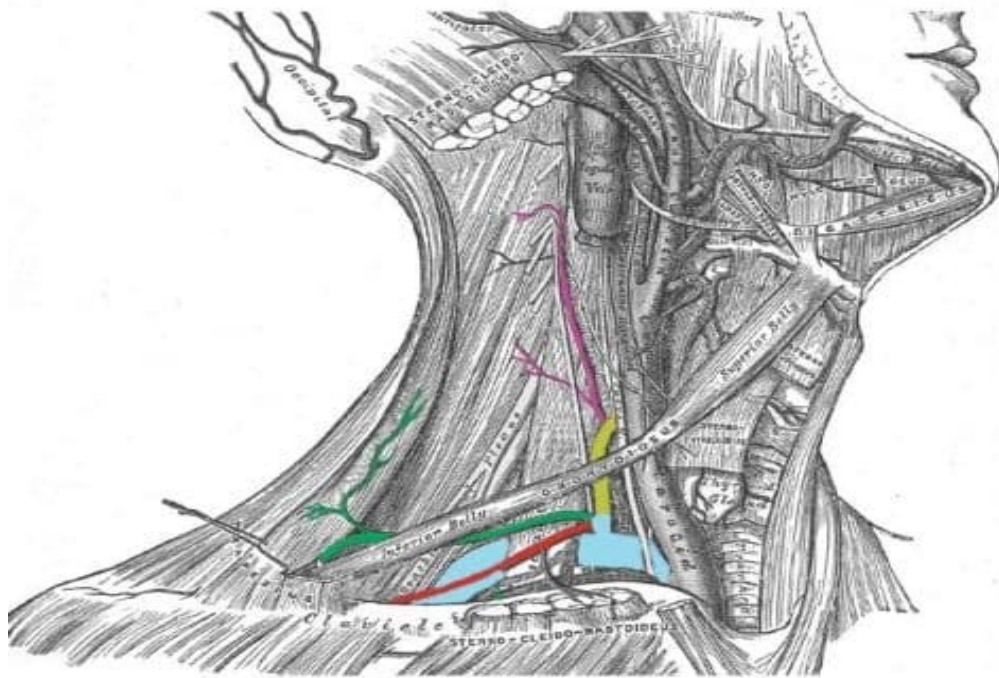
1-Vertebral

2-Internal thoracic

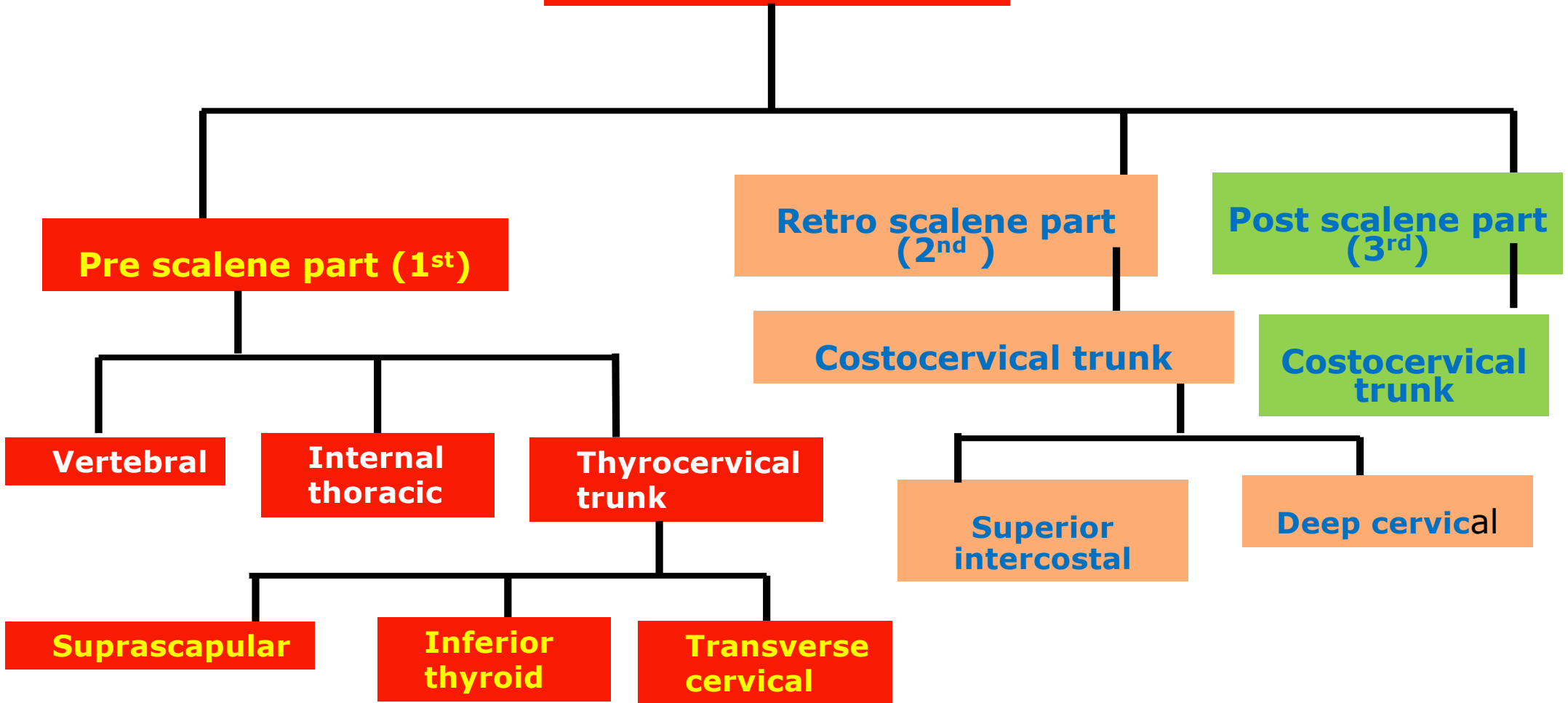
3-Thyrocervical trunk (which gives suprascapular, inferior thyroid & transverse cervical arteries).

