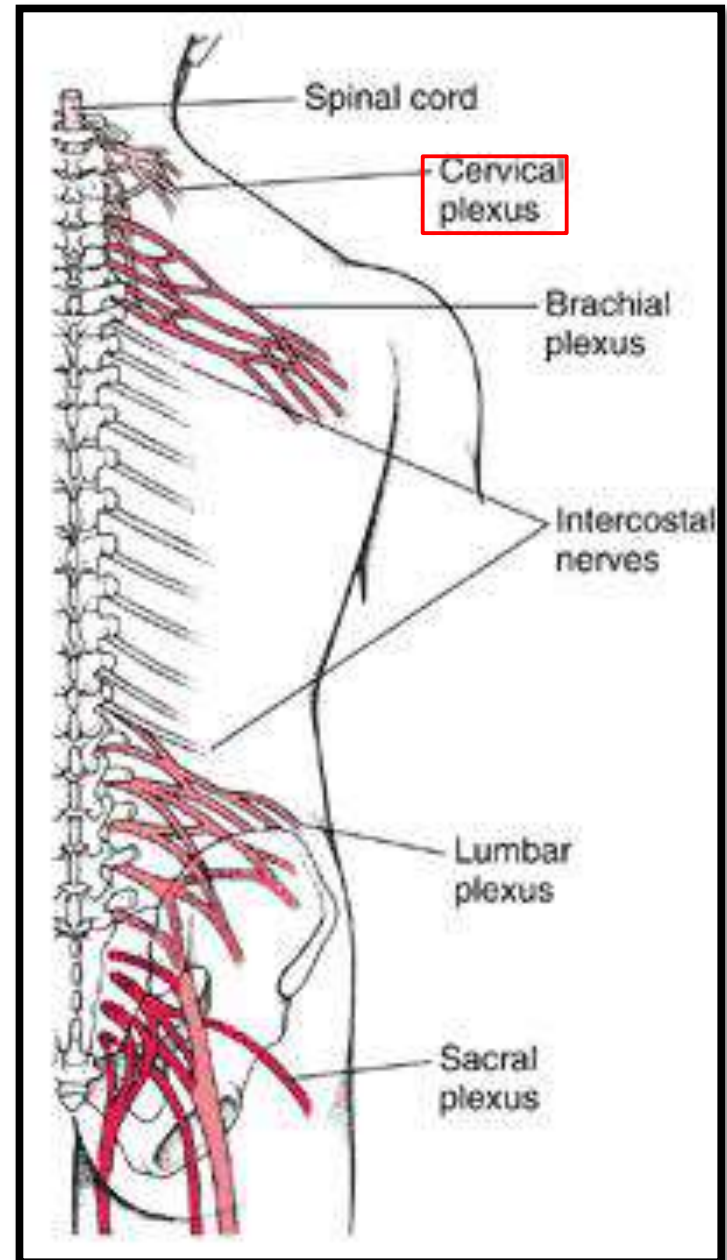


Cervical Plexus

Presented by :- Dr. Sushma Tomar
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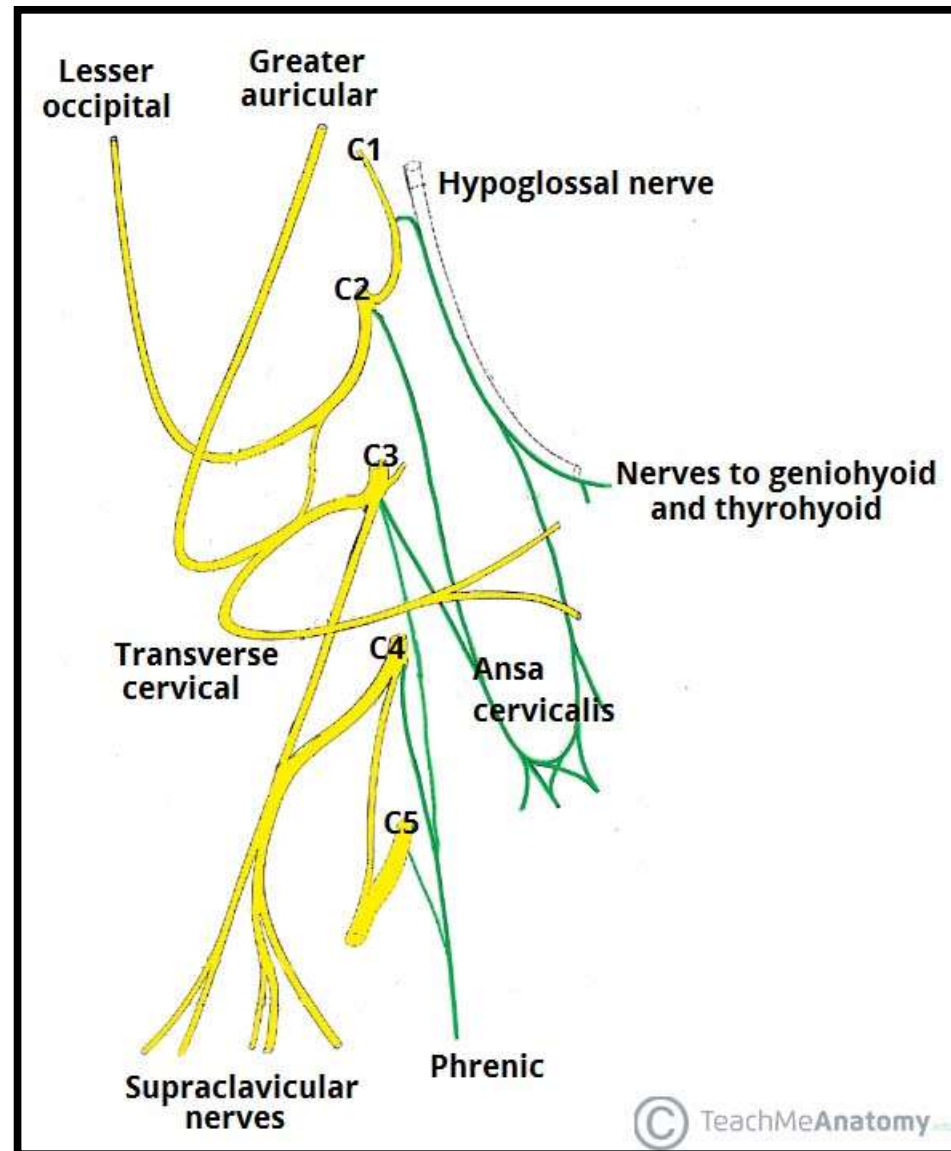
Introduction

