Temporalis

TEM-per-AL-is

Etymology Latin, relating to the temple

Overview

Temporalis (Fig. 3-15) is a large, scallop-shaped muscle covering the side of the head in front of, superior to, and behind the ear. It is a muscle of the temporomandibular joint (TMJ). It should be examined and treated in all clients complaining of headaches or TMJ problems. Therapists usually pay a lot of attention to the anterior and middle portions, but the posterior section of the muscle should be addressed as well.

Attachments

- Superiorly, to the bone and fascia in the temporal fossa superior to the zygomatic arch
- Inferiorly, to the coronoid process of the mandible and the anterior edge of the ramus of the mandible

Actions

- Closes the jaw
- Moves the jaw posteriorly and laterally
- Maintains the resting position of the mandible

Referral Areas

To all or part of temporal region, eyebrow region, cheek, and incisor and molar teeth.

Other Muscles to Examine

- Masseter
- Pterygoids
- All facial muscles
- All anterior, lateral, and posterior neck muscles

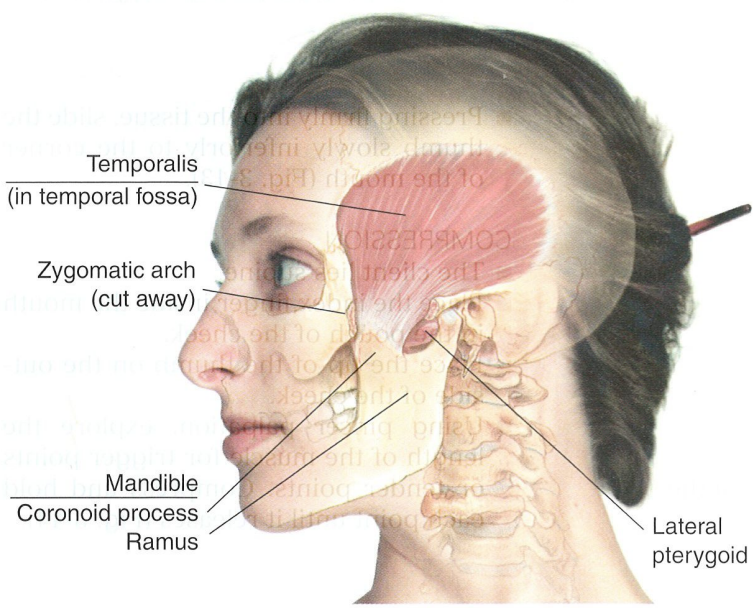

Figure 3-15 Anatomy of temporalis

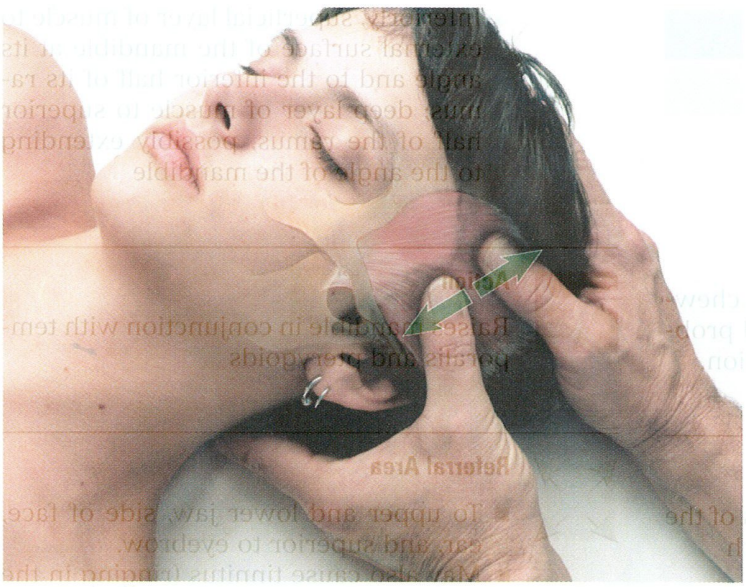

Figure 3-16 Cross-fiber stroking of temporalis with thumbs

Manual Therapy

STRIPPING

- The client lies supine.
- Place fingertips at top of anterior part of muscle (superior and lateral to eyebrow).
- Pressing firmly medially, glide the fingertips inferiorly toward zygomatic arch.
- Place fingertips at the top of the muscle more posteriorly on head. (Note that the muscle is shaped like a scallop, so that it begins higher on the head toward its center, then lower toward the back of the head.) Repeat movement toward zygomatic arch, pressing firmly.
- Continue until the entire muscle is covered.