**b)From 2nd part :** Costocervical trunk which gives superior intercostal & deep cervical arteries.

**c)From 3rd part :**Dorsal scapular A.( In 66% of people )



# Subclavian Artery

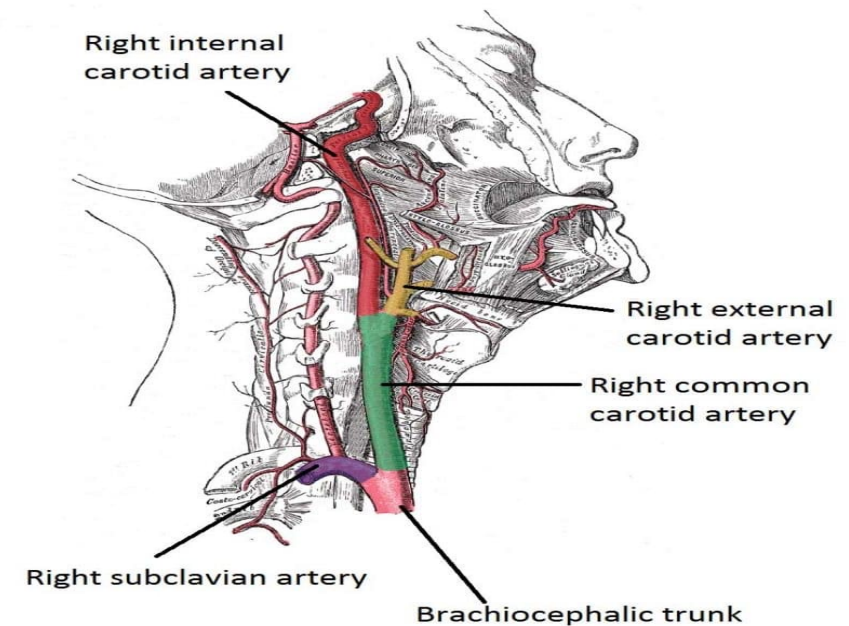


## 2- Common Carotid Artery (CCA)

### Origin:

- **Right artery:** Arises from the brachiocephalic artery behind the right sternoclavicular joint.
- **Left artery:** Arises from the arch of the aorta, behind manubrium sterni.

**End :** Upper border of thyroid cartilage (at disc between C3 and C4 vertebrae) by dividing into external and internal carotid arteries.



## A. External Carotid Artery

### Origin:

It arises from CCA at the upper border of thyroid cartilage (at disc between C3 and C4 vertebrae).

### Course and termination:

It ascends anteromedial to internal carotid artery outside carotid sheath and ends behind the neck of mandible in the substance of parotid gland by dividing into: superficial temporal and maxillary arteries.

