

أهلا

يُمنع أخذ السليفات بدون
إذن المحرر واي اجراء
يخالف ذلك يقع تحت
طائلة المسئولية القانونية



الأستاذ الدكتور يوسف حسين

أستاذ التشريح وعلم الأجنحة - كلية الطب - جامعة الزقازيق - مصر

رئيس قسم التشريح والأنسجة والأجنحة - كلية الطب - جامعة مؤتة - الأردن

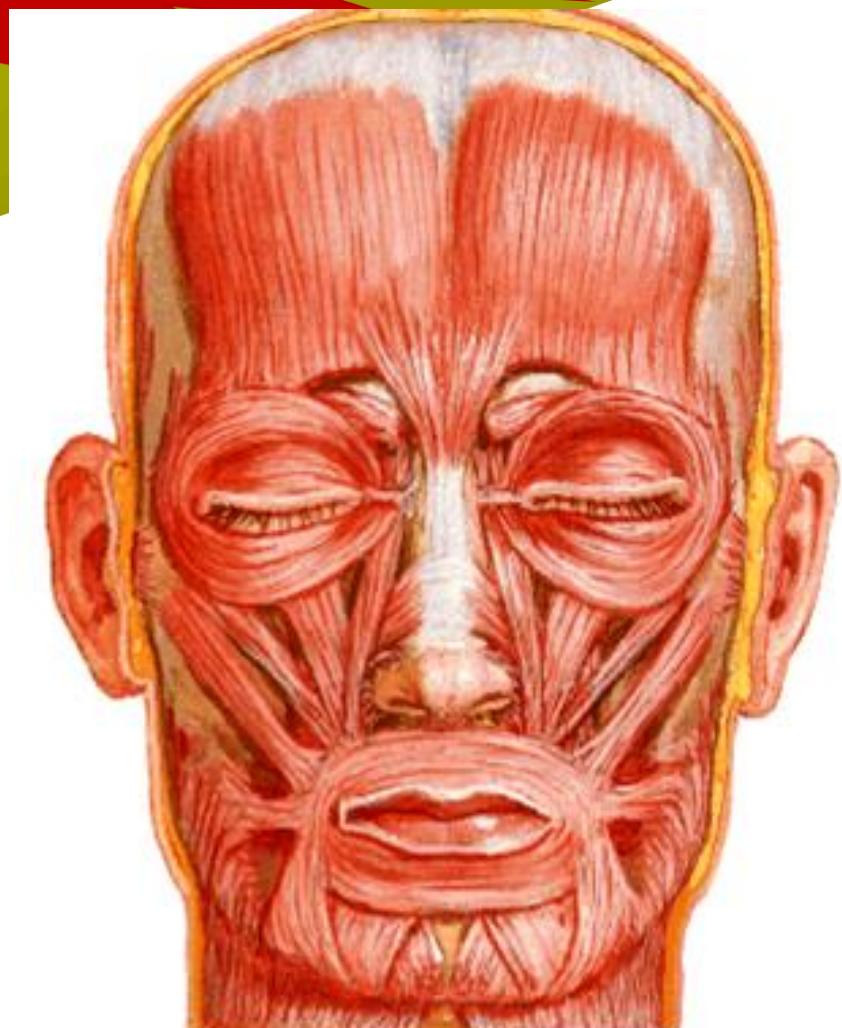
دكتوراه من جامعة كولونيا المانيا

جروب الفيس د. يوسف حسين (أستاذ التشريح)

البوتنيوجرديون
د. يوسف حسين

Muscles of Face

- All muscles of the face are supplied by **facial nerve**.
- They are developed from the **2nd pharyngeal arch**.
- They are mainly **inserted into the skin of the face**.
- When they move, produce various expressions
(Known as **muscles of expression**).



B) Muscles of the nose

- 1- Procerus.
- 2- Compressor and dilator nasi muscles.
- 3- Depressor septi.
- 4- Nasalis.

D) Muscles of the auricle

- 1- Auricularis anterior.
- 2- Auricularis superior.
- 3- Auricularis posterior.
- 4- Intrinsic muscles of the auricle.

A) Muscles of the eyelids

- 1- Levator palpebrae superioris.
- 2- Orbicularis oculi.**
- 3- Corrugator supercilii.

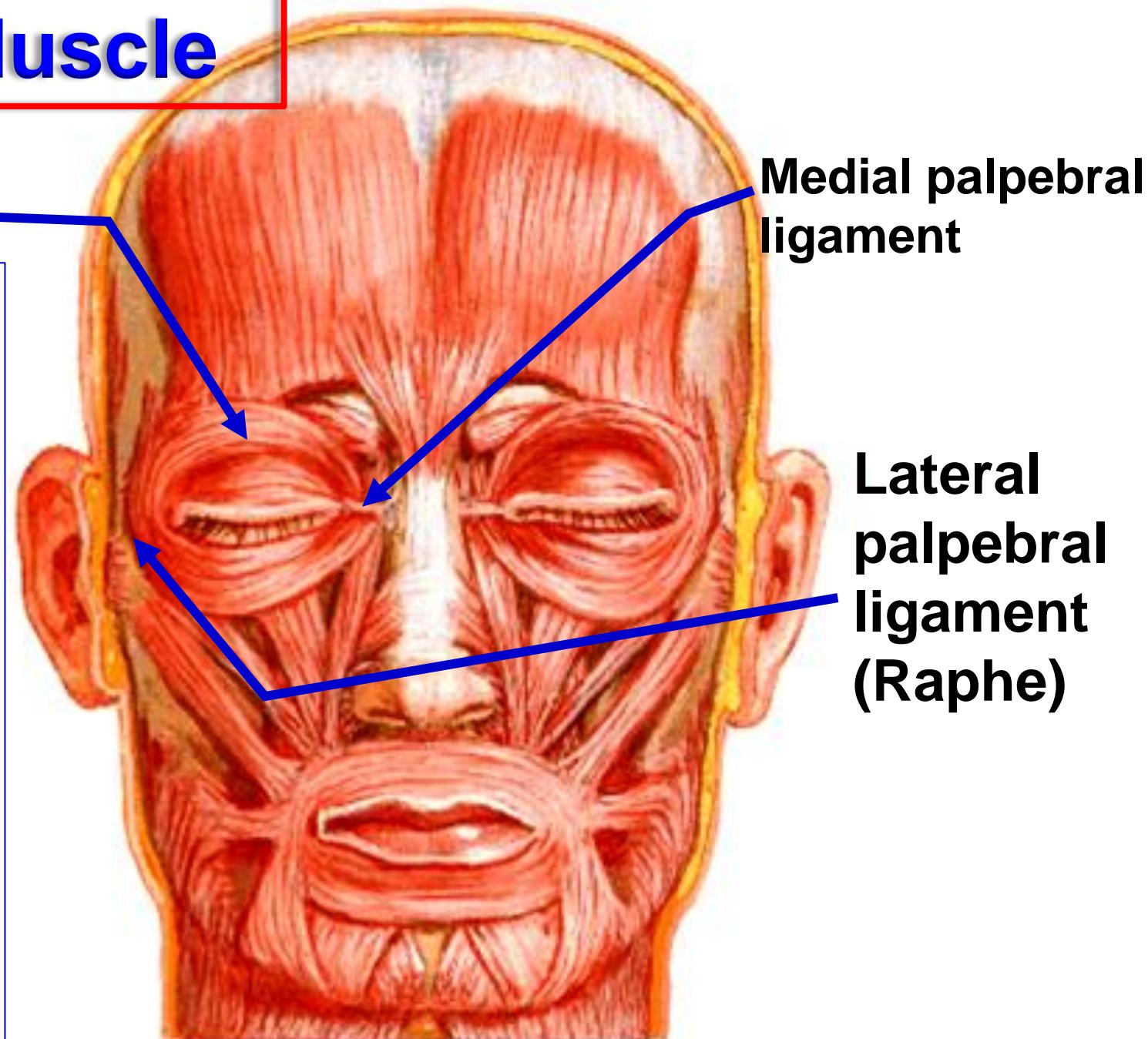
C) Muscles of the mouth

- 1- Levator labi superioris.
- 2- Levator labi superioris alaque nasi.
- 3- Zygomaticus major.
- 4- Zygomaticus minor.
- 5- Levator anguli oris.
- 6- Depressor anguli oris.
- 7- Buccinator.**
- 8- Orbicularis oris.**

Orbicularis Oculi Muscle

1- Orbital part

- **Origin:** from medial palpebral ligament, Frontal process of maxilla and nasal part of frontal bone)
- It forms complete circle around the orbit
- **Insertion:** Lateral palpebral raphe and skin of orbital region above its origin,
- **Actions:** sudden, rapid and tight closure of the eyelids (acts as protective mechanism).



Orbicularis Oculi Muscle

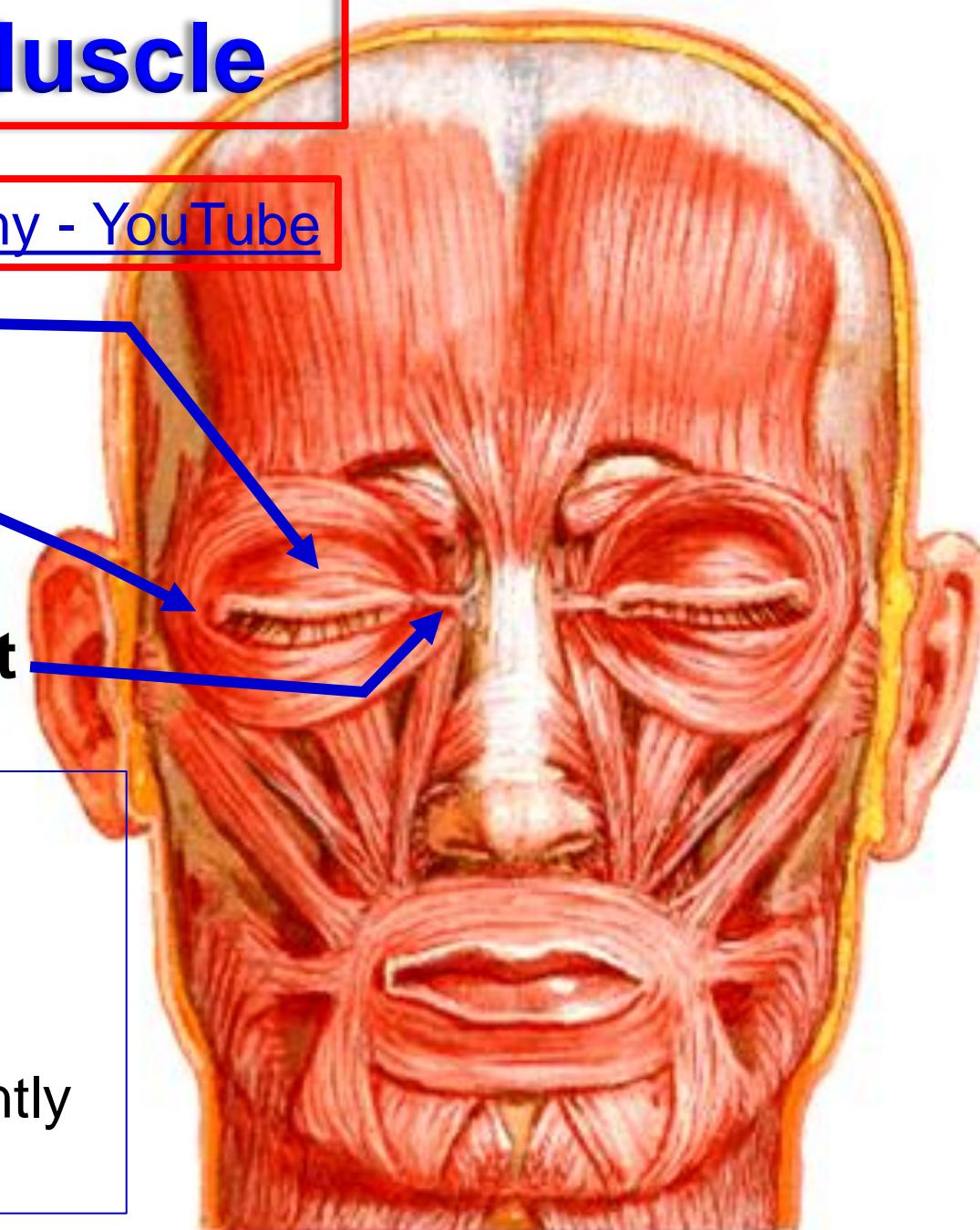
Prof. Dr. Youssef Hussein Anatomy - YouTube

2- Palpebral part

Lateral palpebral raphe

Medial palpebral ligament

- **Origin:** from medial palpebral ligament
- **Insertion:** to lateral palpebral raphe
- **Actions:** closes the eyelids gently during blinking and sleeping

