

# Neck muscles

*presented by*

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# Sternomastoid muscle

## Origin:

Or Sternocleidomastoid muscle

**Clavicular head:** from medial 1/3 of **clavicle** upper surface

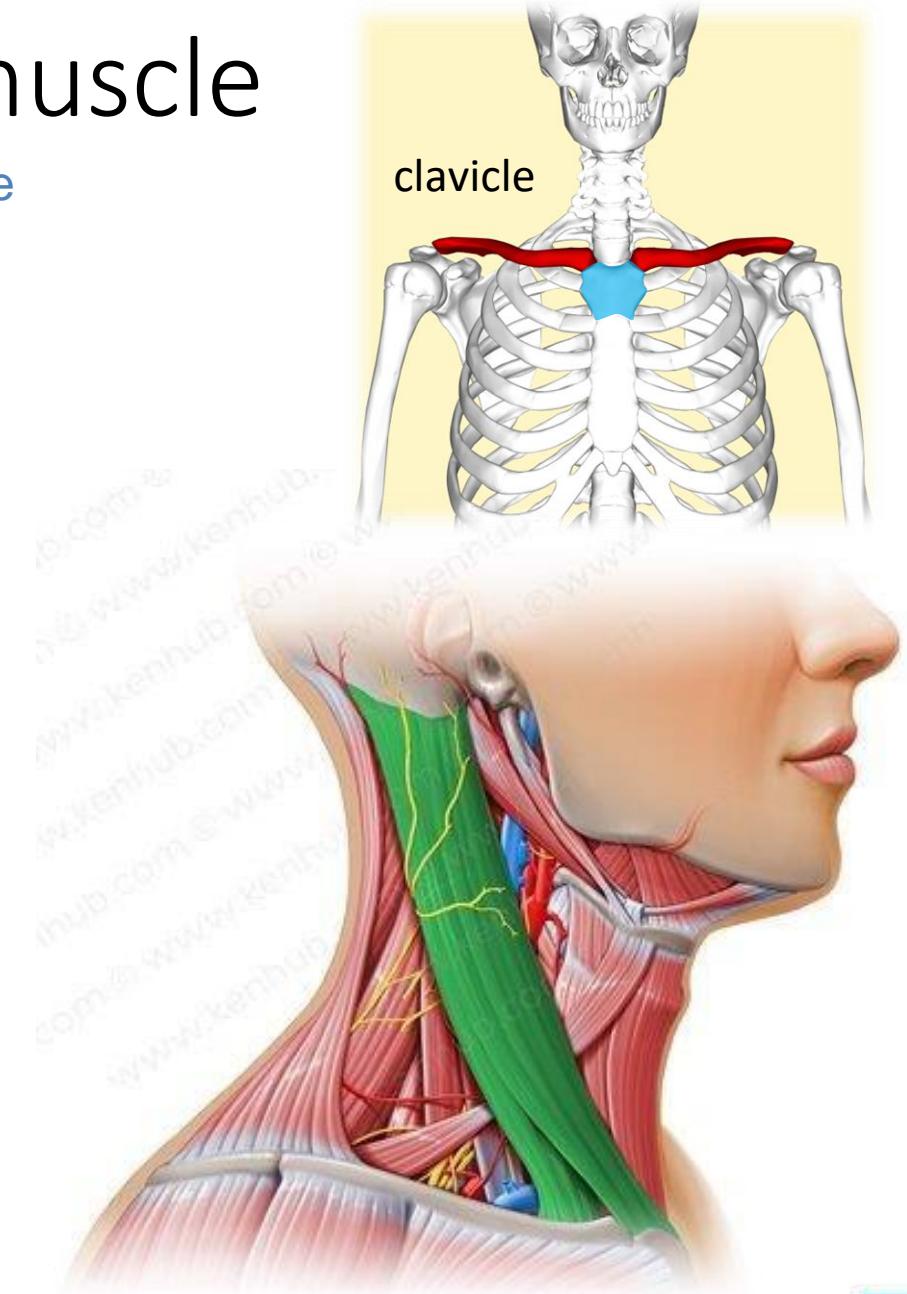
**Sternal head:** from front of **manubrium sterni**

## Insertion:

Mastoid process outer surface

Superior nuchal line lateral 1/2

**Nerve supply:** spinal accessory nerve  
(11<sup>th</sup> cranial N)



# Action:

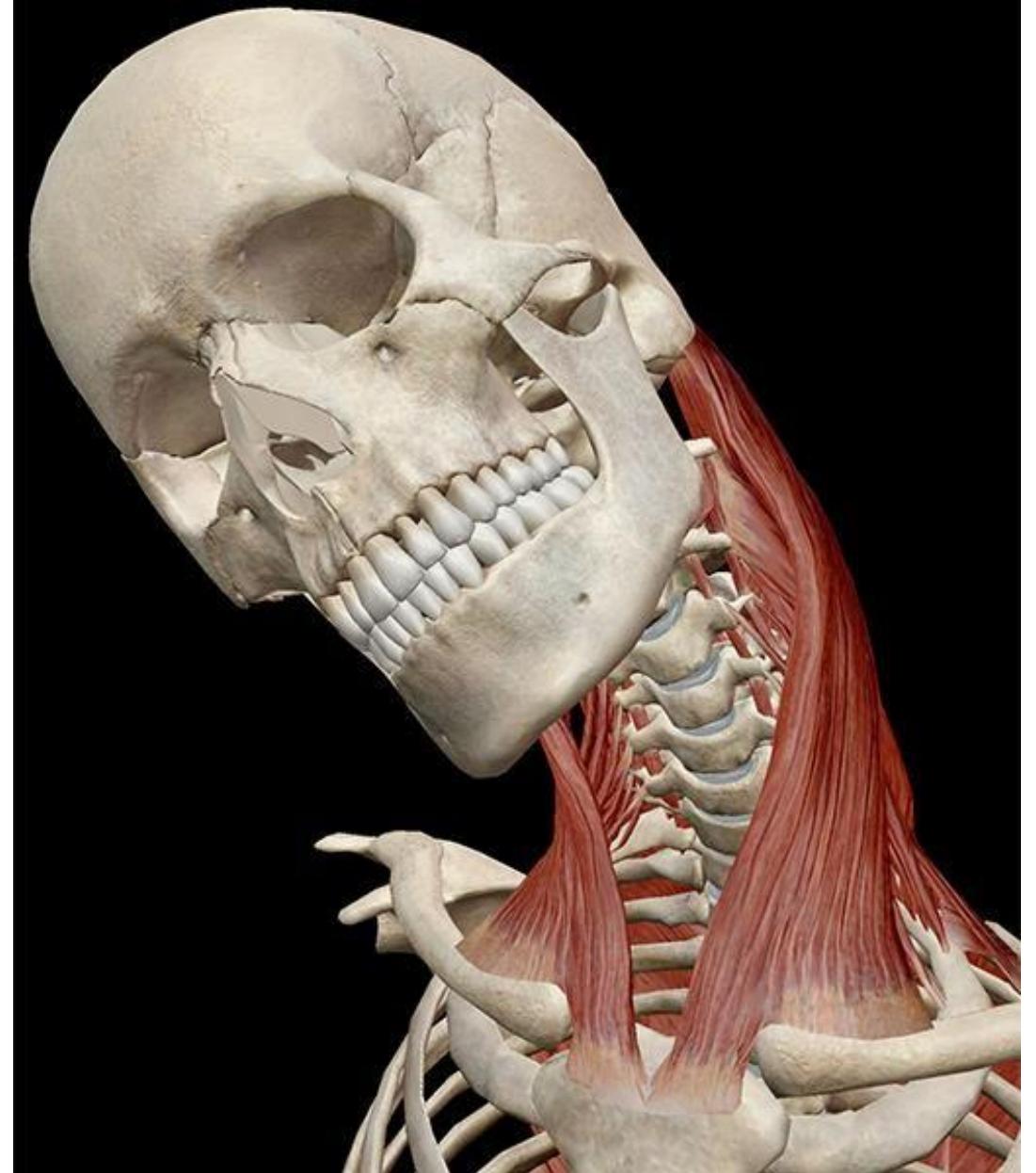
## On one side:

- Flex the neck to same side
- Turn the face up to opposite side

## On both sides:

Anterior fibers: flex neck

Posterior fibers: extend the neck



# Platysma muscle

**Site:** superficial fascia of the neck

**Origin:** thoracic fascia up to 2<sup>nd</sup> rib

**Insertion:** base of the mandible

**Nerve supply:** cervical branch of facial nerve

**Action:**

grimacing = vertical folds of neck

Depress the mandible.



# Supra hyoid group of muscles

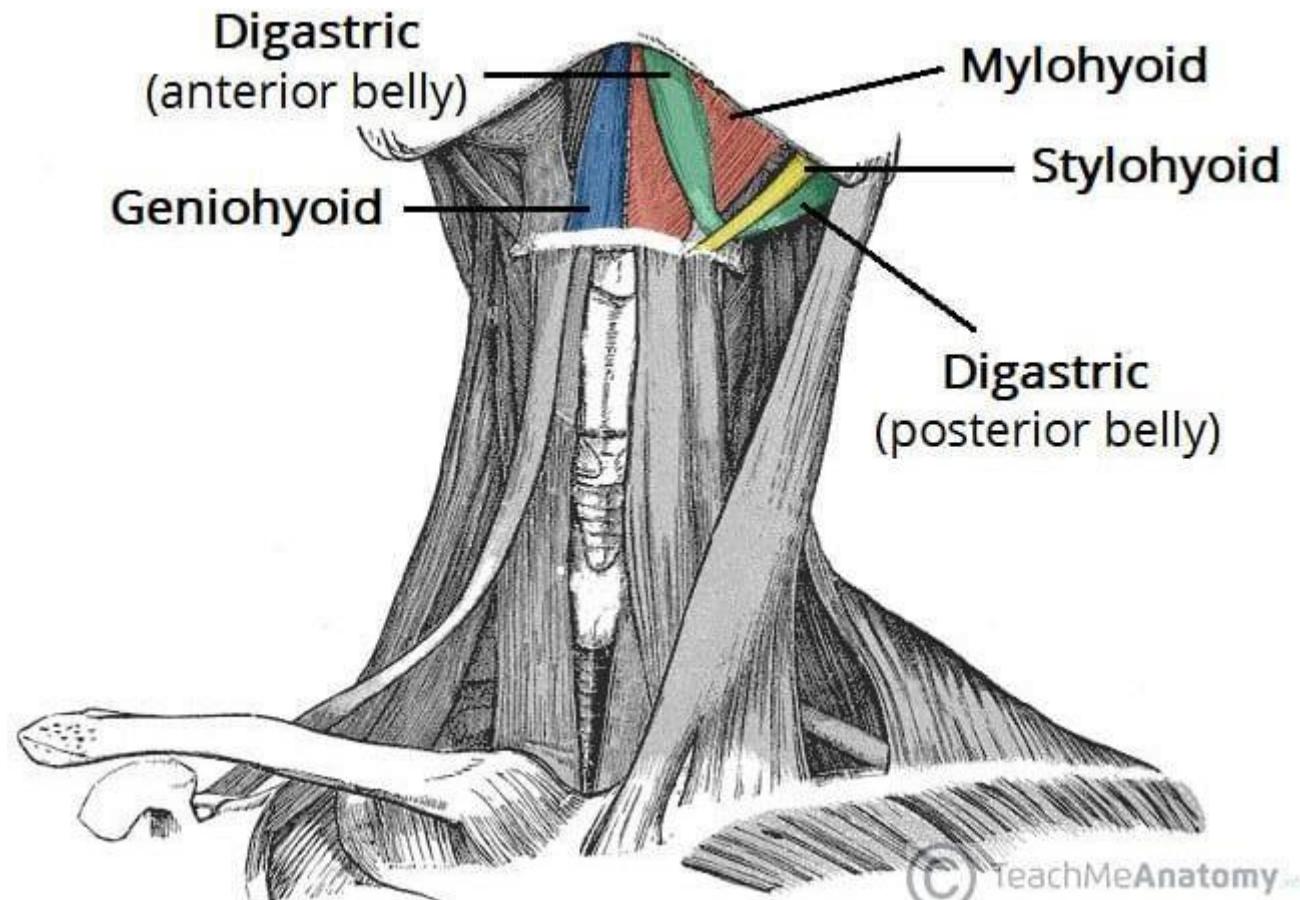
✓ **Digastric muscle**  
(Di = 2)