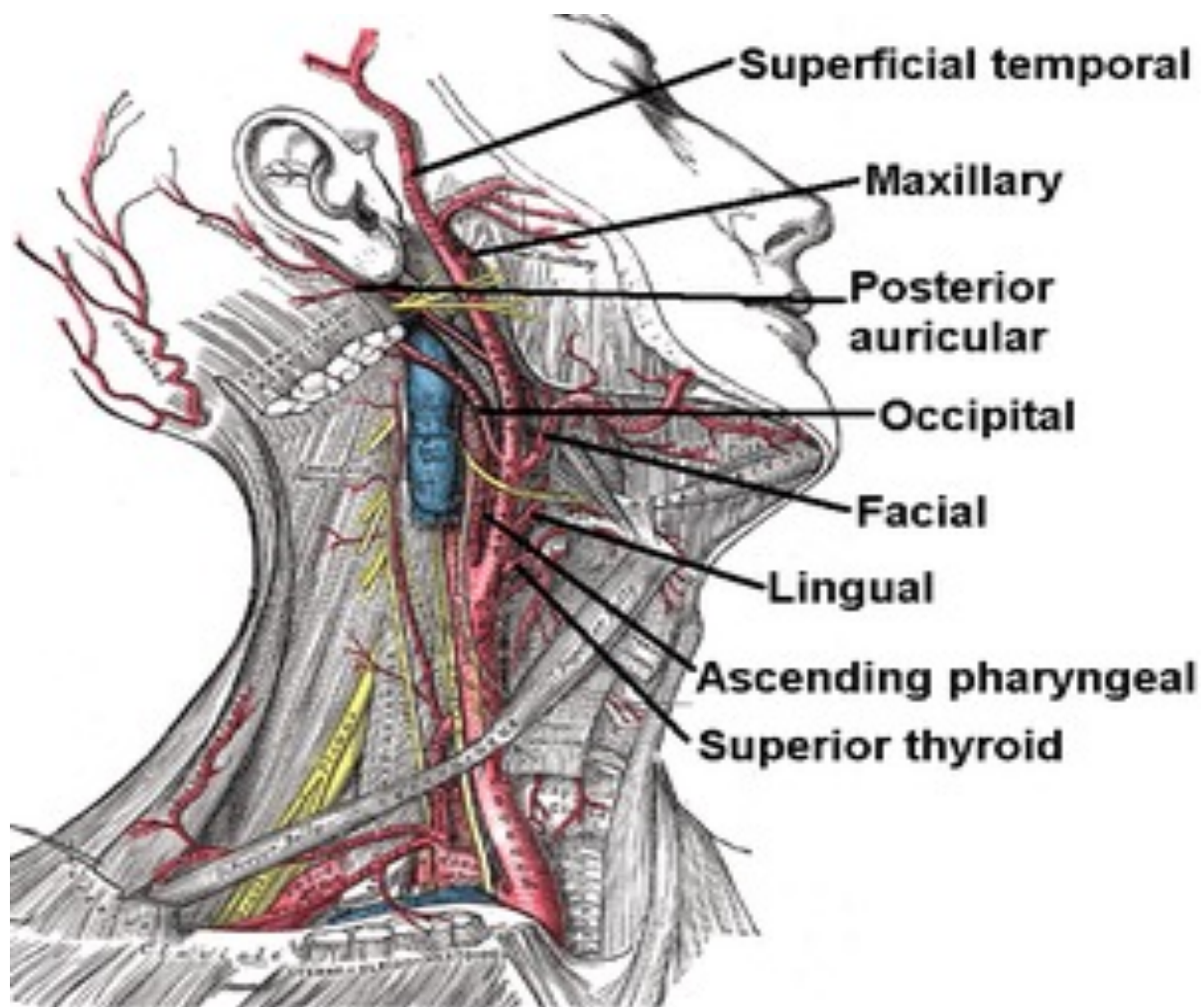
### Branches of external carotid artery:

**1. Three from the anterior aspect:** **S**uperior thyroid, **L**ingual and **F**acial arteries.

**2. Two from the posterior aspect:** **O**ccipital and **P**osterior auricular arteries.

**One from the medial (deep) aspect:** **A**scending pharyngeal artery

**Some African Ladies Found Our Petra More Satisfactory**



## B. Internal Carotid Artery

**Origin:** Arises from common carotid artery opposite the upper border of thyroid cartilage

**Termination:** at the base of brain by dividing into anterior and middle cerebral arteries.

At its beginning it shows a localized dilatation called the carotid sinus.

**Parts :** It has 4 parts:

**1-Cervical part:** It lies in the neck, inside carotid sheath, medial to vagus and internal jugular vein.

**Branches:** It has no branches in the neck.

**2-Petrous part:** pass in the carotid foramen & canal inside the petrous part of temporal bone , then leave it, and passes through the foramen lacerum to enter the cavernous sinus.

### **Branches:**

- ***Carotico-tympanic artery:*** Enters tympanic cavity.
- ***Artery of pterygoid canal (Vidan artery) :*** For the pharynx.