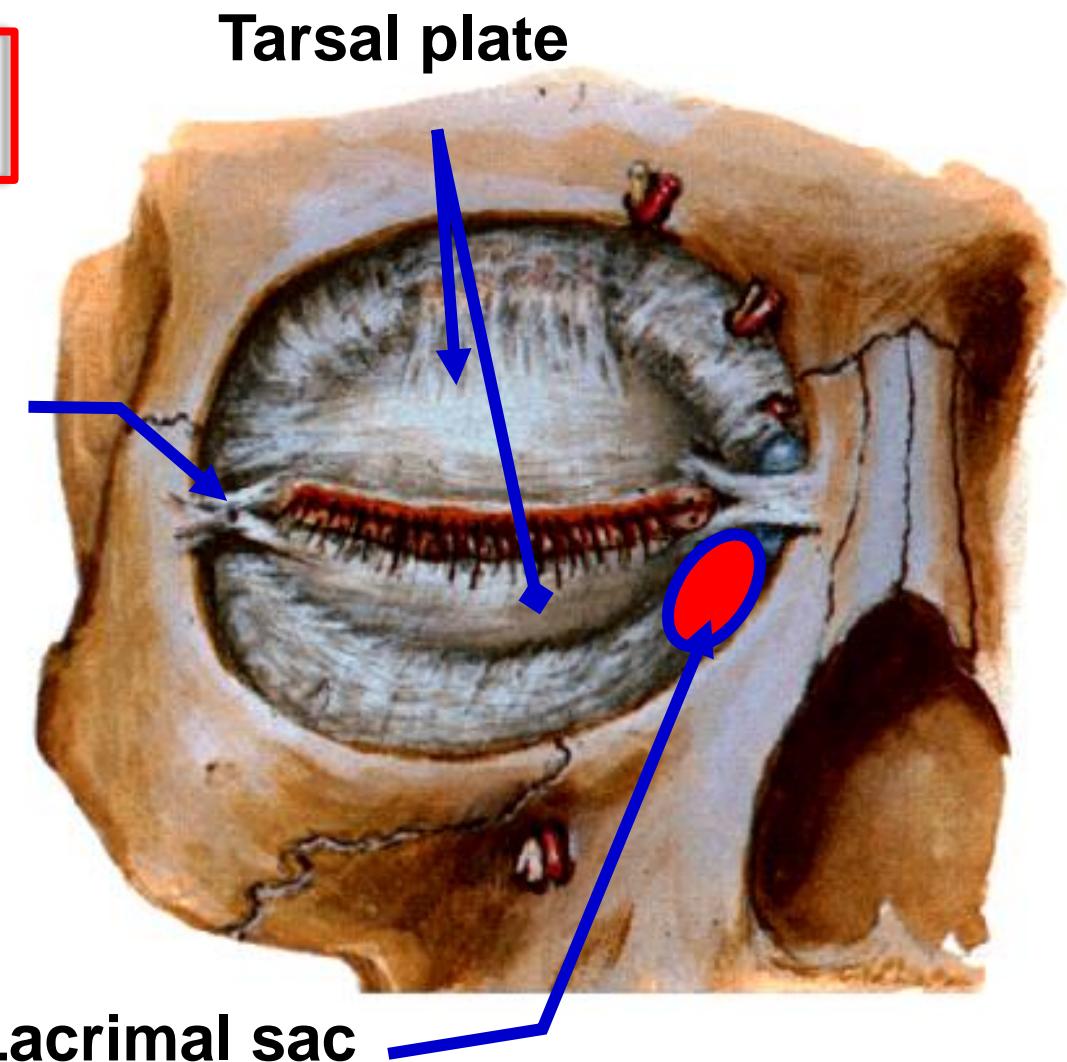


Orbicularis Oculi Muscle

3- Lacrimal part

Lateral Palpebral raphe

- **Origin:** from the lacrimal bone
- It passes behind the lacrimal sac
- **Insertion:** lacrimal fascia covering the lacrimal sac, tarsal plate of the eyelids, lateral palpebral raphe.
- **Actions:** dilates lacrimal sac which receives tears and conveys them to nasolacrimal duct
- Pulls the eye lids and tears medially.



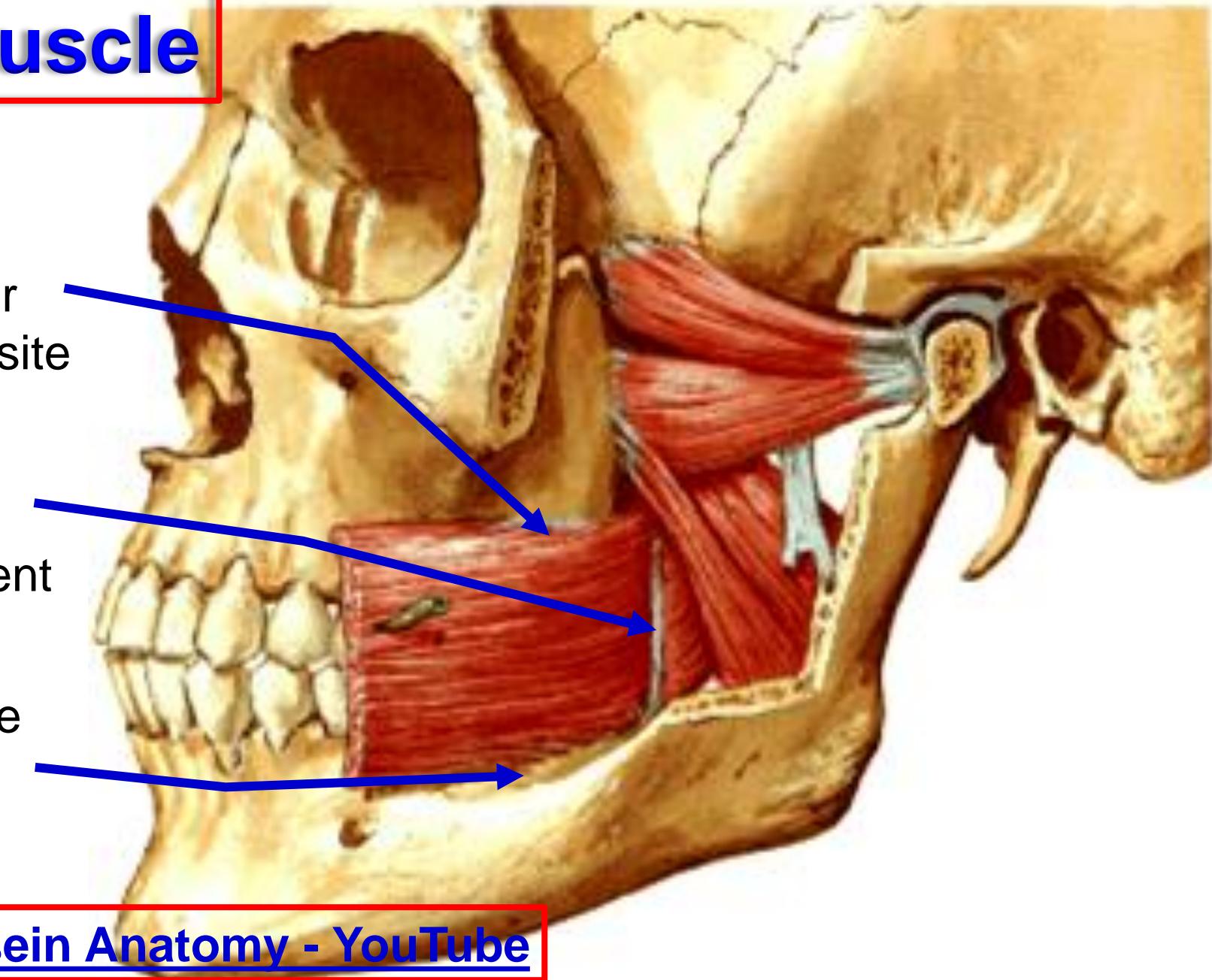
Buccinator Muscle

Origin

Upper fibres from outer surface of maxilla opposite molar teeth

Middle fibres from the pterygomandibular ligament

Lower fibres from oblique line in outer surface of mandible opposite molar teeth



Buccinator Muscle

Prof. Dr. Youssef Hussein Anatomy - YouTube

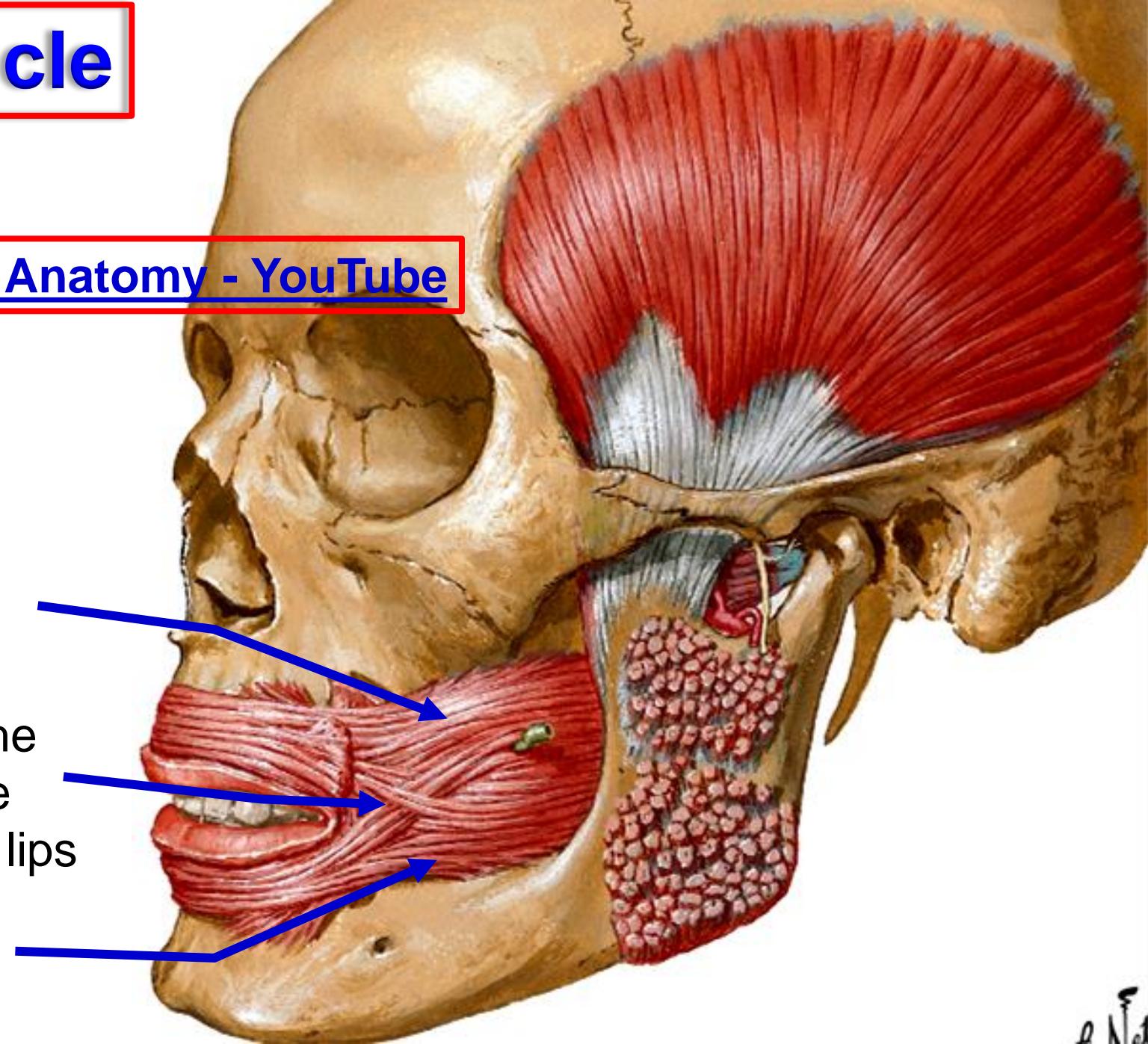
Insertion

Upper fibers into upper lip



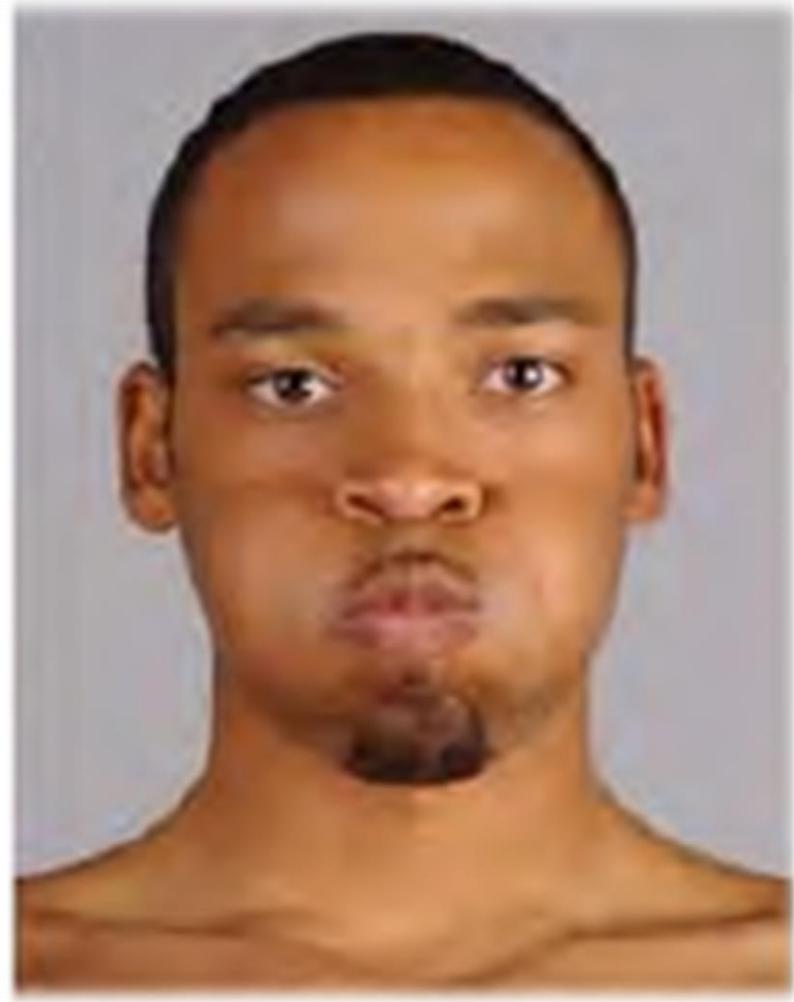
Middle fibers decussate at the lateral angle of mouth and are inserted into upper and lower lips