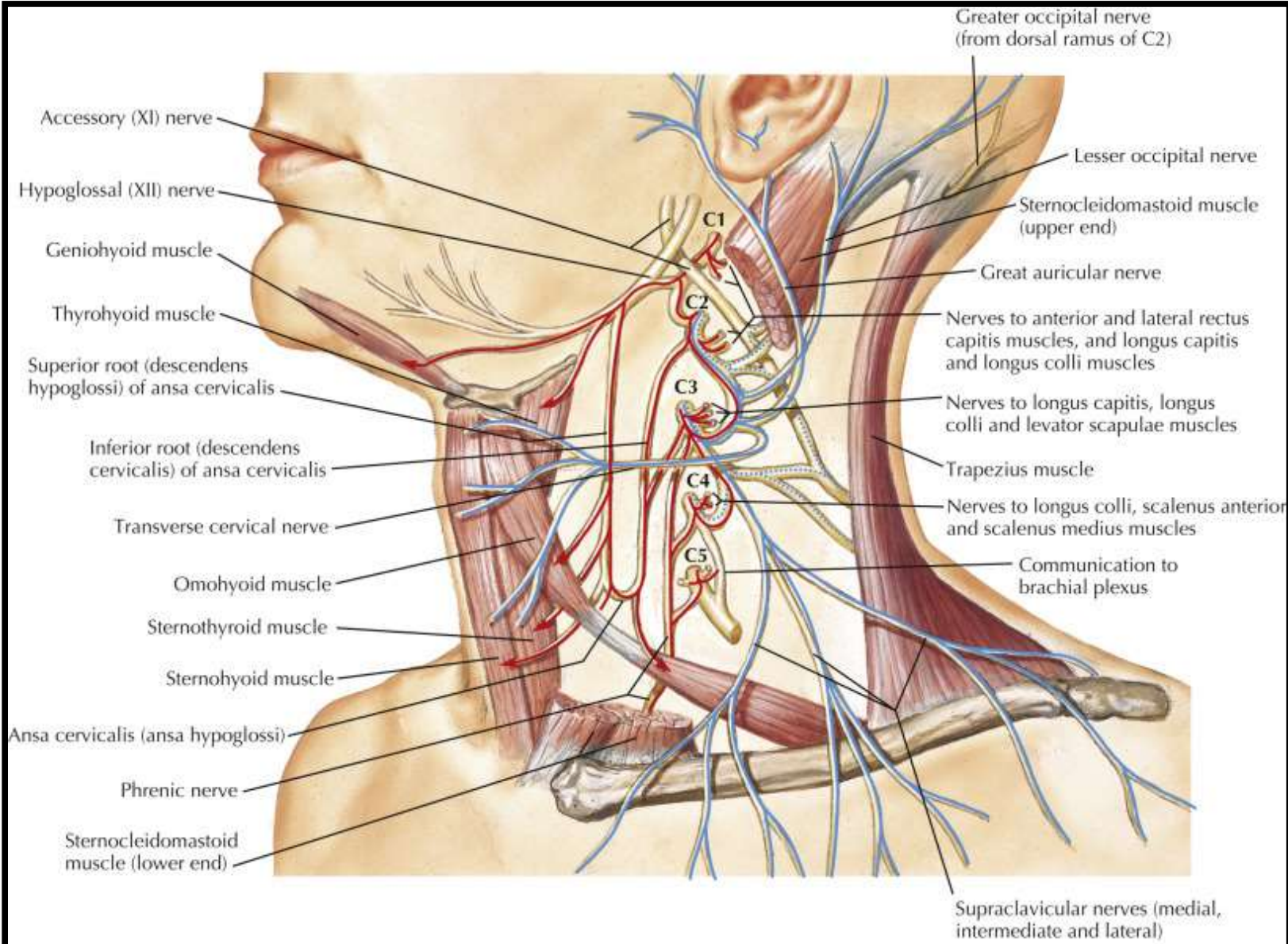
- A **nerve plexus** is a network of interwoven nerves.
- **Cervical plexus** provides nerves to:
 - **Head.**
 - **Neck** and
 - **Shoulder.**
- Supplies **skin** and **muscles** of neck and thoraco-abdominal **diaphragm.**



Introduction contd...

- It is a plexus of loops.
- Formed from the **anterior rami of the first four cervical nerves (C1-C4)**.
- Lies beneath the **prevertebral fascia** on the **scalenus medius** and **levator scapulae**, and under cover of sternocleidomastoid.



