94a Kinesiology Quiz and Kinesiology: Palpation Neck, Face, and Scalp

94a Kinesiology: Palpation
Neck, Face, and Scalp
Class Outline

5 minutes	Attendance, Breath of Arrival, and Reminders
60 minutes	Kinesiology Quiz
65 minutes	Total

If there is time after the quiz:
Palpation skills; Otherwise, include at the start of 94b Class.

94a Kinesiology: Palpation
Neck, Face, and Scalp
Class Reminders

- **Assessments:**
  - 96b Deep Massage Touch Assessment
    Packet A:81-82; 89-90
- **Quizzes:**
  - 94a Kinesiology Quiz - 75 questions in 60 minutes – **NOW!!**
  - See syllabus for list of muscles to review
- **Preparation for upcoming classes:**
  - 94a Kinesiology: Palpation – Neck, Face, and Scalp
  - 94b Deep Massage: Technique Demo and Practice – Anterior Neck, Face, and Scalp
    - Lauterstein: Chapters 15 & 17.
  - 95a Special Populations: Seniors
  - 95b Deep Massage: Guided Full Body
    - Lauterstein: Chapter 19; L: 16

Classroom Rules

Punctuality - everybody's time is precious

- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

The following are not allowed:

- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

You will receive one verbal warning, then you'll have to leave the room.

94a Kinesiology Quiz

94a Palpation

Palpation

Set Up by the Students

- Students form groups of 3.
- Each group sets up a table and gets 1 face cradle, 1 bolster, and 2 chairs.
- Receivers must remain clothed.
- There will be no need of sheets except for a face cradle cover.

Demo and Practice

- All of the students come to a central table to watch a brief demonstration of how to palpate one of the focus muscles:
  - List and identify the bony landmarks, especially origins and insertions.
  - List and identify the muscle bellies and tendons.
  - List and explain the actions.
  - Demo how to palpate the muscle while simultaneously offer resistance to the action, "Contract, relax. Contract, relax."
  - The students go back to their table to practice the palpation.
  - 2 students palpate the third student collaboratively.
  - The instructor and assistant circulate to offer guidance and touch comparisons:

- This process repeats for each muscle that will be palpated.
- Once all the focus muscles have been palpated on the first student, repeat the process so that each student will palpate twice and be palpated once.

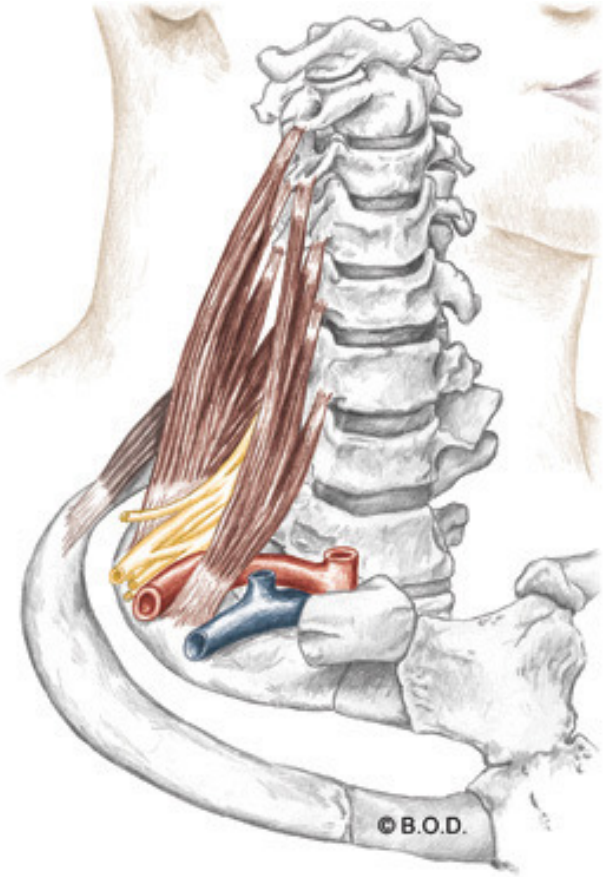
Study and Palpation

Use the remaining time for study and palpation of the following muscles:

- Scalenes
- Frontalis
- Temporalis
- Masseter

Scalenes

Trail Guide, Page 247



Anterolateral View

Scalenes
are sandwiched between the SCM and the anterior flap of the trapezius.

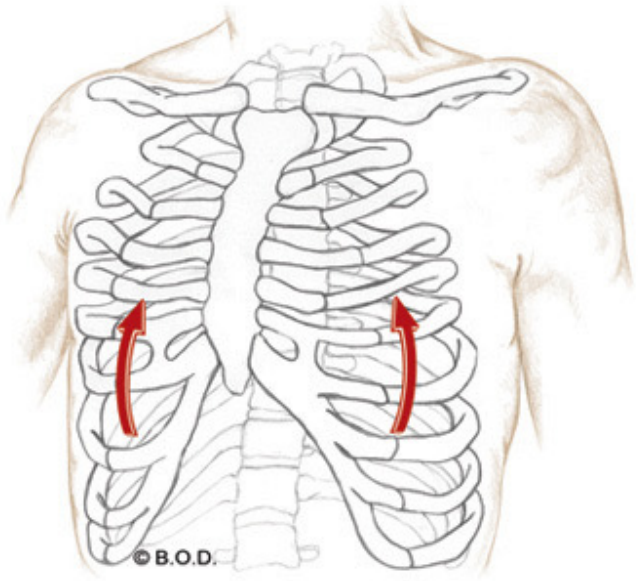
During inhalation, the scalenes perform the vital task of elevating the upper ribs.

Unilateral actions of the Scalenes

Lateral flexion of the head and neck

Rotation of the head and neck to the opposite

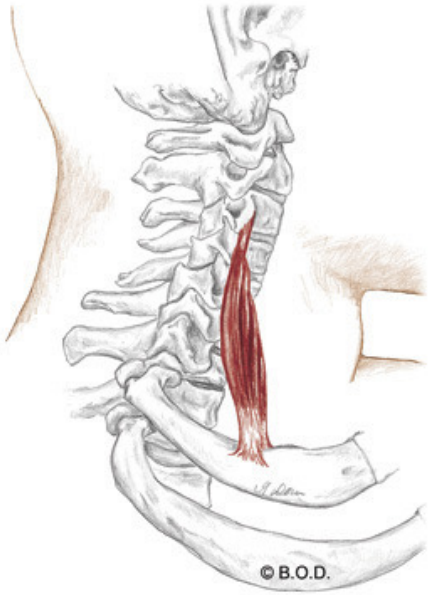
Bilateral actions of the Scalenes



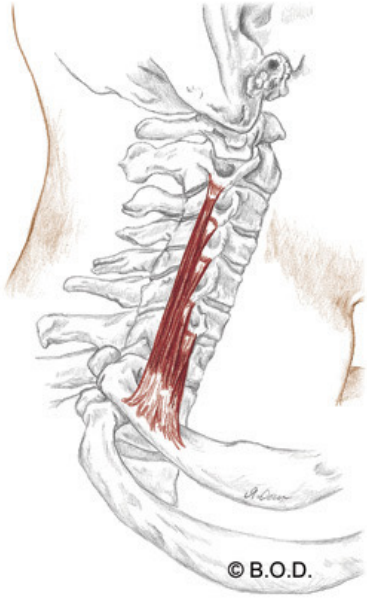
Elevate the ribs during inhalation

Flexion of the head and neck

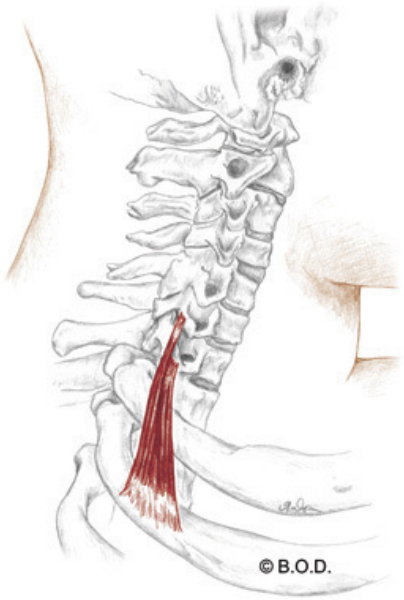
Anterior scalene



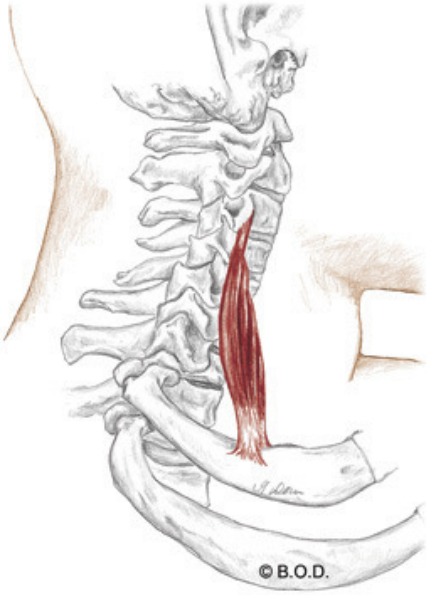
Middle scalene



Posterior scalene



Anterior Scalenes, page 247



Lateral View

A *Unilaterally:*

With the ribs fixed, laterally flex the head and neck to the same side

Rotate the head and neck to the opposite side

Bilaterally:

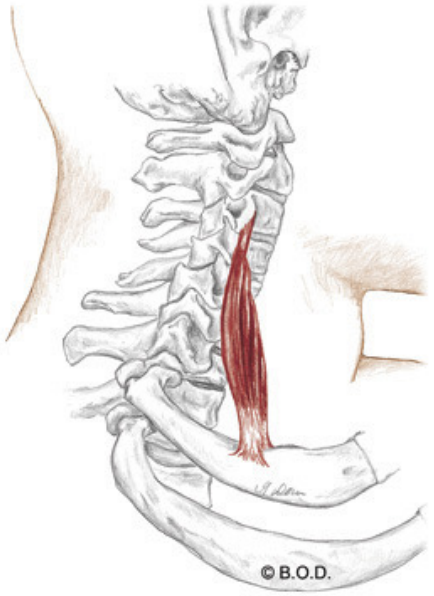
Elevate the ribs during inhalation

Flex the head and neck (anterior only)

O Transverse processes of third through sixth cervical vertebrae (anterior tubercles)

I First rib

Anterior Scalenes, page 247



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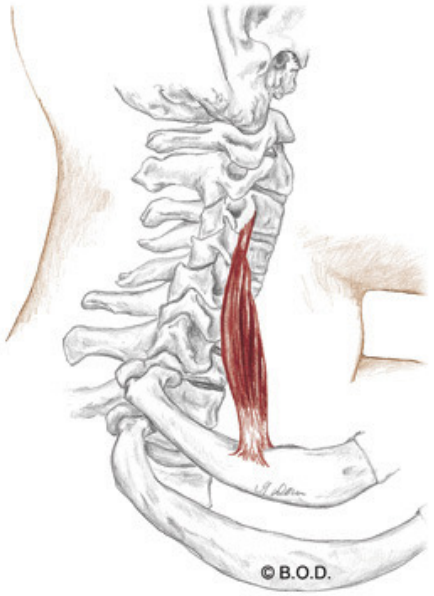

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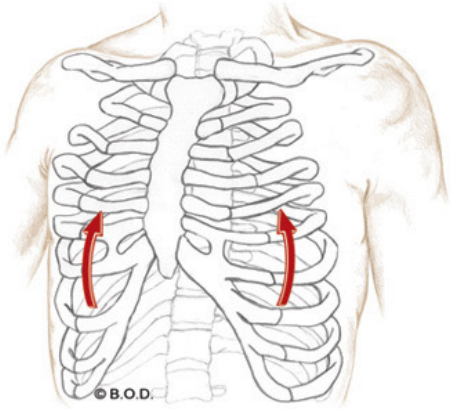
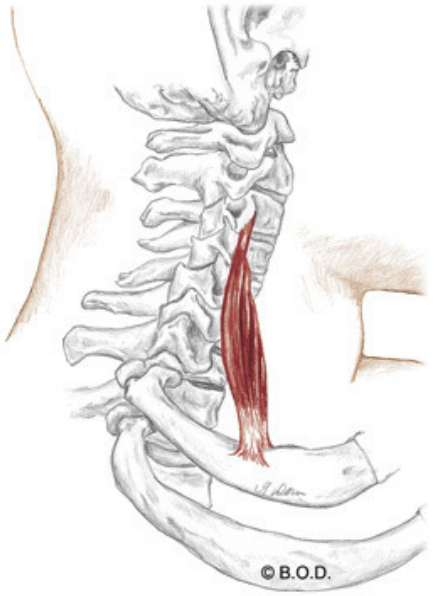


Anterior Scalenes, page 247



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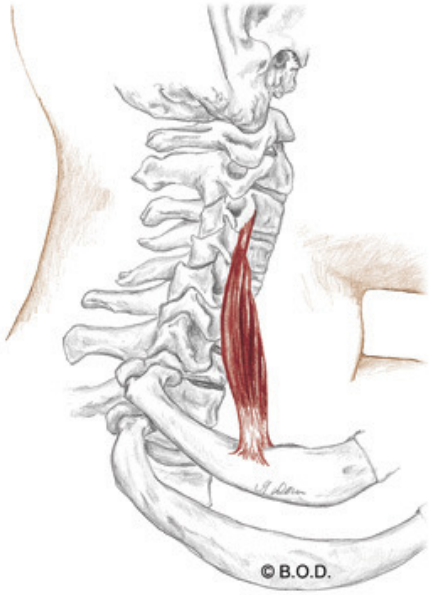
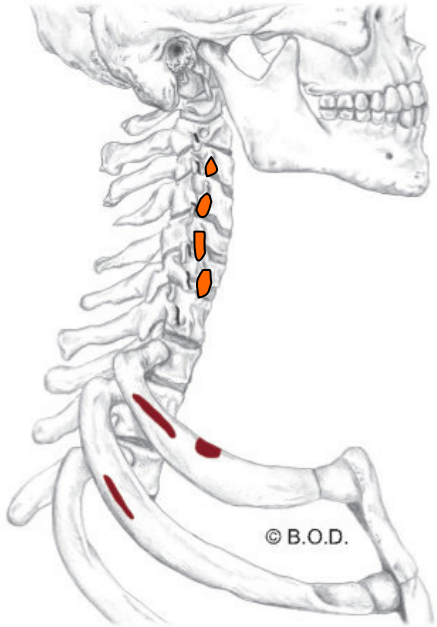


Lateral View



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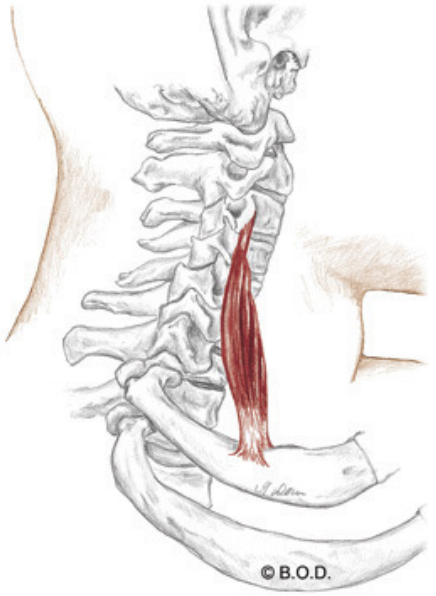