Lower fibers into lower lip



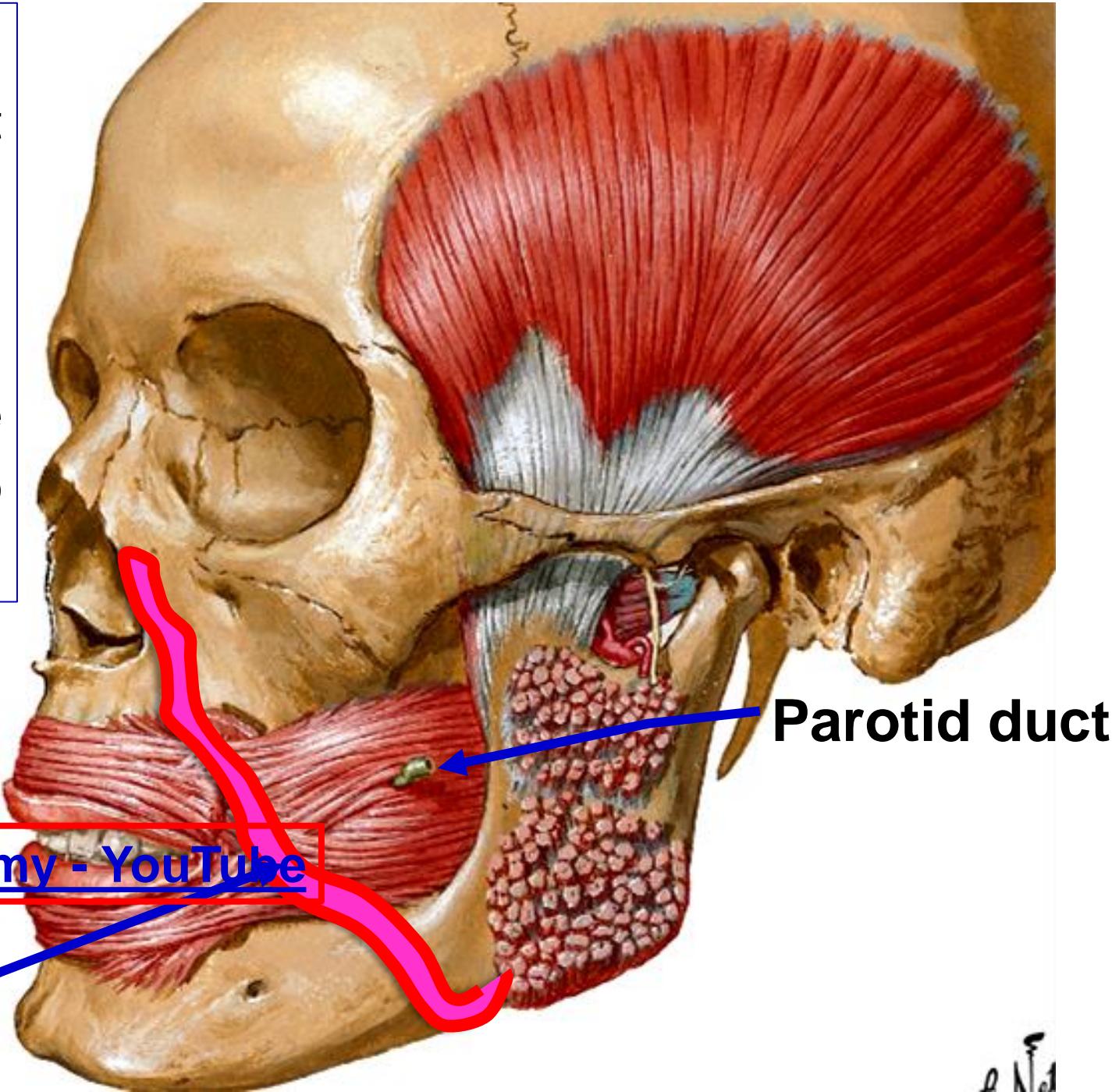
❖ **Actions of buccinator;**

- 1- It compresses the cheek against the teeth during mastication to **prevent accumulation of the food into the vestibule** of the mouth.
- 2- It expels air outside the mouth during whistling (**buccina =trumpet**).
- 3- **Buccinator with Orbicularis oris allows the mouth to keep air inside it and then blows it out (act of blowing)**
- 4- **The Buccinator is also active during suckling, and smiling**
- 5- It cause proper closure of angle of mouth and prevents dribbling of saliva



*** Relations of buccinator;**

- It is covered by buccal pad of fat and facial artery.
- It is pierced by
 - 1) Parotid duct
 - 2) Buccal branch of the mandibular nerve (sensory) to supply mucosa of cheeks.



Prof. Dr. Youssef Hussein Anatomy - YouTube

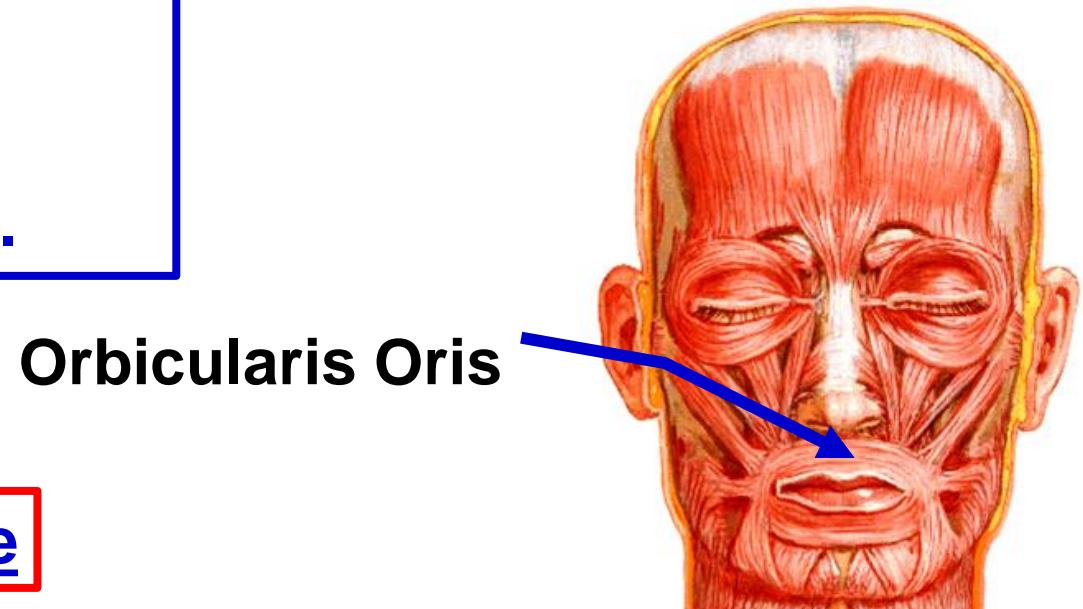
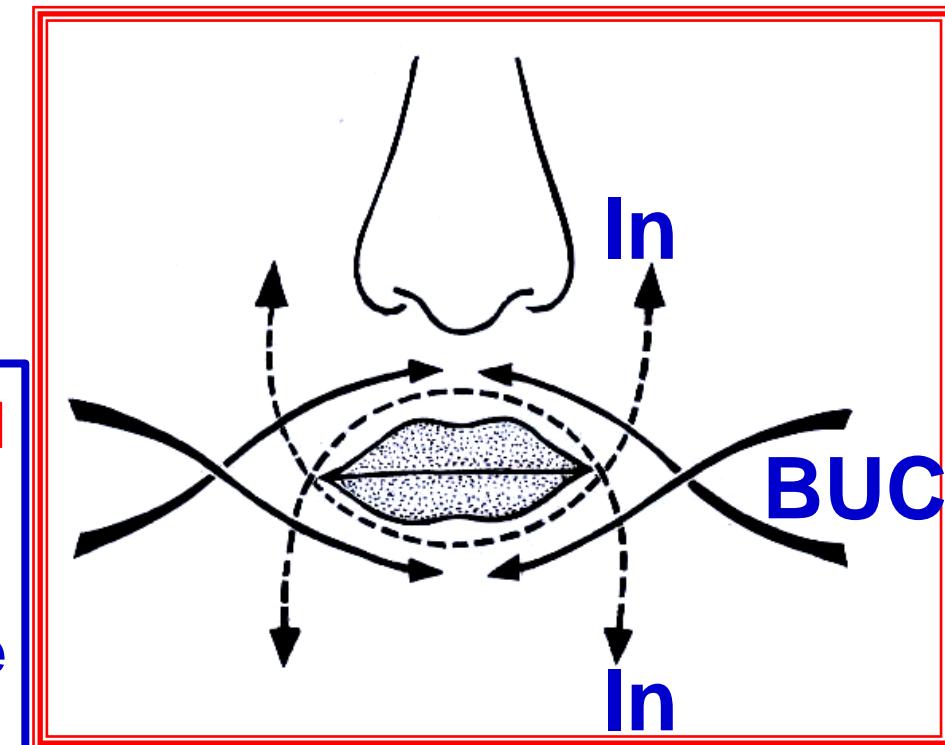
Facial artery

Parotid duct

Orbicularis Oris Muscle

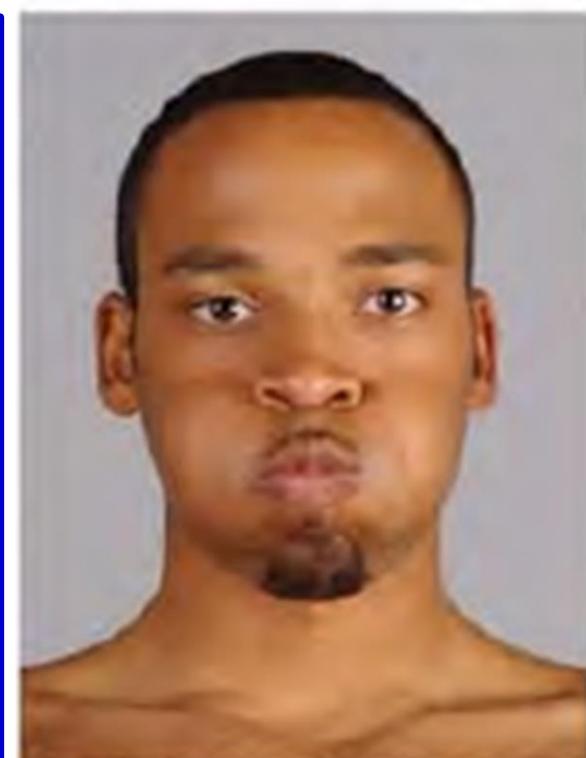
sphincter of the mouth opening

- Origin; from the outer surface maxilla and mandible opposite the incisor teeth.
- Insertion; The fibres curve around the angle of the mouth
 - a- Upper fibres inserted into the lower lib.
 - b- Lower fibres inserted into the upper lib.



* Actions;

1. Closes the mouth
2. Narrowing of the mouth, the lips into the smallest possible circle (whistling expression)
3. Important for speech, kissing.
4. **Buccinator with Orbicularis oris allows the mouth to keep air inside it and then blows it out (act of blowing)**



Buccinator + orbicularis oris



Orbicularis oris

Elevators of upper lip and angle of the mouth

Levator labii superioris
alaque nasi.