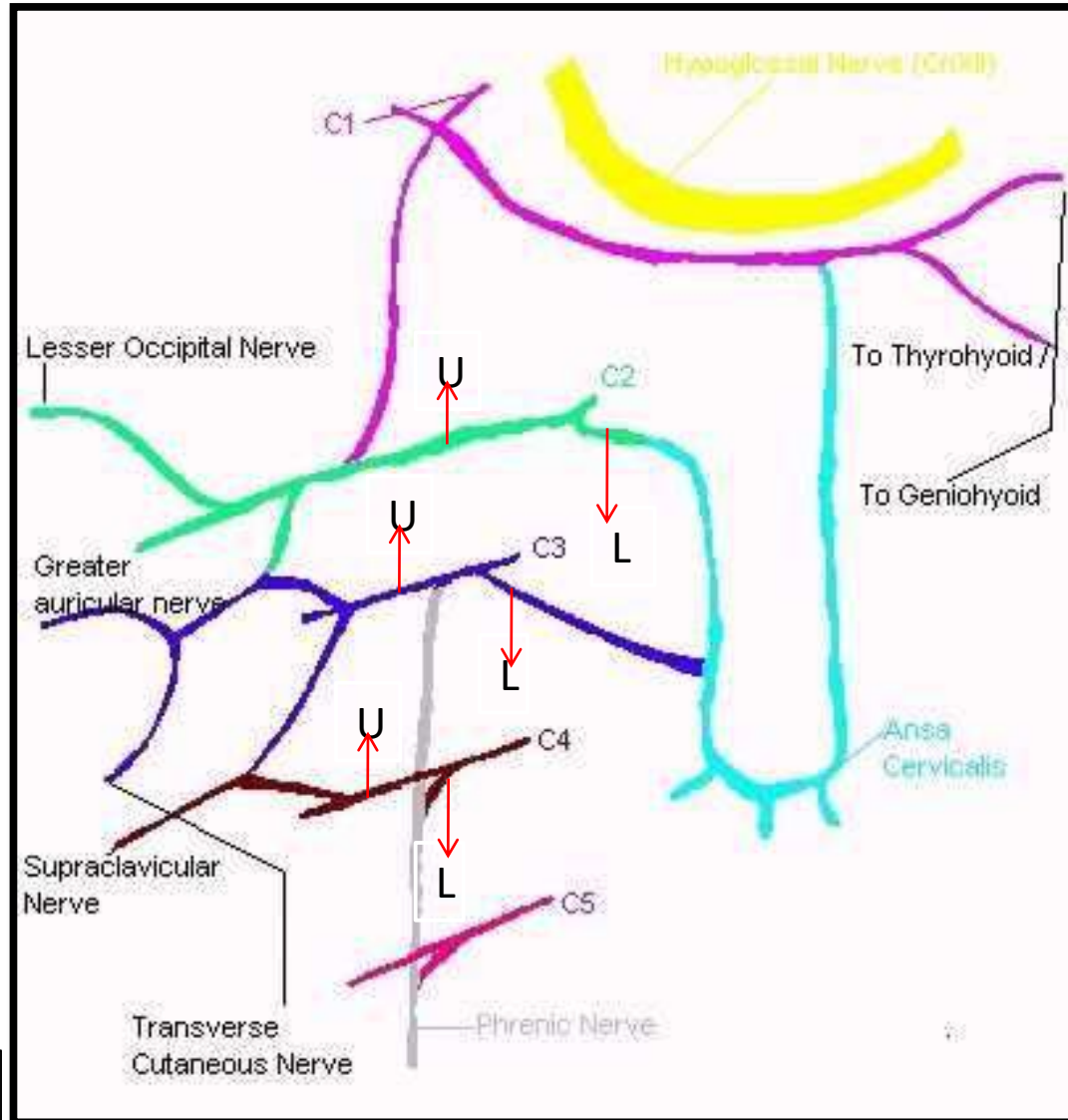


- Motor fibers
- Sensory fibers
- Proprioceptive fibers

F. Natta
M.D.

Formation of Cervical Plexus

- Each formative ramus divides into upper and lower branches, **except** the first cervical.
- **C1** joins with the upper branch of **C2**.



U- Upper Branch, L- Lower Branch

Branches Of Cervical Plexus

SUPERFICIAL BRANCHES: 4 cutaneous branches:

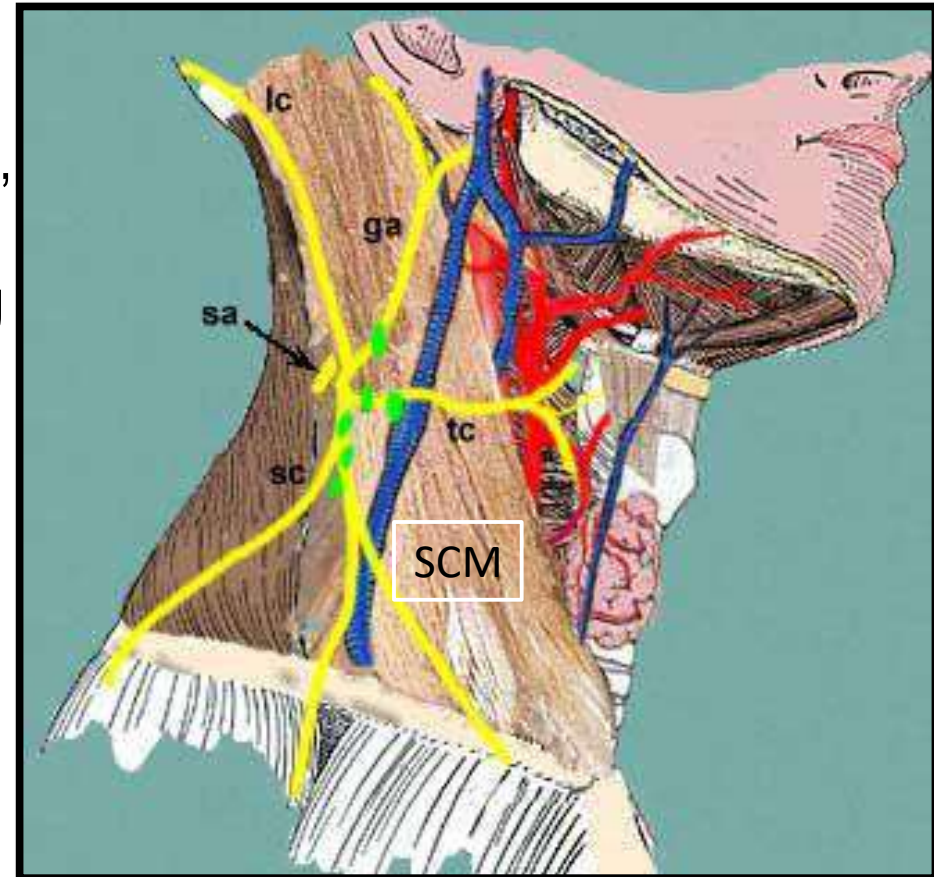
- Provides cutaneous innervation to **head**, **neck**, and **shoulder** area.
- **3** ascending branches and **1** descending branch.
- Arise from near the middle of posterior border of sternocleidomastoid.