### 3-Cavernous part:

- ❖ Inside the cavernous sinus, the artery runs in a sinuous course .
- ❖ It leaves the sinus through the anterior part of its roof.
- ❖ The artery runs superomedial to abducent nerve and medially to oculomotor nerve , trochlear nerve , ophthalmic and maxillary respectively

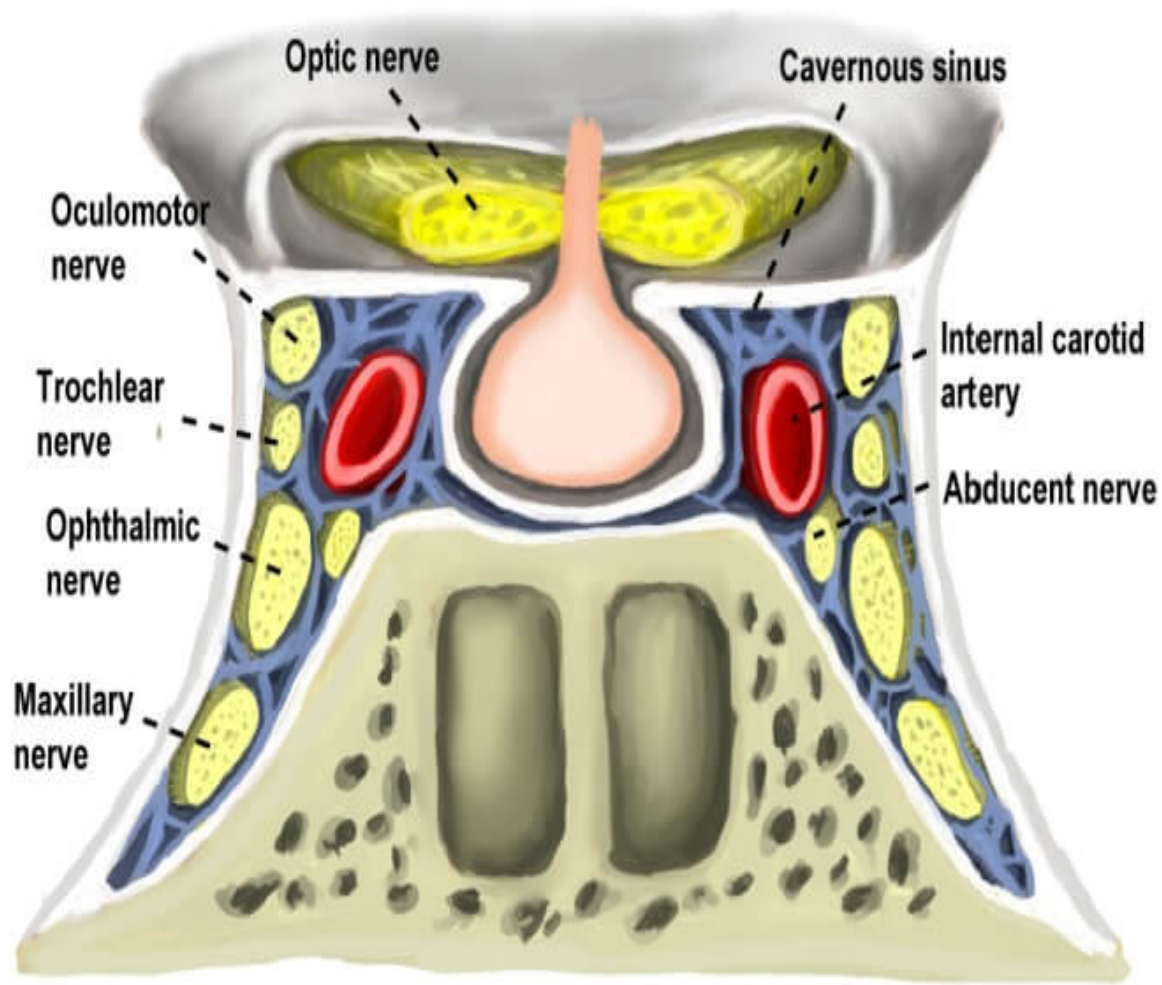
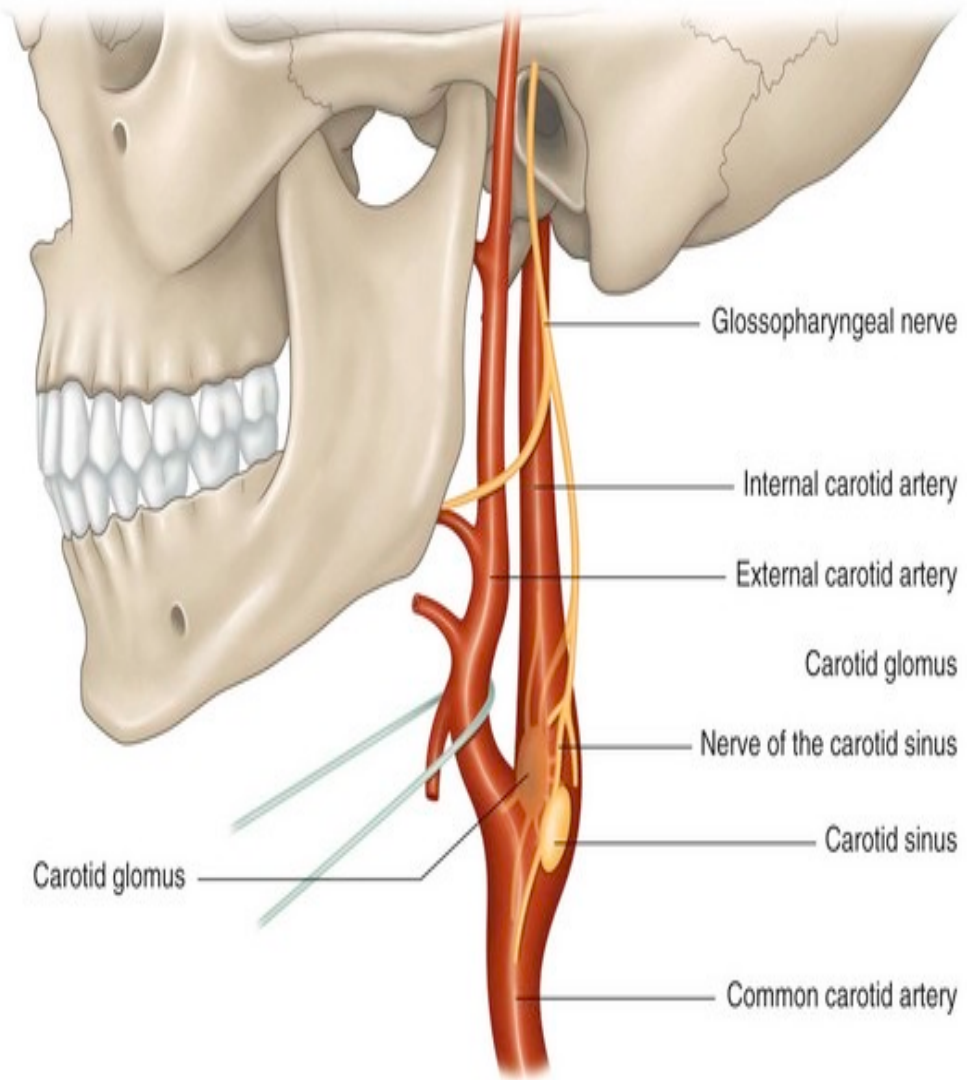
**Branches:** Inferior hypophyseal artery for the posterior lobe of the pituitary gland.

