

Organization and Triangles of Neck



SCRUBS

STUDENT COLLABORATIVE RESOURCES FOR UNDERSTANDING AND BRODY SUCCESS

Mission Statement

SCRUBS is a student-driven initiative that aims to develop supplemental resources for current and future cohorts that will pass through Brody. Members of **SCRUBS** participate in a variety of sub-committees working to create resources for students, by students. These resources aim to offer unique perspectives from students that have walked in the same shoes, developing resources that we wish we had been exposed to during our time in the course.

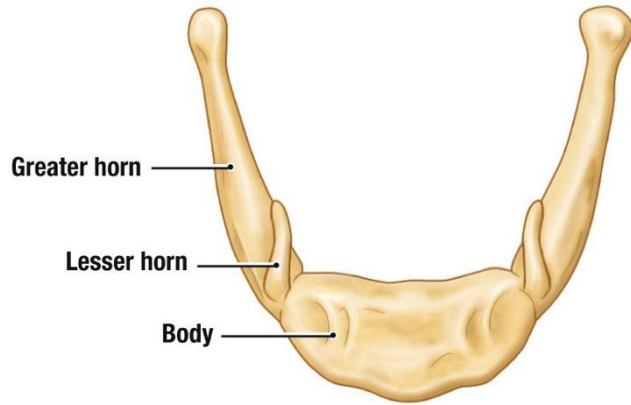
The hope is this organization will become a staple of the Brody student body, exemplifying the unique collaborative community that Brody offers. If this is a mission that aligns with your goals and you have the desire to help those that will come behind you, as well as a goal to leave your mark on Brody as a whole, we invite you to join the team!

Disclaimer

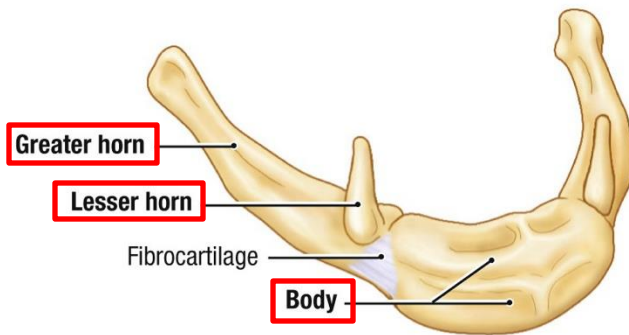
The resources that are included in this document are made by students and not the faculty. As such, there is the possibility for errors in our development, although this is mitigated via a team approach to development with multiple stages of vetting. If there is a contradiction with the coursework presented within your course, please go by the course documents. Additionally, **SCRUBS** aims to supply ***supplemental resources***, however these are in no way replacements to the instruction of the Brody faculty. Use these resources as a supplement, but not as your primary source for course material.

Osteology

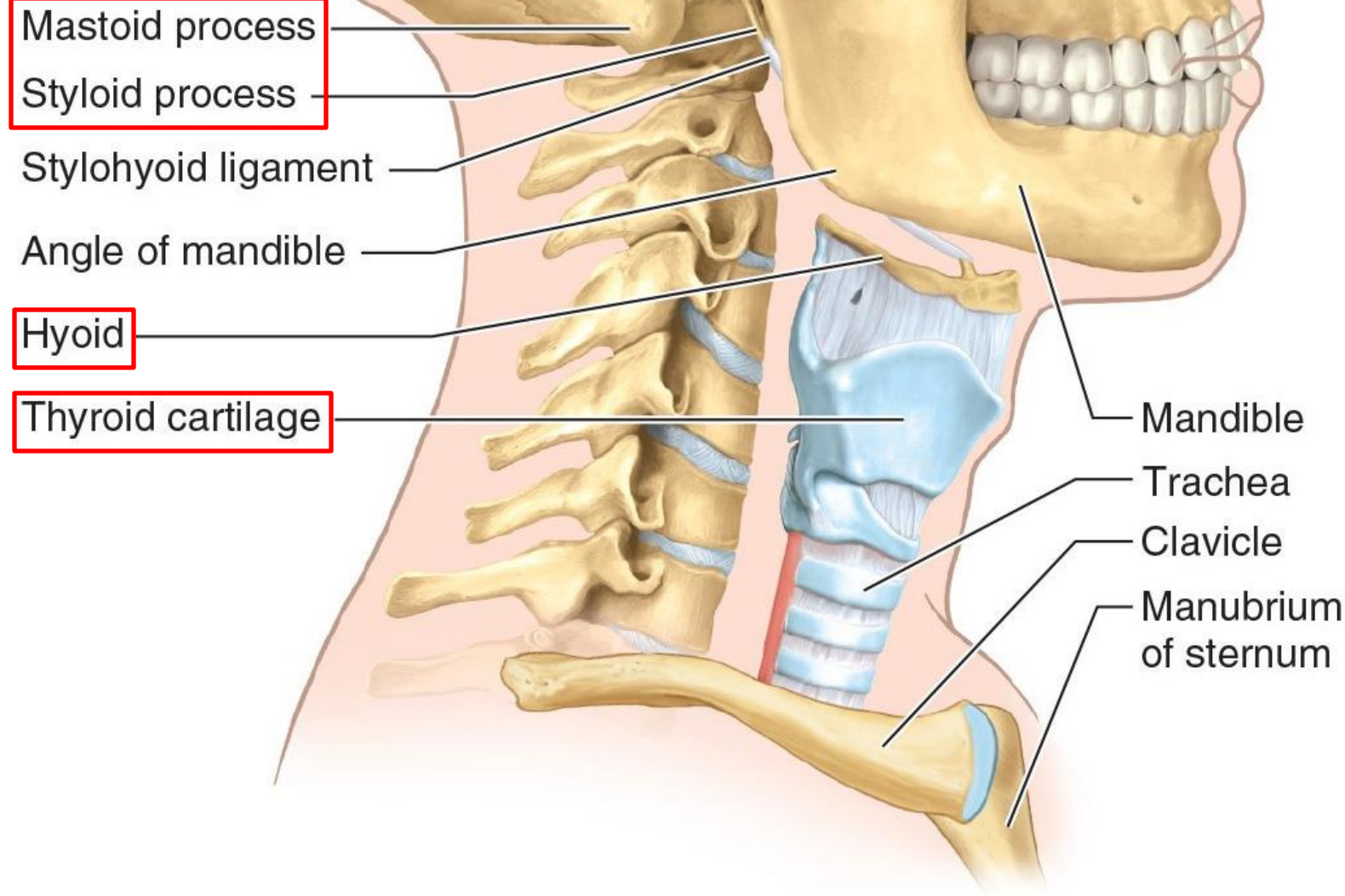
- Styloid Process
- Mastoid Process
- Hyoid Bone
- Thyroid Cartilage



