



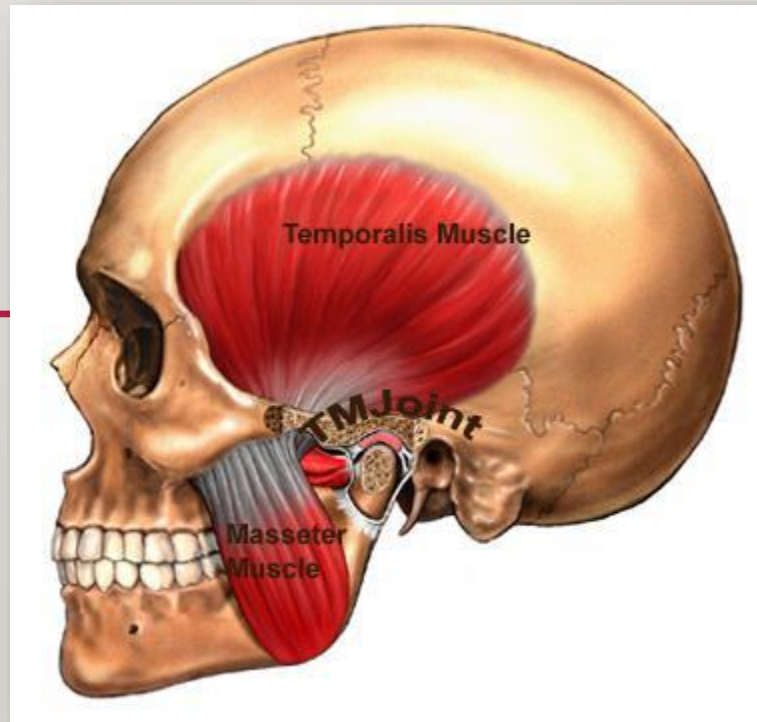
# EXTRAORAL EXAMINATION

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**Dr Maryam Jalili**

Oral Medicine Specialist

# MUSCLES OF MASTICATION



# DESCRIPTION

3

They are **functionally** classified as: •

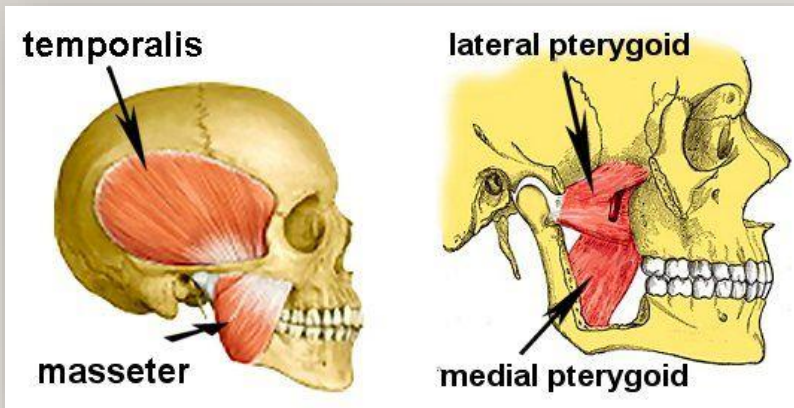


## Jaw elevators: •

- Masseter
- Temporalis
- Medial pterygoid
- Upper head of lateral pterygoid

## Jaw depressors •

- Lower head of lateral pterygoid
- Anterior digastric
- Geniohyoid
- Mylohyoid



# ELEVATOR MUSCLES



the “ primary Muscles of Mastication”

**4** powerful muscles :

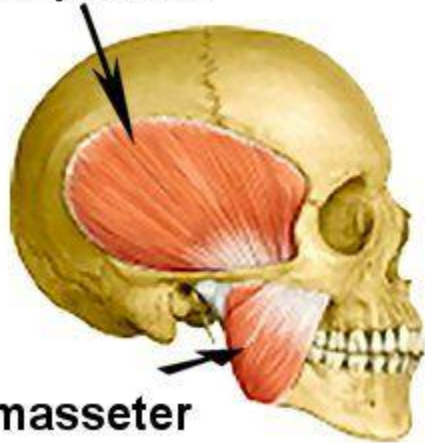
**Masseter**

**Temporalis**

**Medial Pterygoid**

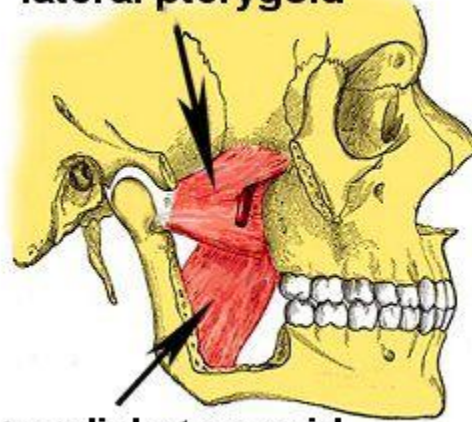
**Lateral pterygoid**

temporalis



masseter

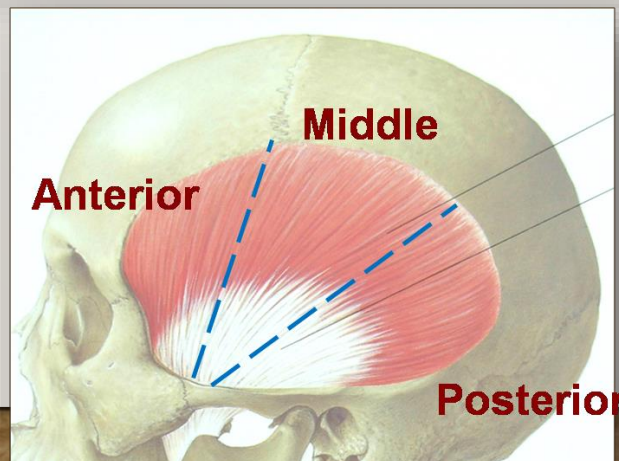
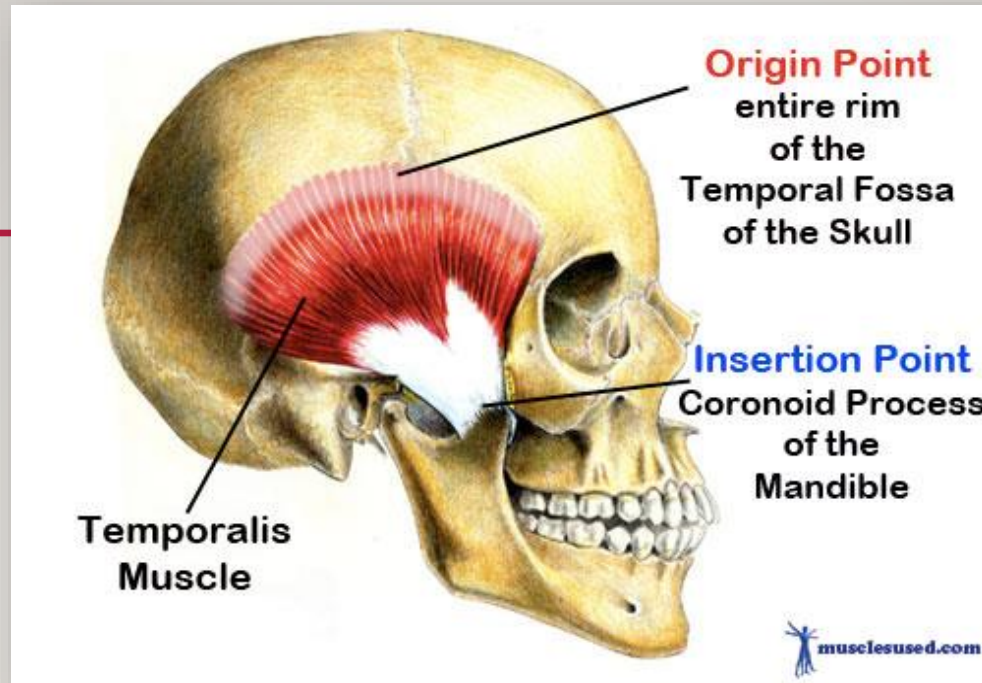
lateral pterygoid