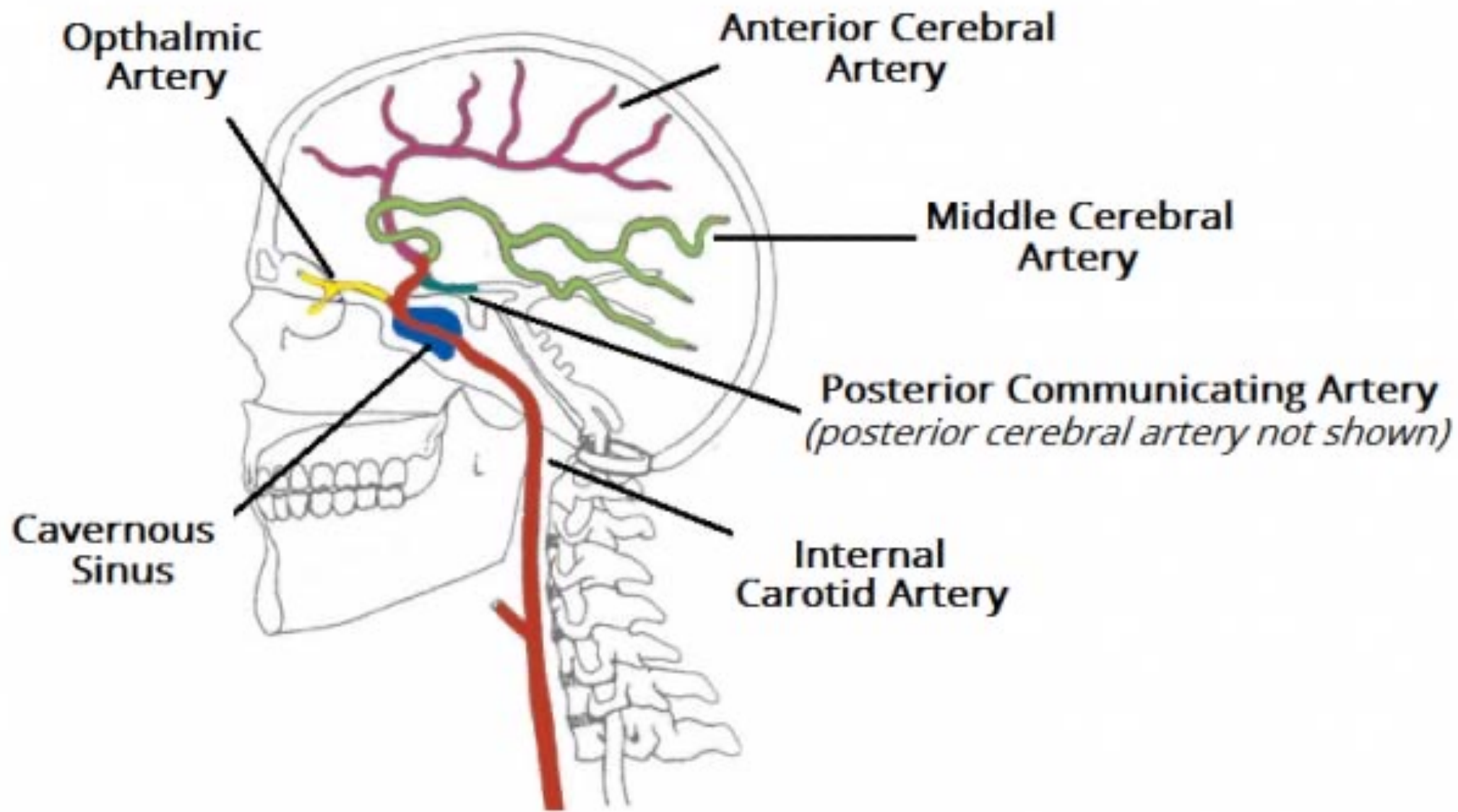
### 4-Cerebral part:

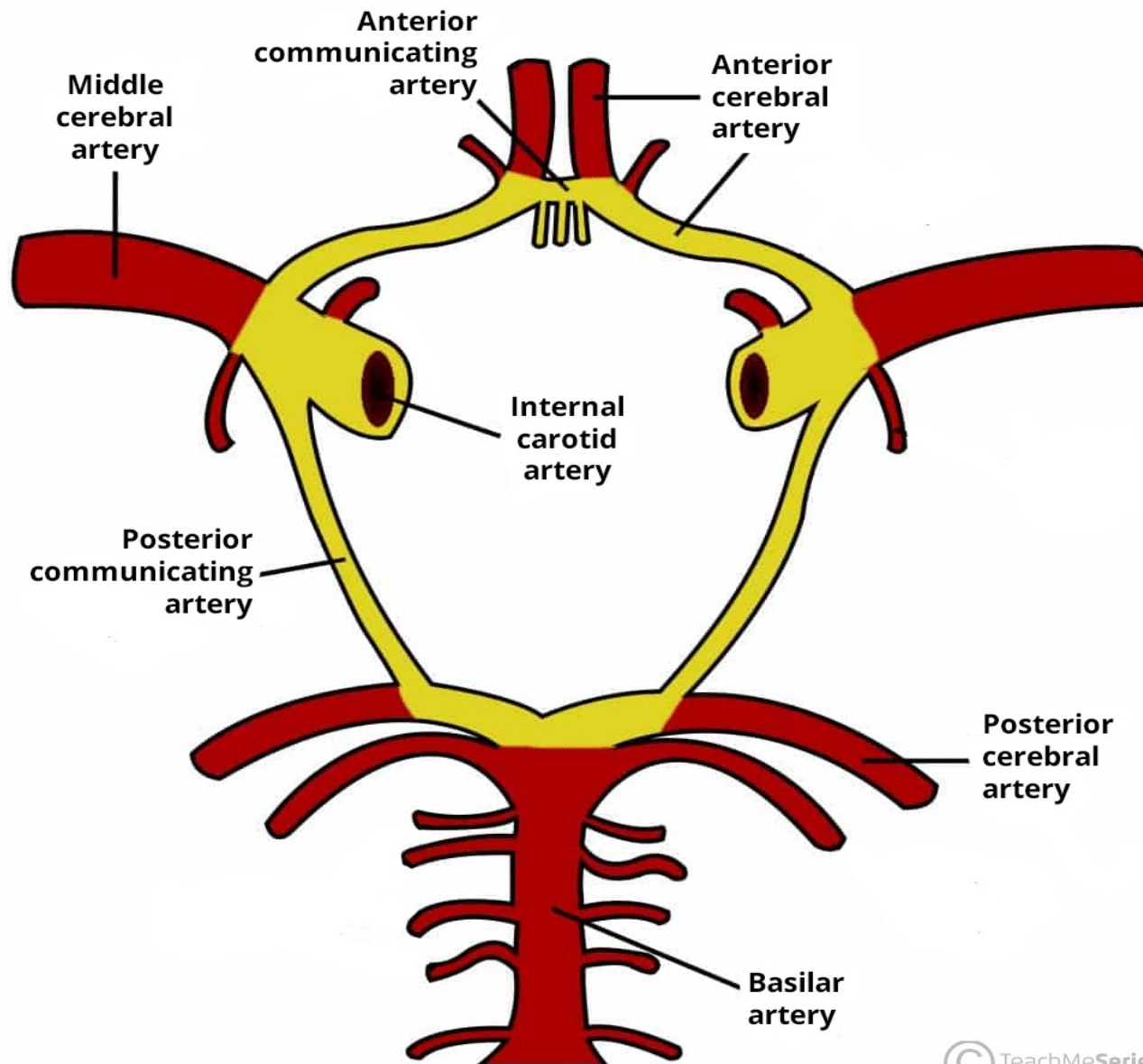
After leaving the roof of cavernous sinus, the artery ends just below **the anterior perforated substance of** the base of the brain by dividing into its two terminal branches ( anterior & middle cerebral arteries ) .