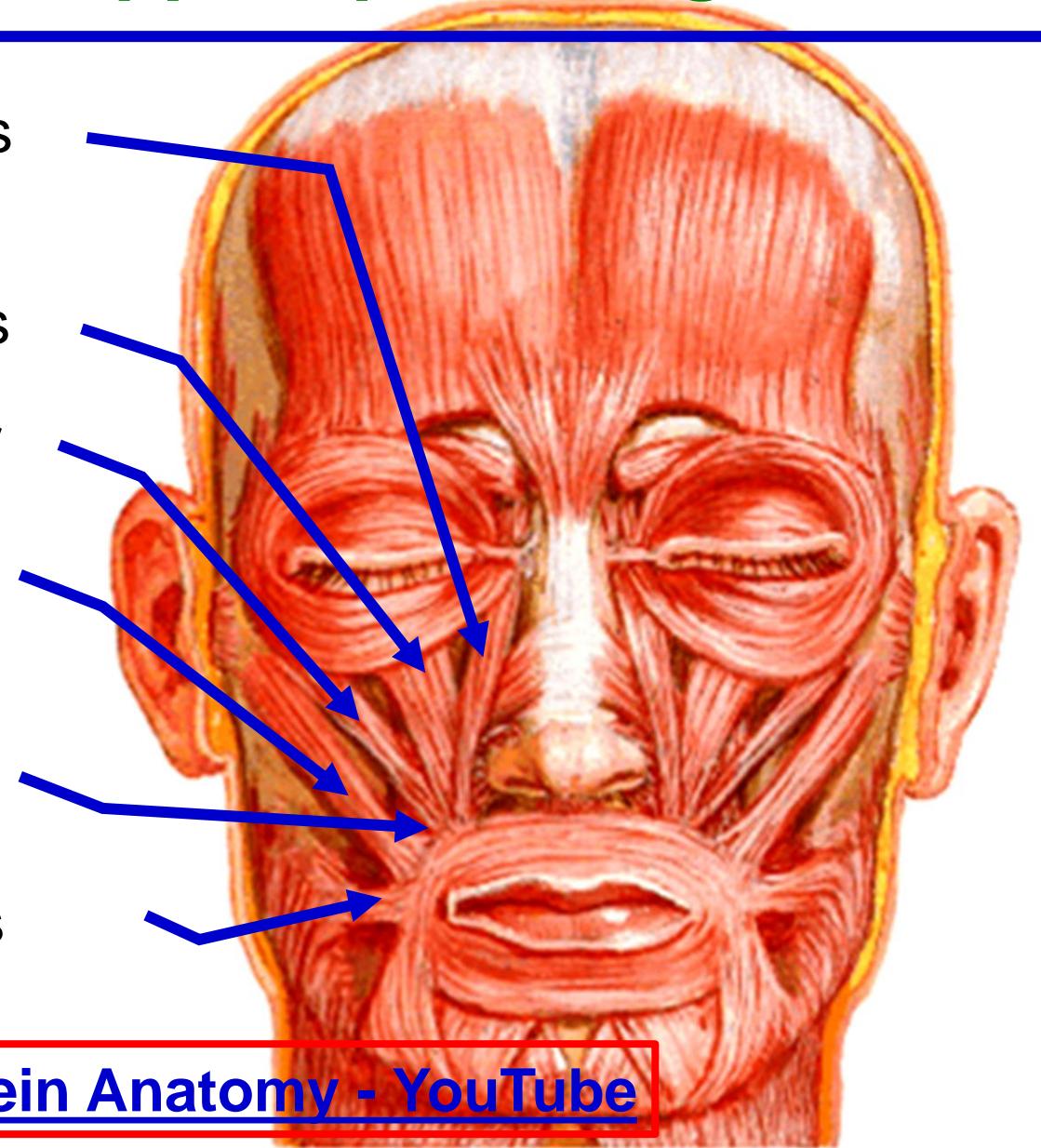
Levator labii superioris

Zygomaticus minor

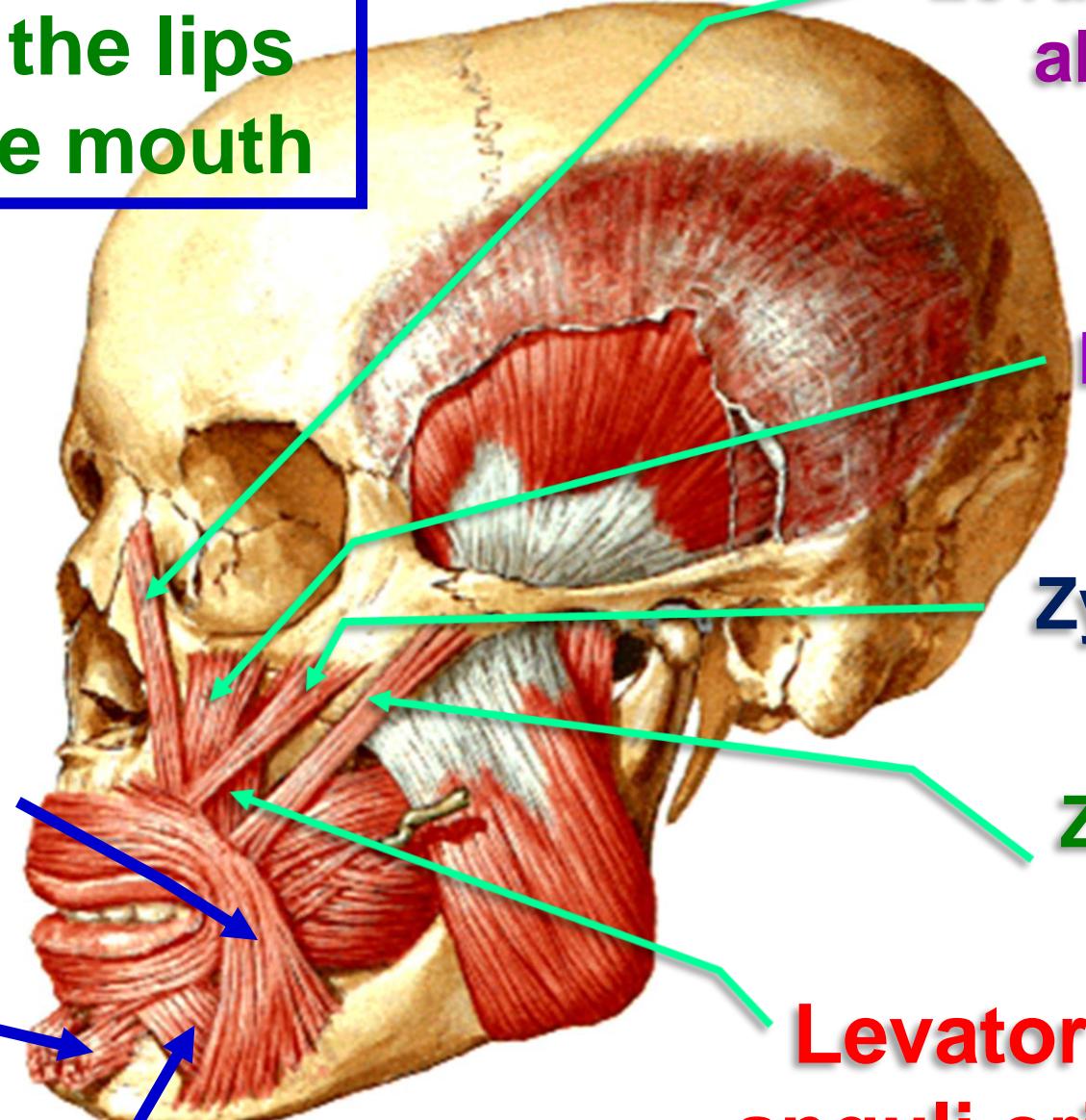
Zygomaticus major

Levator anguli oris

Risorius



Elevator and Depressors of the lips and angle of the mouth



Levator labii superioris
alaeque nasi

Levator labii
superioris

Zygomaticus
minor

Zygomaticus
major

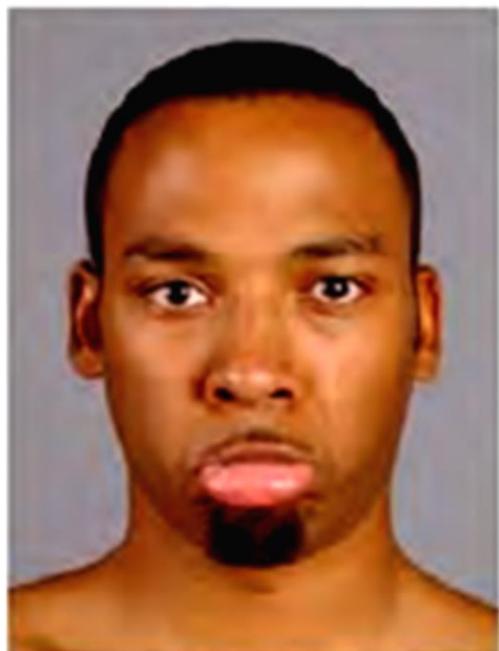
Depressor anguli oris

Mentalis

Depressor labii inferioris

Levator
anguli oris

- **Actions Zygomaticus minor and Zygomaticus major**
- Expression of contempt and disdain
الازداء و الأحتقار
- **Retractor and elevator of angle of mouth**

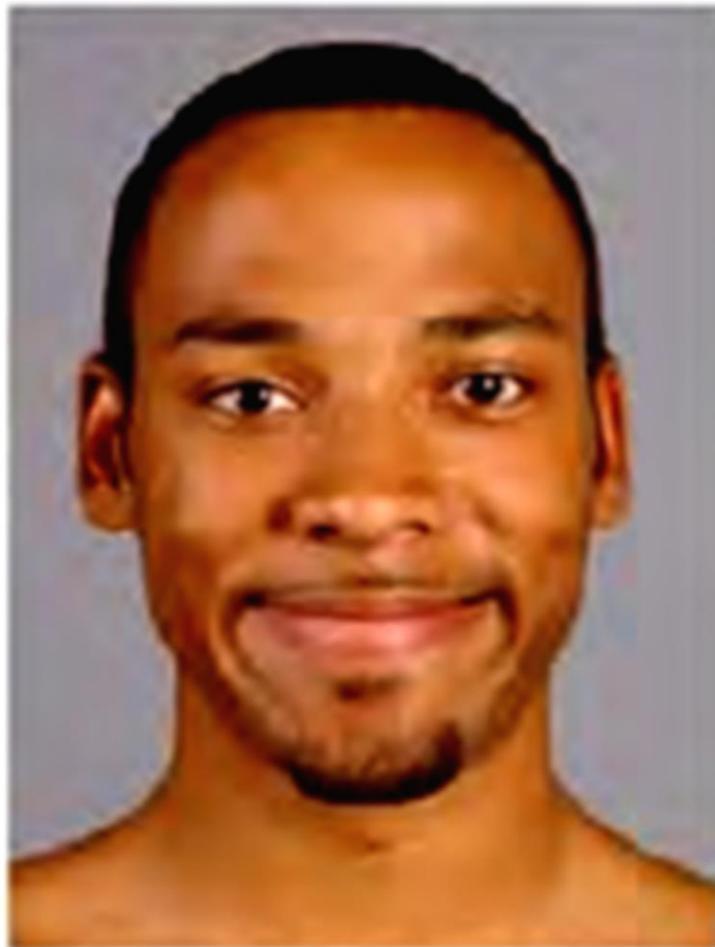


- **Actions of Mentalis**
- Expression of doubt الشك
- Elevators and protrude lower lip



Zygomaticus major + minor

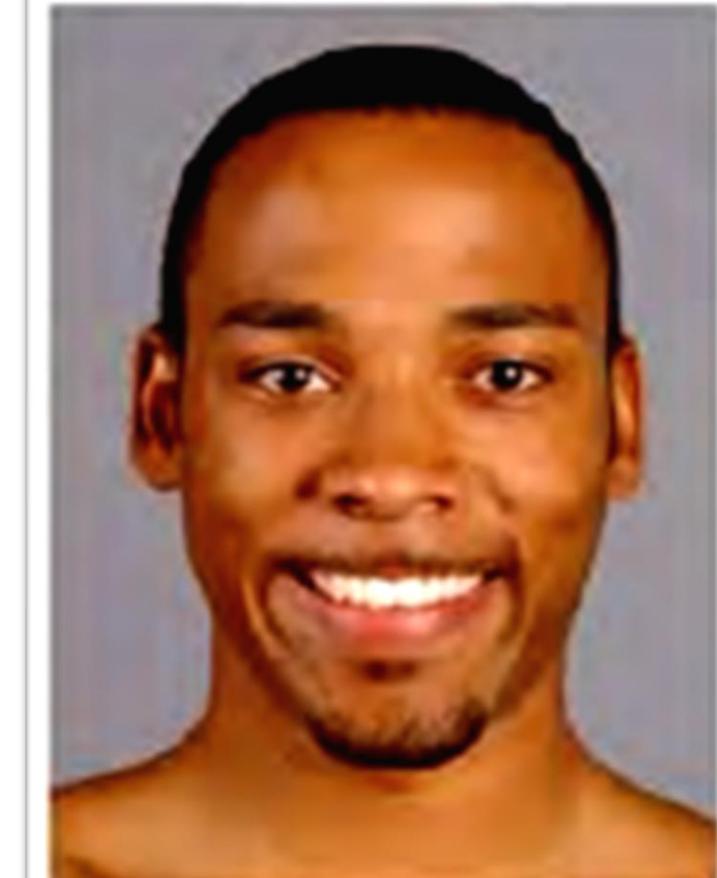
Actions of **Depressor labii inferioris** and **risorius**