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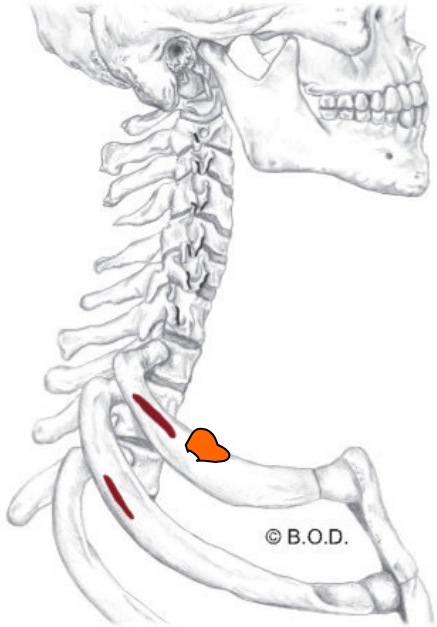
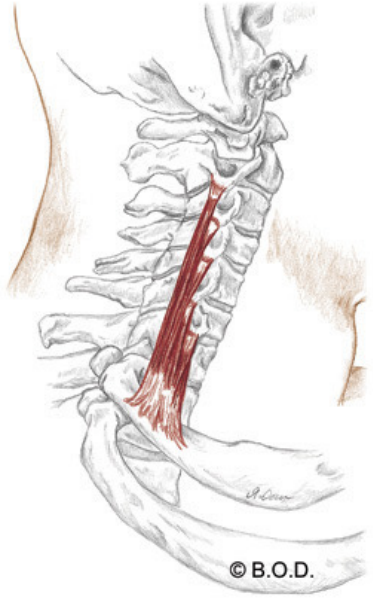


Middle Scalenes, page 247



Lateral View

A *Unilaterally:*

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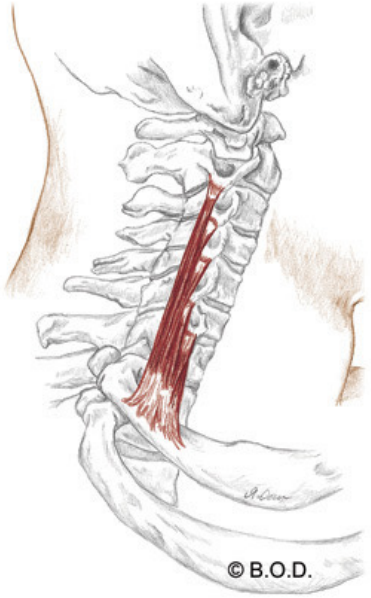
Bilaterally:

Elevate the ribs during inhalation

O Transverse processes of second through seventh cervical vertebrae (posterior tubercles)

I First rib

Middle Scalenes, page 247



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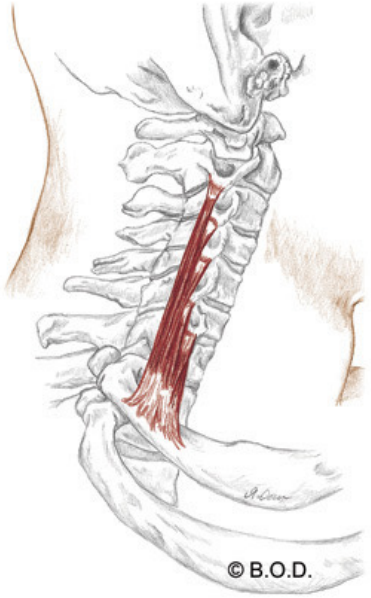

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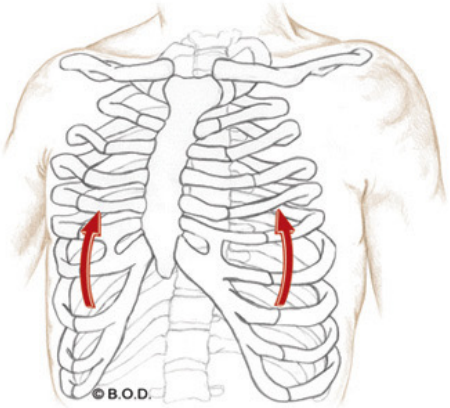

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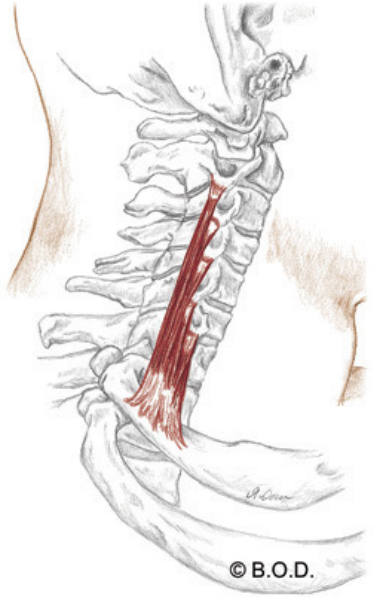
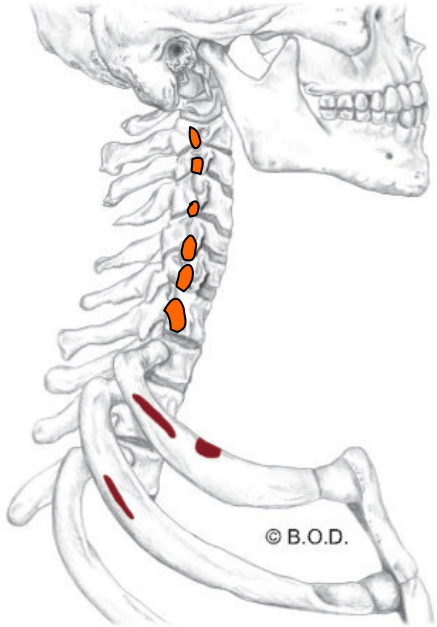


Lateral View



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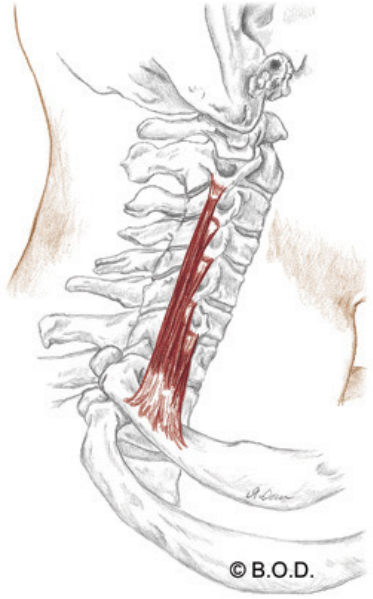

Lateral View

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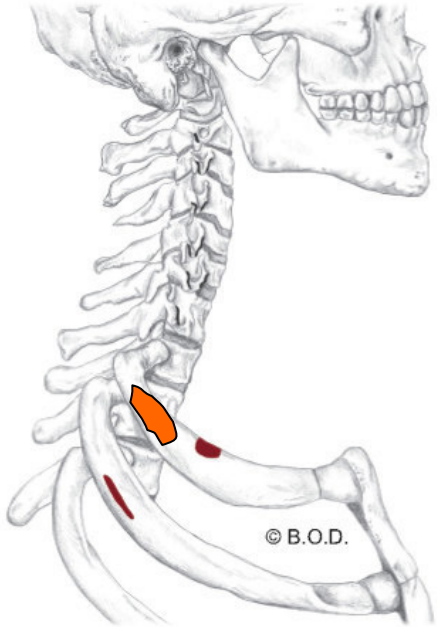
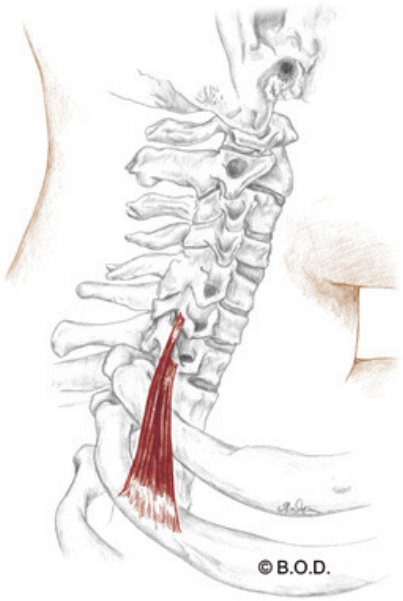


Posterior Scalenes, page 247



Lateral View

A *Unilaterally:*

With the ribs fixed, laterally flex the head and neck to the same side

Rotate the head and neck to the opposite side

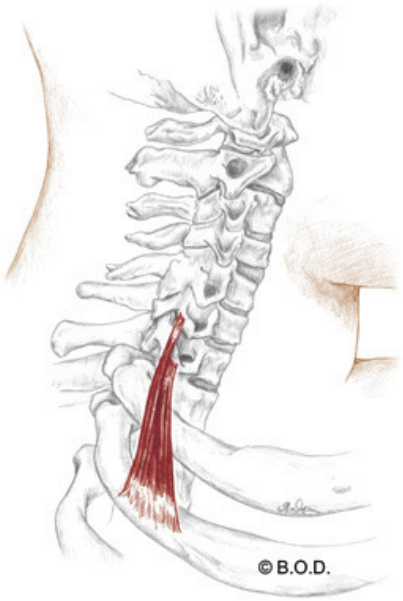
Bilaterally:

Elevate the ribs during inhalation

O Transverse processes of sixth and seventh cervical vertebrae (posterior tubercles)

I Second rib

Posterior Scalenes, page 247



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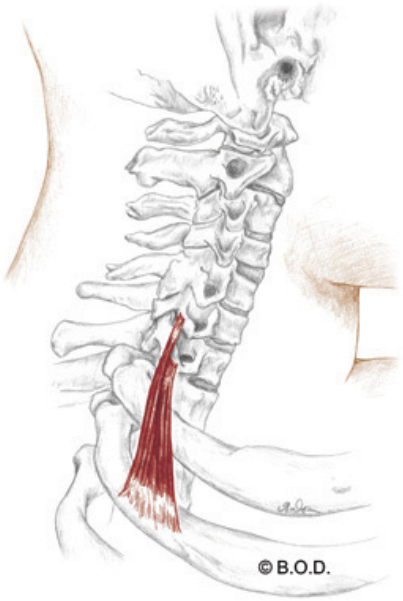

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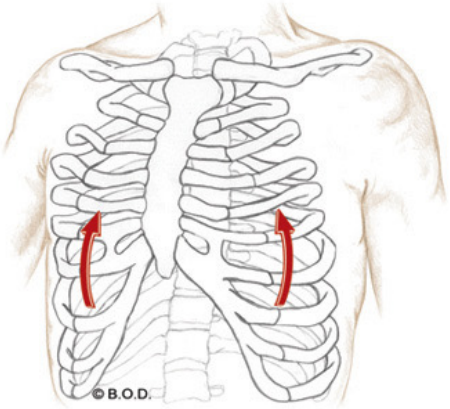

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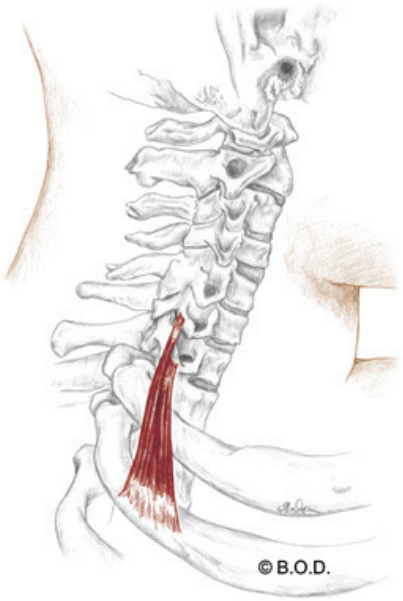

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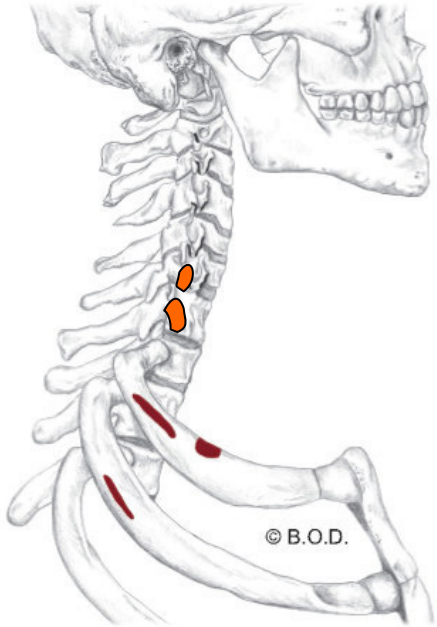

Posterior Scalenes, page 247

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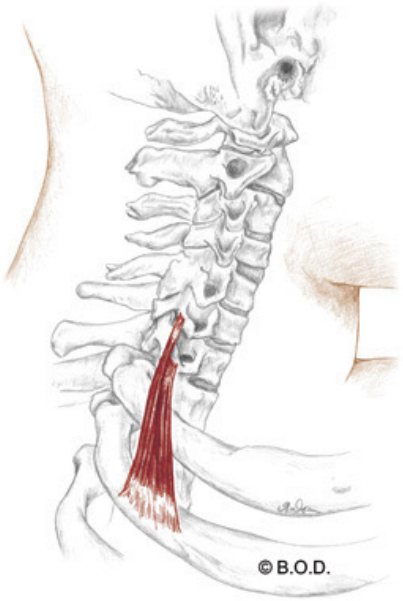
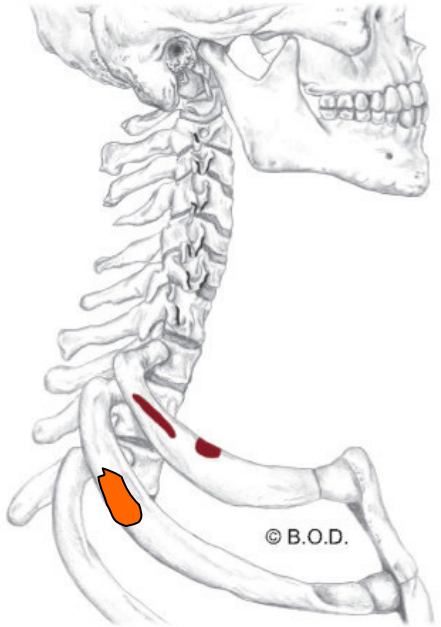


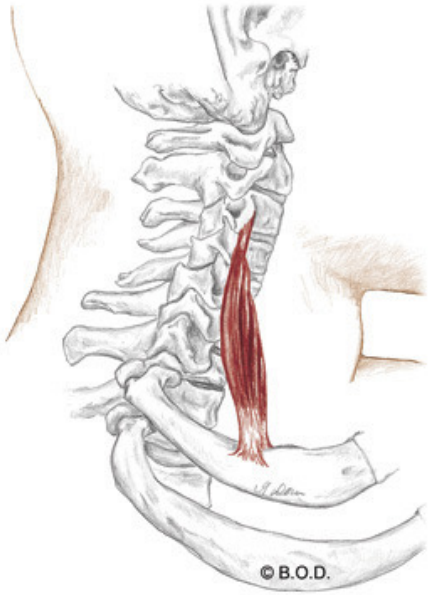
Lateral View

O Transverse processes of sixth and seventh cervical vertebrae (posterior tubercles)

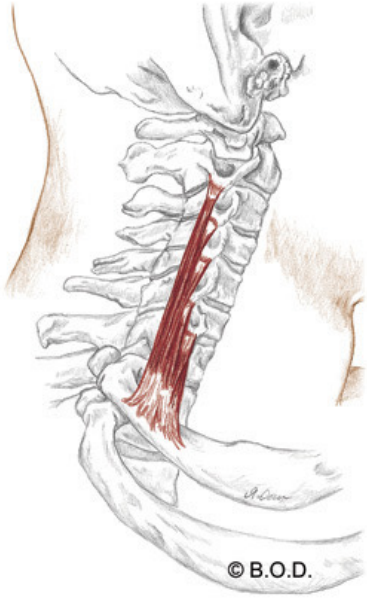
I Second rib



Anterior scalene



Middle scalene



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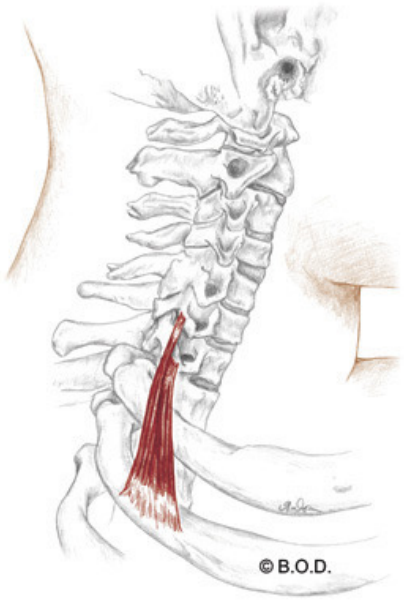

Frontalis and Occipitalis

Trail Guide, Page 258

Lateral View

Frontalis and Occipitalis together form the occipitofrontalis.