STROKING ACROSS THE FIBER (1)

- The client lies supine.
- Place fingertips on sides of client's forehead at the anterior edge of temporal fossa (superior to lateral end of eyebrows).
- Pressing firmly, glide the fingertips across the muscle to its posterior edge behind the ear.
- Moving downward, repeat the procedure to cover the entire muscle.

STROKING ACROSS THE FIBER (2)

- The client lies supine.
- Hold the client's head in your spread hands, with your thumbs resting together on the anterior aspect of temporalis.
- Pressing firmly into the muscle with the edges of your thumbs, glide your thumbs apart, so that each thumb slides an inch or two (Fig. 3-16). Move the hands posteriorly, repeating the procedure, until the entire temporalis muscle is covered.

Masseter

MASS-e-ter

Etymology Greek, masticator

Overview

Masseter (Fig. 3-17) is the most prominent chewing muscle. It should be treated first in TMJ problems, since it is in an easily accessible position.

Attachments

- Superiorly, to zygomatic process of the maxilla and to the zygomatic arch
- Inferiorly, superficial layer of muscle to external surface of the mandible at its angle and to the inferior half of its ramus; deep layer of muscle to superior half of the ramus, possibly extending to the angle of the mandible

Action

Raises mandible in conjunction with temporalis and pterygoids

Referral Area

- To upper and lower jaw, side of face, ear, and superior to eyebrow.
- May also cause tinnitus (ringing in the ears).

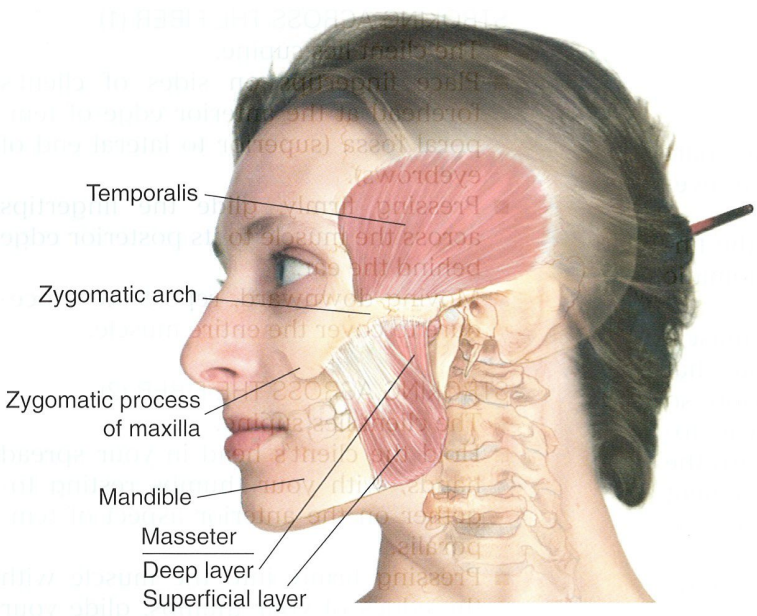

Figure 3-17 Anatomy of masseter

Other Muscles to Examine

- Temporalis
- Pterygoids
- All facial muscles
- All muscles of anterior, lateral, and posterior neck

Manual Therapy

STRIPPING

- The client lies supine.
- Place the thumb or fingertips at the upper aspect of the muscle, just anterior to the opening of the ear canal.
- Pressing firmly inward, glide the thumb (Fig. 3-18A) or fingertips (Fig. 3-18B) downward along the length of the muscle to the mandible.
- Pause at barriers or tender spots until release is felt.
- Make as many passes as necessary, starting nearest the ear and working forward, to cover the entire muscle (usually one or two passes will suffice).
- When a great deal of tenderness is present, repeat the above process, beginning lightly and pressing in more deeply each time.