✓ **Mylohyoid muscle**

✓ **Stylohyoid muscle**

✓ **Geniohyoid muscle**

✓ **Hyoglossus muscle**



# Digastric muscle

## Origin:

**Anterior belly:** digastric fossa of the mandible

**Posterior belly:** digastric notch on medial surface of mastoid process

**Insertion:** intermediate tendon attached to greater horn by fibrous sling

## Nerve supply:

**Anterior belly:** nerve to mylohyoid

**Posterior belly:** descending motor of facial nerve

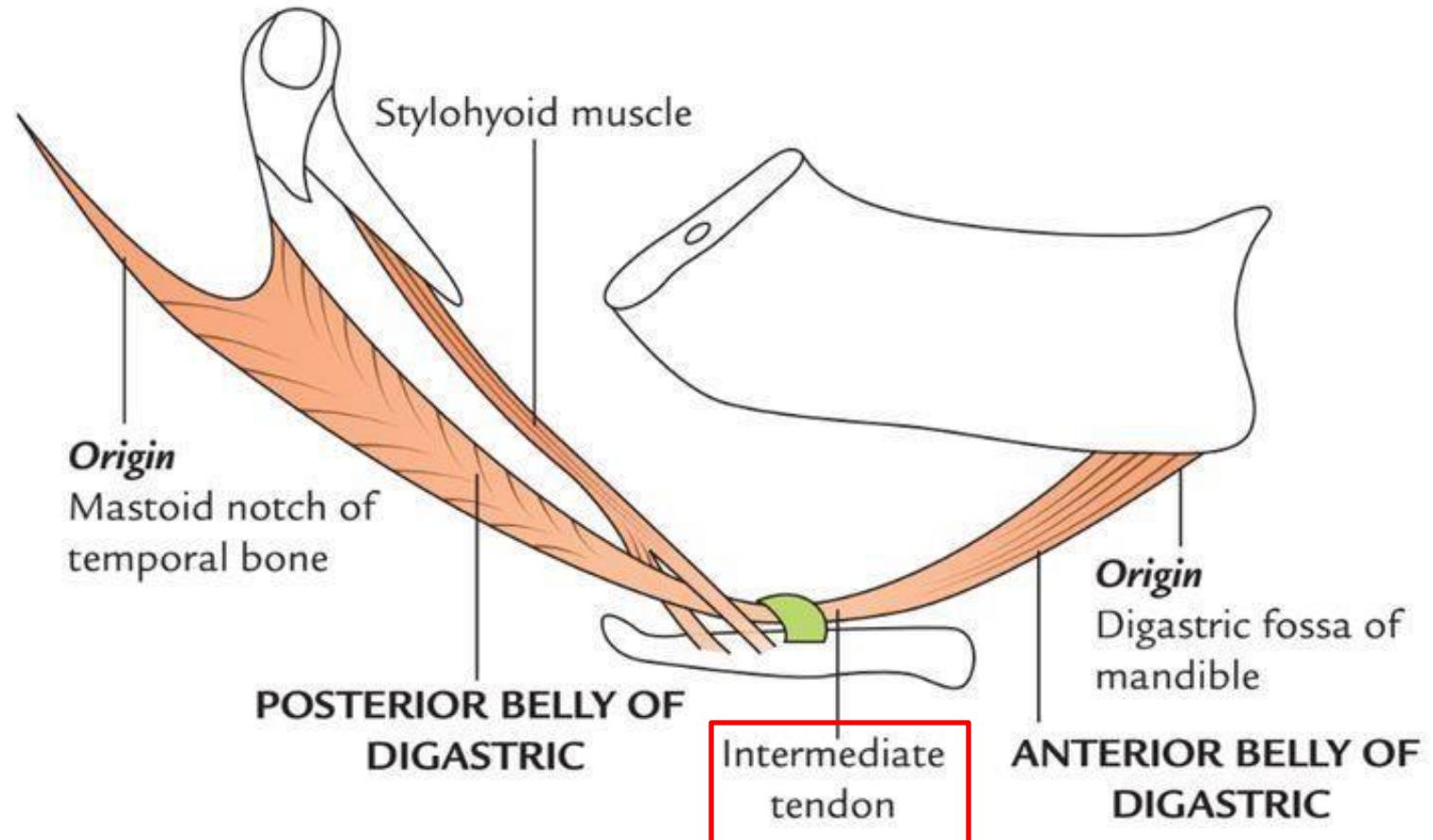
# Action:

## Anterior belly:

Depress mandible & elevate hyoid up and forward

## Posterior belly:

elevate hyoid up and back



# Stylohyoid muscle

## Origin:

Styloid process base posteriorly

## Insertion:

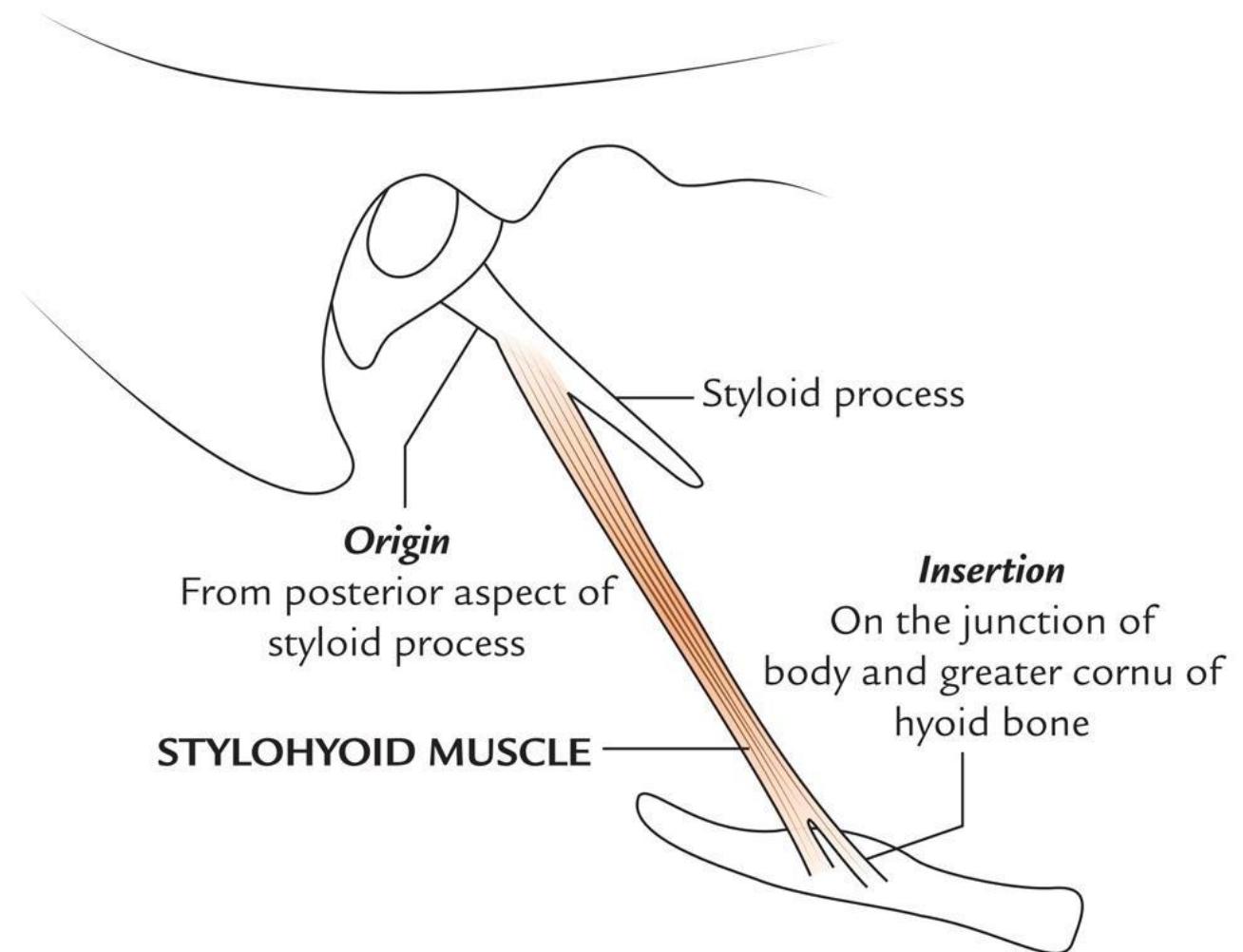
Split tendon surround posterior belly of digastric & attached to greater horn of hyoid bone at its junction with body.