They are responsible for raising the forehead into an expression of surprise.

Although they are superficial, their thin fibers cannot be isolated.

Occipitofrontalis, page 258

A *Frontalis:*
Raise the eyebrows and wrinkle the forehead

Occipitalis:
Anchor and retract the galea posteriorly

O *Both:* Galea aponeurotica

I *Frontalis:*
Skin superior to eyebrows

Occipitalis:
Superior nuchal line of the occiput

Lateral View

Occipitofrontalis, page 258

A *Frontalis:*
Raise the eyebrows and wrinkle the forehead

Occipitalis:
Anchor and retract the galea posteriorly

O *Both:* Galea aponeurotica

I *Frontalis:*
Skin superior to eyebrows

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Lateral View

Occipitofrontalis, page 258

A *Frontalis:*
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Lateral View

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Occipitofrontalis, page 258

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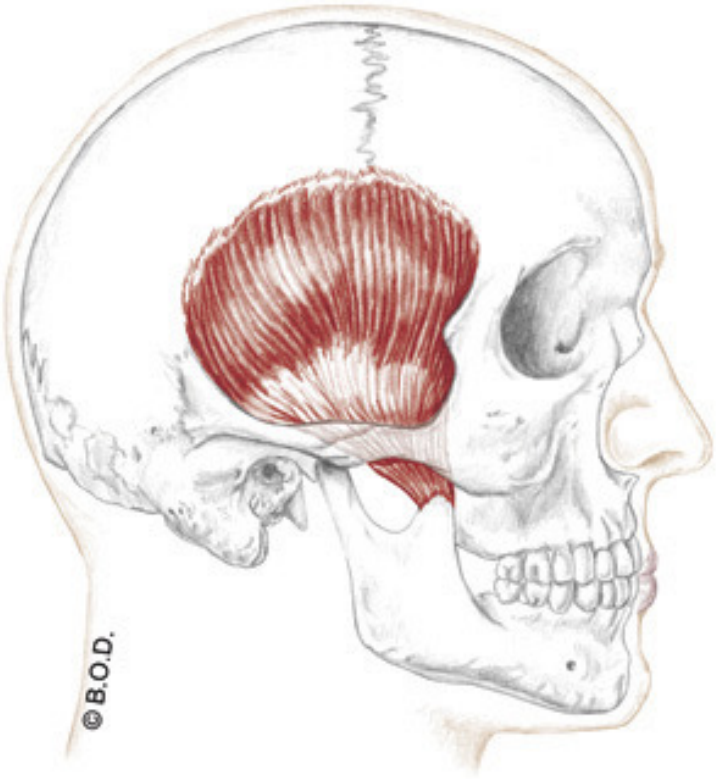
Lateral View

Temporalis, page 251

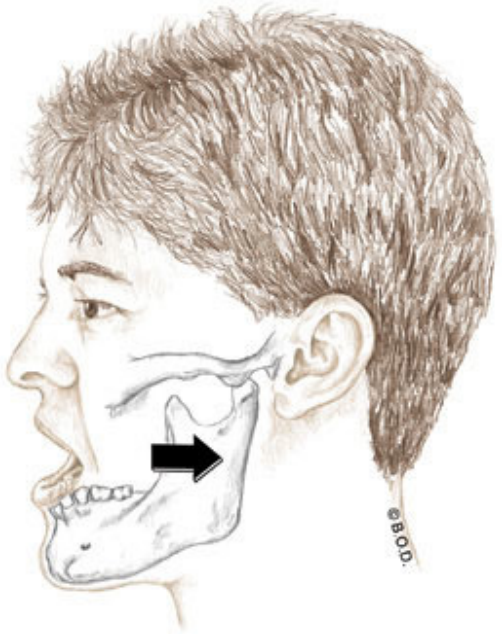


Lateral View

Temporalis is located on the temporal aspect of the cranium with its broad origin attaching to the frontal, temporal, and parietal bones.

Actions of the Temporalis

Elevation of the mandible



Retraction of the mandible

Temporalis, page 251

A

Elevate the mandible (temporomandibular joint)

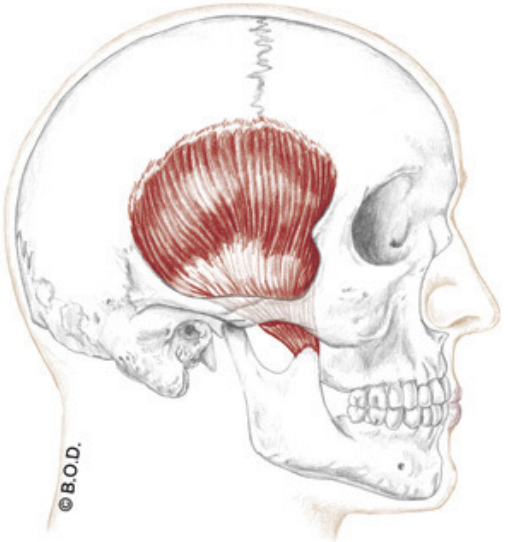
Retract the mandible (temporomandibular joint)

O

Temporal fossa
Temporal fascia

I

Coronoid process of the mandible
Anterior edge of the ramus of the mandible



Lateral View

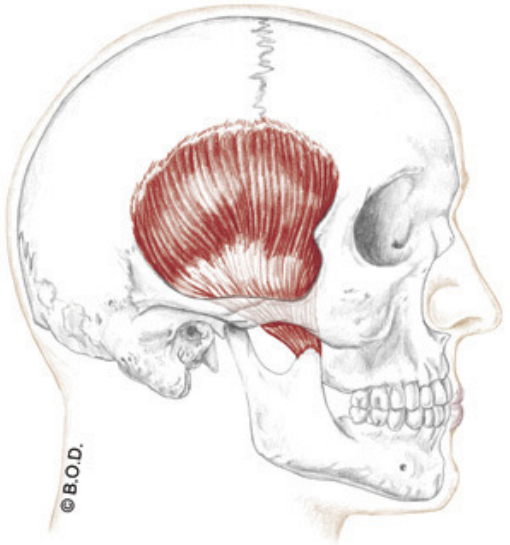
Temporalis, page 251

A Elevate the mandible (temporomandibular joint)

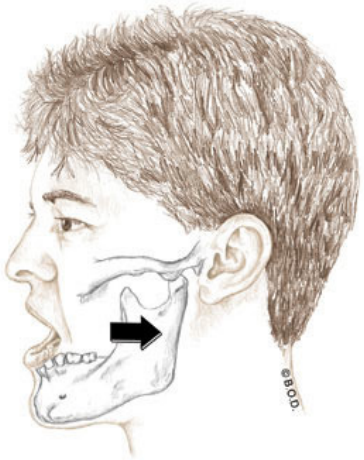
Retract the mandible (temporomandibular joint)

O Temporal fossa
Temporal fascia

I Coronoid process of the mandible
Anterior edge of the ramus of the mandible



Lateral View



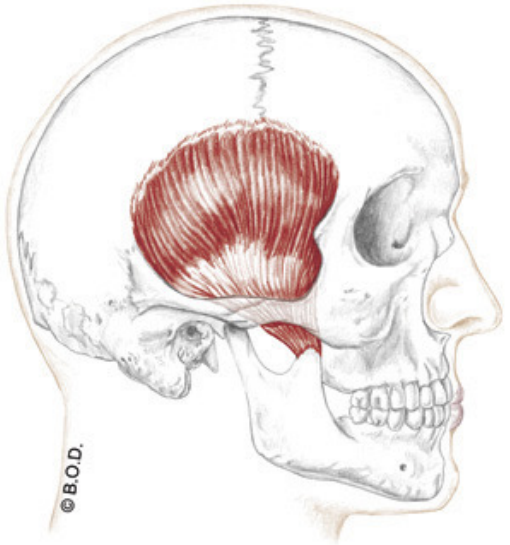
Temporalis, page 251

A Elevate the mandible (temporomandibular joint)