Risorius

Actions of risorius

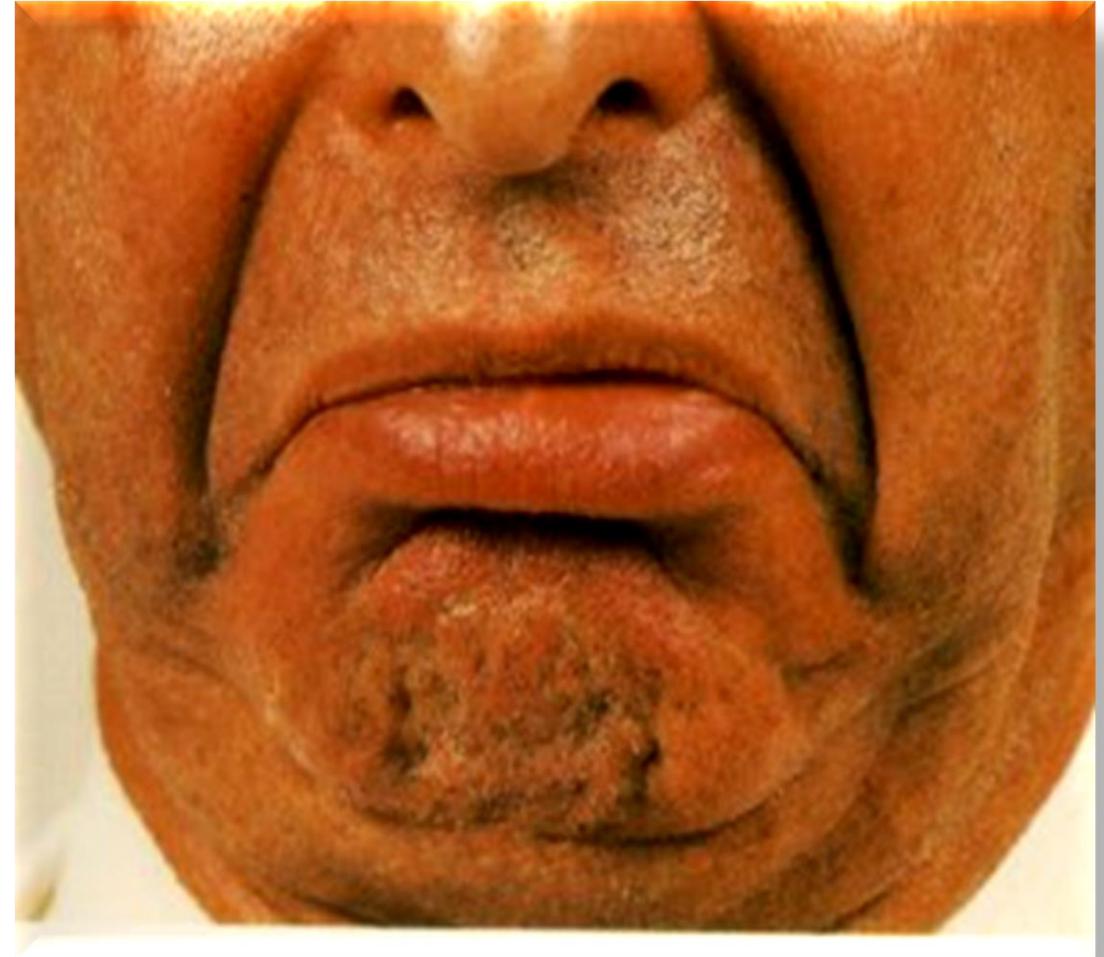
**Expression of
smiling**



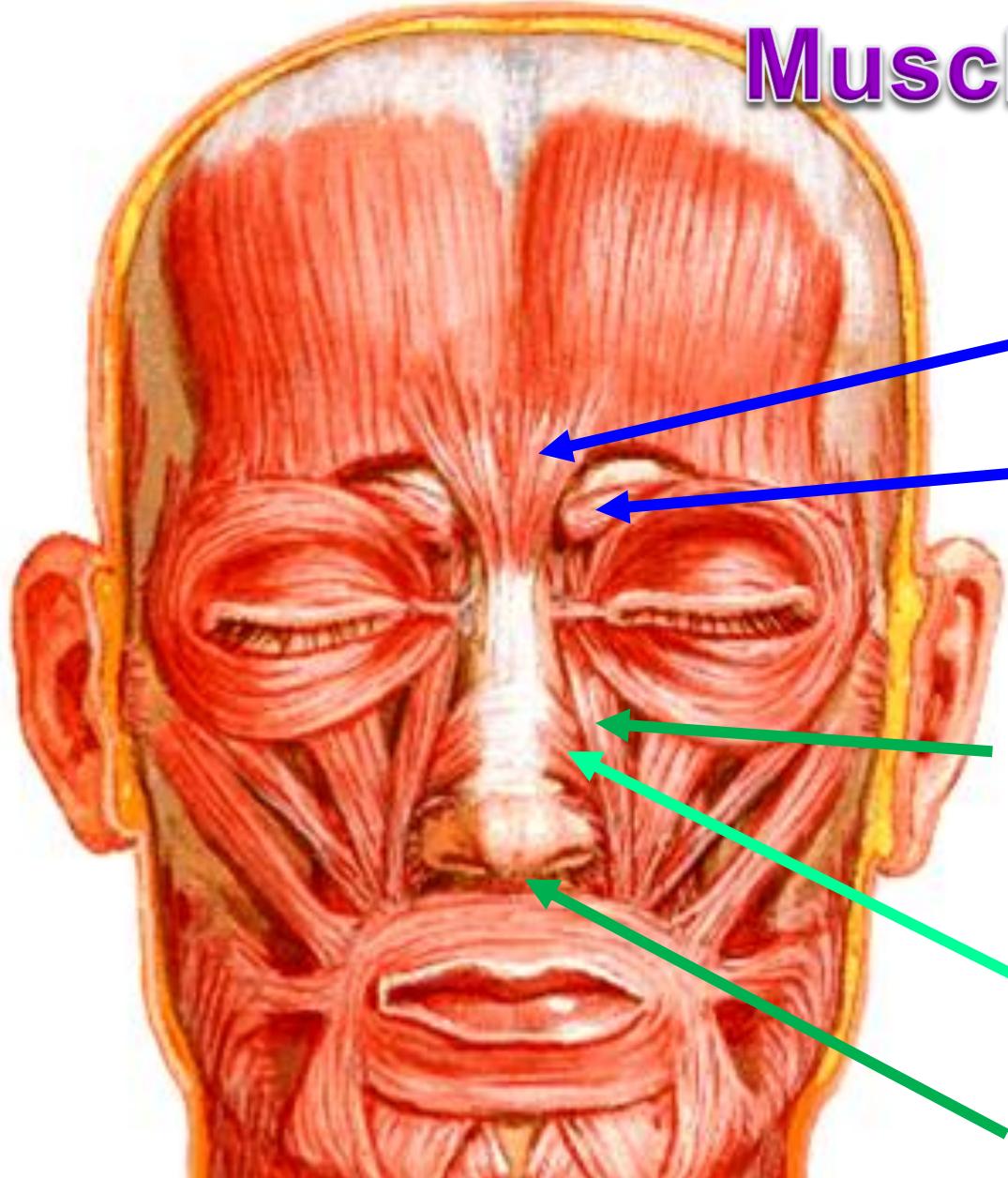
Risorius + depressor labii inferioris

Prof. Dr. Youssef Hussein Anatomy - YouTube

- Actions of
- **Depressor anguli oris**
- **Depressor labii inferioris**
- **Mentalis**
- **Depressors of lower lip and angle of the mouth**
- Deepen Nasolabial fold
- Expression of sadness الحزن



Muscles attached to nose



Procerus

Corrugator
supercili

Levator
Labii superioris
alaeque nasi

Nasalis

Depressor septi

- Alar part of Nasalis and Levator labii superioris
alaeque nasi: Elevation and dilatation of anterior nasal openings (ala of the nose).



Procerus + transverse part of nasalis

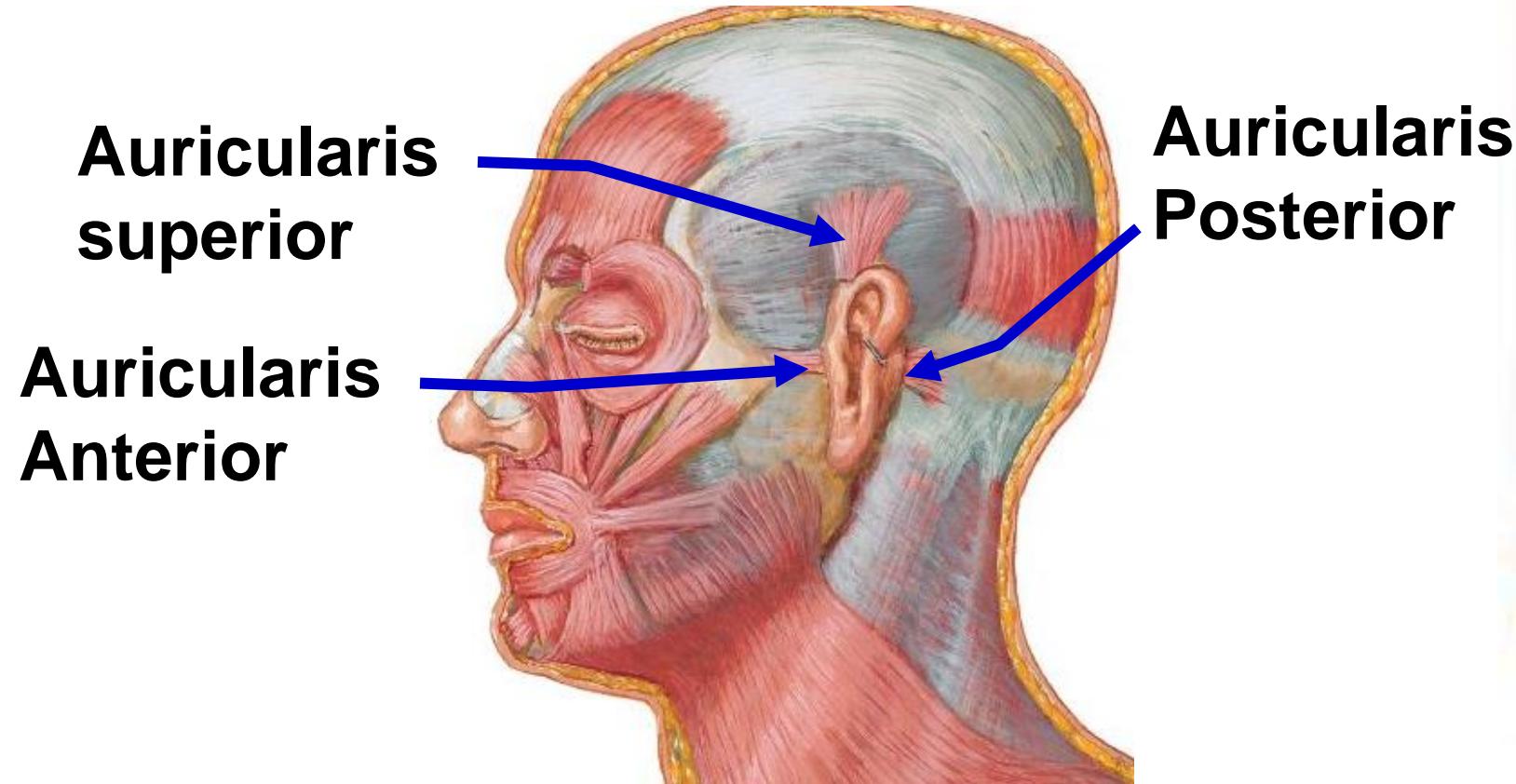
- **Procerus and transverse part of nasalis**
- **Elevates the nose**
- **Produce transverse wrinkle over the bridge of nose**



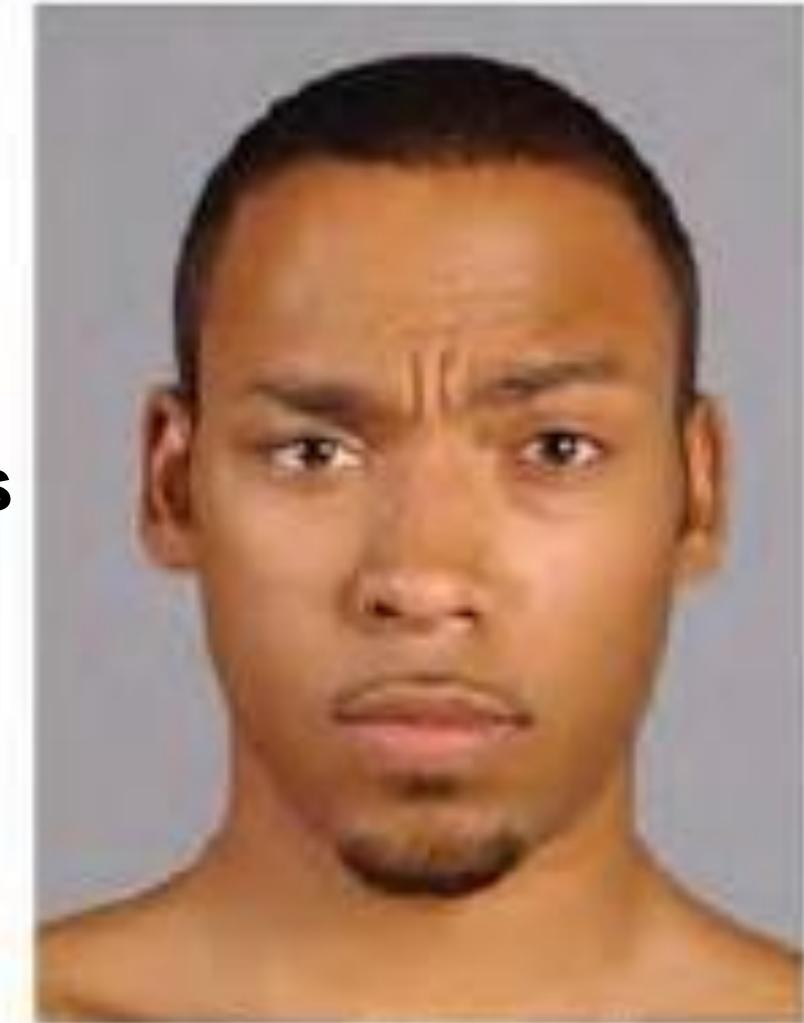
Lev labii sup. alaeque nasi +
alar part of nasalis