medial pterygoid

# TEMPORALIS

5



# *TEMPORALIS*



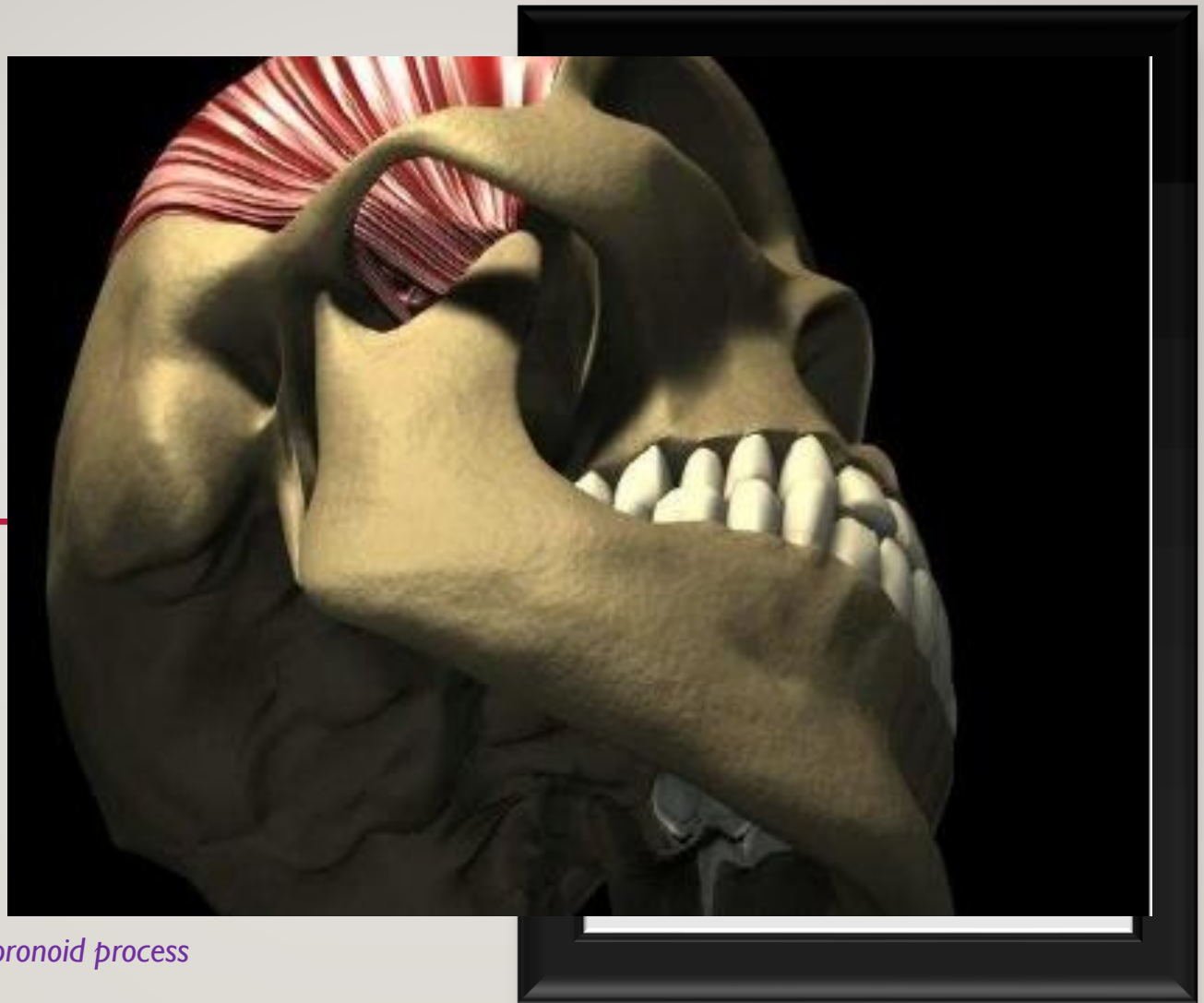
ORIGIN

temporal fossa

# *INSERTION*

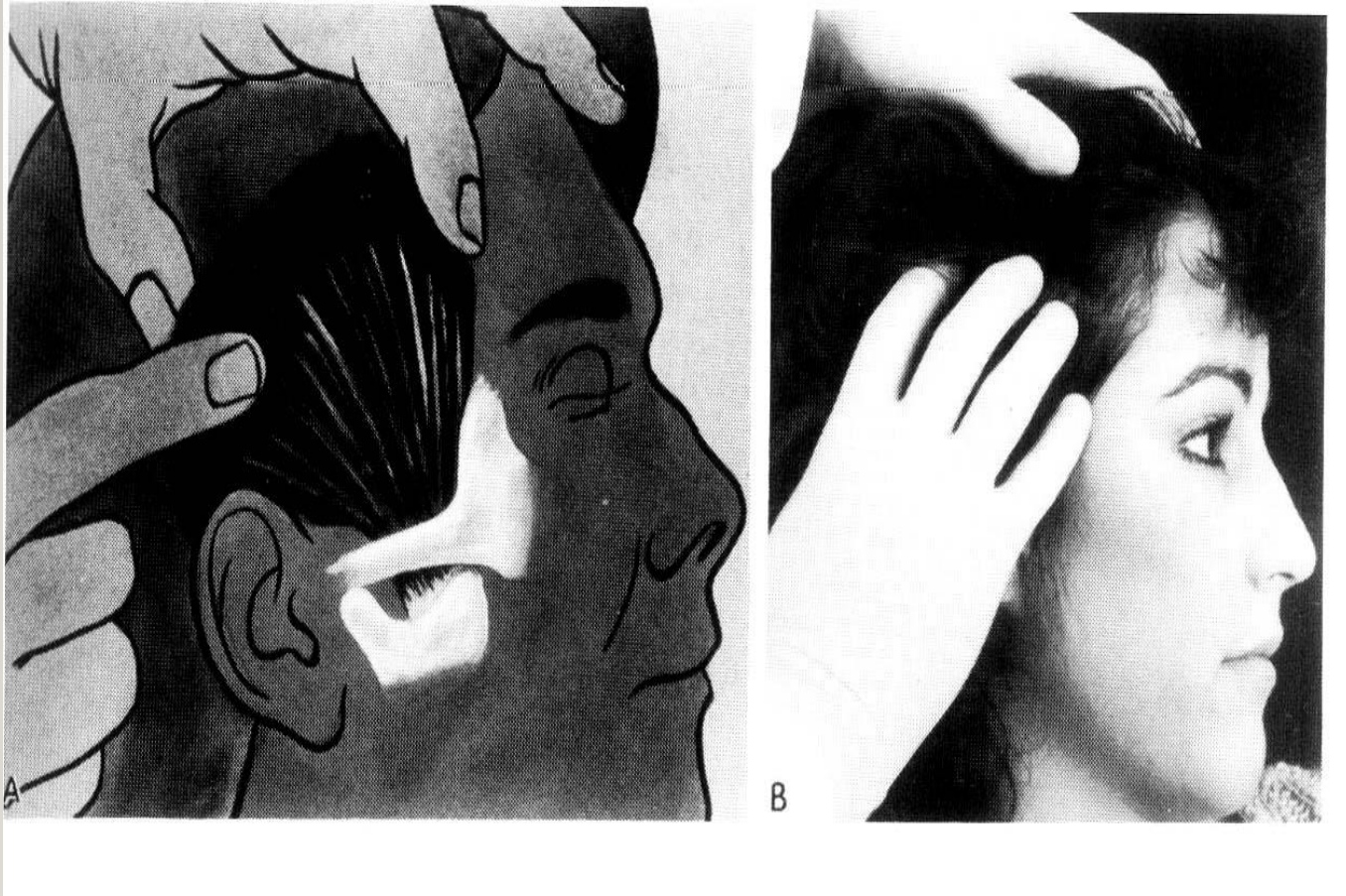
*Margins & deep surface of coronoid process*