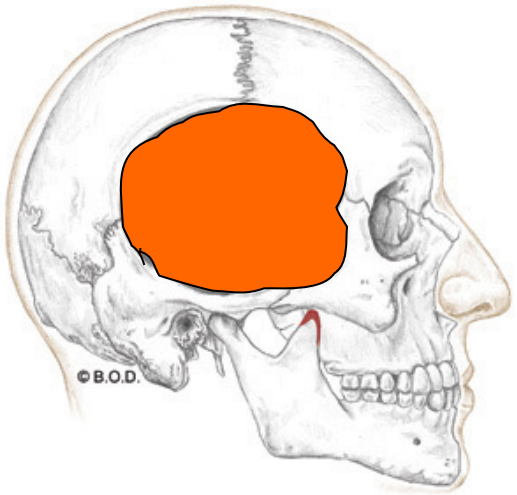
Retract the mandible (temporomandibular joint)

O Temporal fossa
Temporal fascia

I Coronoid process of the mandible
Anterior edge of the ramus of the mandible



Lateral View



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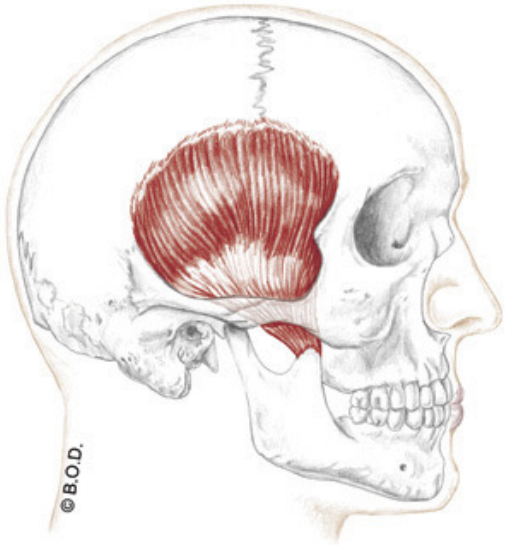
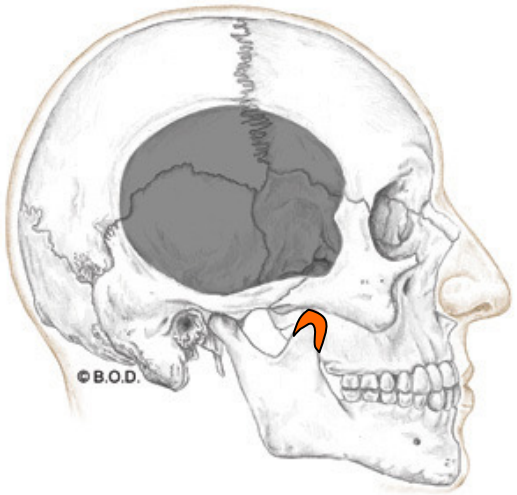
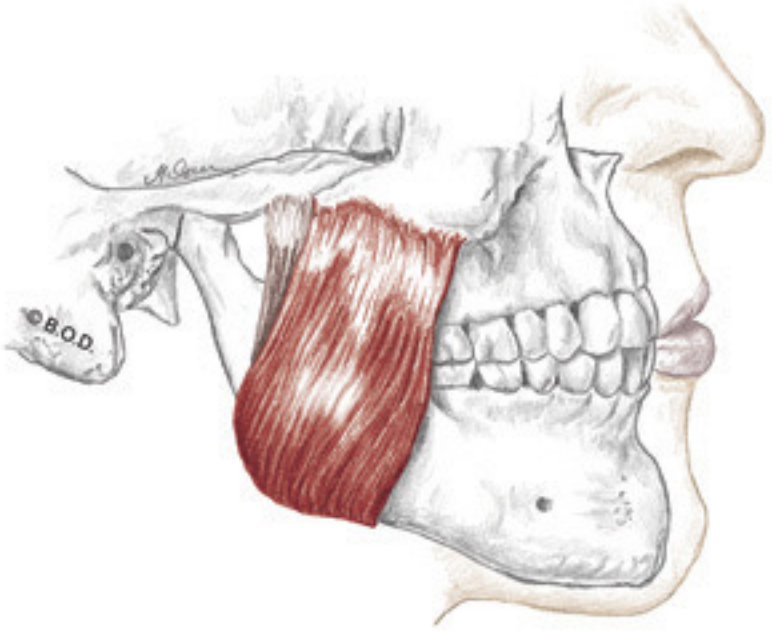


Lateral View



Masseter, page 250



Lateral View

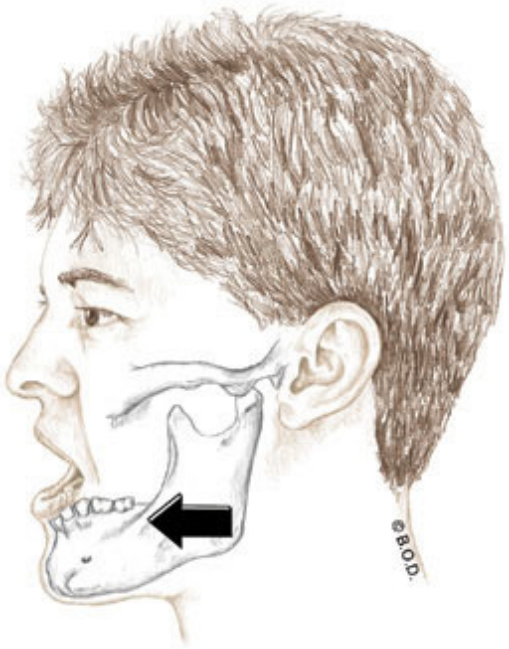
Masseter is the strongest muscle in the body relative to its size.

The two masseters together exert nearly one-hundred-fifty pounds of pressure.

Along with temporalis, masseter is a muscle of mastication.

Actions of the Masseter

Elevation of the mandible



Protraction of the mandible

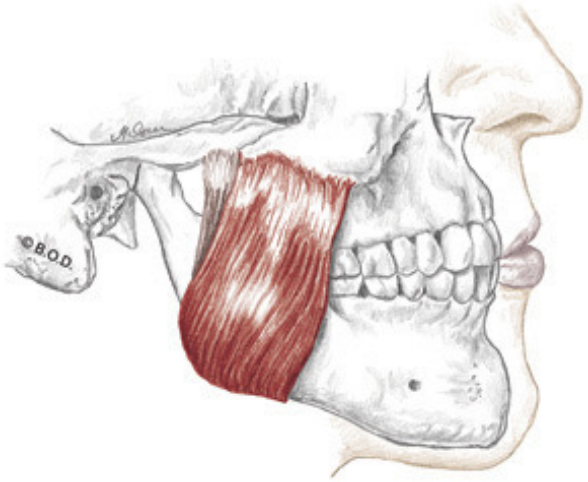
Masseter, page 250

A Elevate the mandible (temporomandibular joint)

May assist to protract the mandible (TM joint)

O Zygomatic arch

I Angle of the mandible
Ramus of the mandible



Lateral View

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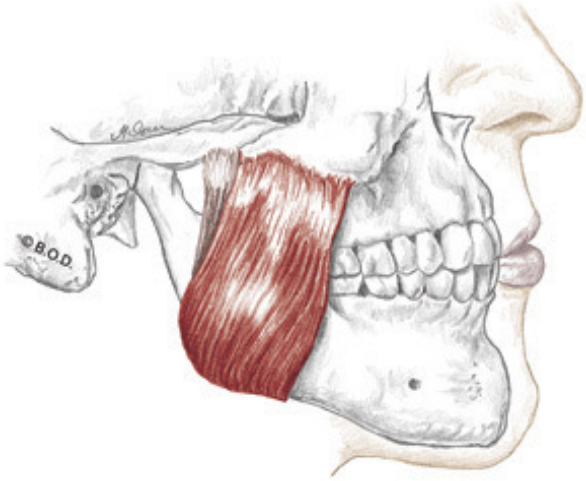
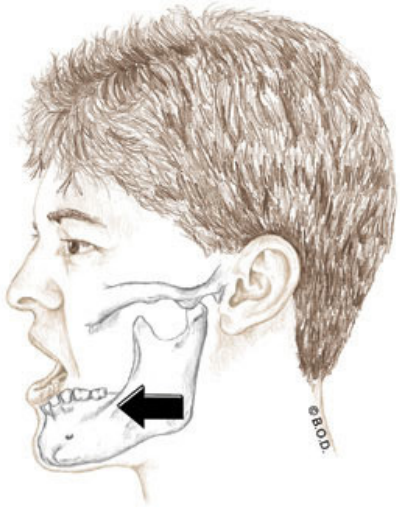
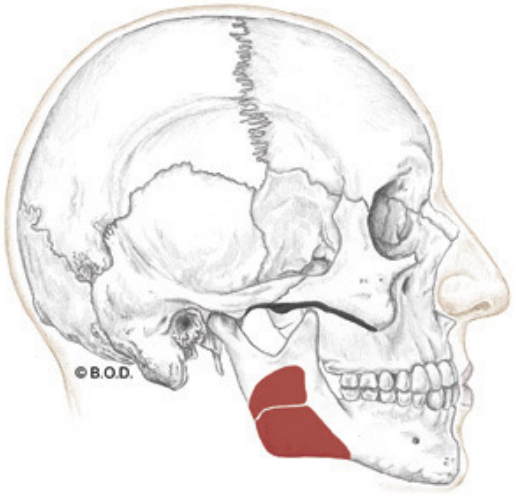