D. Anterosuperior View of Hyoid Bone



C. Right Anterolateral View of Hyoid Bone



Organization

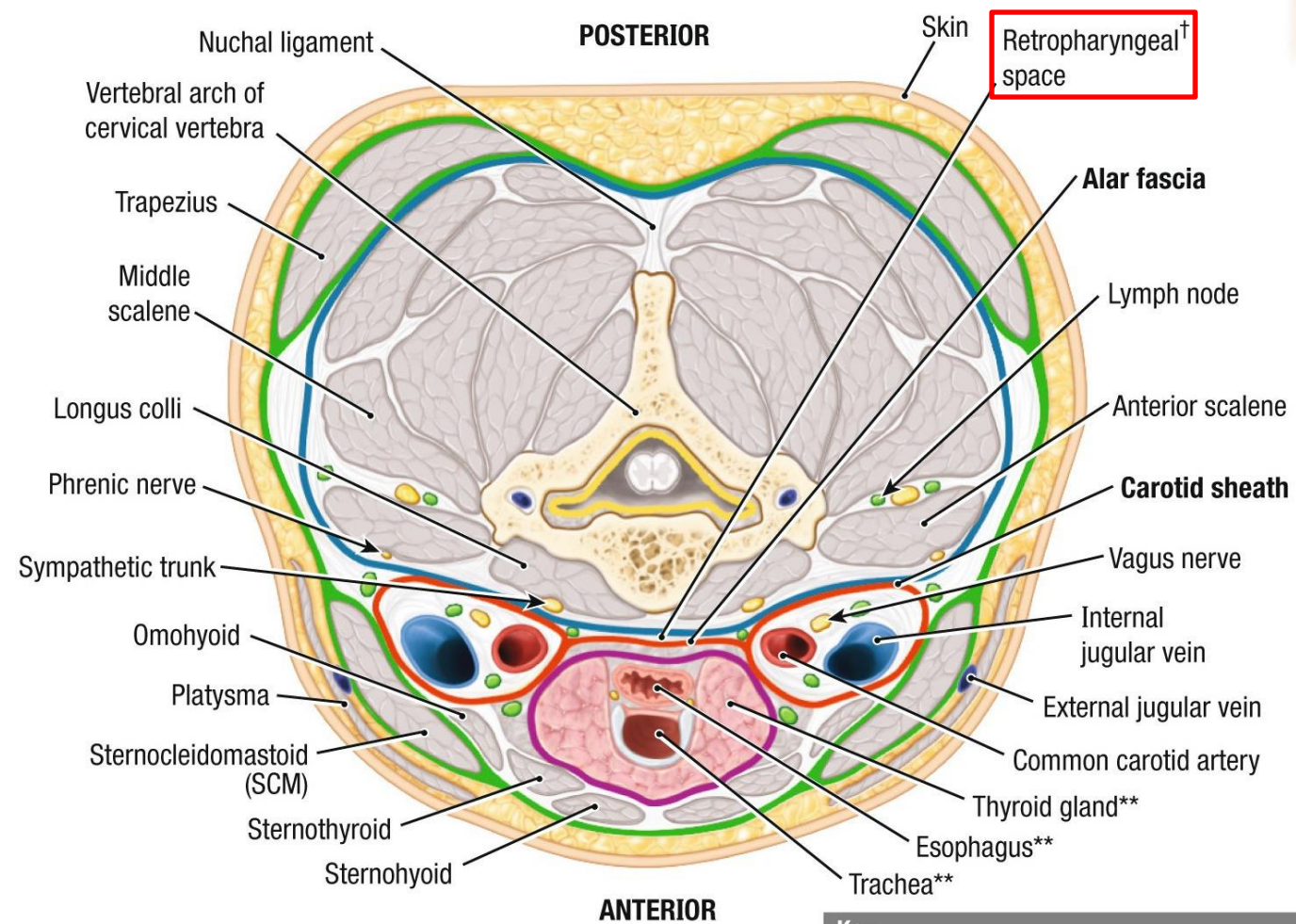
Organization of Neck

Superficial Fascia

- Location of the **platysma** muscle

Deep Cervical Fascia

1. **Investing fascia**
2. **Prevertebral fascia**
3. **Visceral fascia**
4. **Carotid Sheath**
 - Medial: **Common & internal carotid artery**
 - Posterior/Between: **Vagus nerve (CN X)**
 - Lateral: **Internal jugular vein**



Key

Subcutaneous tissue of neck (superficial cervical fascia)

Deep cervical fascia:

Investing layer

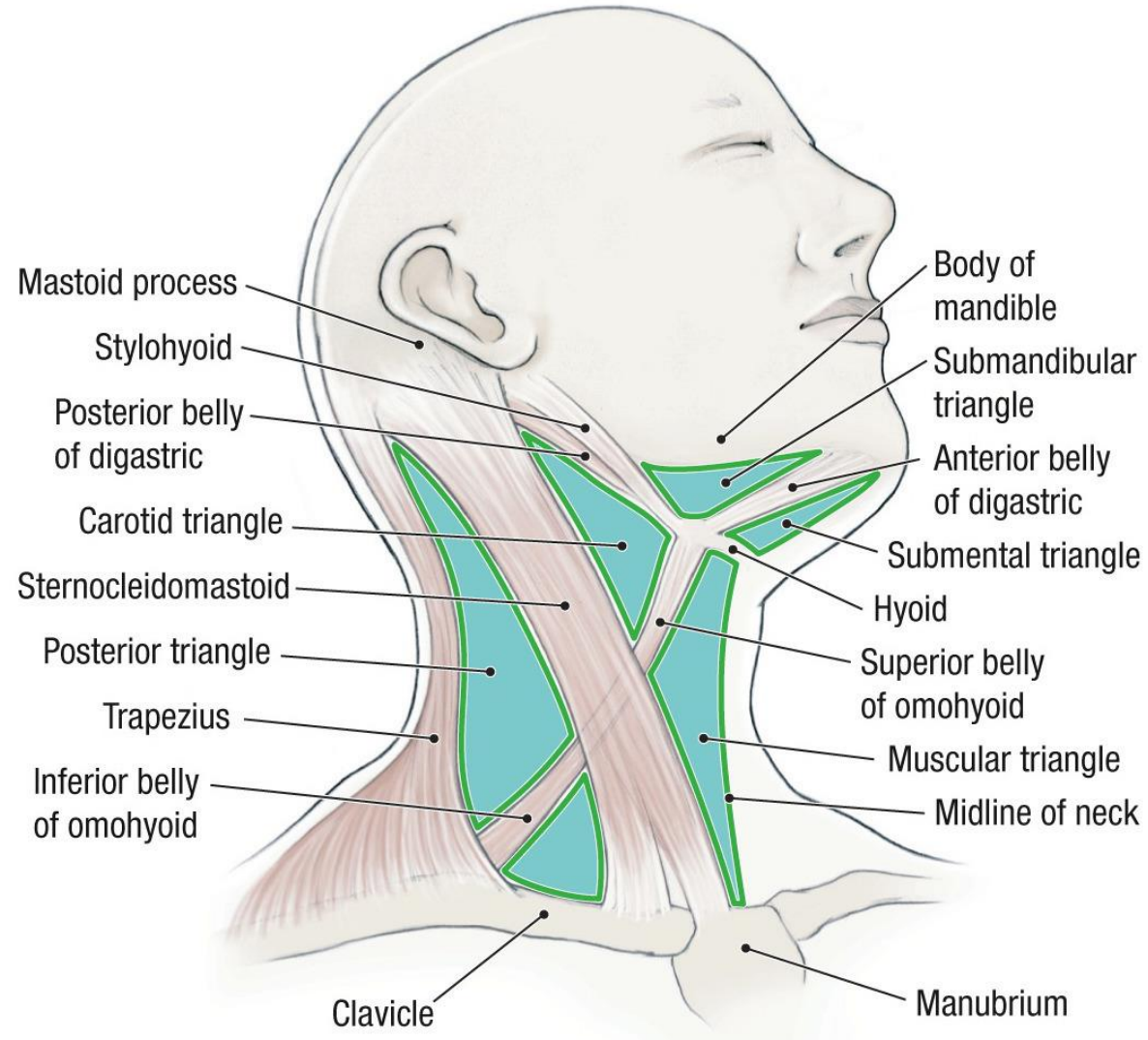
Pretracheal layer*

Prevertebral layer

Alar fascia and carotid sheath

* Buccopharyngeal fascia is a component of the pretracheal layer

Triangles of the Neck



Anterior Muscles of the Neck

Suprahyoid Muscles

Pay attention to the names!