Corrugator supercili Produce

frowning أو قطب الجبين



Muscles of auricle



Corrugator supercili

dr_youssefhussein@yahoo.com



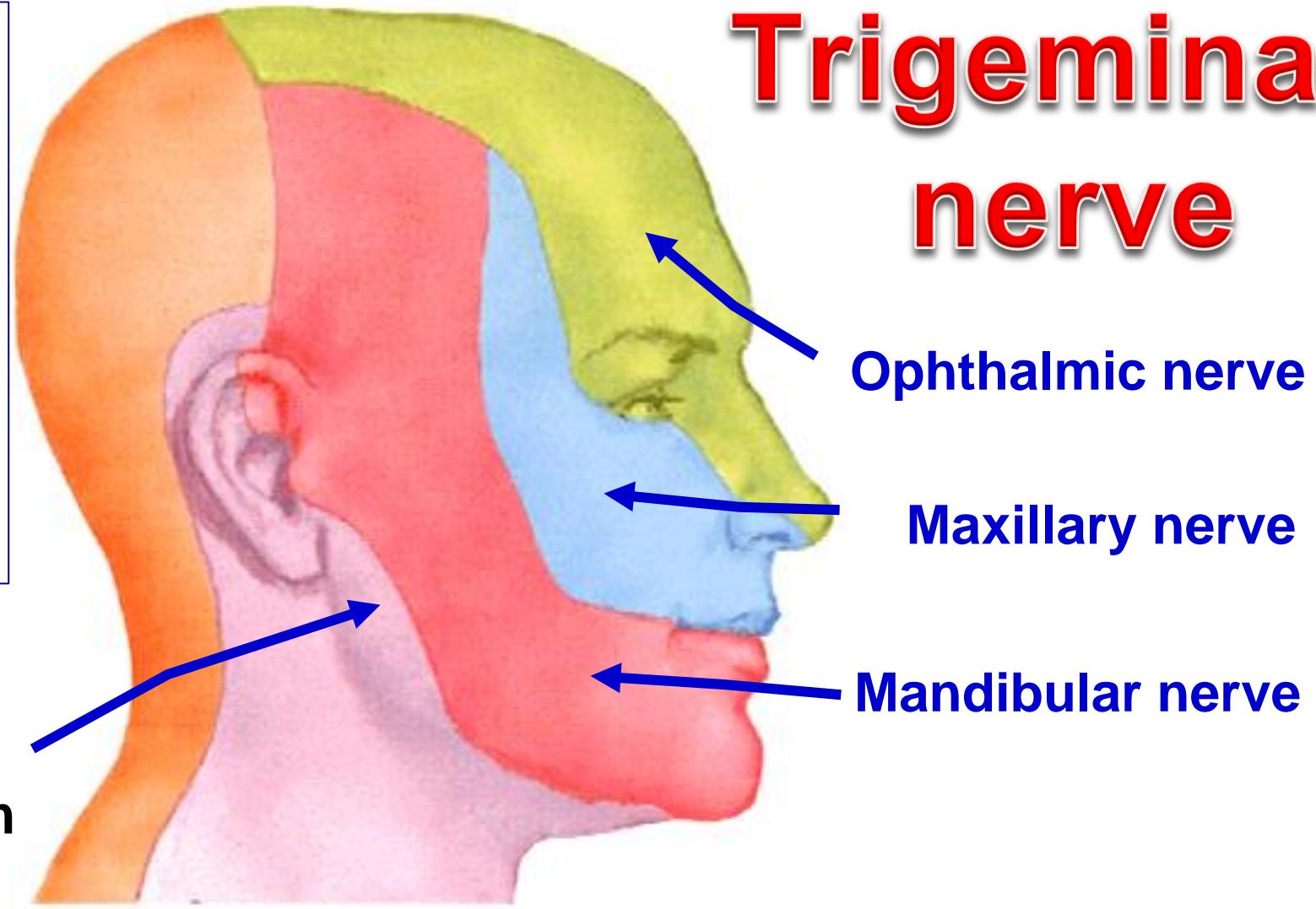
Sensory nerve Supply of Face

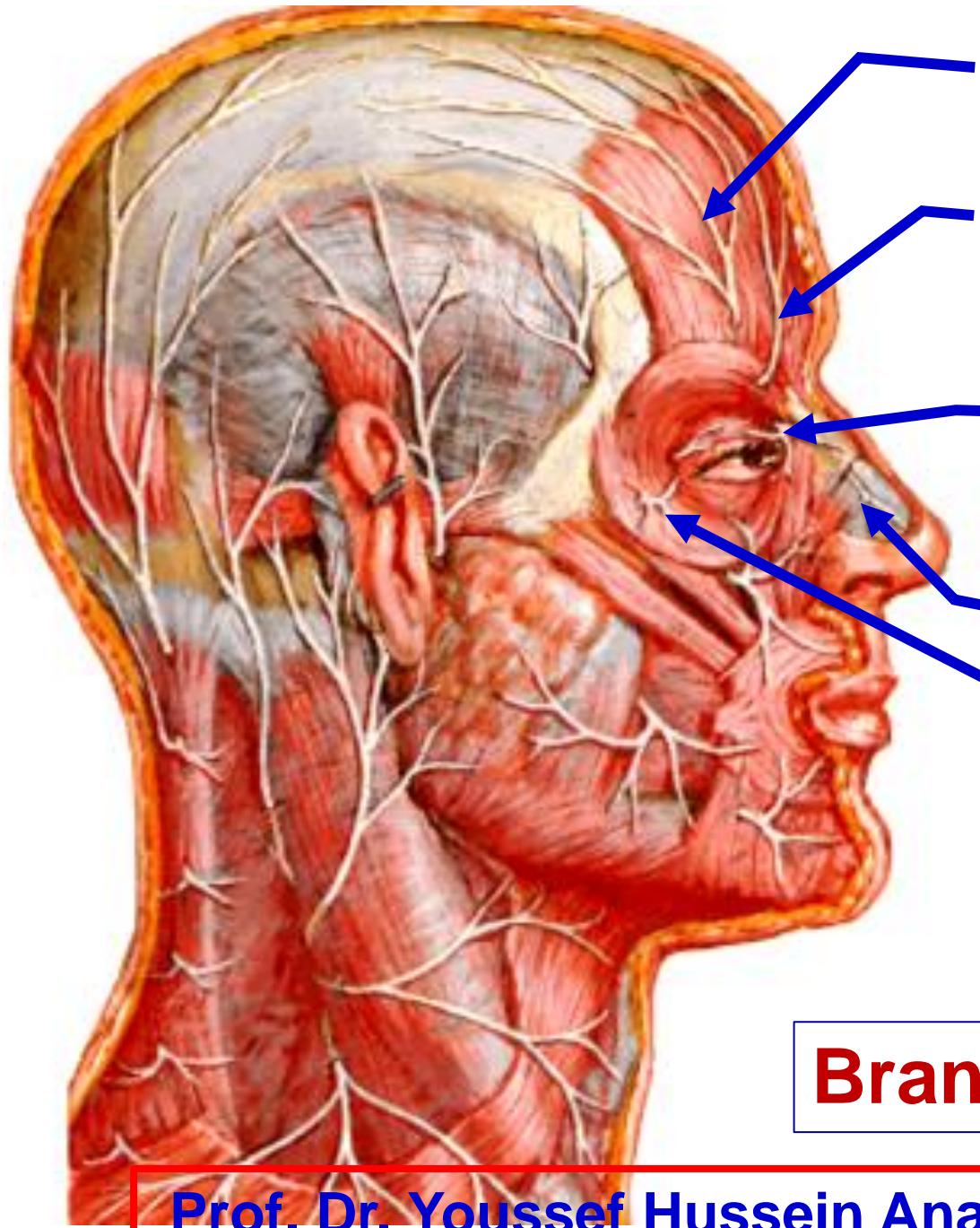
Sensory Innervations

- The skin of the face is supplied by branches of trigeminal nerve **except** skin over **angle of mandible** supplied by **great auricular nerve.**

Trigeminal nerve

Great auricular nerve (C2, 3) from cervical plexus





Supraorbital nerve from frontal nerve

Supratrochlear nerve from frontal nerve

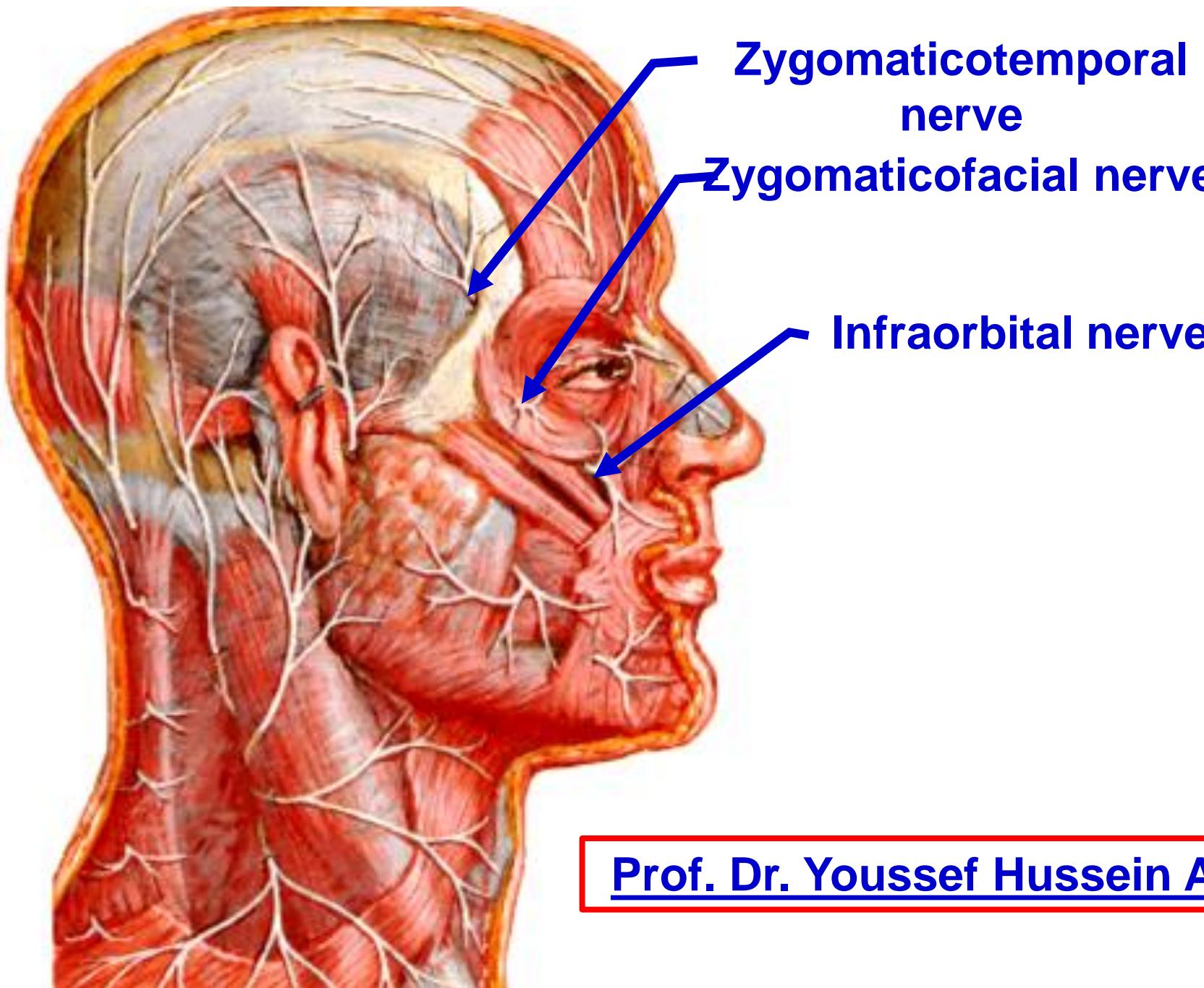
Infratrochlear nerve from nasociliary nerve