*Anterior Border of Ramus*



# TEMPORALIS

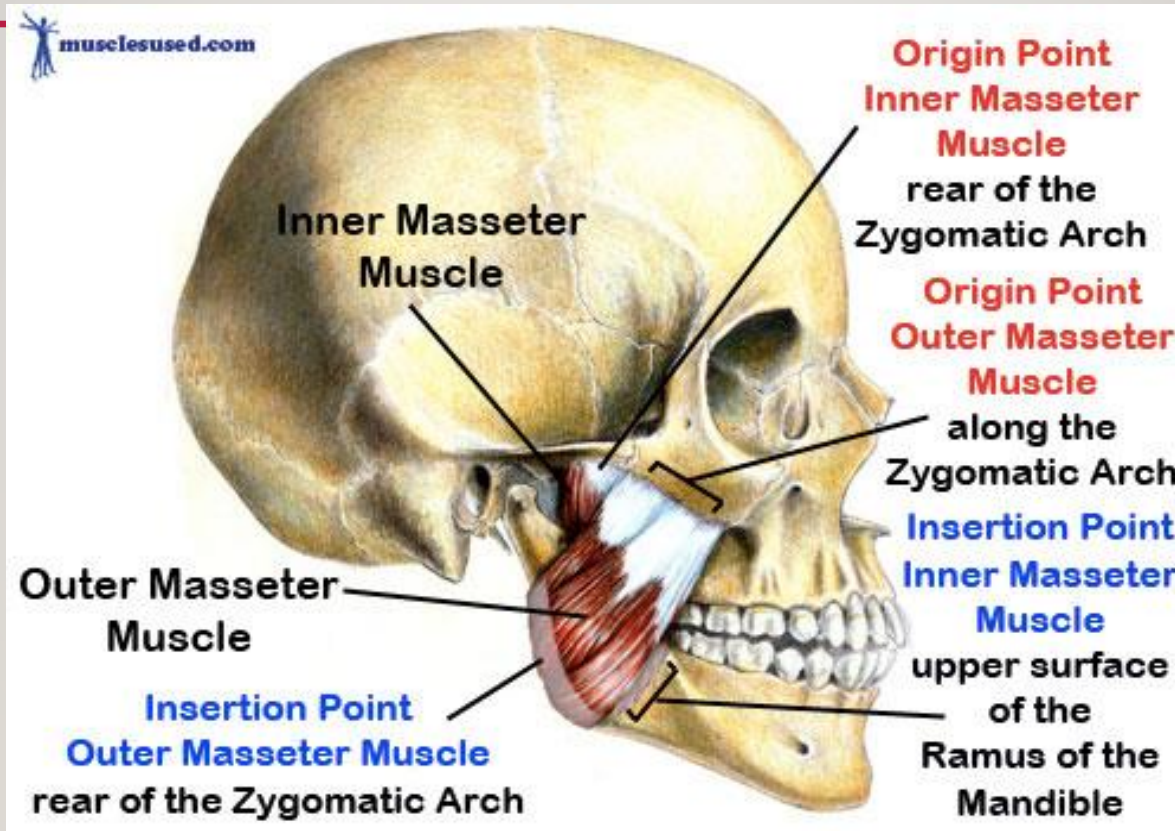
8



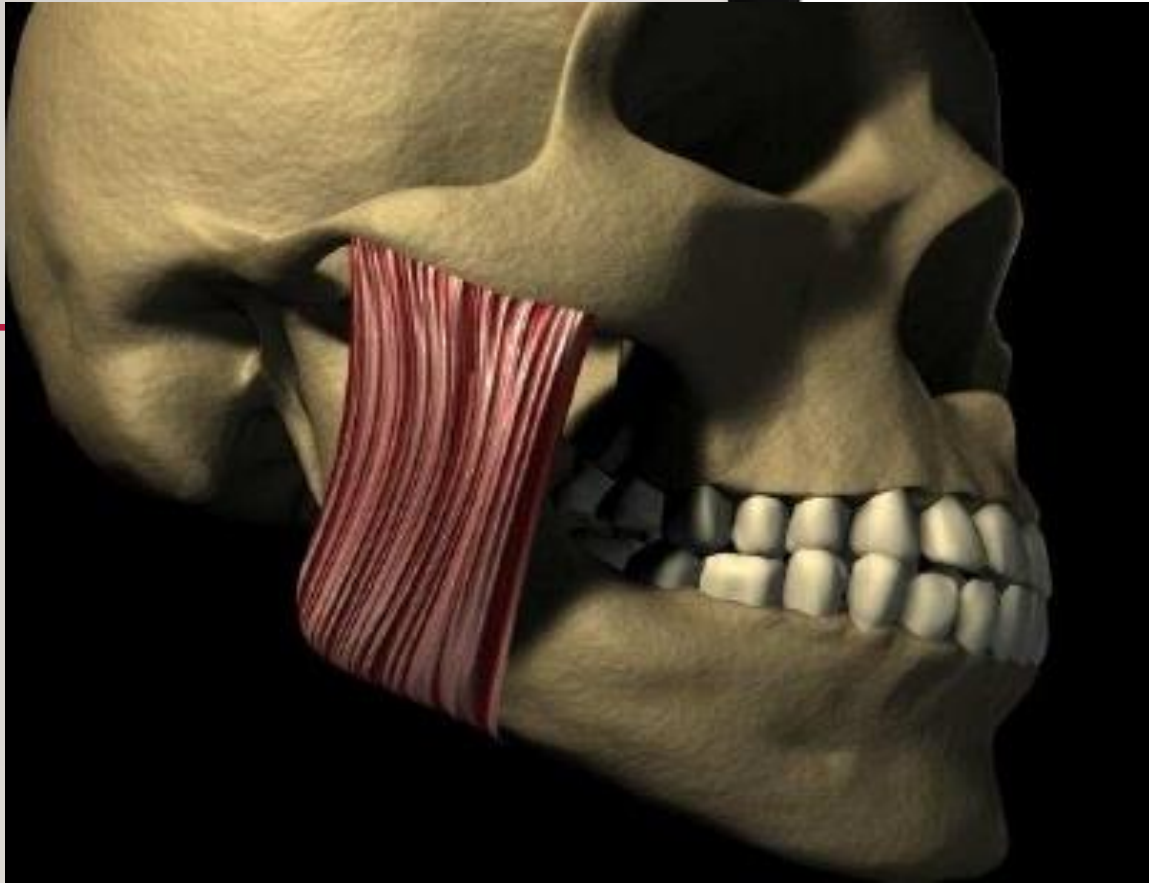
# MASSETER



9



# *MASSETER*



# ACTION

**Elevation(bilateral):**masseter elevates the mandible to occlude the teeth in mastication.

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**Ipsilateral excursion(unilateral):**as the