Ascending Branches:-

- **Lesser Occipital Nerve**(C2)
- **Greater Auricular Nerve**(C2 & C3)
- **Transverse Cutaneous Nerve**(C2 & C3)

Descending Branch:-

- **Supraclavicular Nerve**(C3 & C4)



sa- spinal accessory, **lo-** lesser occipital, **ga-** greater auricular, **tc-** transverse cutaneous, **sc-** supraclavicular, **SCM-** Sternocleidomastoid

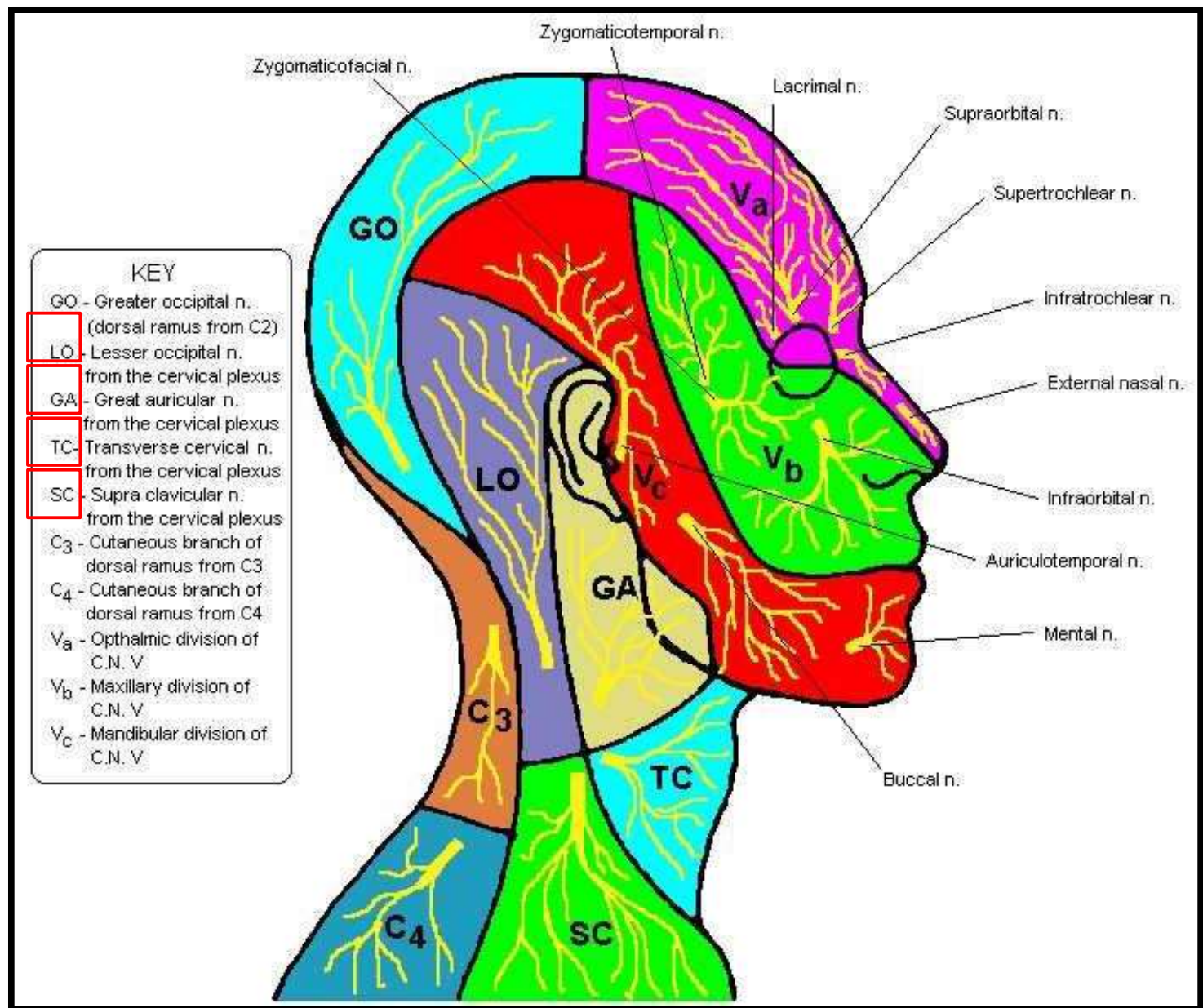


Image showing dermatomes of cutaneous branches of cervical plexus