#### **Branches:**

1. Ophthalmic artery.
2. Anterior cerebral artery.
3. Middle cerebral artery.
4. Posterior communicating artery.
4. Anterior choroidal artery.



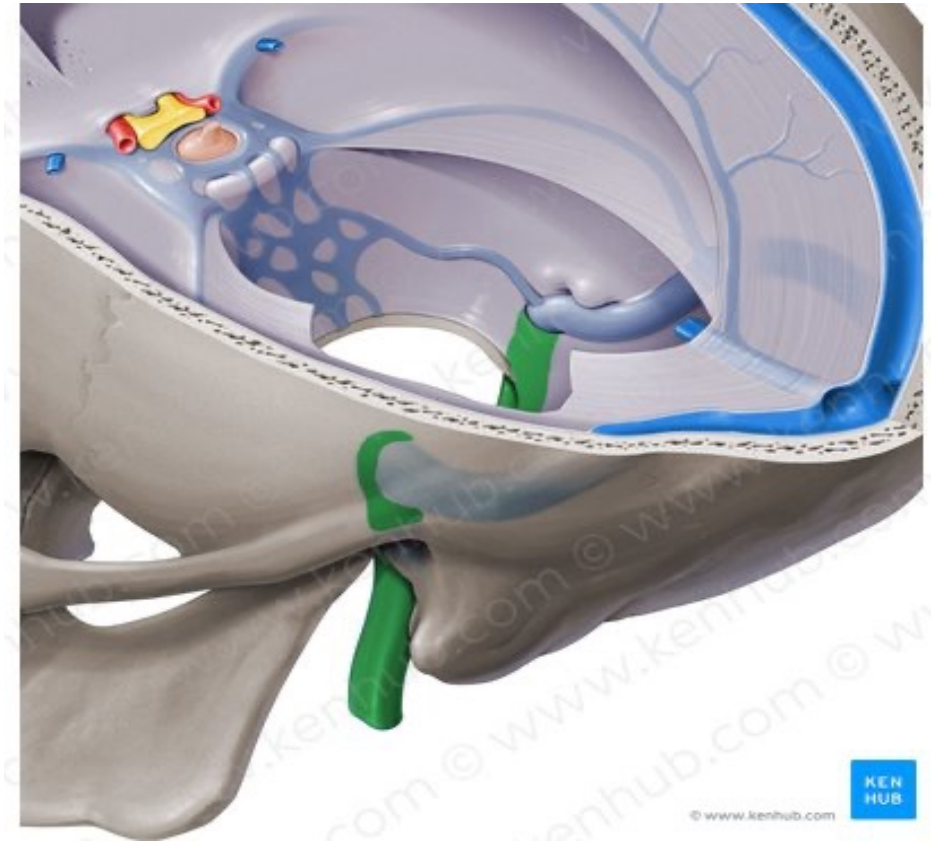
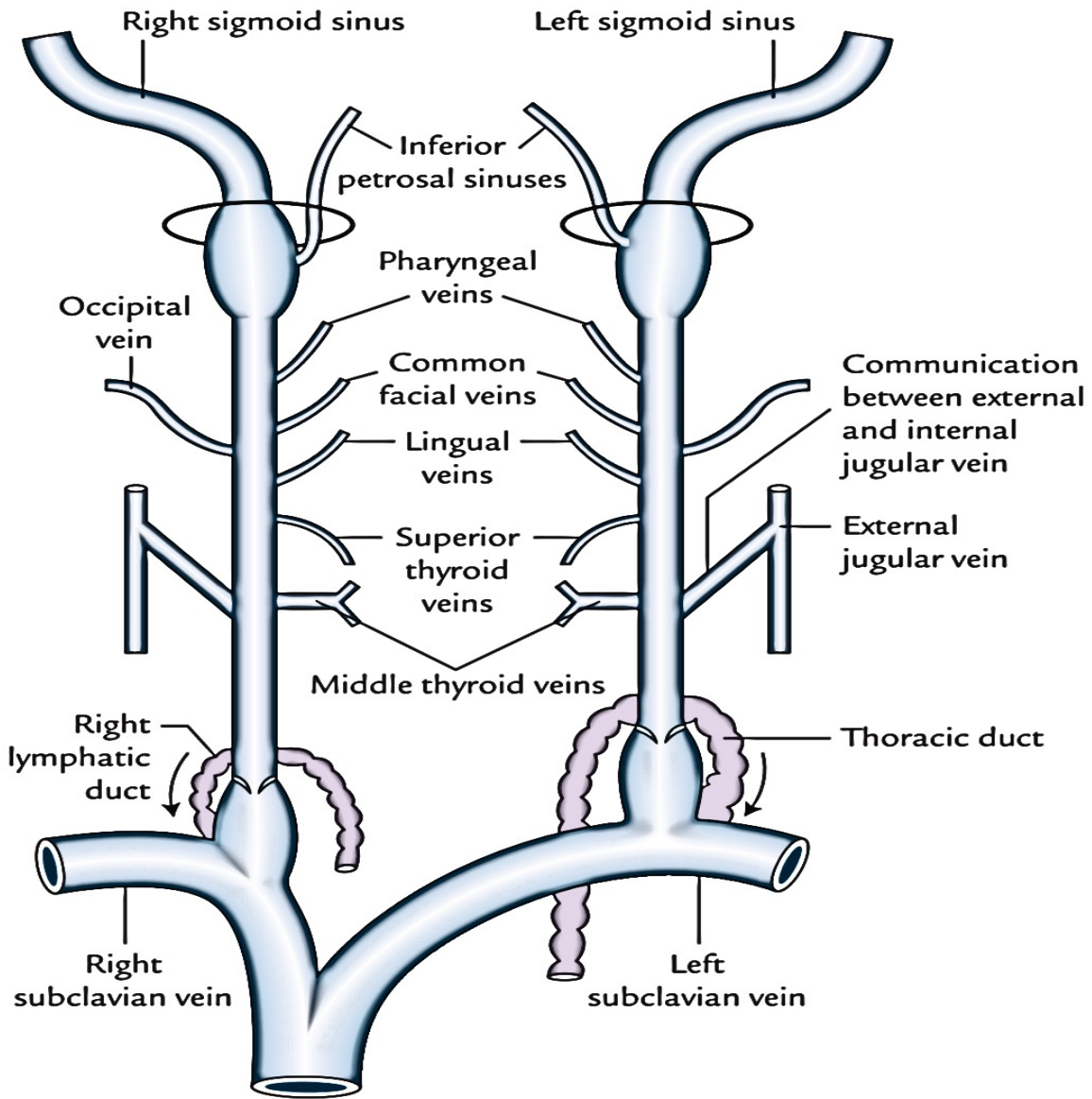




## **II. Veins :**

### **Internal Jugular Vein**

- \* It **begins** at the jugular foramen as a continuation of the sigmoid sinus.
- \* It **descends** inside the carotid sheath lateral to the internal and common carotid arteries and vagus nerve.
- \* It **ends** by joining the subclavian vein to form the brachiocephalic vein **behind the medial end of clavicle.**
- \* At its upper and lower ends, it forms the superior and inferior bulbs.
- \* **Surface anatomy:** A line is drawn from sternoclavicular joint to a point between mastoid process and angle of mandible.
- \* **Tributaries:** From above downwards:
  1. Inferior petrosal sinus.
  2. Pharyngeal veins.
  3. Common facial vein.
  4. Lingual vein.
  5. Superior thyroid vein.
  6. Middle thyroid vein.



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 detailed vein patterns, and small, simple star or plus symbols scattered around the text. The overall composition is balanced and aesthetically pleasing, with the teal color providing a soft contrast to the black text and white background.