External nasal nerve from nasociliary nerve

Palpebral branch of lacrimal nerve

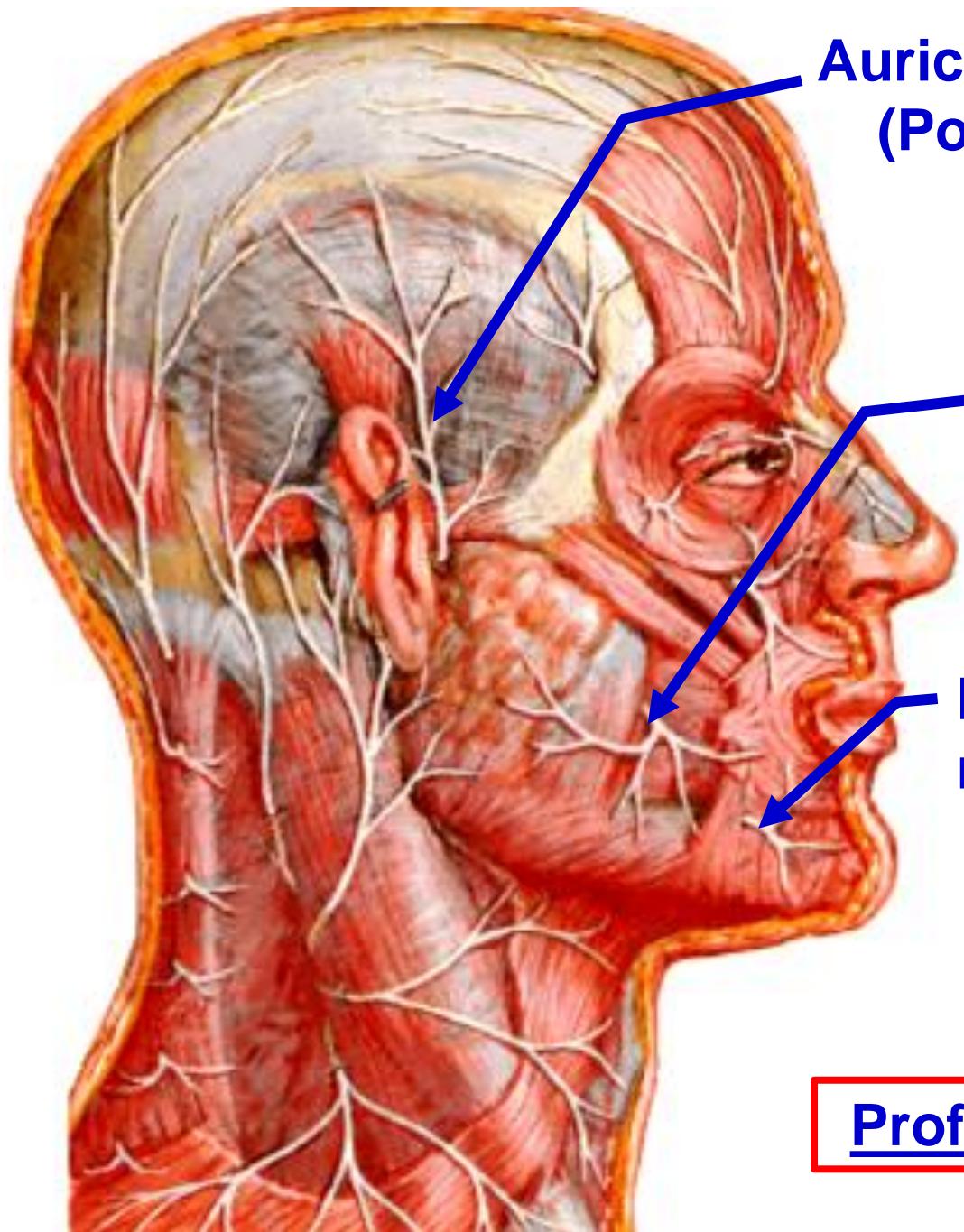
Branches of the ophthalmic nerve

Branches of the maxillary nerve



Prof. Dr. Youssef Hussein Anatomy - YouTube

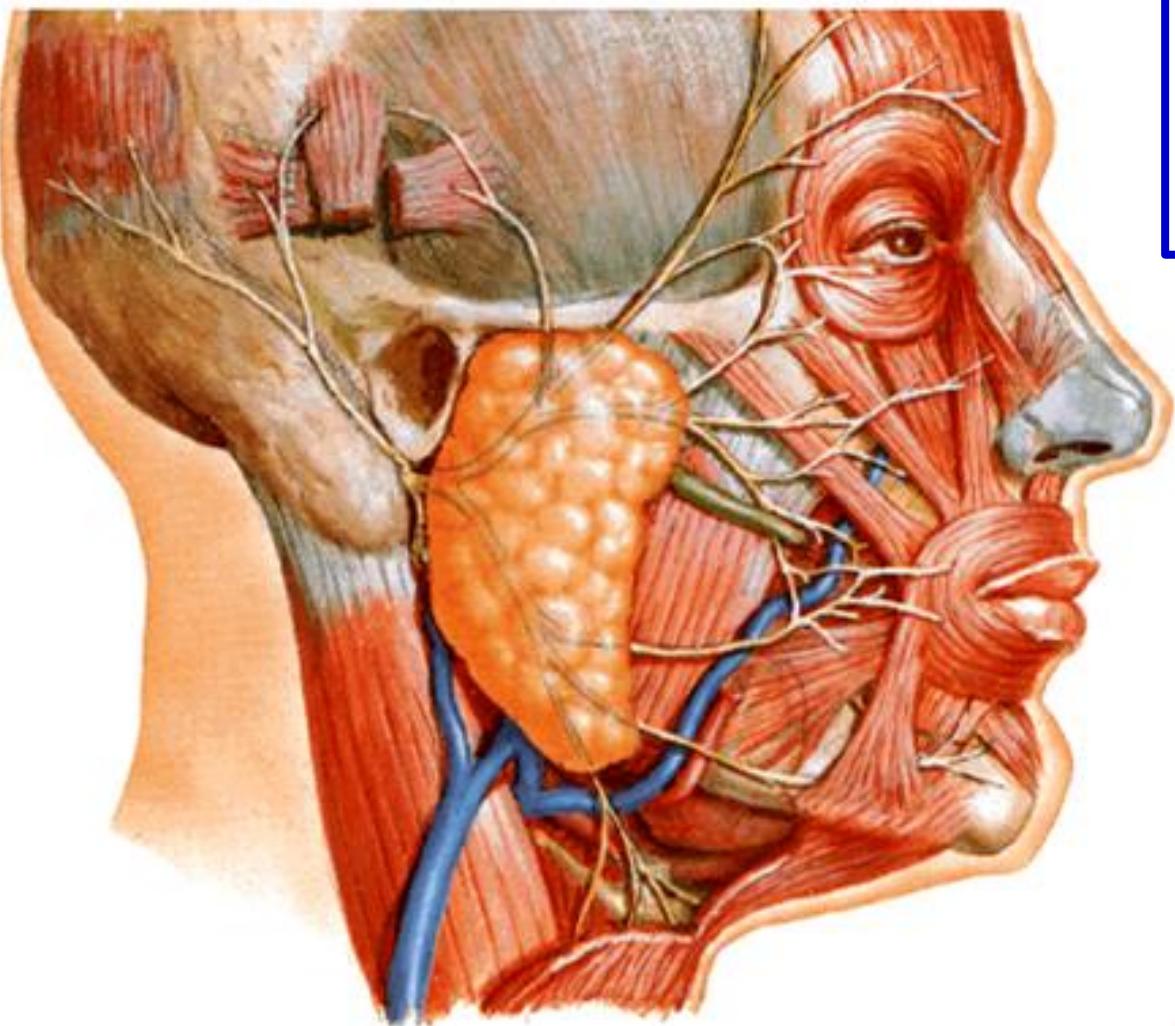
Branches of the mandibular nerve



dr_youssefhussein@yahoo.com



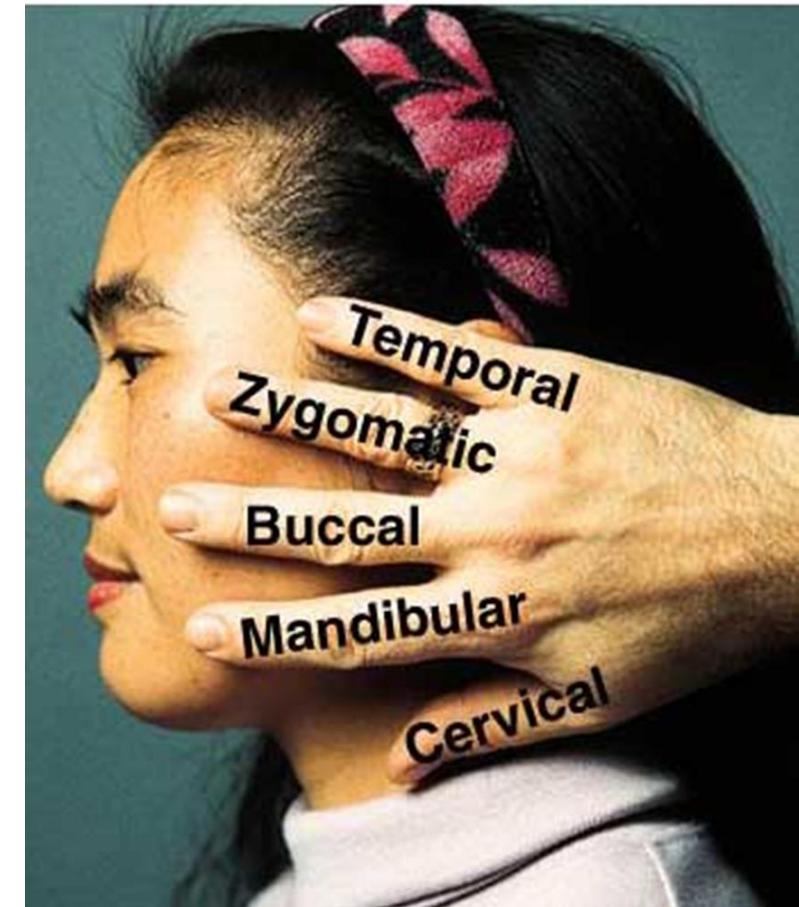
Motor nerve supply of Face Facial Nerve



- **Extracranial part of Facial Nerve**

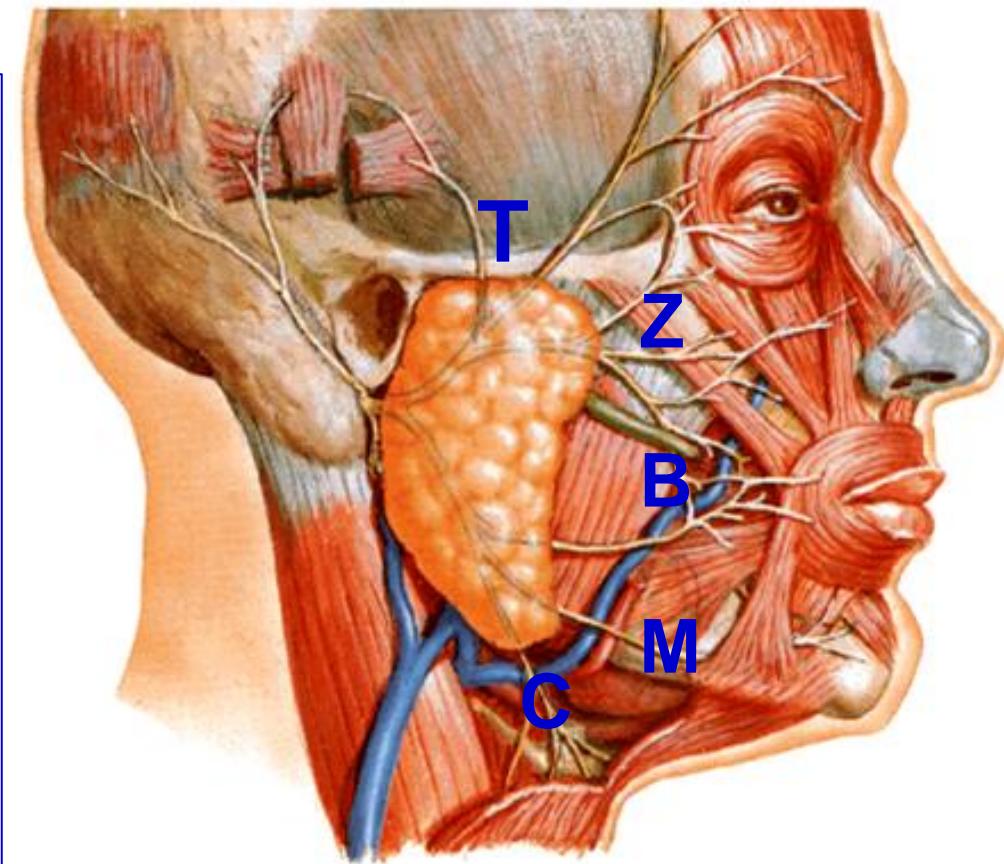
- It leaves the skull through the **stylomastoid foramen**.
- Then, it enters into the **parotid gland**.

Branches of the Facial Nerve



❖ Terminal branches

- 1- **Temporal branches** supply frontal bellies of occipitofrontalis, **orbicularis oculi** and auricularis anterior and superior muscles.
- 2- **Zygomatic branches** supply **orbicularis oculi**, muscles of the upper lip and nose.
- 3- **Buccal branches** supply buccinator and muscles around the mouth.
- 4- **Mandibular branch** supply orbicularis oris and muscles of the lower lip.
- 5- **Cervical branch** descends to the neck to supply the platysma muscle.