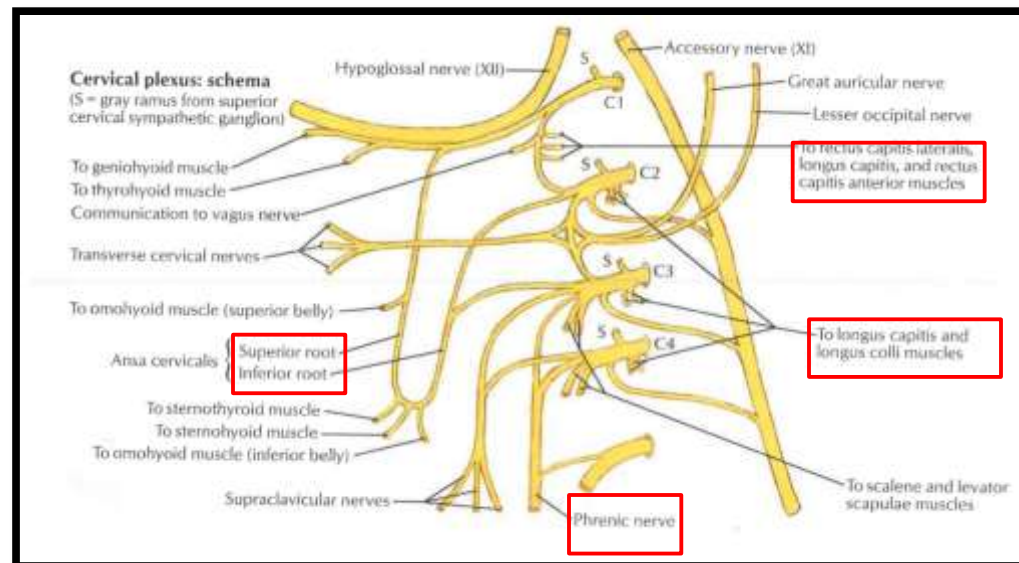
Branches of Cervical Plexus Contd...

DEEP BRANCHES: Muscular branches.

- Divide into medial and lateral series.

Medial Series:-

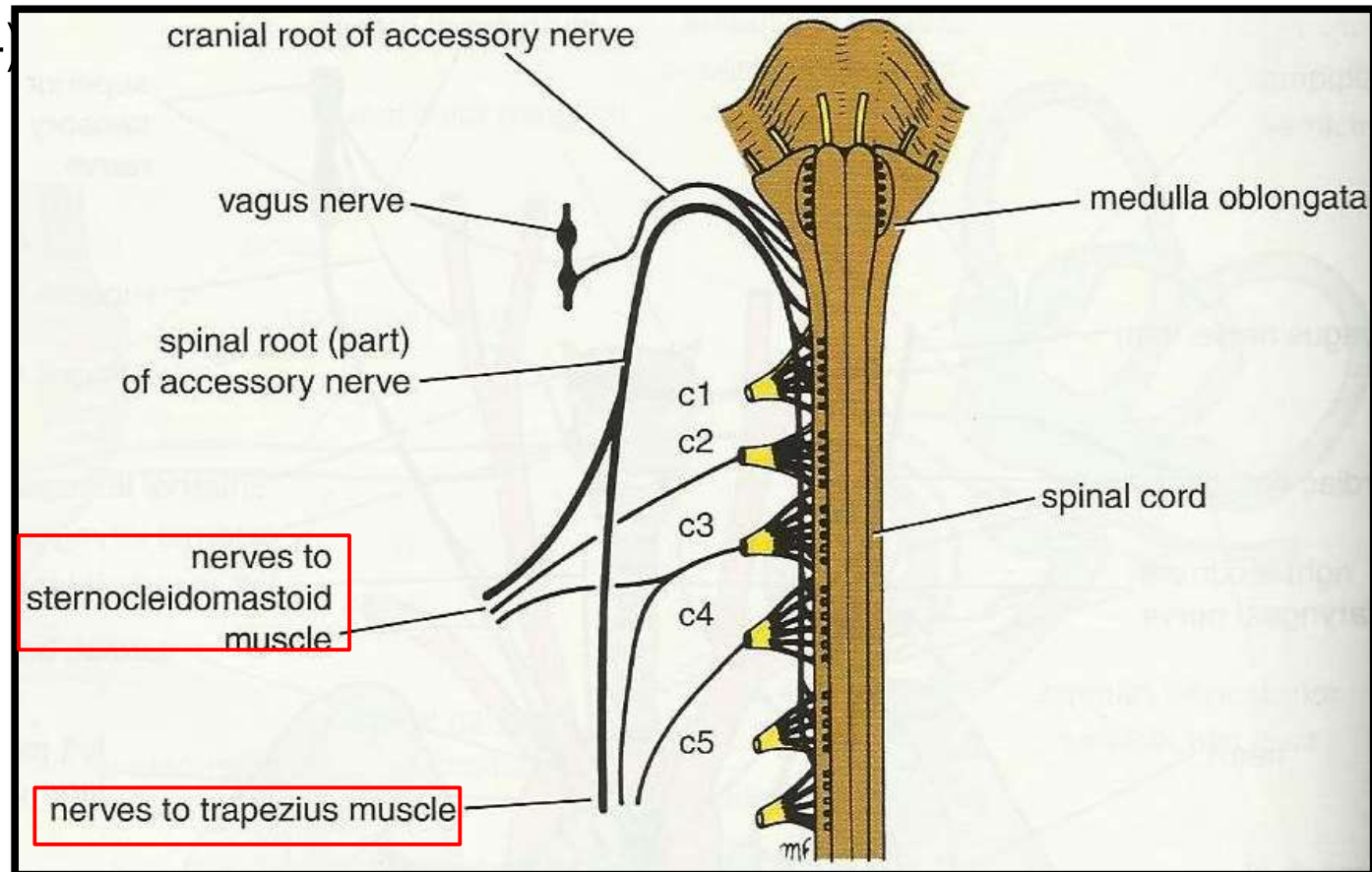
1. Nerve to Rectus capitis lateralis (C1)
2. Nerve to Rectus capitis anterior (C1,C2)
3. Nerve to Longus capitis (C1-C4)
4. Nerve to Longus colli (C2-C4)
5. Inferior root of ansa cervicalis (C2, C3)
6. **Phrenic nerve (C3, C4, C5)**
[see image of 5th slide]