Lateral View





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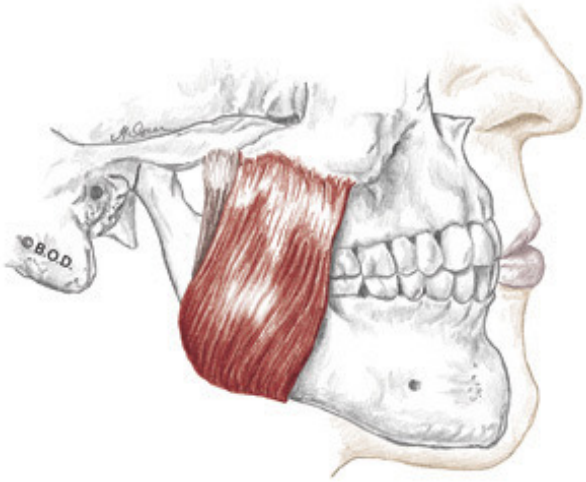
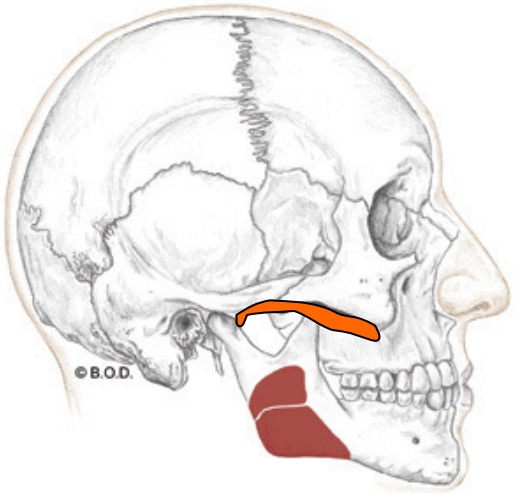


Lateral View



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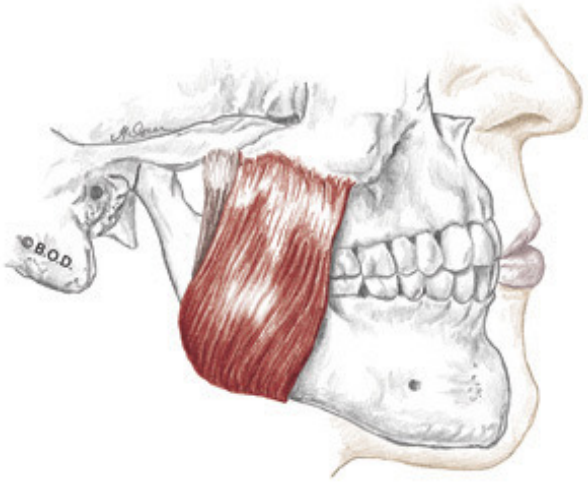
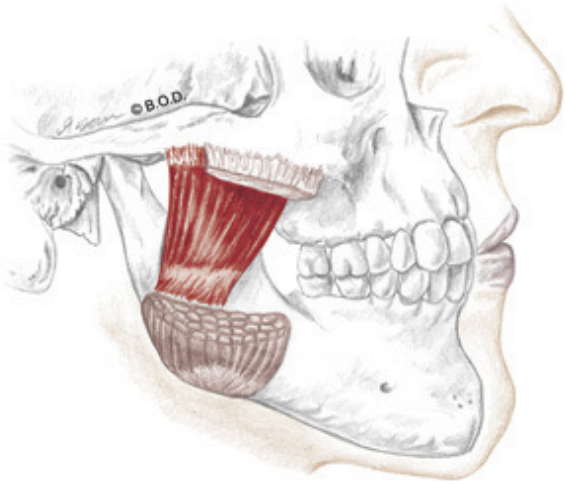
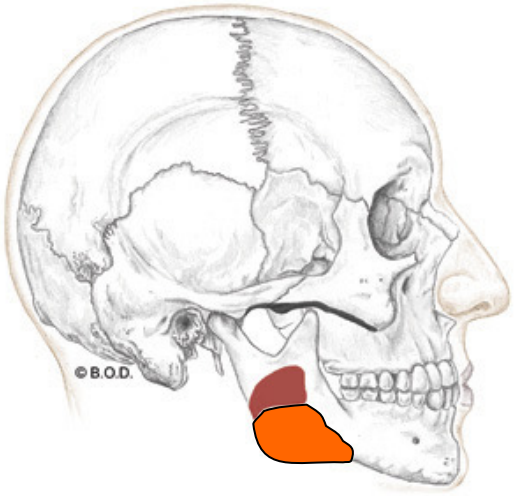


Lateral View





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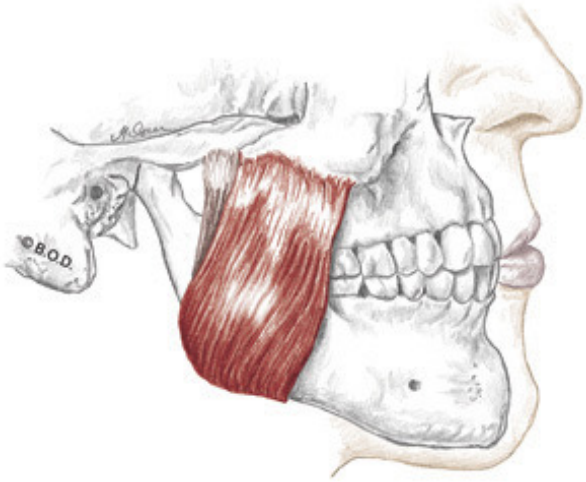

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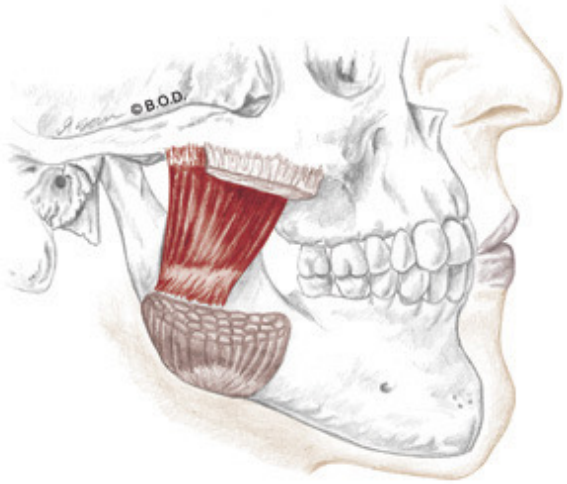

