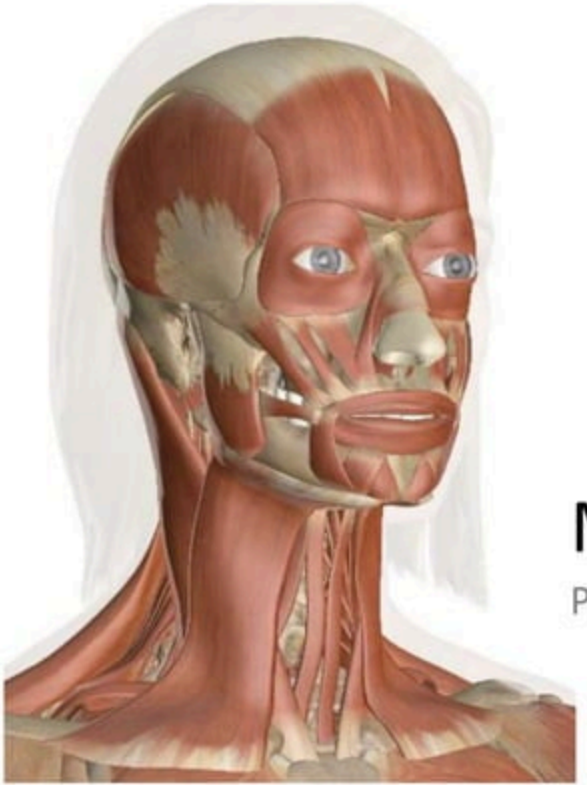

Muscles of Head & Neck

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Presented to: Sir Elamen

Muscles of Head & Neck

- The muscles of the head and neck perform many important tasks, including
  - movement of the head and neck
  - chewing and swallowing
  - Speech
  - facial expressions
  - movement of the eyes.
- These diverse tasks require both strong, forceful movements and some of the fastest, finest, and most delicate adjustments in the entire human body.

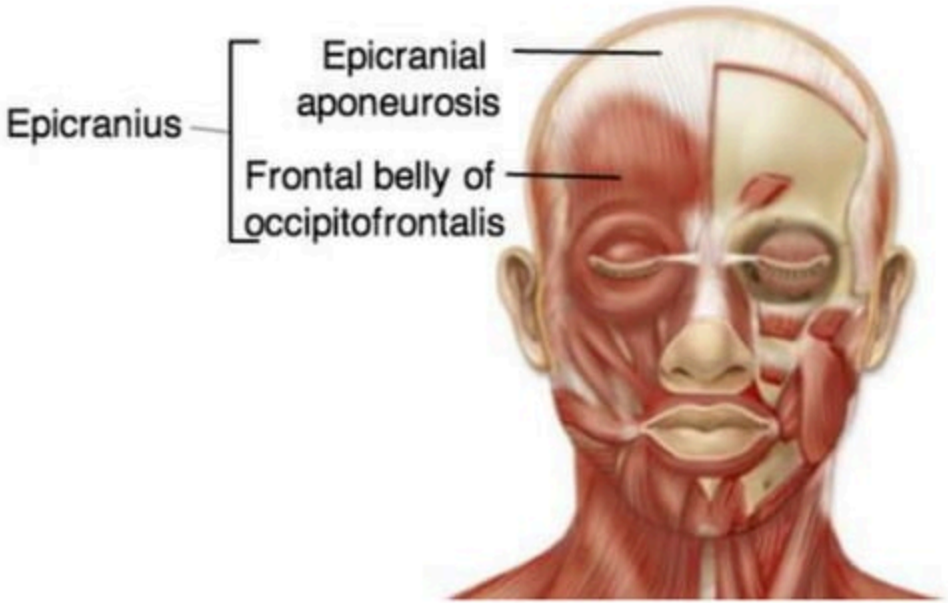
Muscles of Head

- The muscles of head contains
  - Occipitofrontalis (Epicranius)
  - Orbicularis Oculi
  - Nasalis
  - Zygomaticus Muscles
  - Risorius
  - Depressor Anguli Oris (Triangularis)
  - Levator Labii Superioris
  - Depressor Labii Inferioris
  - Orbicularis Oris
  - Mentalis
  - Buccinator
  - Platysma