origin of the masseter muscle is slightly lateral to its insertion , a single masseter muscle can move the mandible to the same side.



**Unilateral chewing**

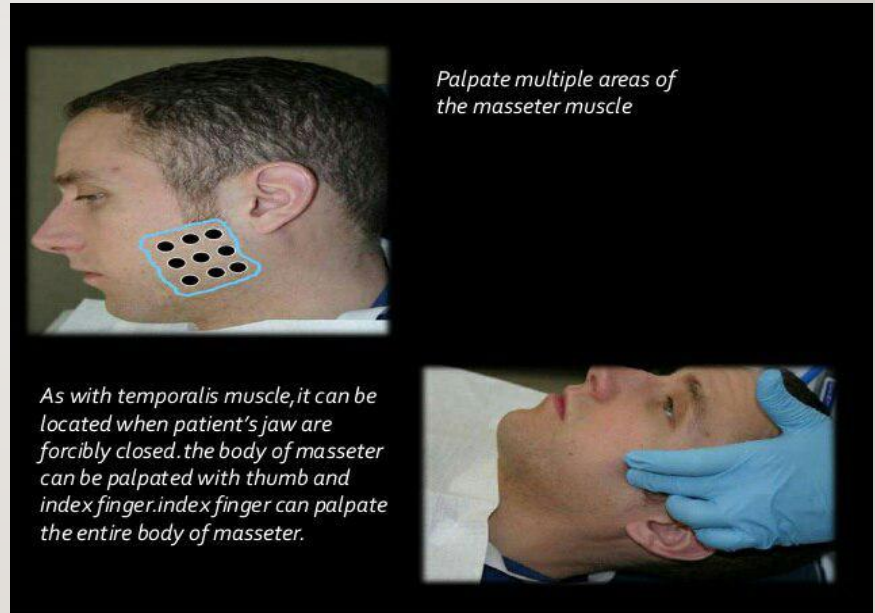
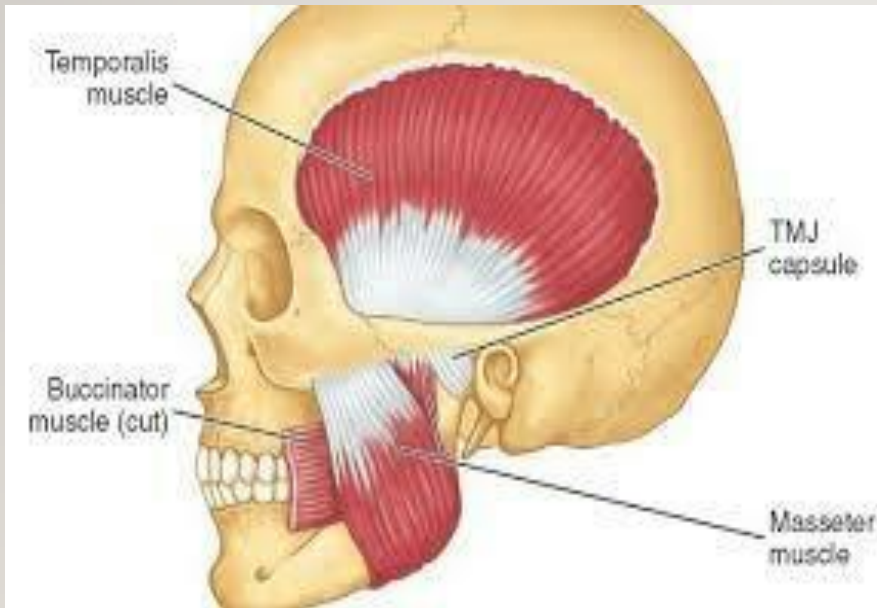
**Retrusion: (bilateral):** when the mandible is in a protruded position the deep fibers are in a position to retrude the mandible