Stylohyoid

O: Styloid process

I: Hyoid

N: CNVII

A: Swallowing/speaking

Mylohyoid

O: Mandible

I: Hyoid

N: CNV3

A: Swallowing/speaking

Geniohyoid

O: Mandible

I: Hyoid

N: CNXII

A: Swallowing/speaking

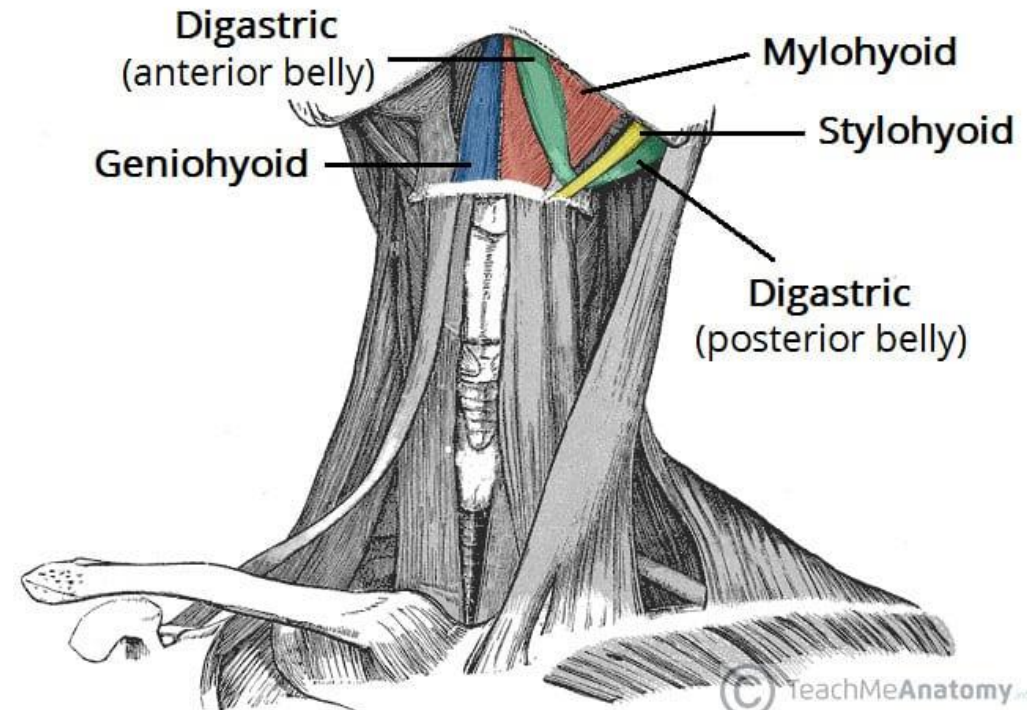
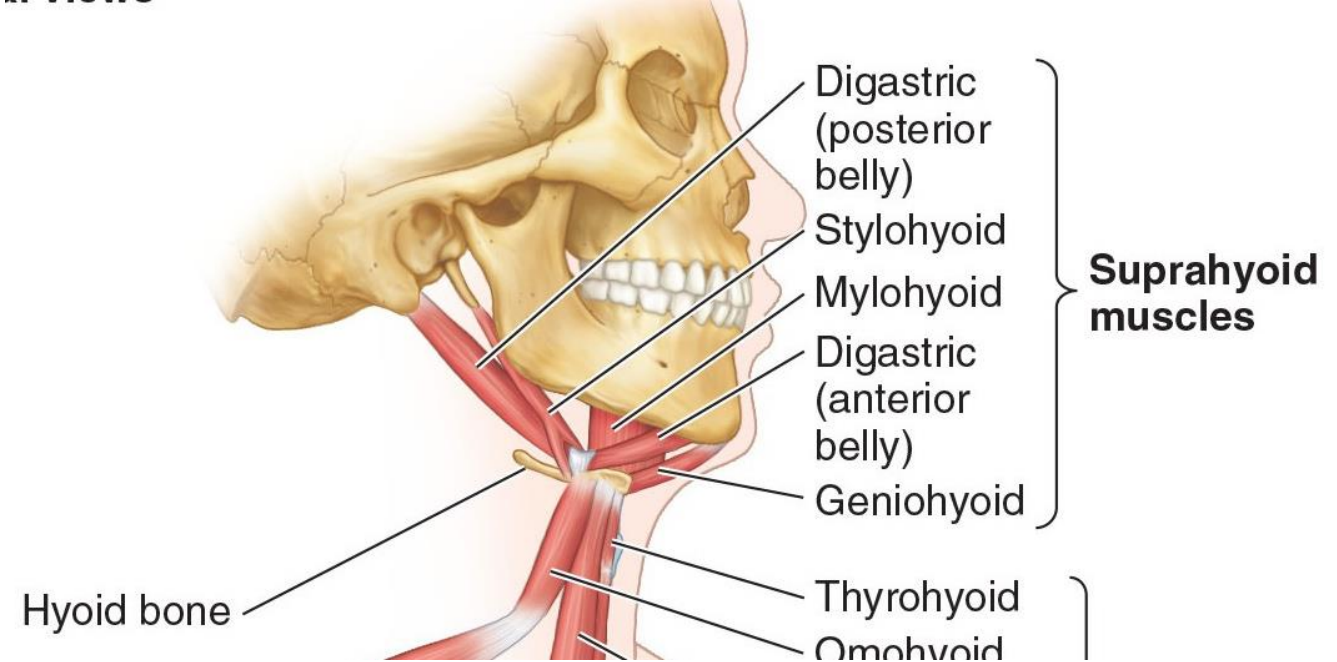
Digastric

O: Mandible

I: Mastoid process

N: CNV3 branch (ant. belly)
CNVII branch (post. belly)

A: Swallowing/speaking



Infrahyoid Muscles

Pay attention to the names!

Omohyoid

O: Scapula

I: Hyoid

N: Ansa Cervicalis (C1-C3)

A: Swallowing/speaking

Sternohyoid

O: Sternum/clavicle

I: Hyoid

N: Ansa Cervicalis (C1-C3)

A: Swallowing/speaking

Sternothyroid

O: Sternum

I: Thyroid Cartilage

N: Ansa Cervicalis (C1-C3)