Deep Branches of Cervical Plexus Contd...

Lateral Series:- Nerve to

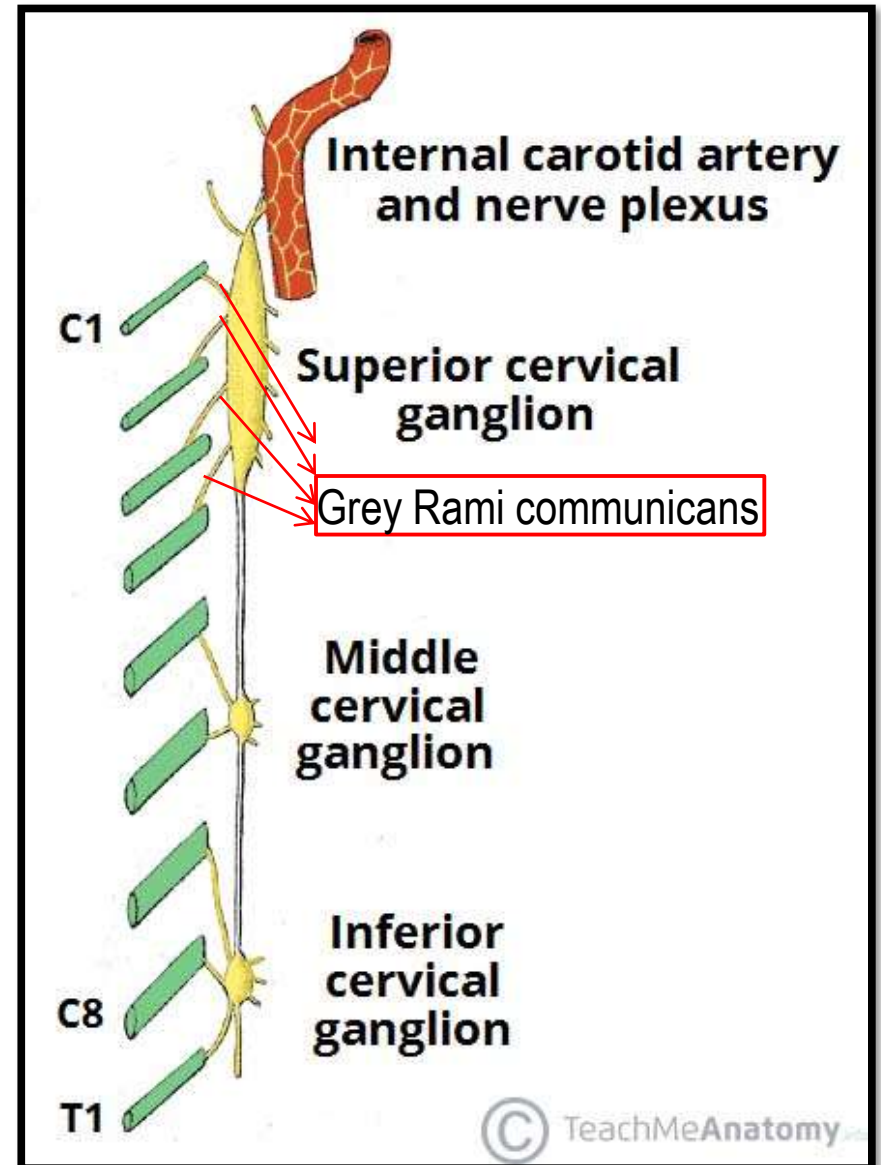
- Sternocleidomastoid (C2)
- Trapezius (C3 & C4)
- Levator scapulae (C3 & C4)
- Scalenus medius (C3 & C4)
- Scalenus anterior (C4)