# MASSETER

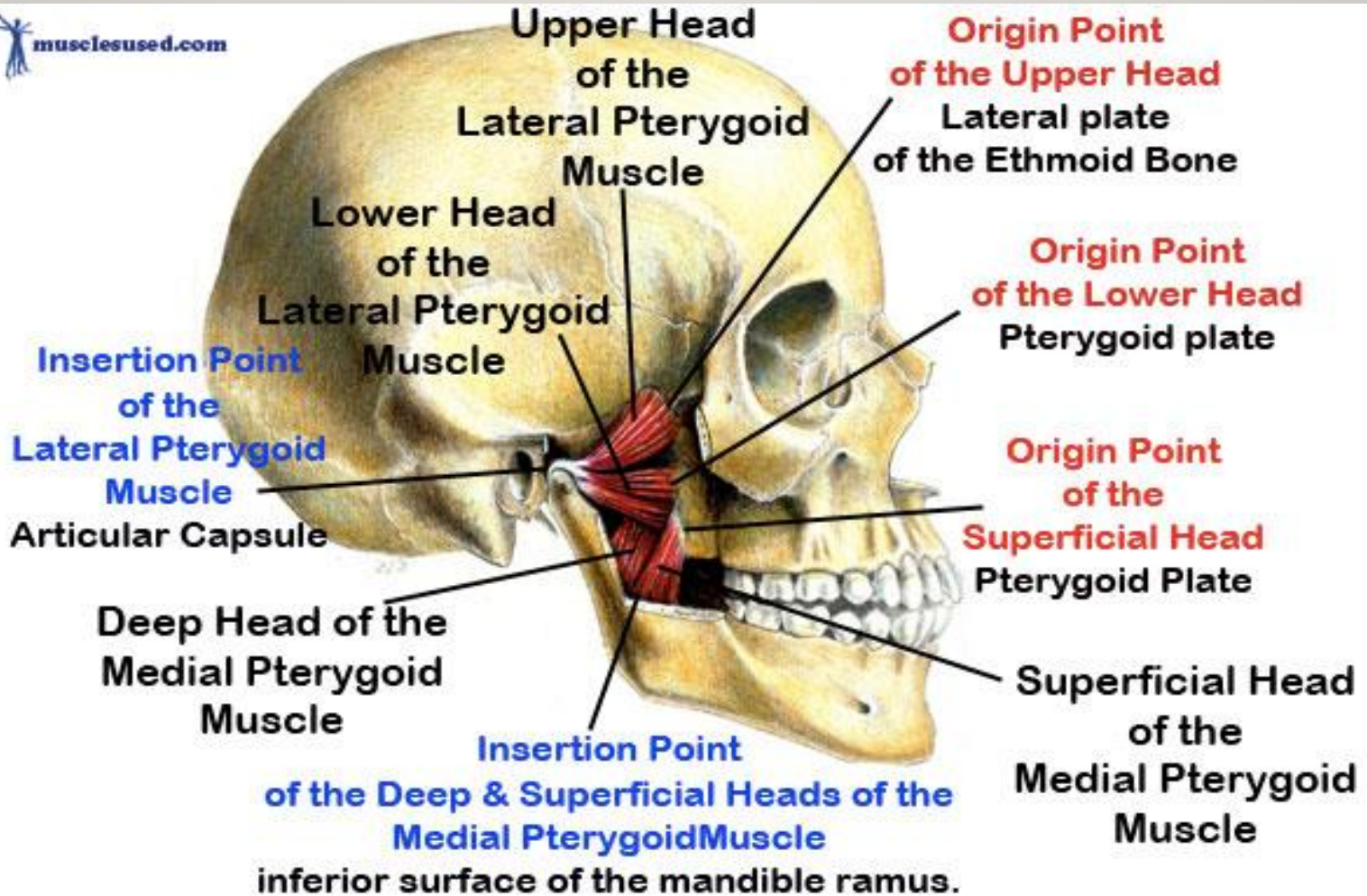
12



## 2.Masseter



# PTERYGOIDS



# PTERYGOIDS

15

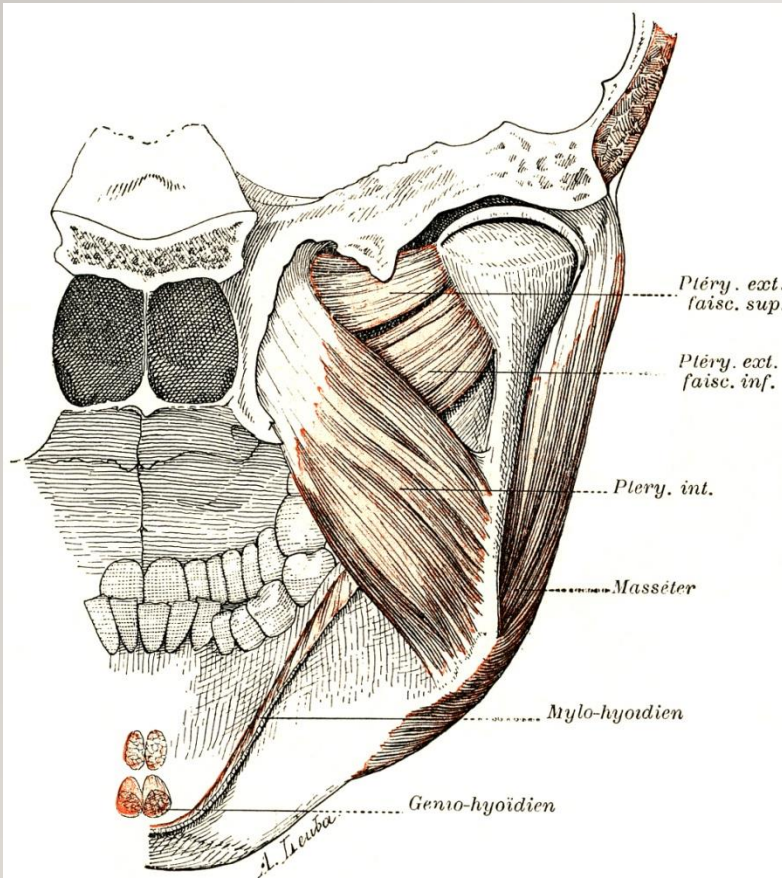
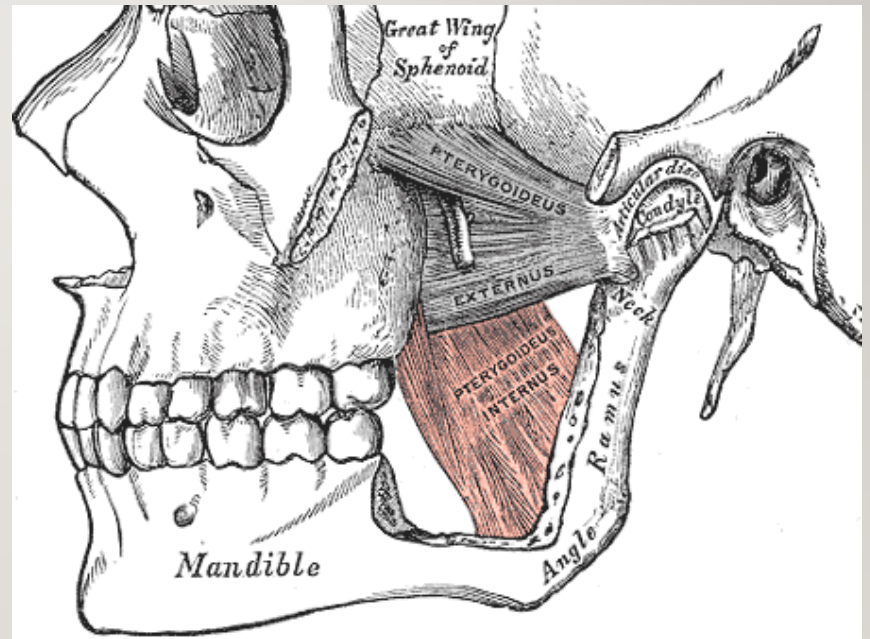