A: Swallowing/speaking

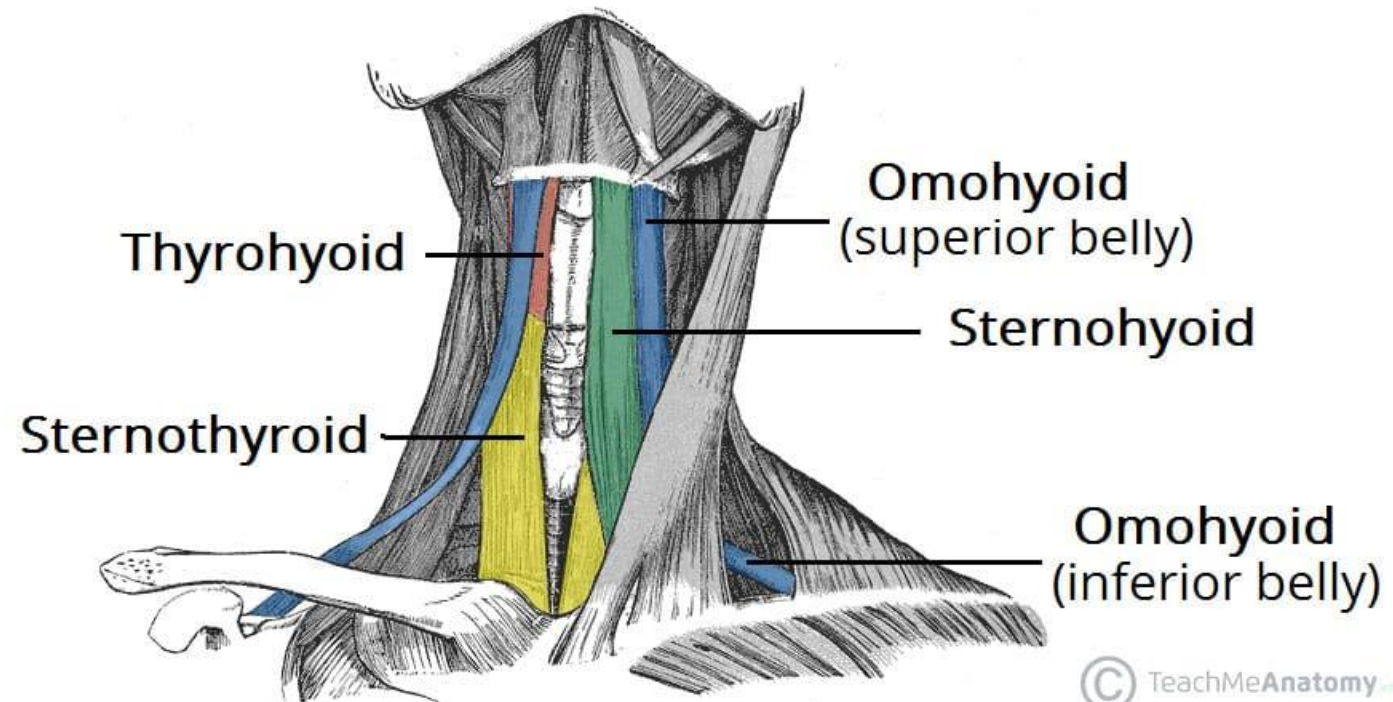
Thyrohyoid

O: Thyroid Cartilage

I: Hyoid

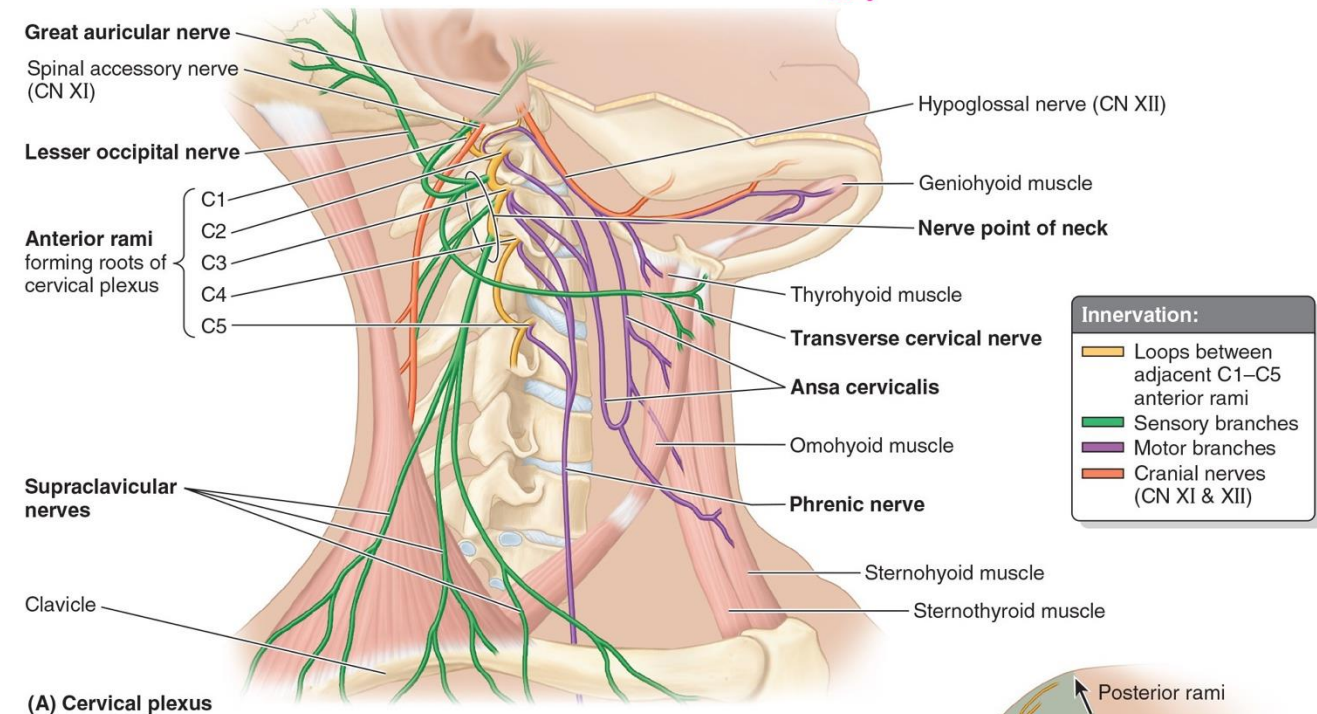
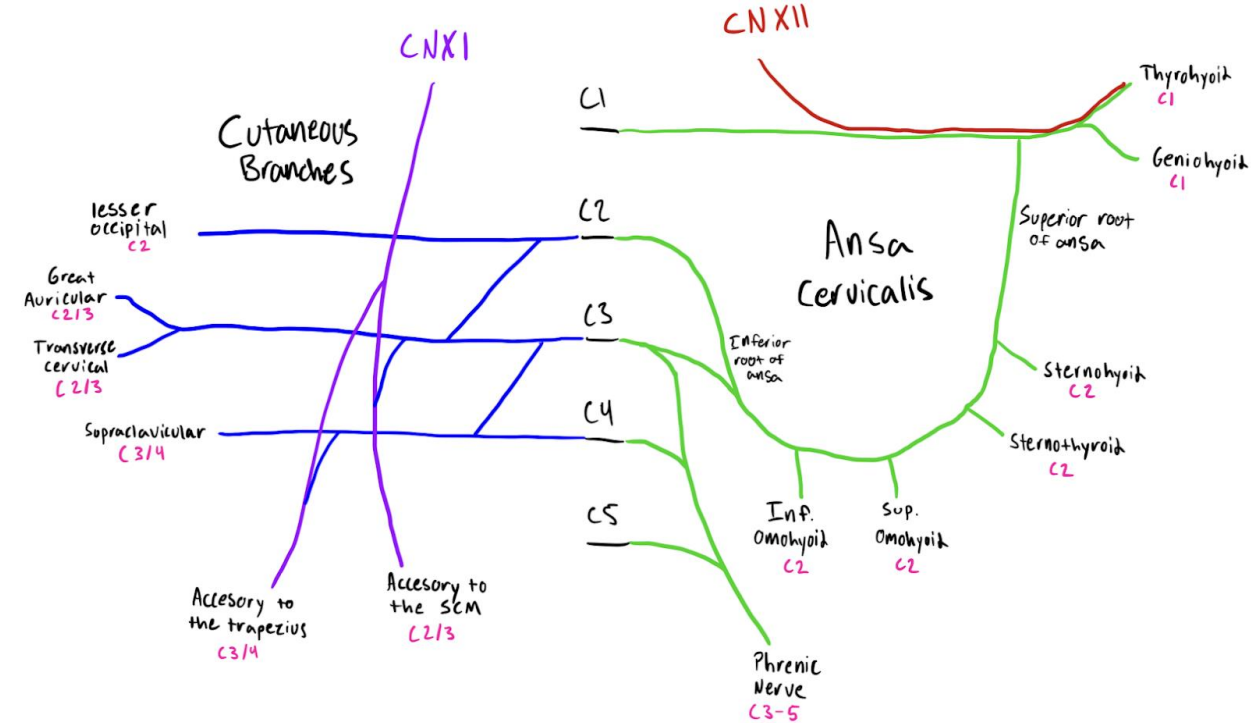
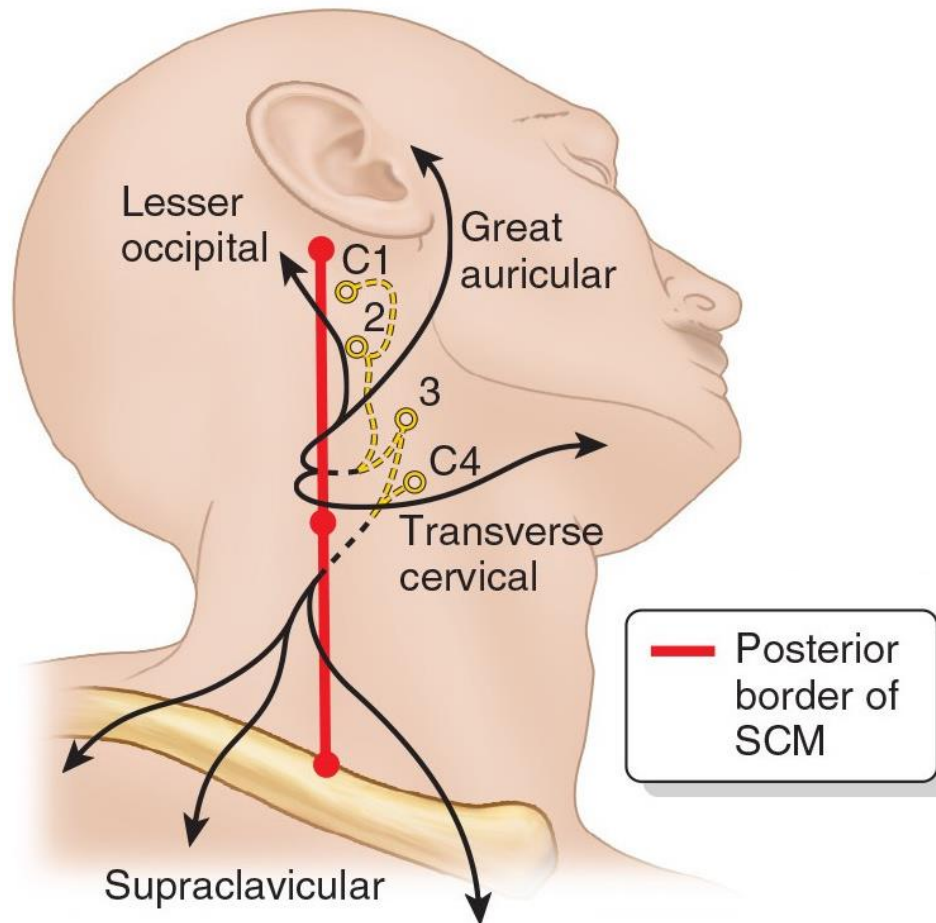
N: CNXII