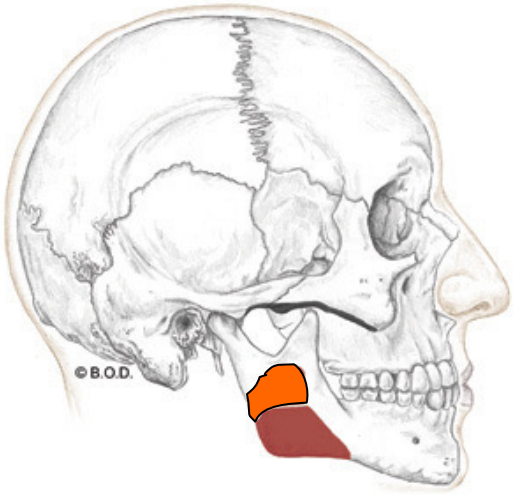

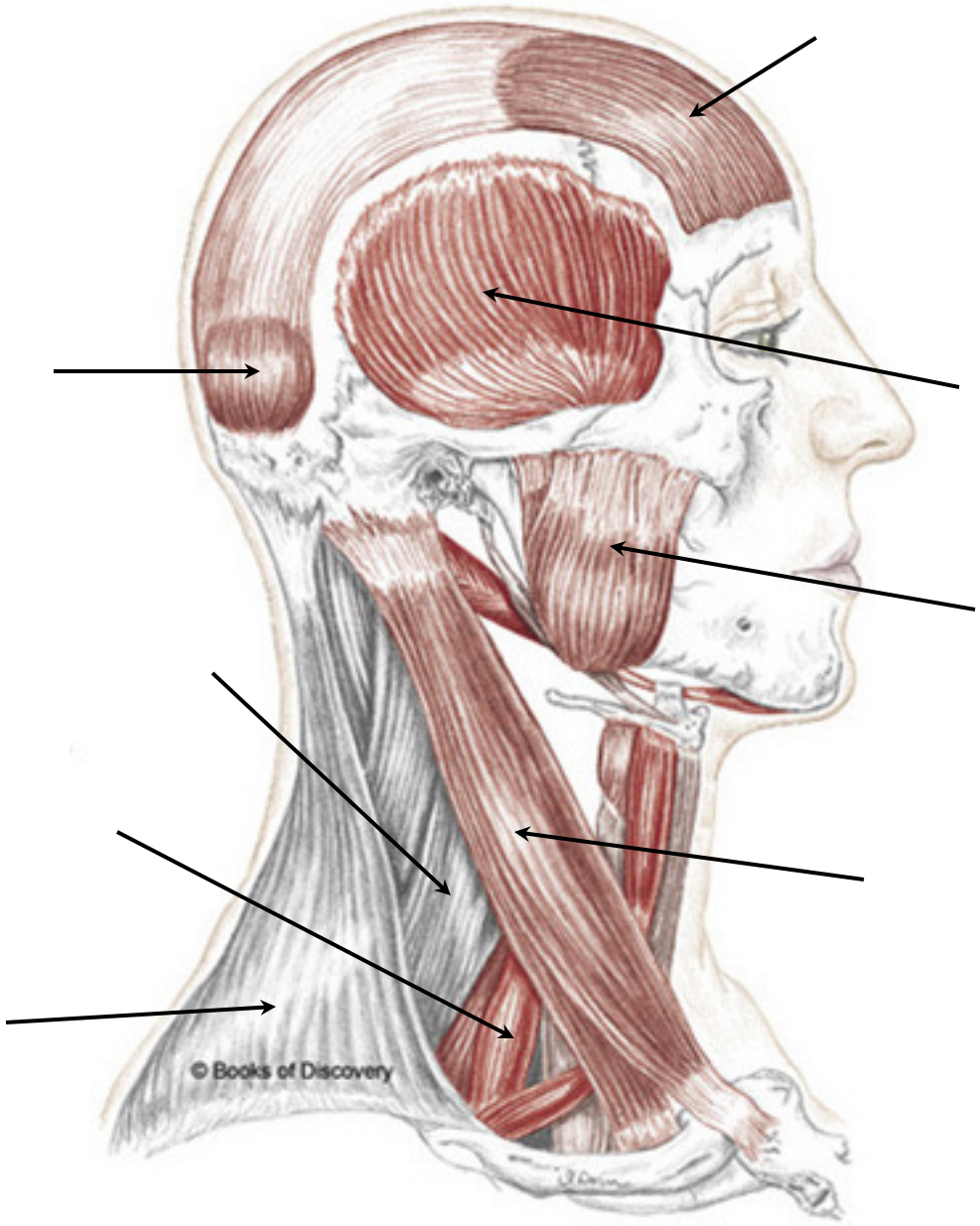
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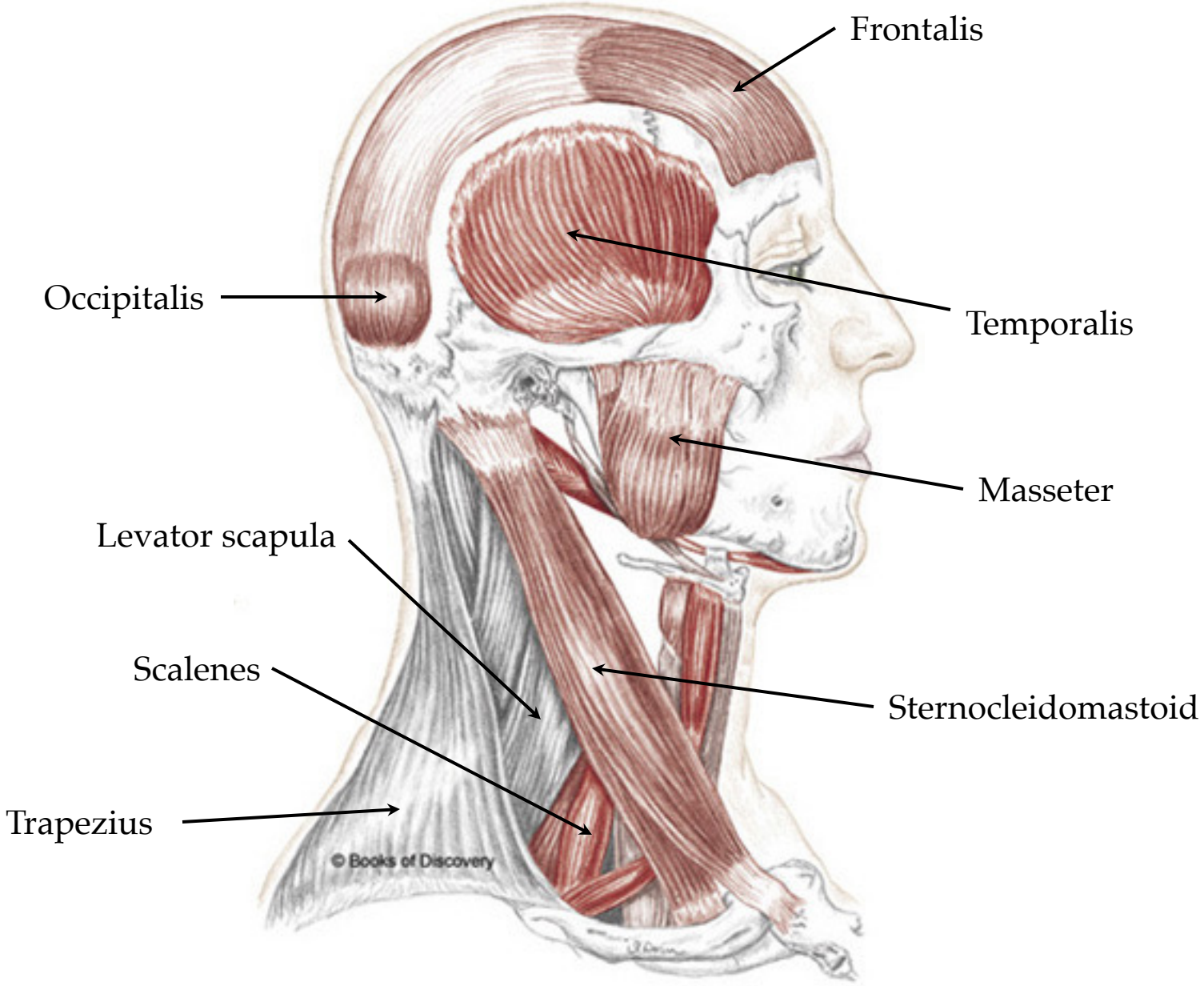
Frontalis
Occipitalis
Temporalis
Masseter
Levator scapula
Scalenes
Sternocleidomastoid
Trapezius
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94a Kinesiology Quiz and Kinesiology: Palpation of Neck, Face, and Scalp