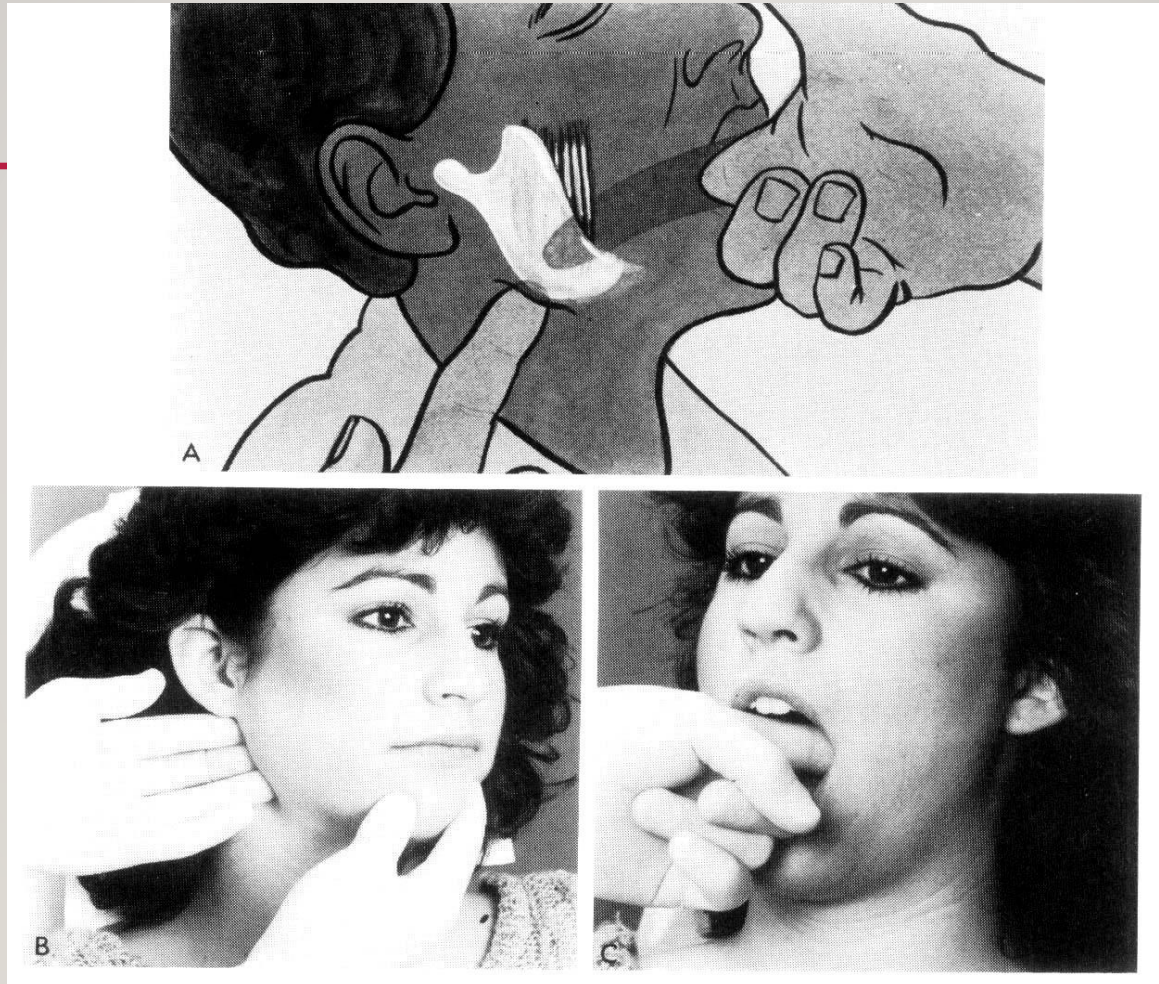
FIG. 136. — Muscles ptérygoidiens.

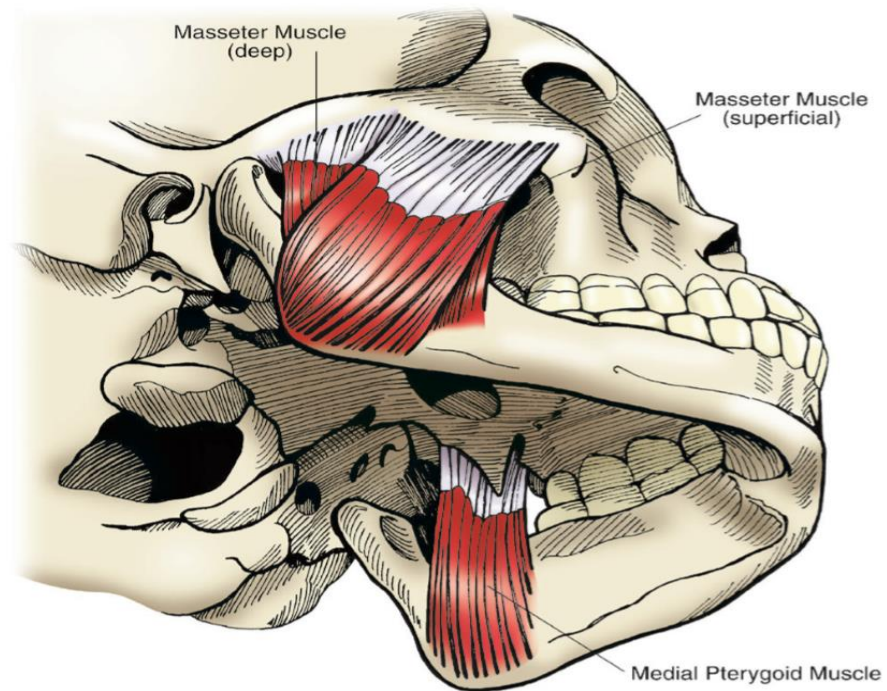


# MEDIAL PTERYGOID



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**FIGURE 11-6** The masseter and medial pterygoid muscles have their insertions at the inferior border of the mandibular angle. They join together to form a sling that cradles the ramus of the mandible and produces the powerful forces required for chewing. The masseter muscle has been divided into a deep portion and a superficial portion.