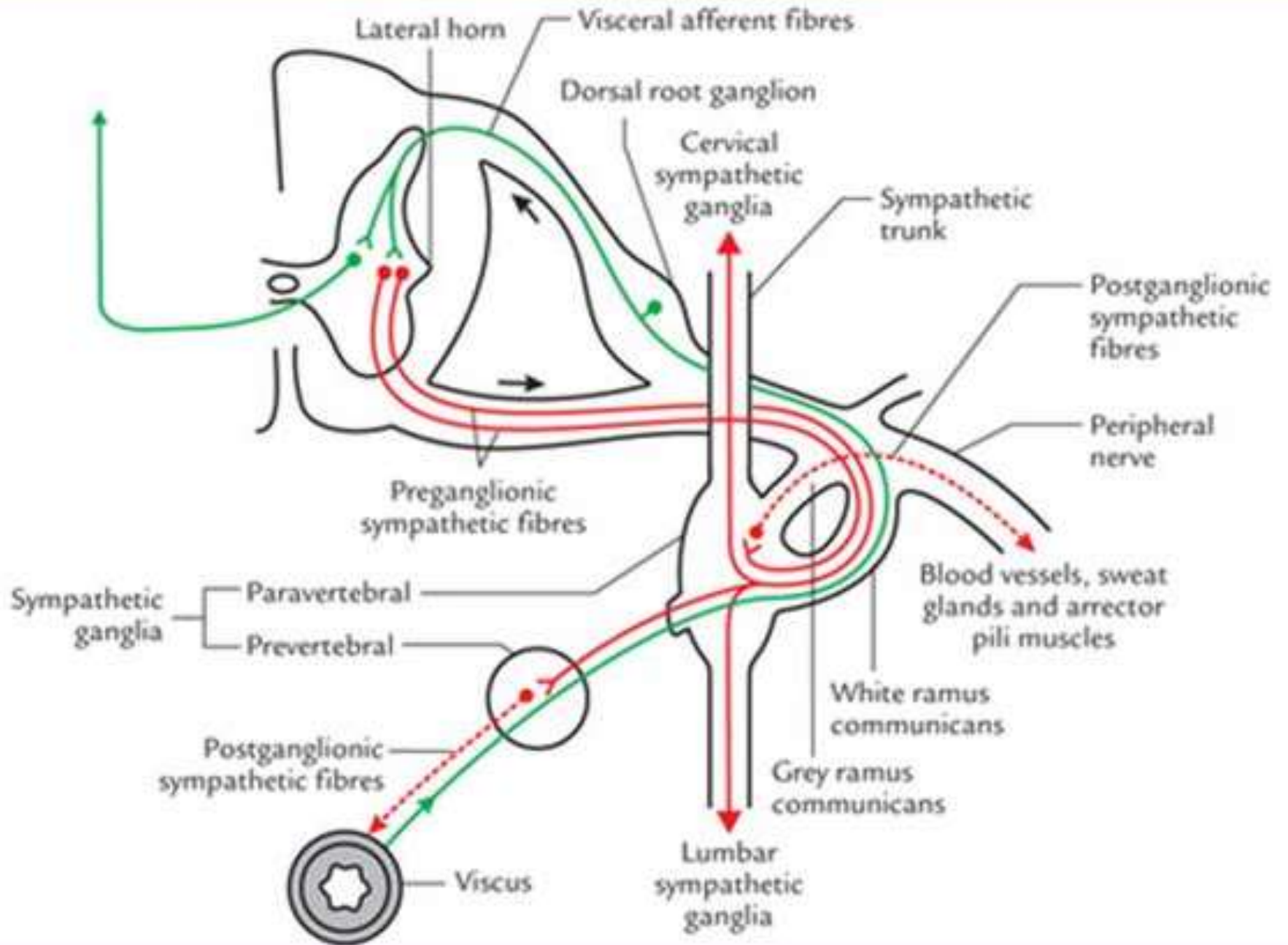


Communicating Branches of Cervical Plexus

With Superior Cervical sympathetic Ganglion:

- All formative rami of cervical plexus receives grey rami communicans from **superior cervical sympathetic ganglion**.