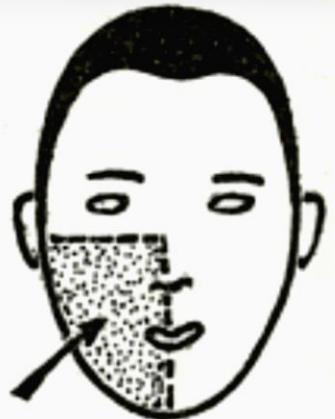




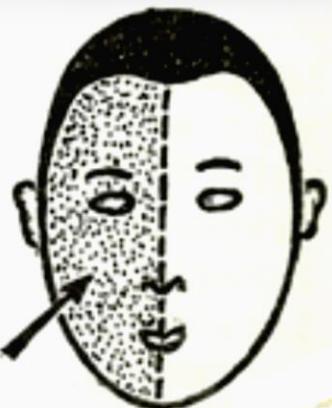
Facial palsy

Bell's palsy

UMNL



LMNL

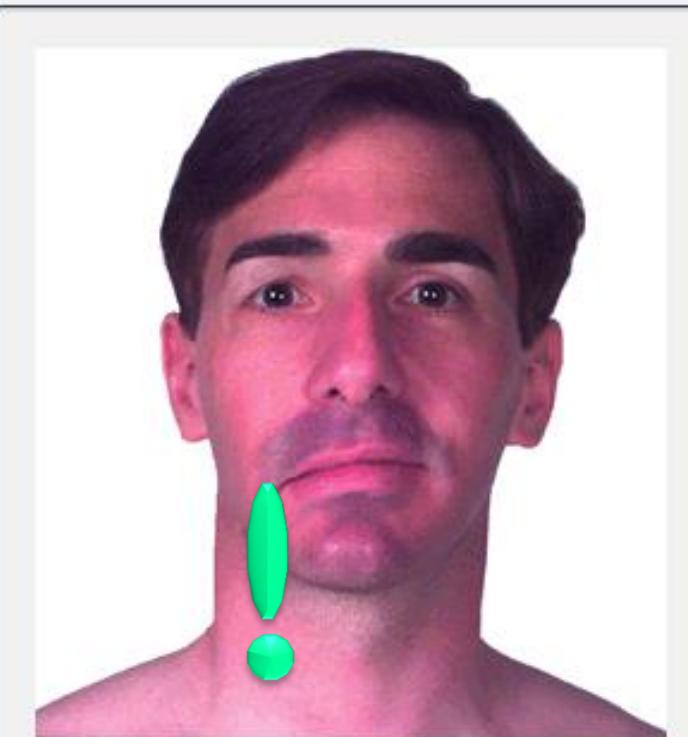


- **Upper motor neuron lesion:** **Lower half of face on opposite side** is only affected. wrinkling is not affected
- **Lower motor neuron lesion (Bell's palsy):** **paralysis of Muscles of Face on same side.** **No wrinkles** on the affected side due to paralysis of occipitofrontalis muscle.



Paralysis of Orbicularis oculi

- Inability to close eye and blinking
- Dryness of cornea and ulceration



Paralysis of buccinator, orbicularis oris

- Inability to whistle or to blow air
- Food accumulates in vestibule of mouth on affected side
- Dribbling of saliva



Paralysis of muscles of upper lip and angle of mouth

- Drop of Angle of mouth on the affected side
- Disappearance of nasolabial fold on the affected side



Paralysis of muscles of the lip and angle of mouth

- The angle of mouth deviates towards the unaffected side with smiling
- The mouth is drawn towards the unaffected side by showing his teeth

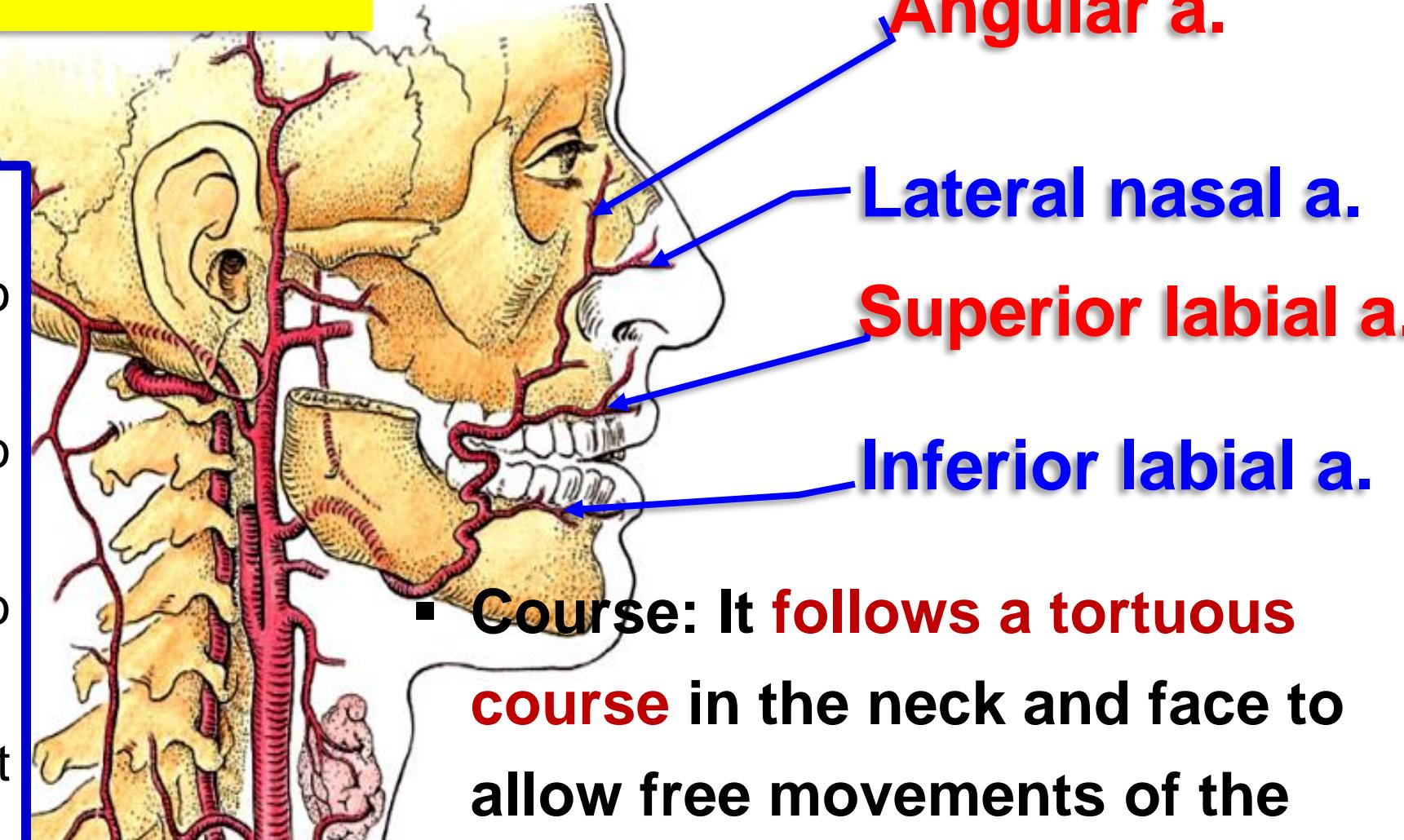
Blood supply of Face

- **Facial artery** is the main arterial supply to the face.
- **Origin:** External carotid artery

Facial artery in the face

B- Branches in the face:

- 1- Inferior labial artery to the lower lip.
- 2- Superior labial artery to the upper lip.
- 3- Lateral nasal artery to the lateral side of the nose.
- 4- Angular artery at medial angle of the eye lid.

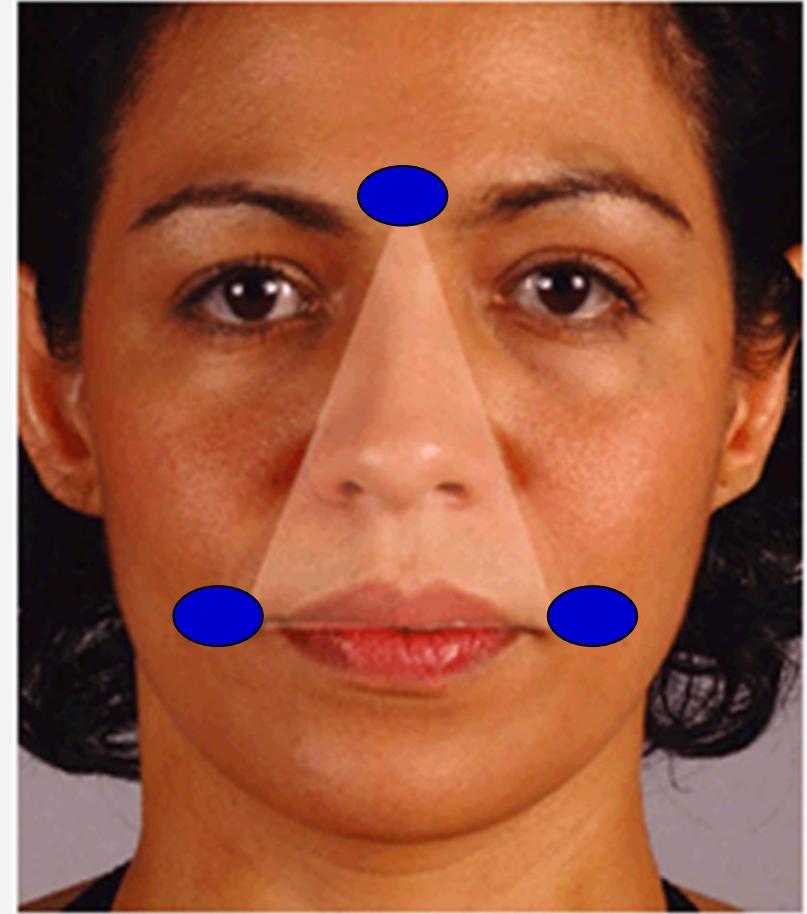


Angular a.
Lateral nasal a.
Superior labial a.
Inferior labial a.

- Course: It follows a tortuous course in the neck and face to allow free movements of the mandible and muscles of the facial expression.

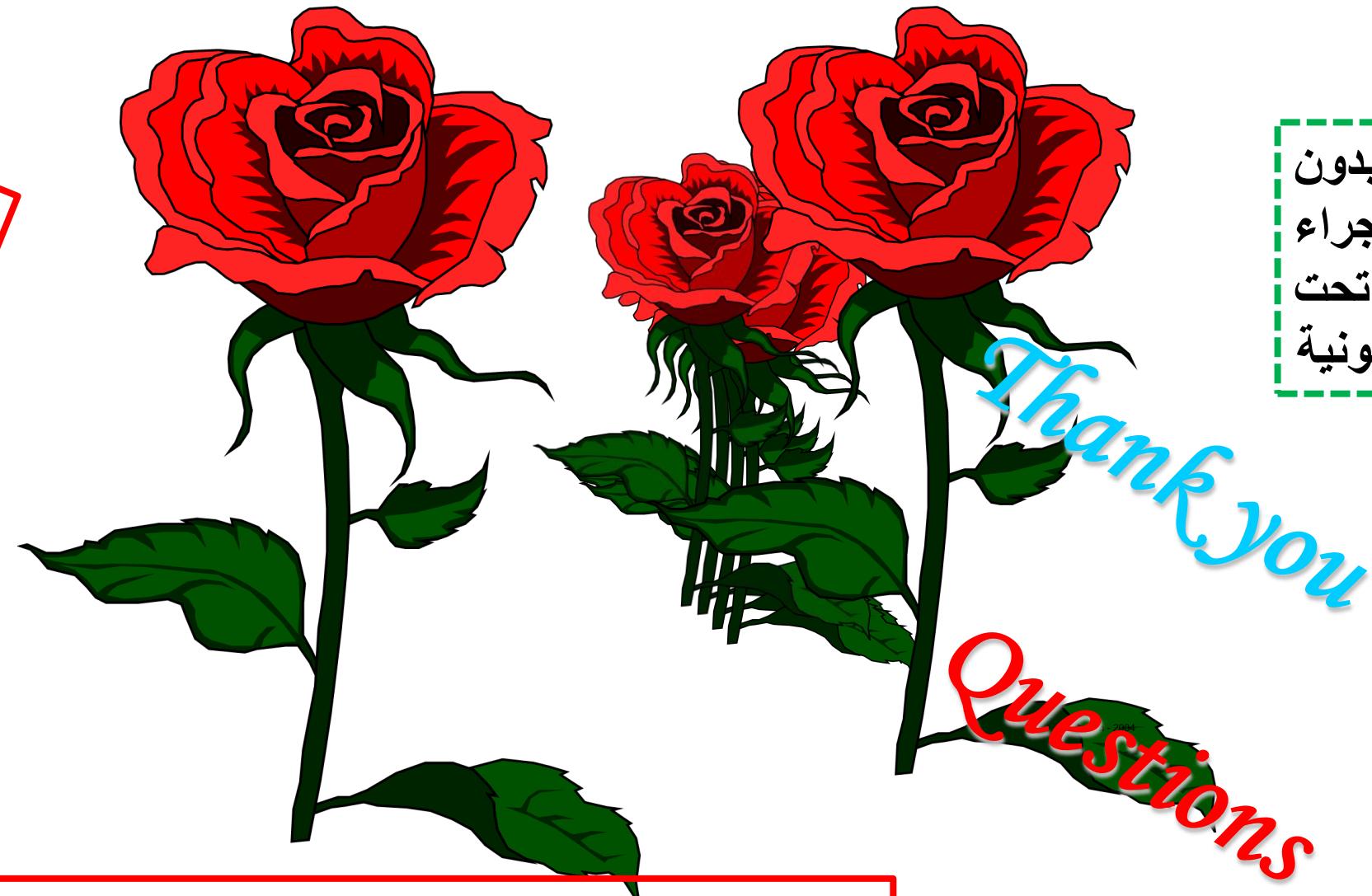
* Dangerous area of the face

- This is triangular area limited by three points:
 - 1- Point at the root of the nose.
 - 2- Points at the lateral angle of the mouth (on each side).
- It includes, nose, upper lip, and medial angle of eye.
- This area (**butterfly area**) is drained by tributaries of the facial vein that connected to cavernous sinus



- The veins of the face are **valveless**, So infection can be carried to the **cavernous sinus** leads to produce inflammation of the cavernous sinus, cavernous sinus thrombosis and meningitis

<https://www.youtube.com/@ProfDrYoussefHusseinAnatomy/playlists>



يُمنع أخذ السلايدات بدون
إذن المحرر واي اجراء
يخالف ذلك يقع تحت
طائلة المسئولية القانونية