A: Swallowing/speaking



Cervical Plexus

Cervical Plexus

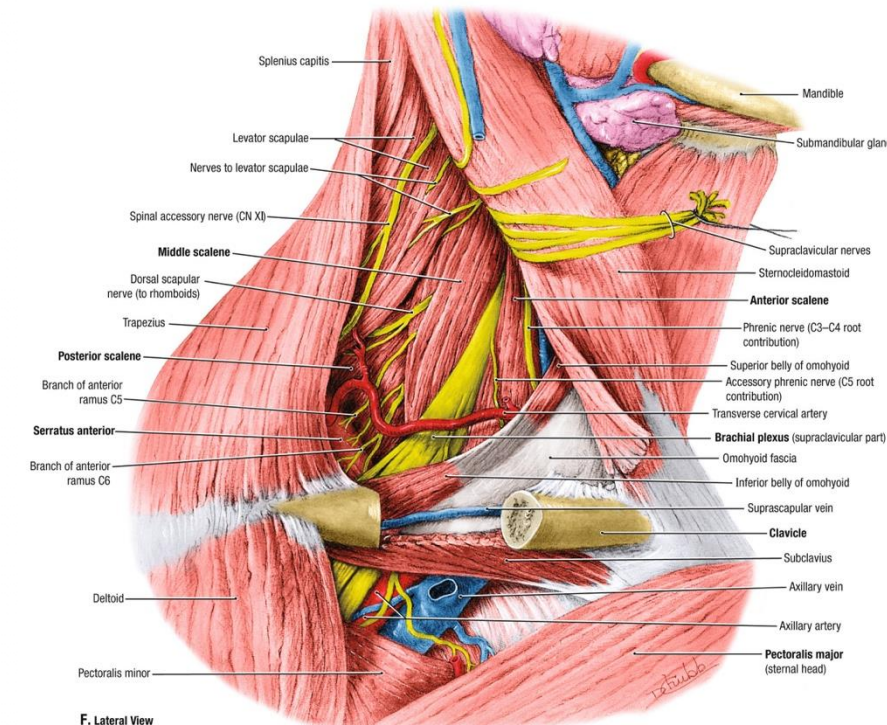
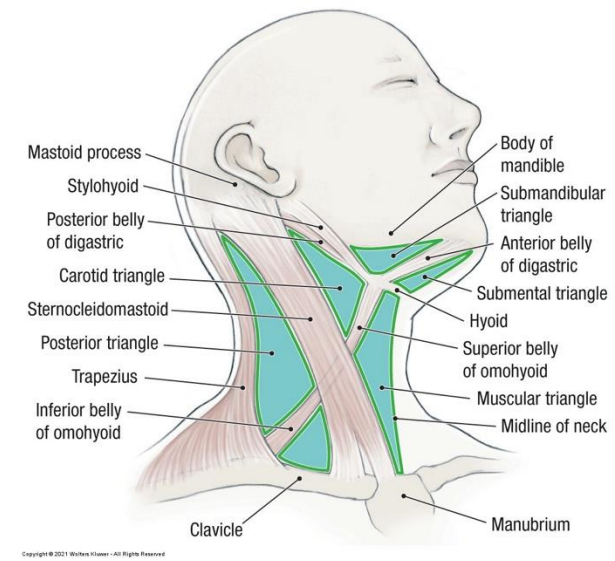
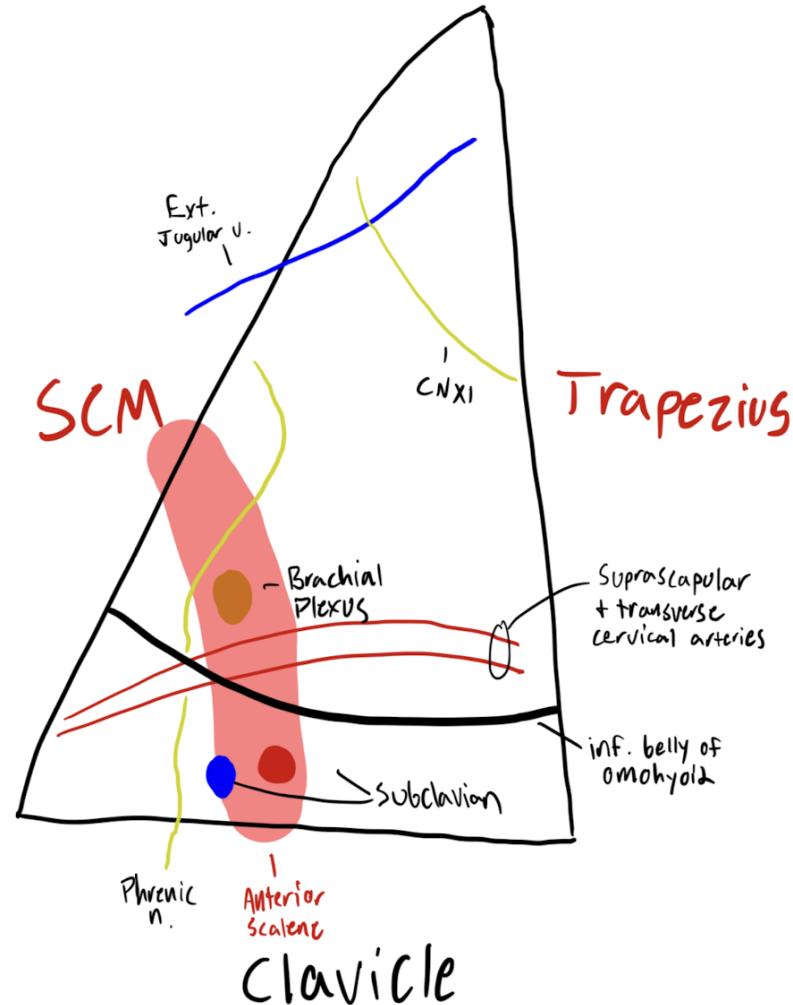