## Nerve supply:

descending motor of facial nerve

## Action:

Pull hyoid bone up & back



# Geniohyoid muscle

Origin:

Inferior genial tubercles

Insertion:

Front of the body of hyoid bone

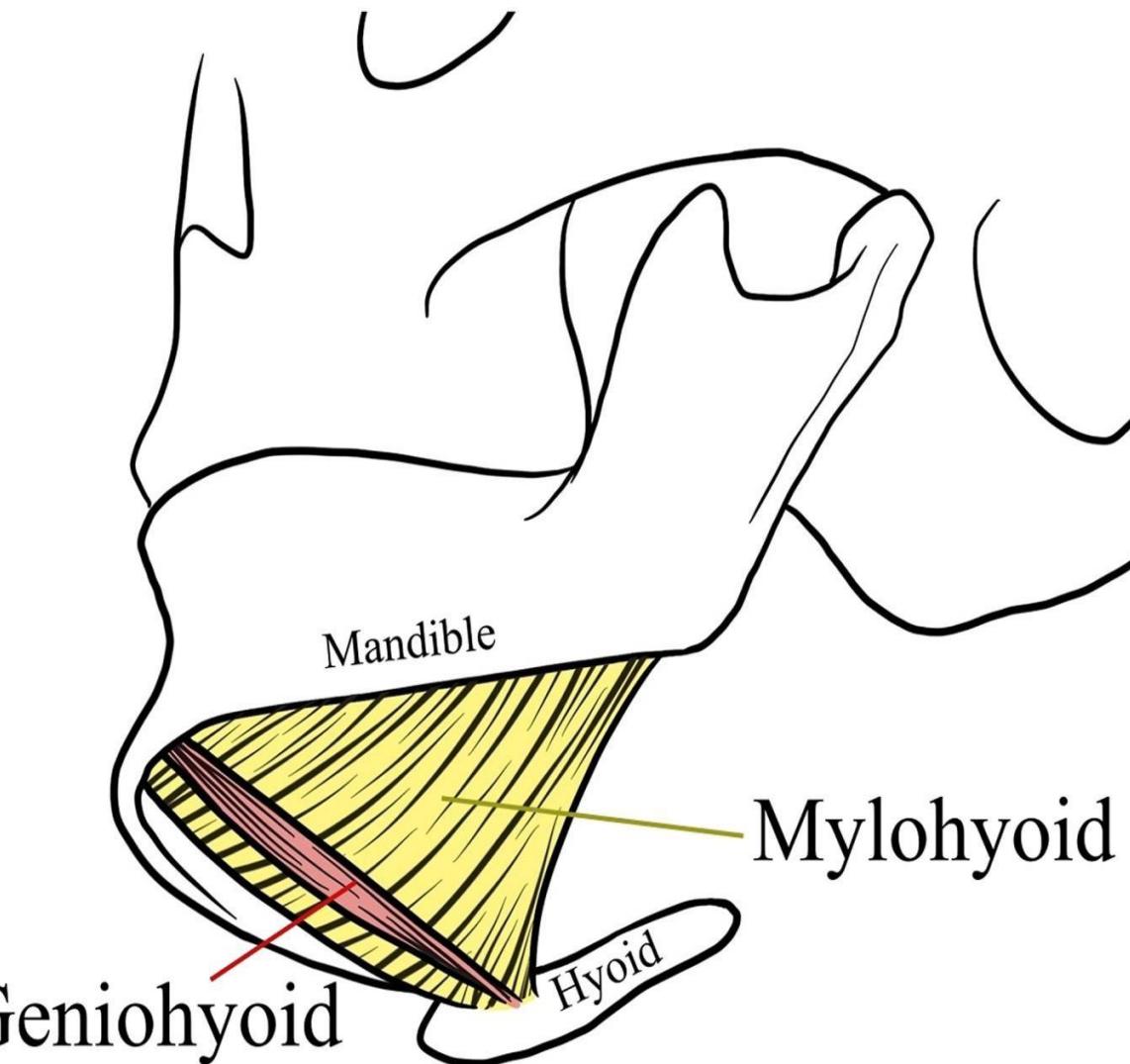
Nerve supply:

C1 via hypoglossal nerve (12<sup>th</sup> cranial N)

Action:

Pull hyoid bone up & forward

Depress the mandible



# Mylohyoid muscle (oral diaphragm)

## Origin:

Mylohyoid line of mandible

## Insertion:

Median raphe of neck

Upper border of body of hyoid

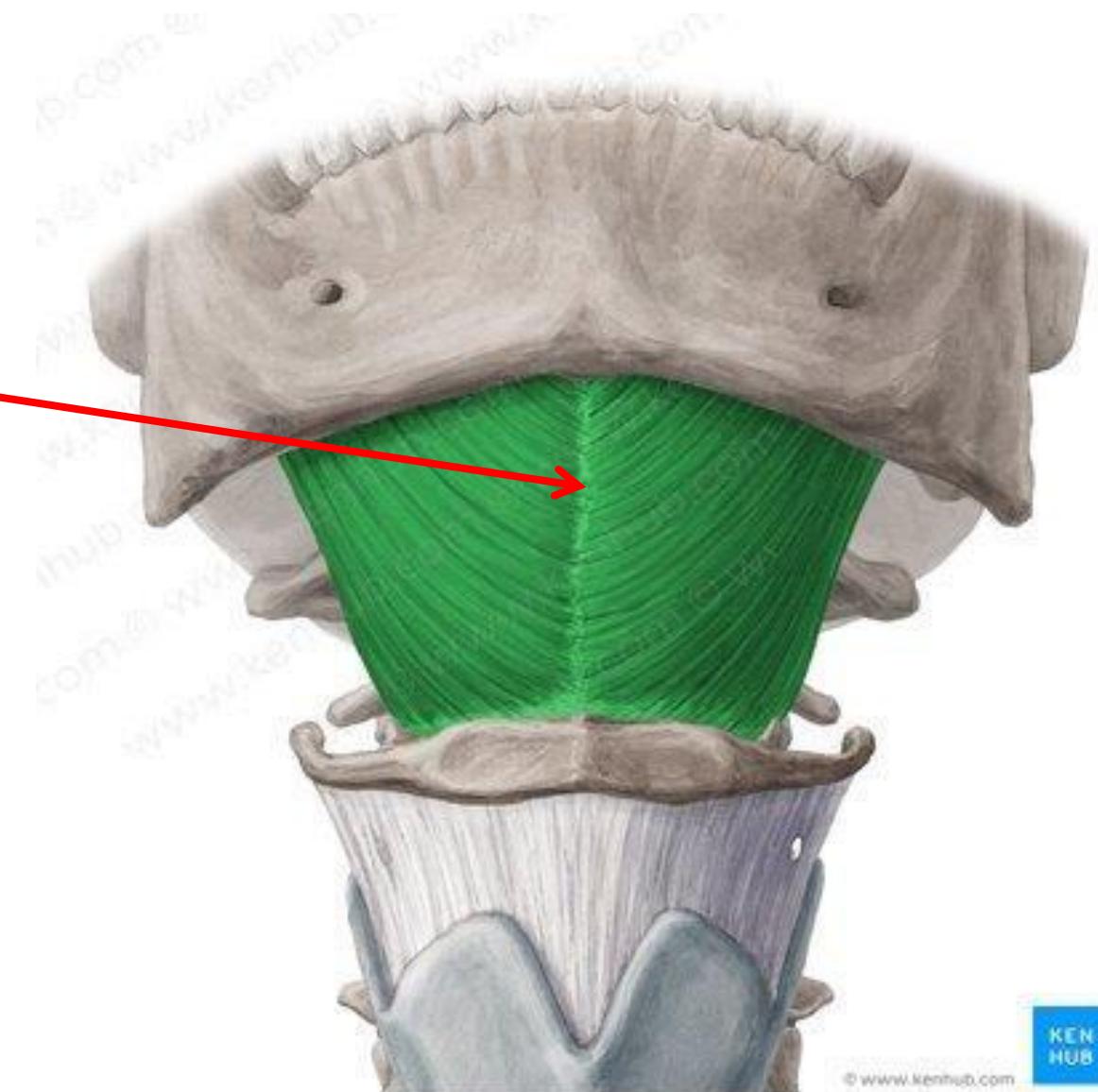
## Nerve supply:

Nerve to mylohyoid muscle

## Action:

Pull hyoid bone up

Depress the mandible



# hyoglossus muscle

## Origin:

All length of Greater horn of hyoid

## Insertion:

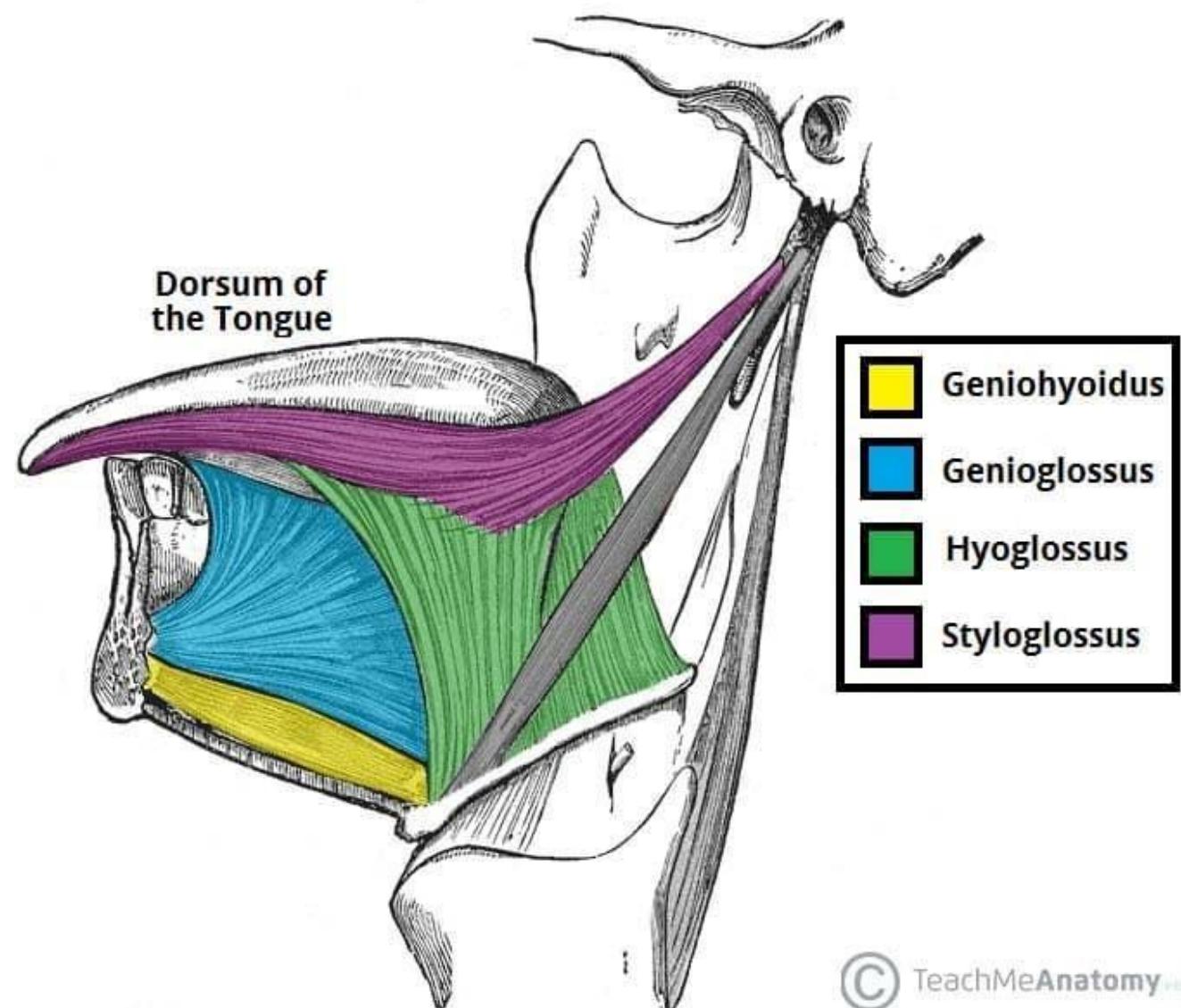
Posterior ½ of side of the tongue

## Nerve supply:

Hypoglossal nerve

## Action:

- Depress posterior part of tongue
- As in suckling
- Elevate hyoid bone



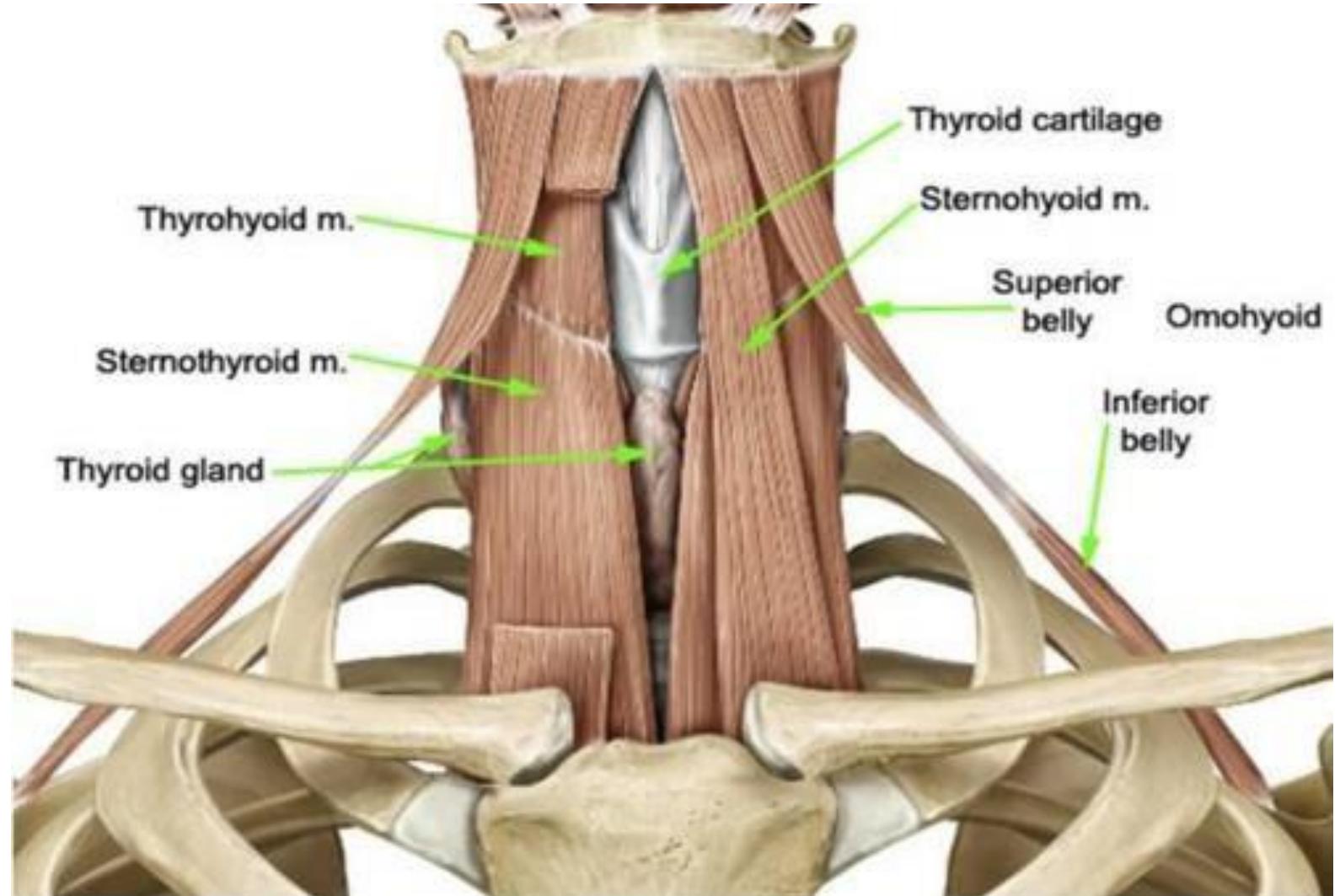
# infra hyoid group of muscles

✓ **Sternohyoid muscle**

✓ **sternothyroid muscle**

✓ **Thyrohyoid muscle**

✓ **Omohyoid muscle**