Occipitofrontalis aka Epicranius

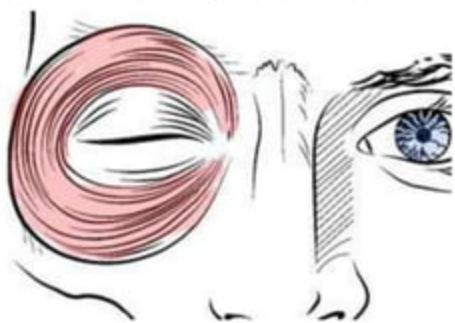
- It's very obvious in its name as the occipital belly covers the occipital bone and the frontal belly covers the frontal bone.
- This muscle has two bellies and this is an unusual muscle not only because of that but it is connected by a giant tendon called the aponeurotica which covers the top of your skull. This is the muscle that helps you raise eye brows and anchor the aponeurosis.
- The origin of the frontal belly is the aponeurotica and the insertion is the skin of the eye brows. The origin of the occipital belly is the occipital bone while the insertion is the aponeurotica.

Occipitofrontalis aka Epicranius



Orbicularis Oculi

- Orbicularis means circular muscle and oculi means eye.
- This is a circular (sphincter) muscle that goes around the eye.
- Fibers anchor the frontal bone and maxillary bone and inserts into the eyelid so that when it contracts it closes the eye.



Nasalis

- The nasalis muscle is what helps you flare your nostrils and “depress the bridge of the nose.” The origin is the maxilla and the insertion is the dorsum of the nose which is literally the top of the bone.

Zygomaticus Muscles

- The origin is the zygomatic bone (the cheek bone!) and it inserts into the skin and muscle at the corner of the mouth so when it contracts it is what literally lifts the corners of your mouth to help you smile.
- In red is zygomaticus muscle.

Risorius

- When the risorius muscle contracts, it draws the corners of the mouth horizontally/laterally and creates the insincere/fake smile because it doesn't involve the skin around the eyes.
- If you were to do a real smile, you would contract the zygomaticus muscles which connect up near your orbicularis oculi muscles and create "crows feet" around the eyes.

Depressor Anguli Oris aka Triangularis

- This lowers the lips of the mouth and is usually used during frowning or making a sad face.
- The origin is the body of the mandible (the chin) and the insertion is the skin/muscle at the corner of the mouth.

Levator Labii Superioris

- Levator = Lifting/elevate
- Labii=Lip
- Superioris = Upper

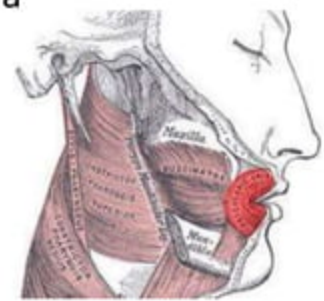
- So this is the muscle that lifts the upper lip. Its origin is the zygomatic bone and its insertion is the the upper lip.

Depressor Labii Inferioris

- This is what lowers (depresses) the lower (inferioris) lip (labii).
- The origin of this is the body of the mandible and the insertion is the skin/muscle of the lower lip.
- Note the triangularis/depressor anguli oris insertion is at the corner of the mouth while the depressor labii inferioris is more medial.

Orbicularis Oris

- Again we see this word orbicularis (circular) but instead of oculi, it's oris, which means mouth.
- It is not a sphincter muscle, it only gives the *appearance* of one, it is actually made of a four independent quadrants of muscles.
- This is a complicated muscle that does everything to close your lips, purse them, protrude/pucker them and is instrumental in playing brass instruments. (see what I did there?)
- The origin of this is basically all the muscles of the mouth that cover the maxilla and mandible away from the mouth and the insertion is the skin and muscle around the mouth.



Mentalis

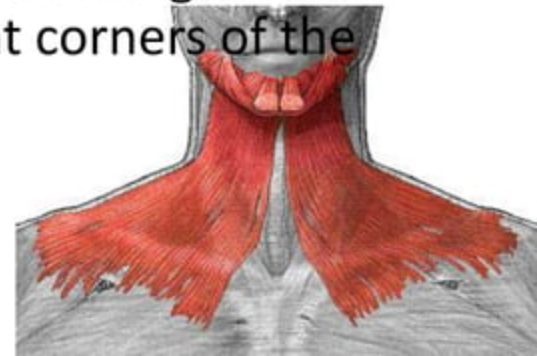
- This one is easy, the mentum = chin in latin, so the mentalis is located at the tip of the chin.
- It raises and pushes up the lower lip, causing wrinkling of the chin, as in doubt or displeasure.
- It is sometimes referred to as the “pouting muscle.” The origin is the mandible (on either side of the midline) and the insertion is the skin of the chin.