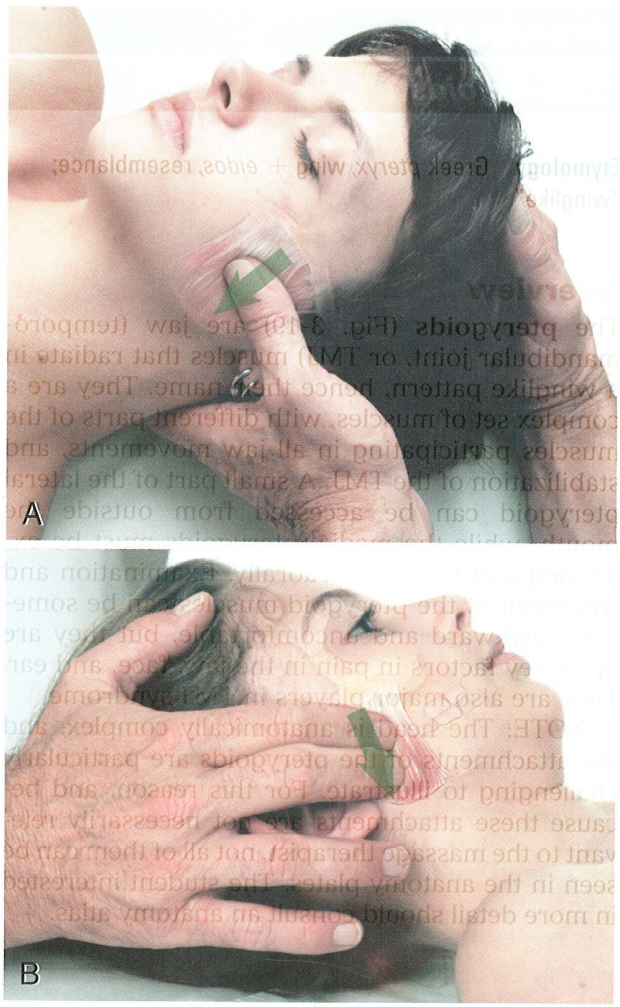

Figure 3-18 External stripping of masseter (A) with the thumb, (B) with the fingertips

Pterygoids

TER-ri-goids

Etymology Greek *pteryx*, wing + *eidos*, resemblance; "winglike"

Overview

The **pterygoids** (Fig. 3-19) are jaw (temporomandibular joint, or TMJ) muscles that radiate in a winglike pattern, hence their name. They are a complex set of muscles, with different parts of the muscles participating in all jaw movements, and stabilization of the TMJ. A small part of the lateral pterygoid can be accessed from outside the mouth, while the medial pterygoids must be examined and treated intraorally. Examination and treatment of the pterygoid muscles can be somewhat awkward and uncomfortable, but they are often key factors in pain in the jaw, face, and ear. They are also major players in TMJ syndrome.

NOTE: The head is anatomically complex, and the attachments of the pterygoids are particularly challenging to illustrate. For this reason, and because these attachments are not necessarily relevant to the massage therapist, not all of them can be seen in the anatomy plates. The student interested in more detail should consult an anatomy atlas.

Medial or Internal Pterygoid

Attachments

- Superiorly, to the inner surface of the lateral pterygoid plate and the lateral surface of the palatine bone, and to the maxilla
- Inferiorly to the lower border of the ramus of the mandible, close to the angle of the mandible, and to the medial surface of the ramus of the mandible near the angle.

Actions

- Participates in raising the mandible
- Protracts the mandible
- Acting alternately, moves the mandible from side to side in grinding motion

Referral Area

- Jaw in front of ear
- Side of jaw (both outside and inside mouth)

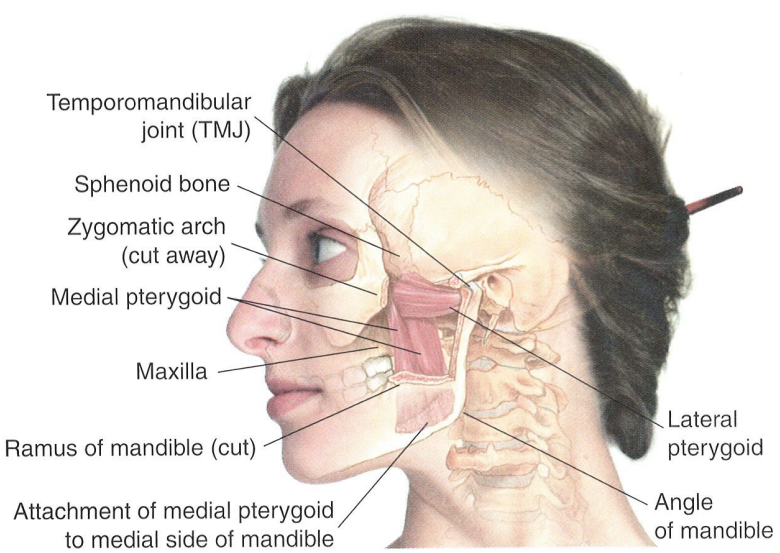

Figure 3-19 Anatomy of pterygoids

Lateral or External Pterygoid

This muscle has two divisions: superior and inferior. Note that the two divisions of the lateral pterygoid are antagonists.