# sternohyoid muscle

## Origin:

Back of manubrium sterni

Back of medial end clavicle

Back of sternoclavicular joint

## Insertion:

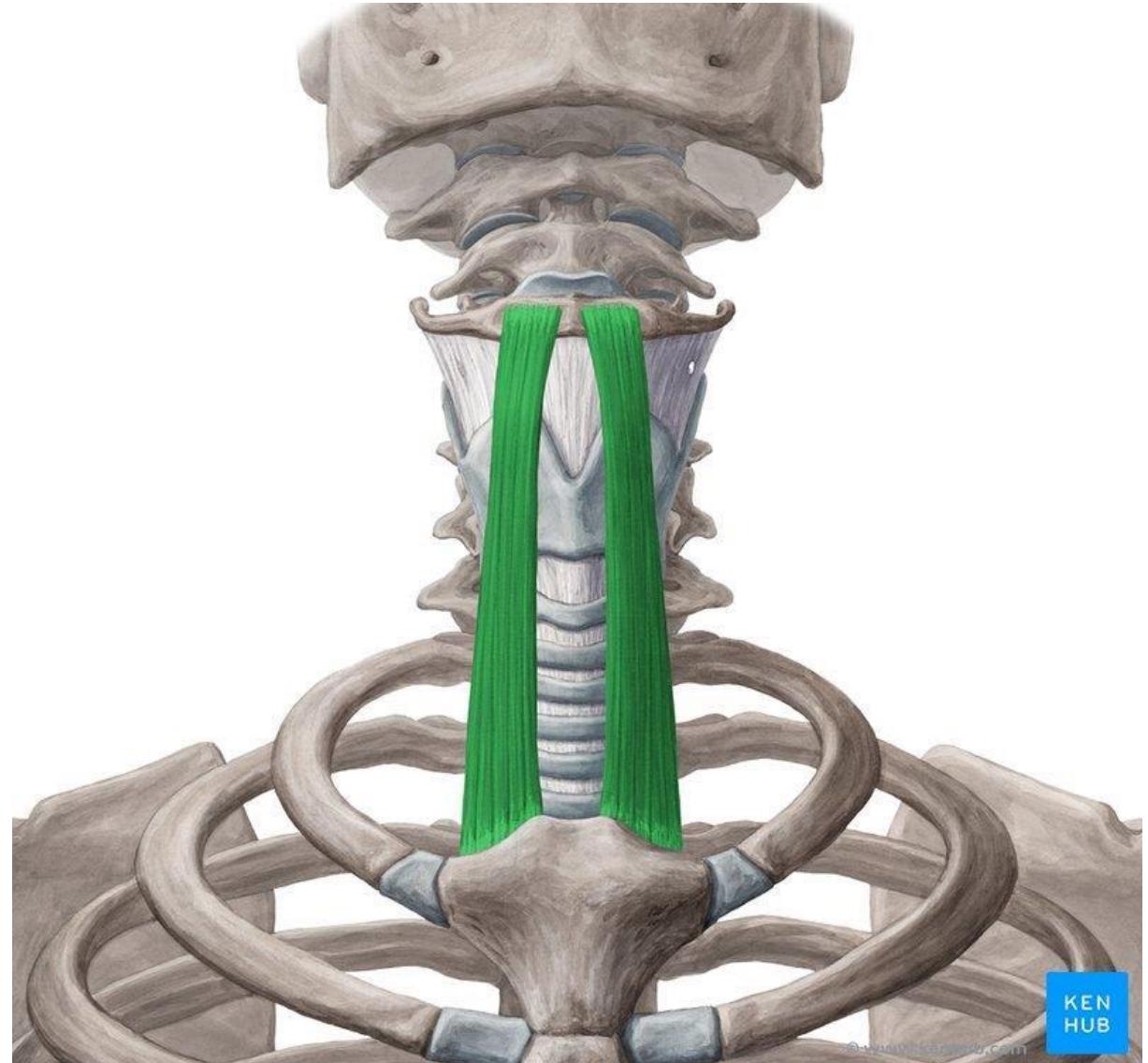
Lower border of body of hyoid bone

## Action:

- Depress hyoid bone
- During deglutition *عملية البلع*

➤ N supply

✓ Ansa cervicalis



# sternothyroid muscle

## Origin:

Back of manubrium sterni

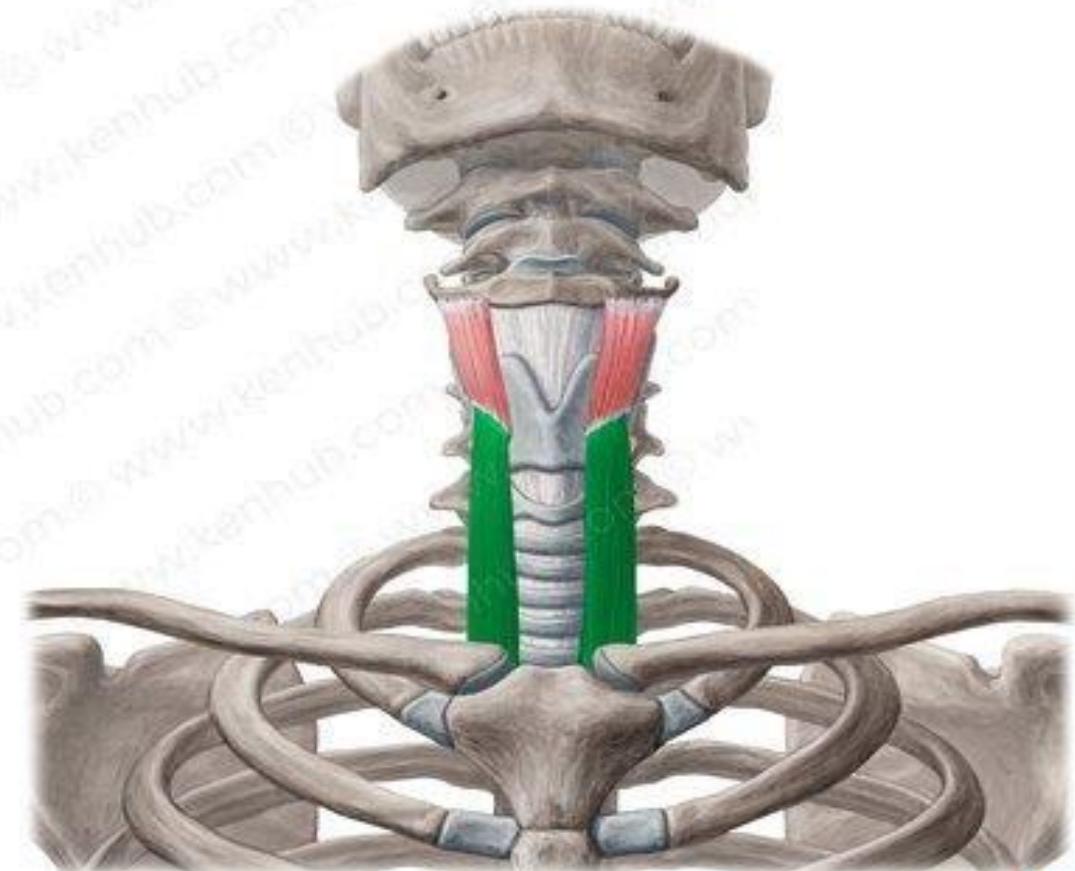
Lower than sternohyoid origin

## Insertion:

Oblique line of thyroid cartilage

## Action:

- Depress larynx ? Because thyroid cartilage is part of the larynx.