Buccinator

- It's latin origin means "trumpeter" and it is the muscle in the cheeks near the 3 molars that helps keep the food in between the teeth by flattening the cheek against the teeth while chewing.
- The origin is the maxilla and mandible, the alveolar margins near the molars and the insertion is the orbicularis oris.

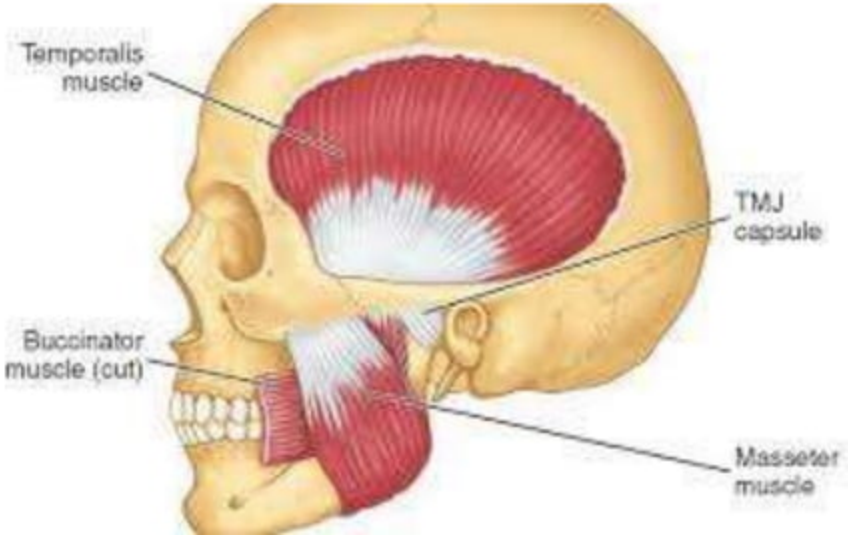
Platysma

- This is a superficial muscle that tightens the neck, helps lower the jaw, helps draw down the lower lip and angle of the mouth during grimacing/melancholy expression as it hits the corner of the mouth.
- The platysma's origin is the fascia of the chest and goes inserts into the lower margin of the mandible, skin and muscle at corners of the mouth.



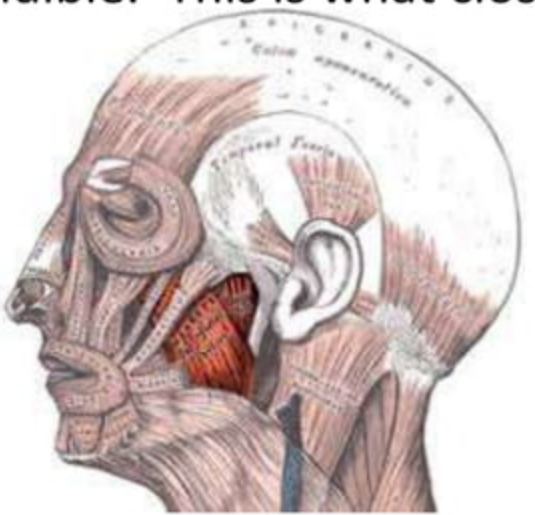
MASTICATORY MUSCLES

- Muscles that involve mastication / chewing.
- These muscles are:
  - Masseter
  - Buccinator
  - Temporalis



Masseter

- The origin of the masseter muscle is the zygomatic arch and it goes down to the angle of the mandible. This is what closes your jaw.