Attachments

Superior attachments:

- Superiorly, to infratemporal crest and inferior lateral surface of greater wing of sphenoid bone
- Inferiorly, to lateral surface of lateral pterygoid plate

Inferior attachments:

- Superiorly, backward, and somewhat downward toward the TMJ, to the ligament of the joint capsule, the articular disc, and the lateral pterygoid plate of the sphenoid
- Inferiorly, diagonally upward to condylar neck and ramus of the mandible just inferior to the joint, to the neck of the mandible, articular disc, and capsule of the temporomandibular joint

Actions

- The two divisions of this muscle are involved in raising and lowering the mandible, as well as moving the mandible posteriorly, anteriorly, and laterally.
- Depresses and protracts the mandible
- Acting alternately, produces side-to-side grinding

Referral Area

- TMJ region
- Face around cheekbone

Other Muscles to Examine

- Masseter
- Temporalis
- All facial muscles
- Anterior, posterior, and lateral neck muscles

Manual Therapy

All of the following are performed with the client supine.

EXTERNAL COMPRESSION (1)

- Use the thumb to find the space just anterior to the TMJ.
- Compress upward, downward, and forward, seeking tender points (Fig. 3-20). Hold each tender point until it releases.

EXTERNAL COMPRESSION (2)

- Place the thumb or two fingertips just under the angle of the mandible.
- Press superiorly and into the medial surface of the mandible, moving slowly and gently, seeking tender points.
- Compress any tender points against the medial surface of the mandible (Fig. 3-21).

Figure 3-20 Compression of pterygoids (1)

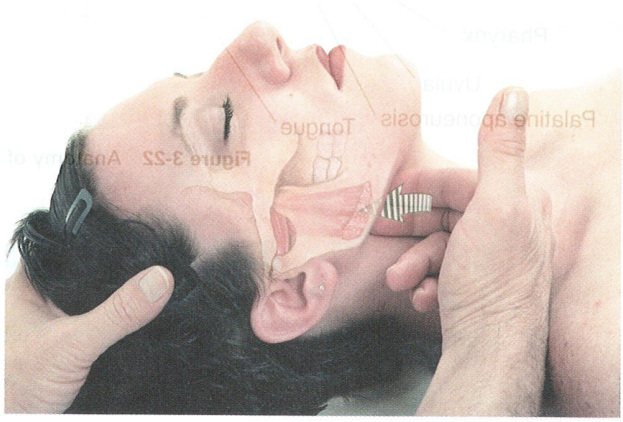

Figure 3-21 Compression of pterygoids (2)

Levator Veli Palatini, Tensor Veli Palatini, and the Palatine Aponeurosis

le-VAY-ter VEL-lee pa-LAT-in-ee
TEN-ser VEL-lee pa-LAT-in-ee
PAL-a-tine ap-o-new-RO-sis

Etymology Levator veli palatini: Latin *levator,* raiser + *velum,* veil or sail + *palatini,* of the palate; "raiser of the veil of the palate"
Tensor veli palatini: Latin *tensor,* tightener + *velum,* veil or sail + *palatini,* of the palate; "tightener of the veil of the palate"
Aponeurosis: Greek, the end of a muscle, where it becomes tendon, from *apo,* from + *neuron,* sinew

Overview

Levator and **tensor palatini** (Fig. 3-22) both attach to the Eustachian (auditory) tube at one end and the palatine aponeurosis at the other. Although further research is needed, they may be involved in the cause of chronic ear infections, as they play a role in keeping the Eustachian tube open.