Triangles of the Neck

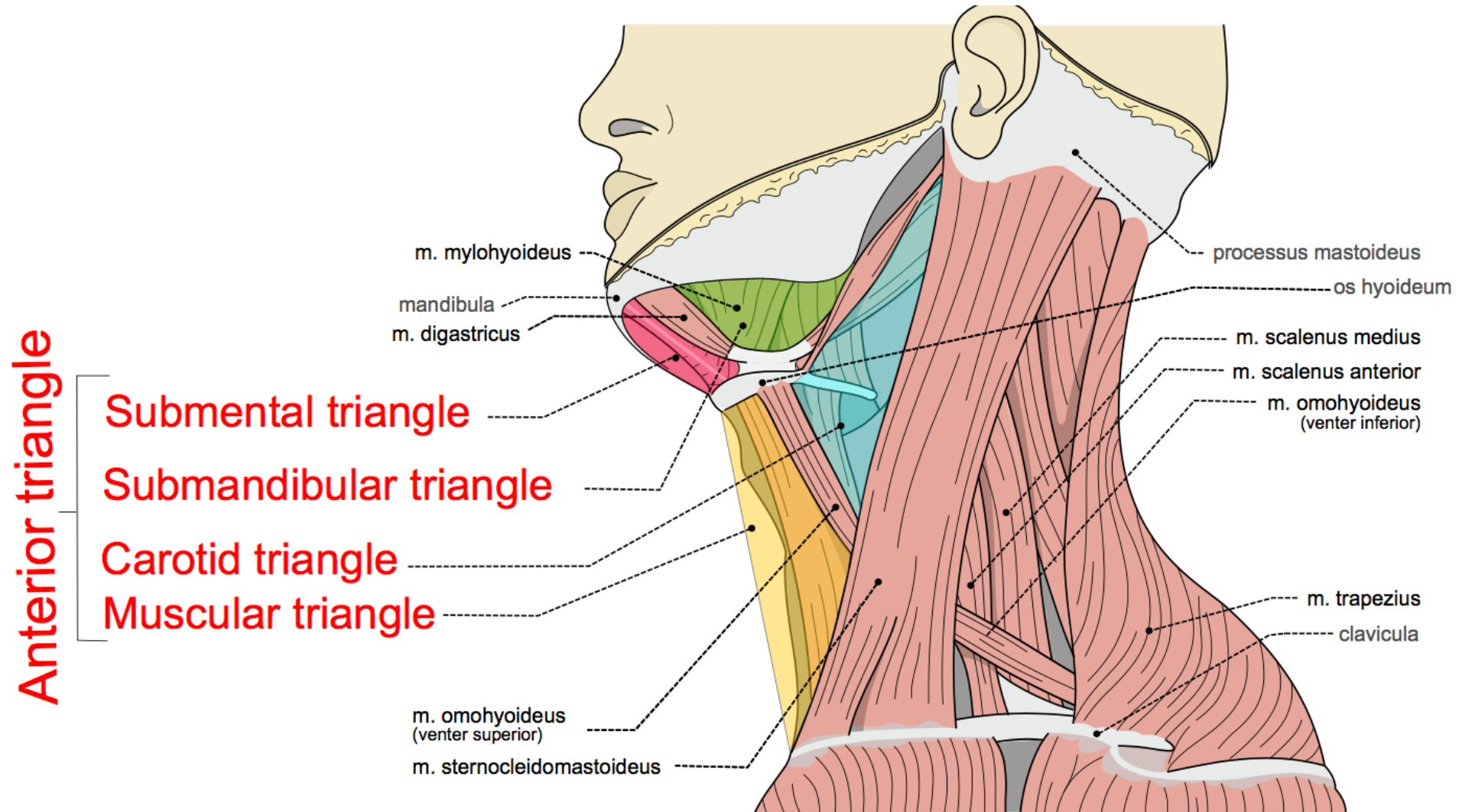
Posterior Triangle

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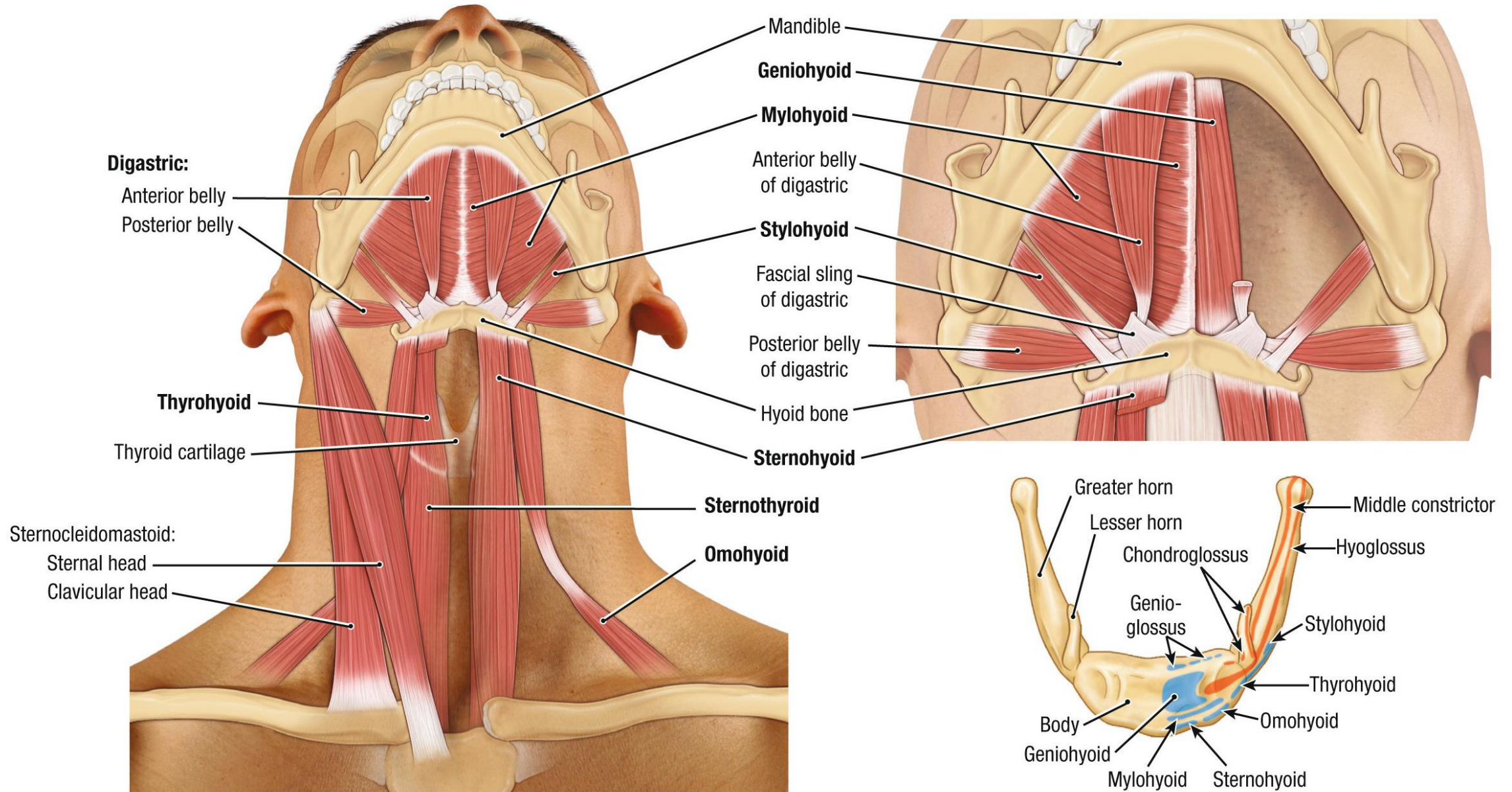
- Accessory nerve
- Cutaneous branches of cervical plexus
- Transverse cervical a.
- Suprascapular arteries a.
- Anterior scalene muscle
- Brachial plexus
- Subclavian vessels
- Phrenic nerve
- Inferior belly of omohyoid



Anterior Triangle



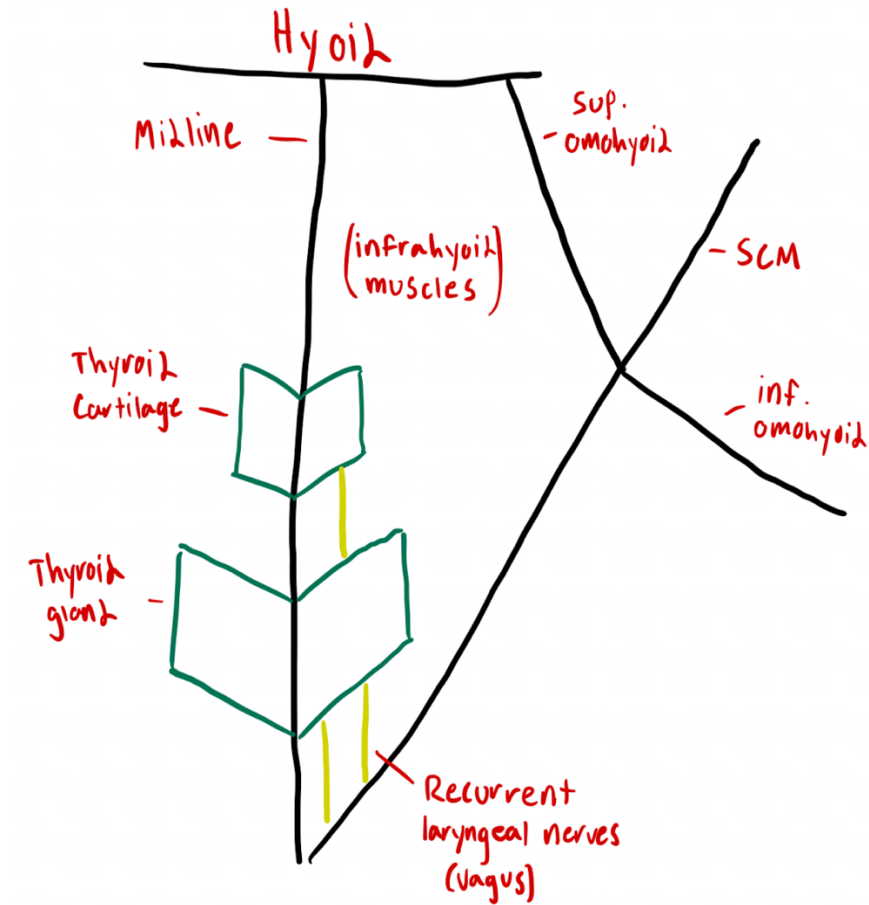
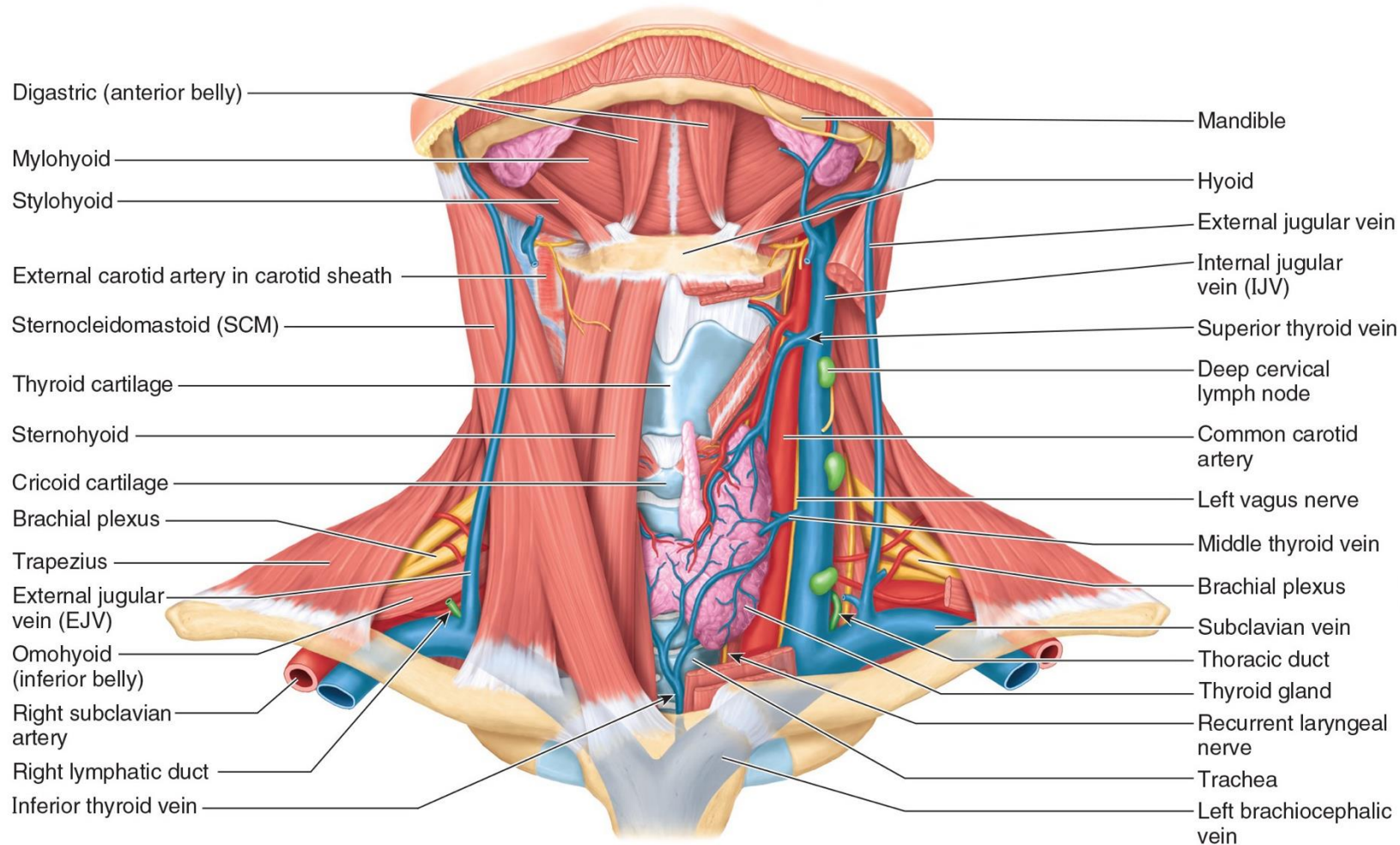
Submental Triangle