# Thyrohyoid muscle

## Origin:

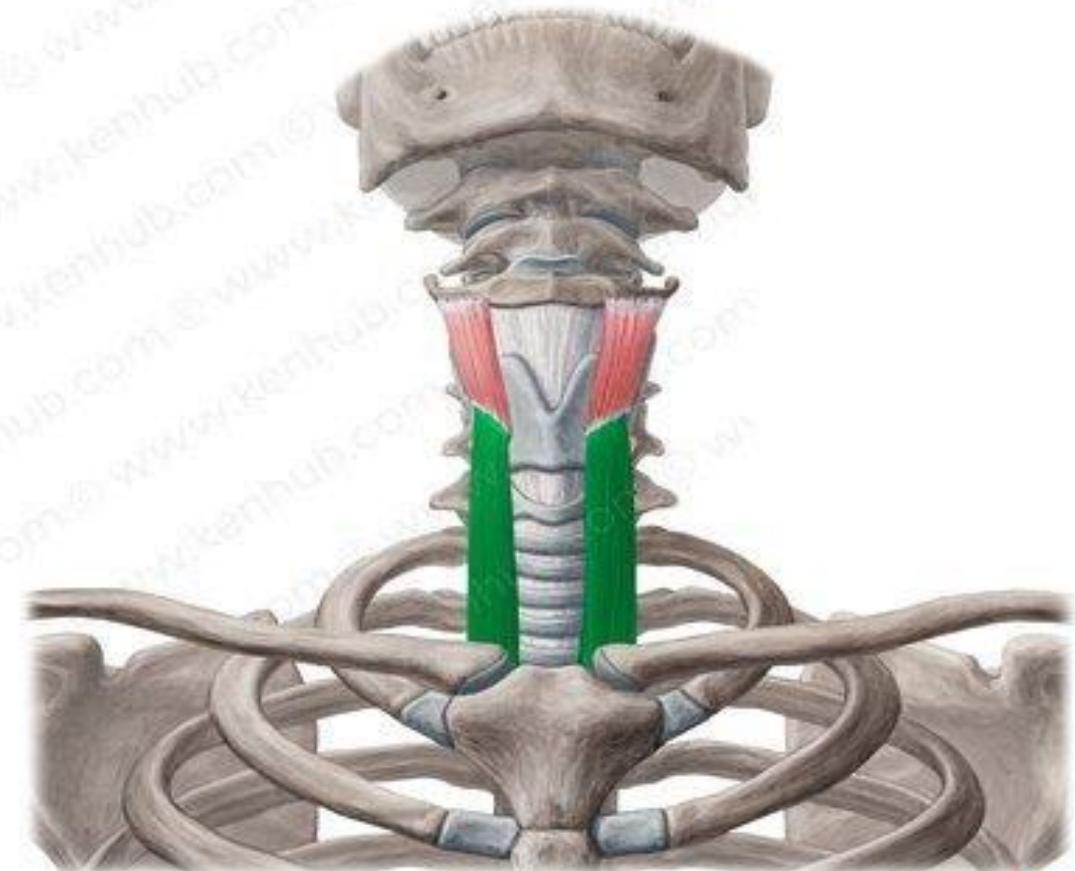
Oblique line of thyroid cartilage

## Insertion:

Lower border of greater horn of hyoid bone

## Action:

- Depress hyoid bone
- Elevate larynx



# Omohyoid muscle

## Origin:

### Anterior (superior) belly:

lower border of body of hyoid bone

### Posterior (inferior) belly:

supra scapular notch of the scapula

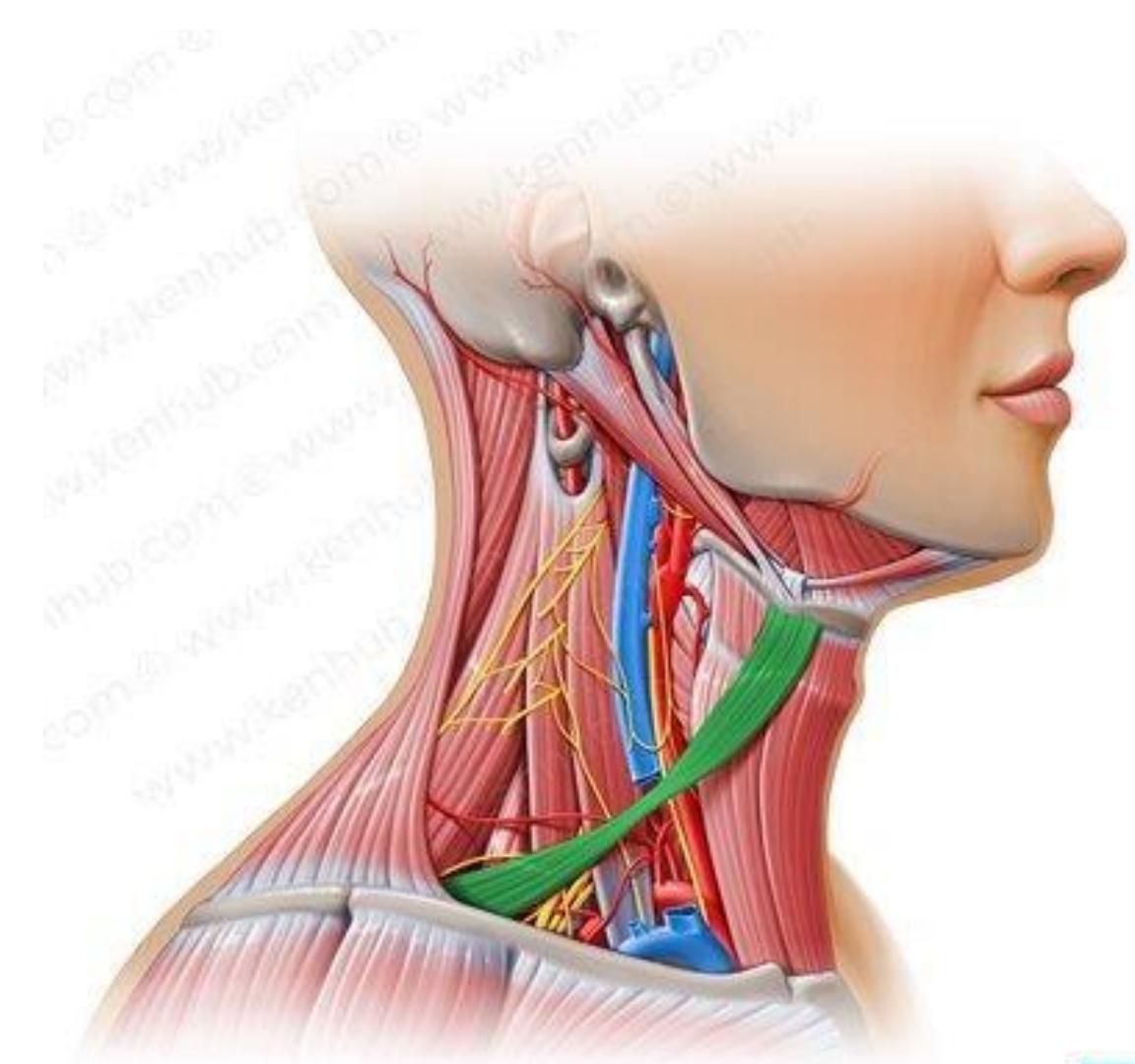
## Insertion: intermediate tendon

(deep to sternomastoid)

attached to clavicle by fibrous sling.

## Action:

- Depress hyoid bone



# Ansa cervicalis

**Nerve loop formed by 2 rami:**

**Descends hypoglossi (superior):**

12 cr. Nerve & C1

**Descends cervicalis (inferior):** C2 & C3

**Supply:** all infrahyoid muscles except  
**thyrohyoid** supplied by **C1 via**  
**hypoglossal nerve.**

**Site:** on anterior wall of carotid sheath.