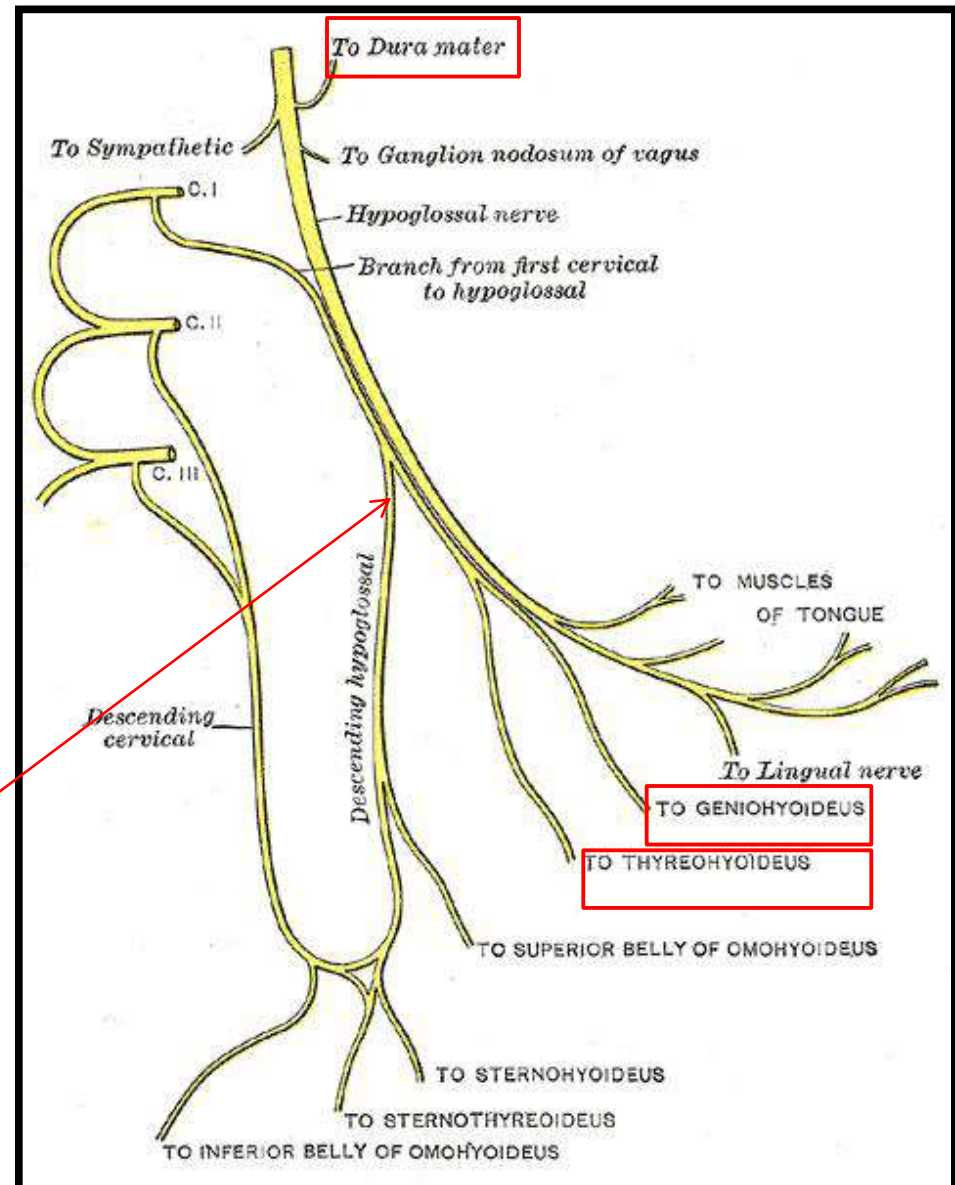




Communicating Branches of Cervical Plexus Contd...

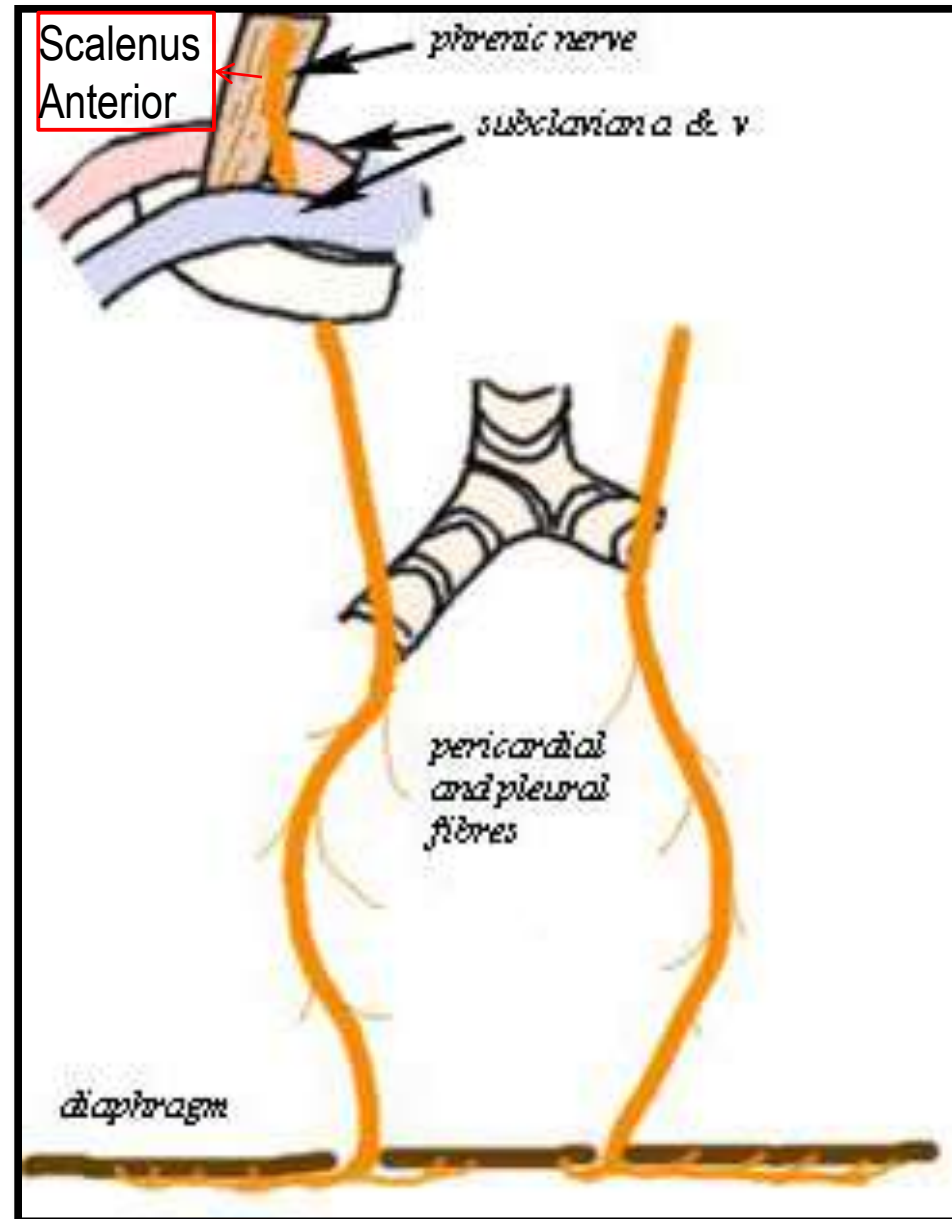
With Hypoglossal Nerve:

- A branch from the loop between C1 & C2 joins the hypoglossal nerve.
- After a short course with the hypoglossal nerve, leaves that nerve as:-
 - **Meningeal branch.**
 - **Superior root of ansa cervicalis (descends hypoglossi).**
 - **Nerve to Thyrohyoid (C1)**
 - **Nerve to Geniohyoid (C1)**



Phrenic Nerve (C3,C4 &C5)

- Descends through the neck and thorax to **supply the diaphragm.**
- It lies on the scalenus anterior muscle and enters the thorax between subclavian artery and subclavian vein.
- **Only motor nerve to the diaphragm.**





*Thank
You*