Attachments

Levator:

- Superiorly, to cartilage of auditory tube and petrous part of temporal bone
- Inferiorly, to palatine aponeurosis

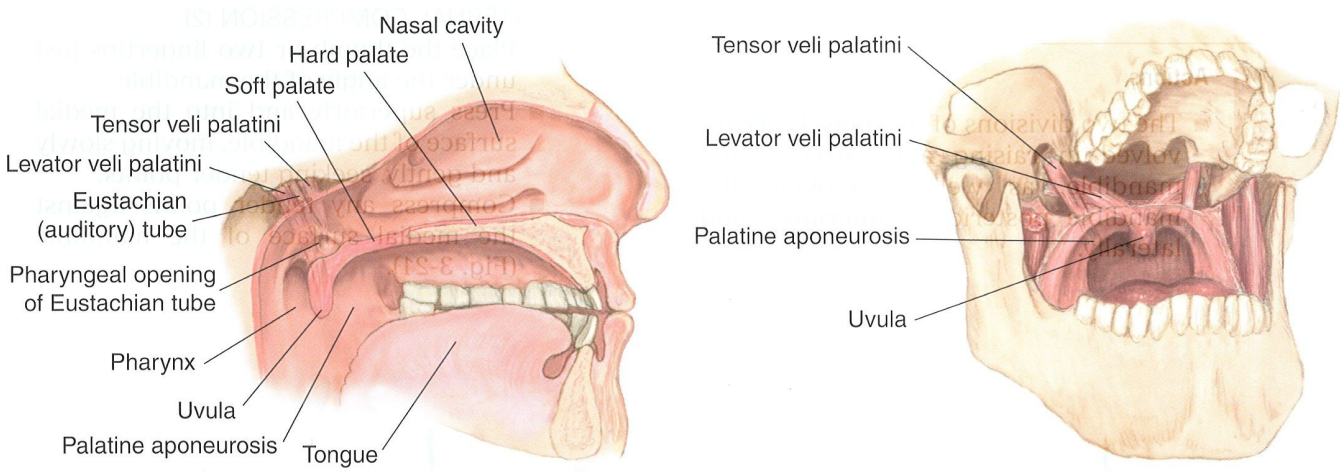

Figure 3-22 Anatomy of tensor and levator veli palatini

Tensor:

- Superiorly, to cartilage of auditory tube, medial pterygoid plate, and spine of sphenoid bone
- Inferiorly, to palatine aponeurosis

Actions

As their names imply, the levator raises the soft palate, and the tensor tenses the soft palate. Both muscles also open the auditory tube to equalize air pressure between the middle ear and the pharynx.

Referral Area

Because these muscles can be accessed only via the palatine aponeurosis, we have no knowledge of trigger points or referral zones for them; however, they are highly suspect in the presence of ear pain and infection.

Other Muscles to Examine

- Temporalis
- Masseter
- Pterygoids
- All anterior, lateral, and posterior neck muscles

Manual Therapy for the Jaw Muscles: Intraoral Work

All of the following are performed with the client supine. Have the client open the mouth as wide as is comfortable.

MANUAL THERAPY FOR THE PALATINE APONEUROSIS (LEVATOR VELI PALATINI, TENSOR VELI PALATINI)

- Place the gloved fingertip on the roof of the mouth just medial to the upper molars.
- Pressing firmly (but gently) superiorly, glide the fingertip back toward the pharynx.
- Maintaining pressure, carefully glide the fingertip along the soft palate toward the center (medially) (Fig. 3-23).

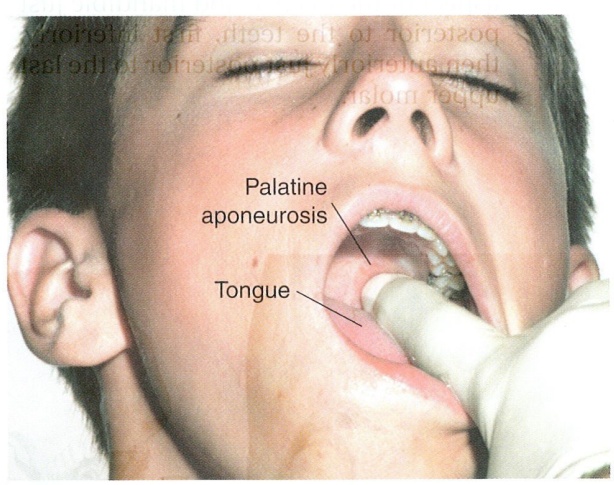

Figure 3-23 Release of palatine aponeurosis (1)