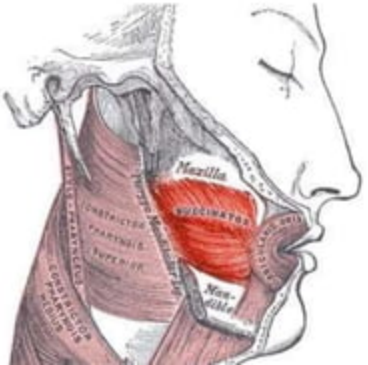


Temporalis

- Temporalis is named that because it originates from the temporal fossa, in the squamous part, of the temporal bone.
- The insertion is at the coronoid process of the mandible.
- This also allows you to close your jaw and also maintains a resting position for the mandible.
- The more horizontal posterior fibers are what help retract the jaw.

Buccinator

- Already mentioned this above, the one that keeps the cheeks flat and keeps the food between the teeth.
- Intrinsic muscles of the tongue form the tongue itself while the 4 extrinsic muscles move the tongue around.

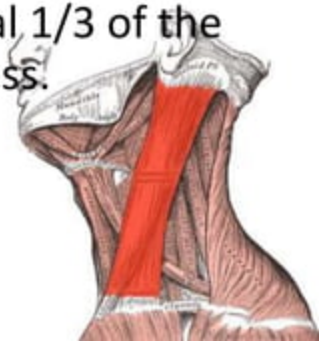


Muscles of the Neck

- Muscles of the neck are:
  - Sternocleidomastoid
  - Scalenes
  - Splenius muscles

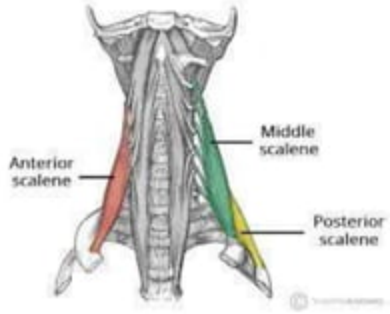
Sternocleidomastoid

- This is the muscle you could feel and see it pop out when you look to the side.
- The function is to create flections of the neck (neck forward) when it contracts when they act together.
- When only one side acts as a time, it helps you rotate your head to face the opposite side and laterally flex the head to the same side (it's an oblique movement that is occurring).
- The origin is the manubrium and the medial 1/3 of the clavicle. This inserts into the mastoid process.



Scalenes

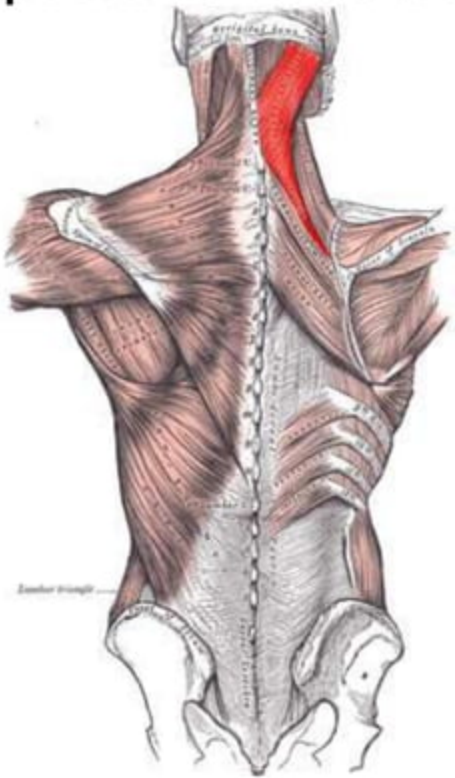
- These are very closely related to the SCM and very difficult to get to. They are usually the ones that get cramped up over night. They help pull on the cervical vertebrae instead of the head to create flexion of the neck and rotate.
- When the scalenes contract they help elevate the top two ribs. When you're at the extreme end of your breathing, especially during exercise, these help give you more volume by raising the ribs. and also play a role in flexion of the neck and rotating it. The origin of the scales are the transverse process of the cervical vertebrae and it inserts into the first and second ribs.



Splenius muscles

- These are found in the back of the neck.
- These are what you feel get tired when you sit close to the screen at a movie theater.
- When both the splenius muscles act together, they are what extend the head (bring it head back).
- When one side acts at a time, it helps rotate the head to the same side and or laterally flex the head to the same side.
- They origin runs from the nuchal ridges of the occipital bone all the way to C7.
- All of these bundles collect to insert into the mastoid process. (The SCM also inserts into the mastoid process).

Splenius muscles



Any Question?

if(yes)

then ask;

else

☺ **THANK YOU** ☺