# ACTION

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**Elevation (bilateral)** : The medial pterygoid acting along with the masseter muscle are powerful elevators of the mandible •

**Closes the jaw** •

# LATERAL PTERYGOID

19

2 heads: •

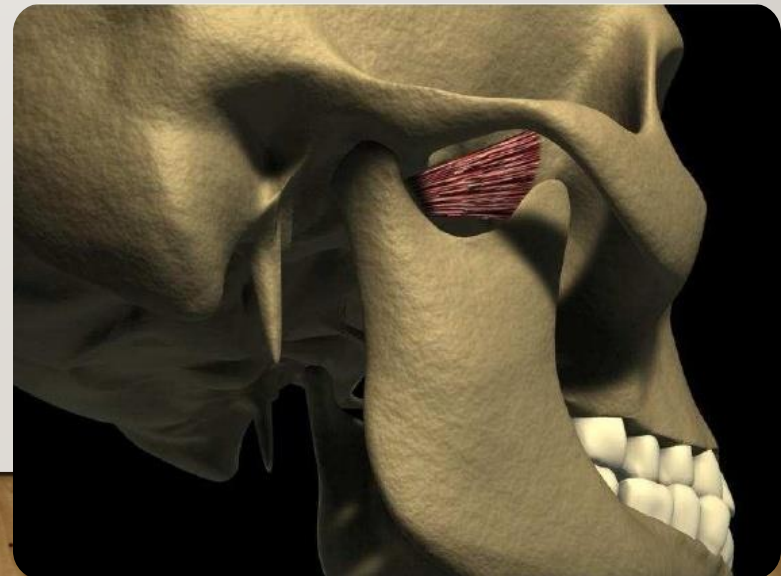
Upper head: •

Origin: pterygoid PLATE & crest of the greater wing of sphenoid •

Insertion: enters the TMJ & inserted into: •

A) articular disc

c) capsule of TMJ (anterior aspect)



# LATERAL PTERYGOID

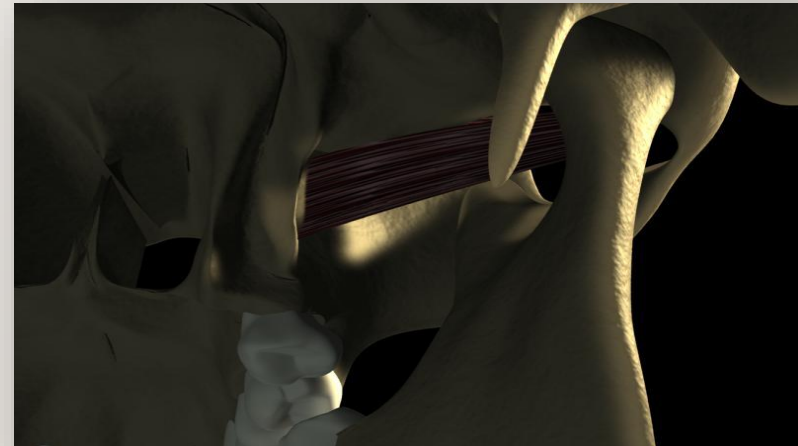
20

Lower head: •

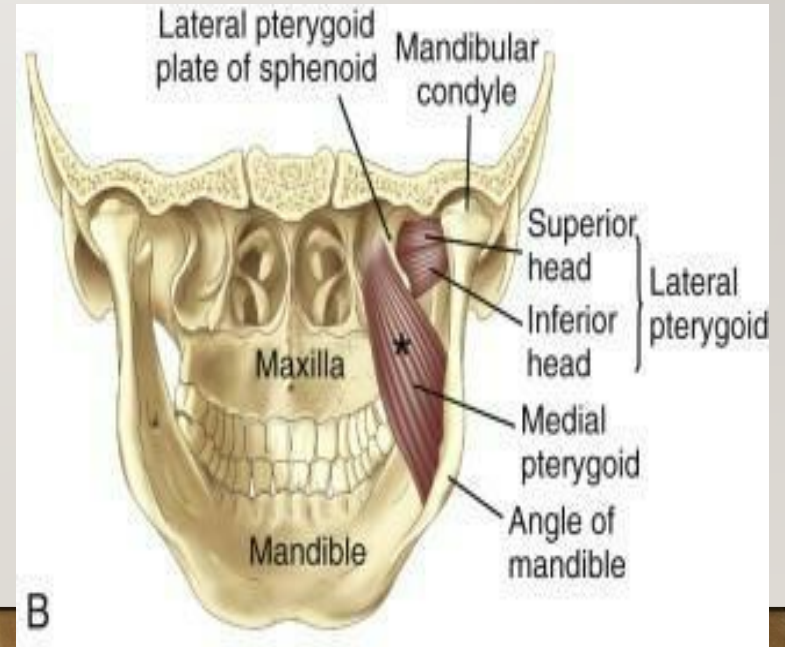
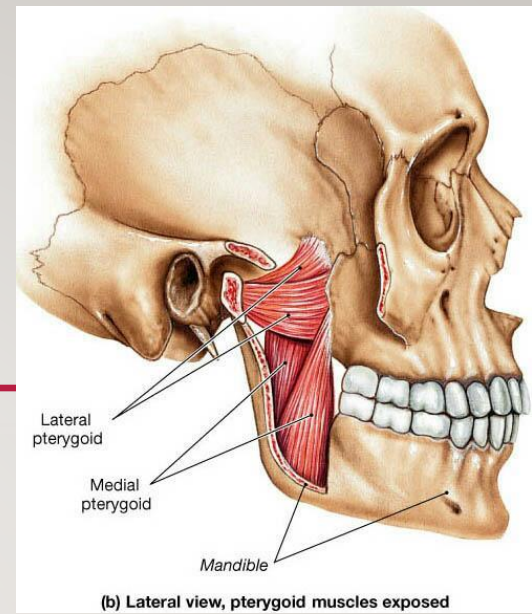
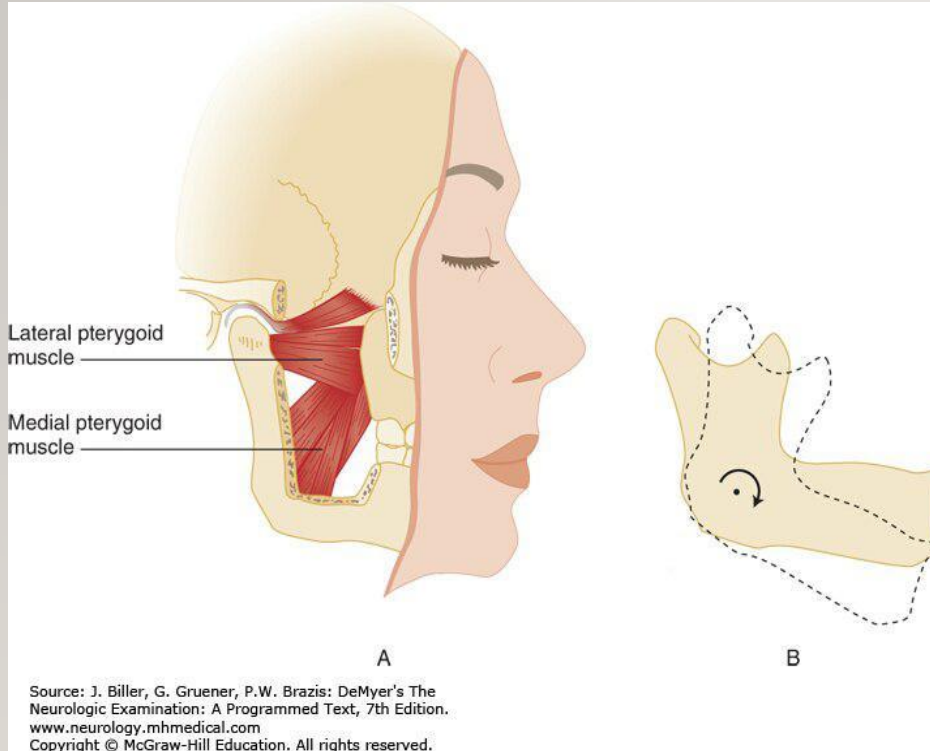