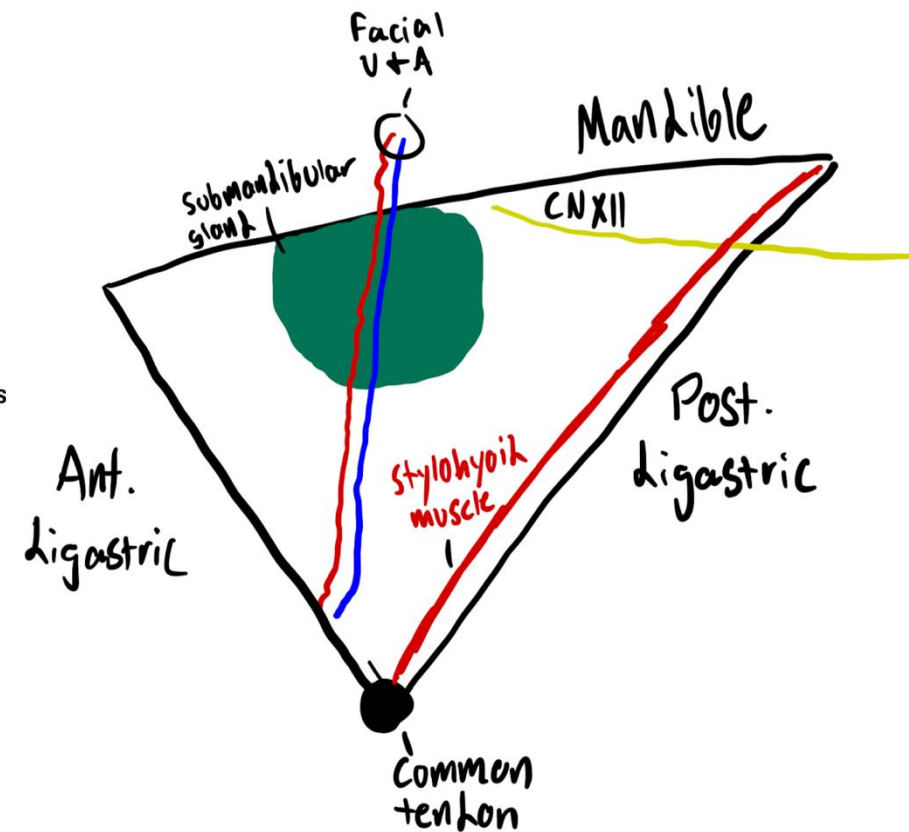
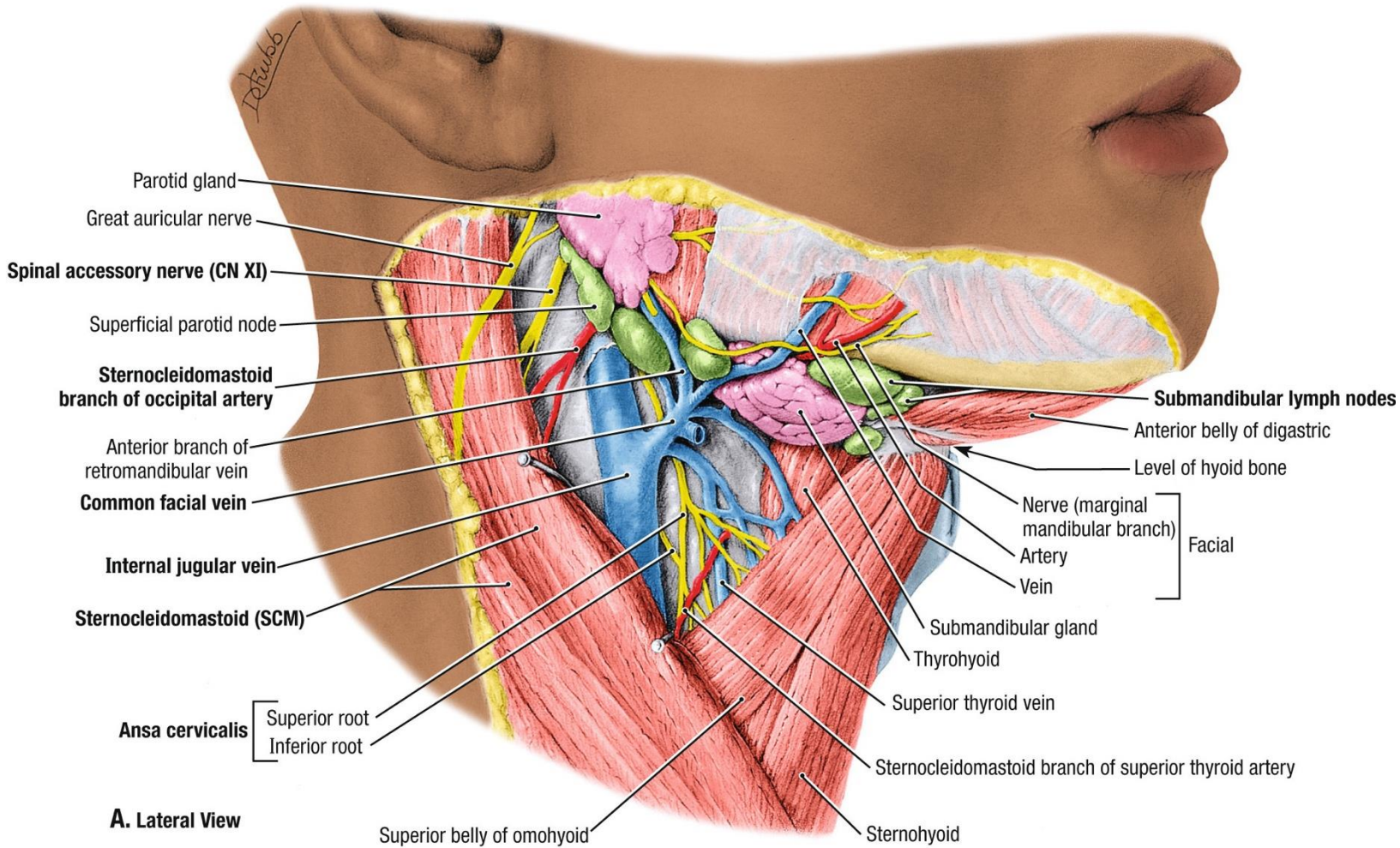
A. Anterior View, Head and Neck Extended