Origin: Lateral surface of the lateral pterygoid plate •

Insertion: as upper head •

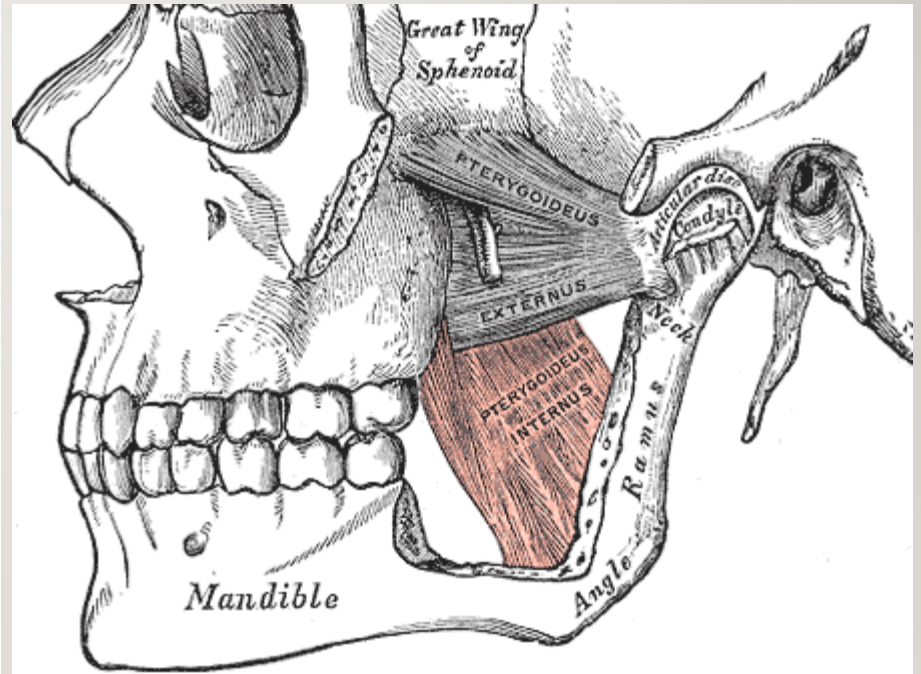


# 3.Lateral Pterygoid



# LATERAL PTERYGOID

22



# Action

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Both muscles produce depression of the mandible .۱



protrusion .۲

Side movement .۳

# ACCESSORY MUSCLES



## *Suprahyoid muscles*

Mylohyoid •

Geniohyoid •

Stylohyoid •

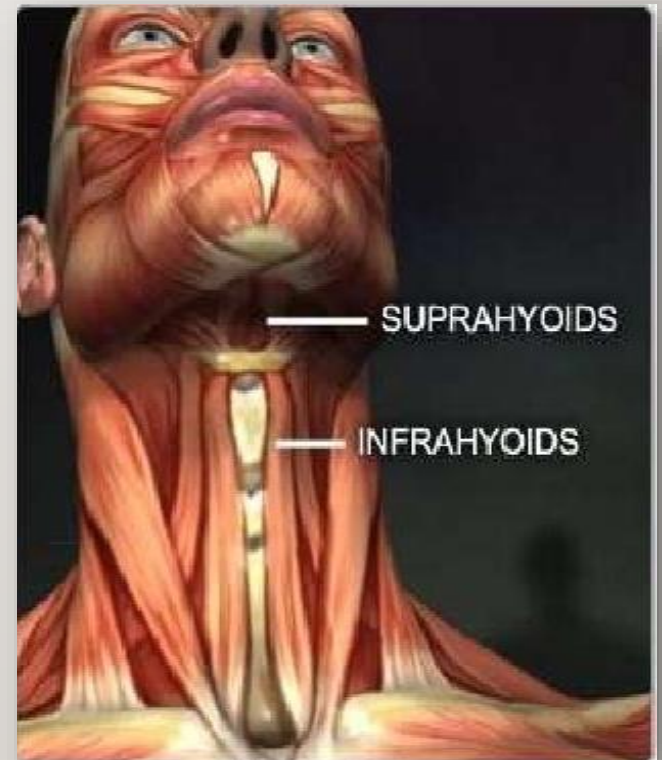
Digastric •

## *Infrahyoid Muscles*

Omohyoid •

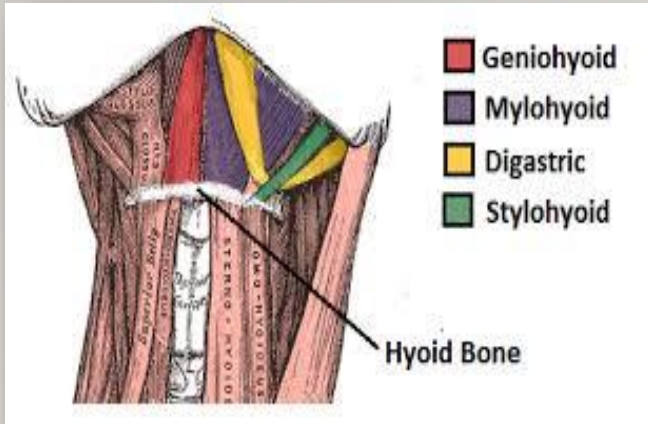
Thyrohyoid •

Sternohyoid •



# *SUPRAHYOID MUSCLES*

25



Supra hyoid muscles: •

digastric , stylohyoid , geniohyoid , mylohyoid

Mandible depression

(provided that the hyoid bone is stabilized at the same time)





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*SCM*



**THANKS FOR  
YOUR ATTENTION**