B. Superior View of Hyoid Bone

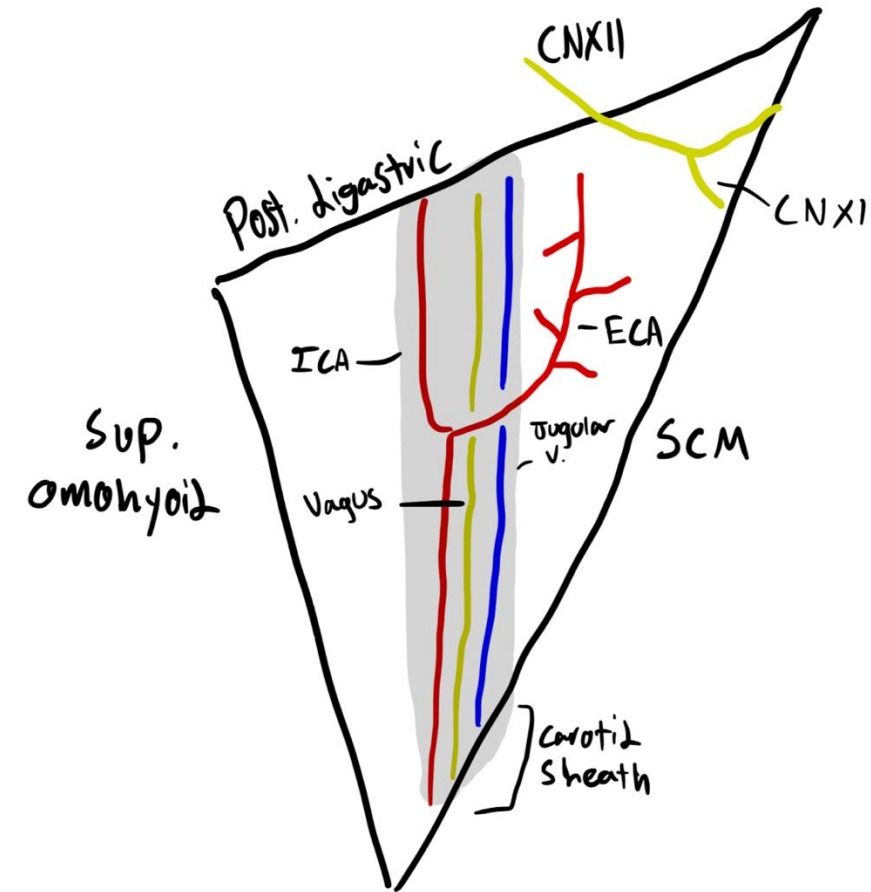
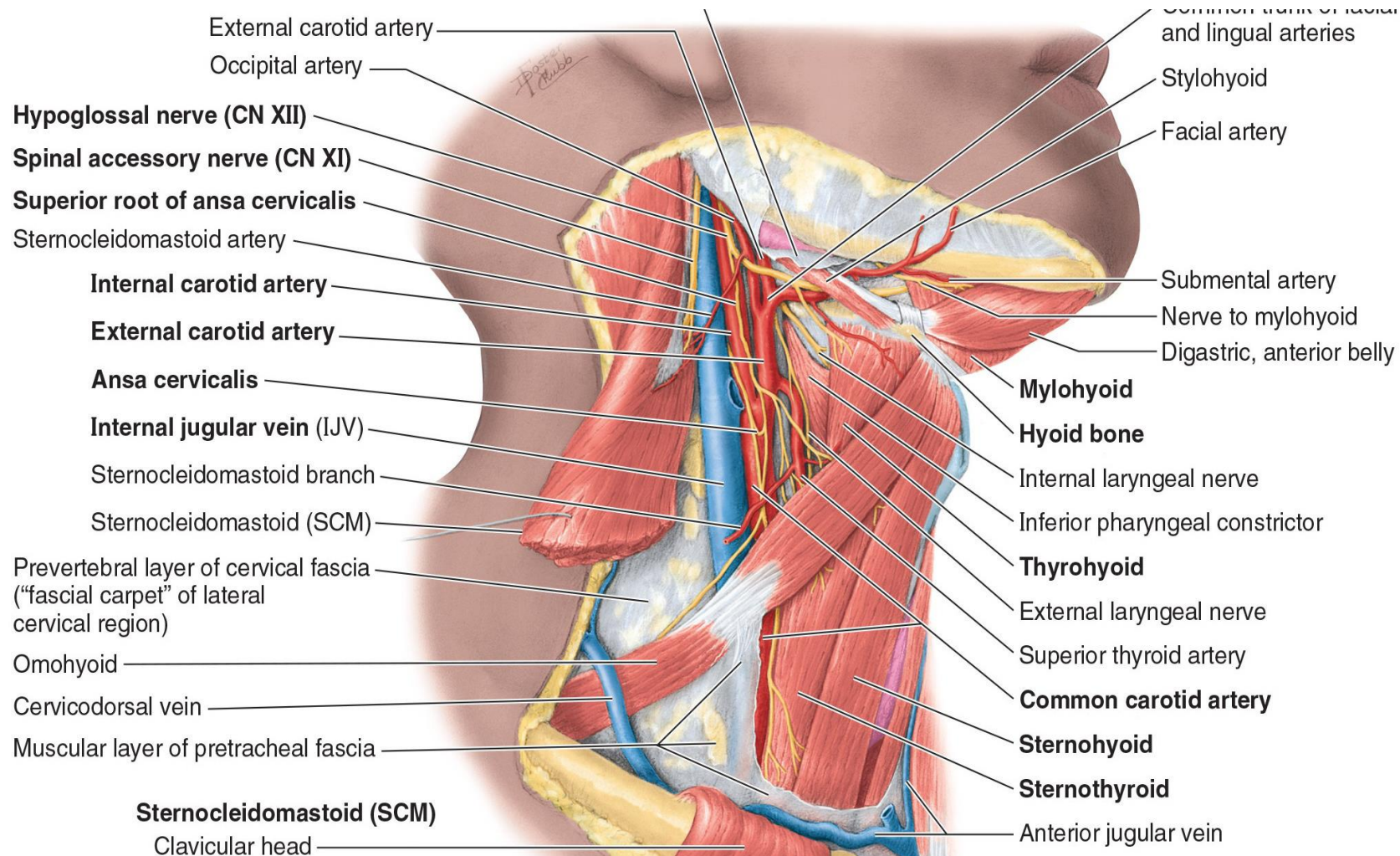
Muscular Triangle



Submandibular Triangle



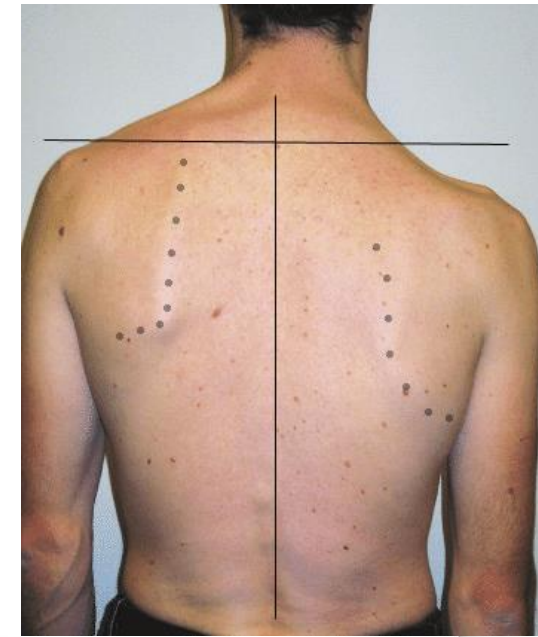
Carotid Triangle



Clinical Anatomy

Clinical Correlations

- **Inflammation of prevertebral fascia:** spread thru **retropharyngeal space** to reach thoracic cavity
- **Anesthesia of skin/neck/chest:** Block cutaneous nerves at post. border of the SCM
- **Superficial wound in posterior triangle:** can sever CNXI = **drooped shoulder**
- **Thoracic outlet syndrome:** At thoracic outlet/inlet pressure on brachial plexus / subclavian artery = pain & numbness in upper extremity



Common points of compression include:

- scalene triangle
- costoclavicular junction
- interpectoral space