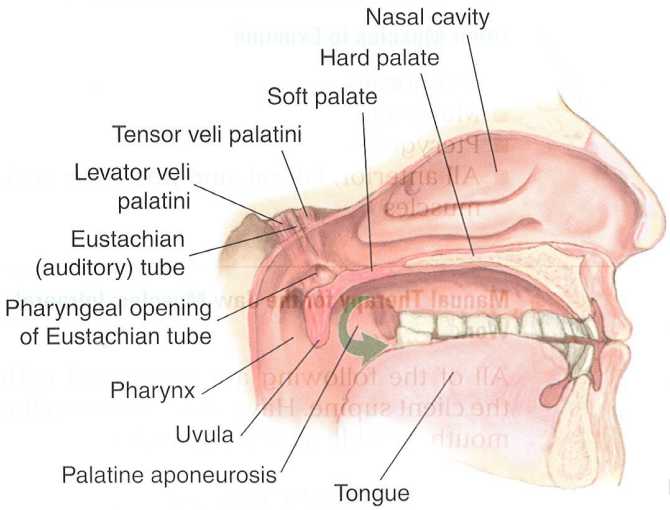

Figure 3-24 Release of palatine aponeurosis (2)

MANUAL THERAPY FOR THE INNER ASPECT

- Beginning just posterior to the last upper molar on the medial side, press the tissue against the bone firmly, gliding in a deep (posterior) direction. The movement should form a "U" shape (Fig. 3-24) as it passes over the inner aspect of the maxilla and mandible just posterior to the teeth, first inferiorly, then anteriorly just posterior to the last upper molar.

MANUAL THERAPY BETWEEN THE MAXILLA AND MANDIBLE

- Place the fingertip at the deepest point (the bend) of the "U" movement just made; that is, on the medial aspect of the mandible.
- Pressing the tissue firmly against the bone, move the finger laterally between the teeth (Fig. 3-25).

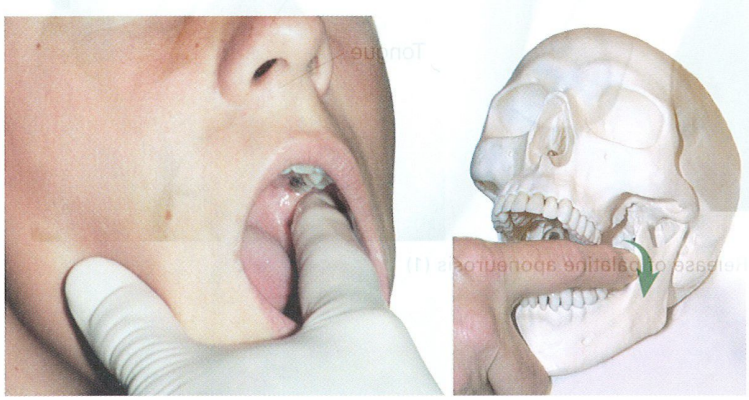

Figure 3-25 Stroking between the maxilla and mandible

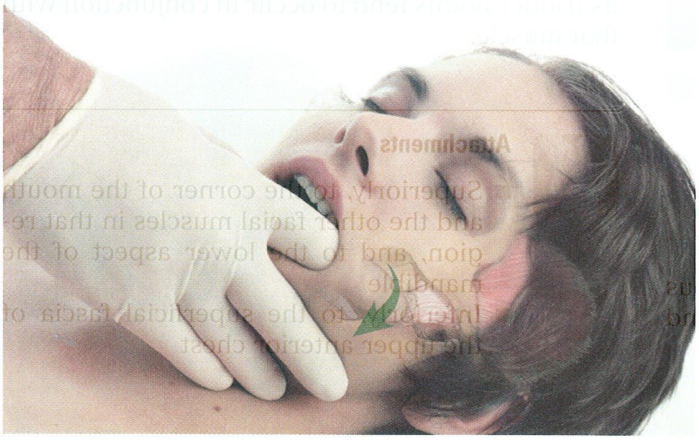

Figure 3-26 Intraoral stroke over the coronoid process

MANUAL THERAPY OF OUTER ASPECT

- Beginning just posterior to the last upper molar on the lateral side, press the tissue against the bone firmly, moving in a deep (posterior) direction. The movement should form a "U" shape as it passes over the coronoid process and inside (deep to) the masseter, first inferiorly, then anteriorly to just posterior to the last lower molar (Fig. 3-26).
- Repeat the above movement pressing outward to work the masseter from inside. You can also work the front border of the masseter with the fingertip (Fig. 3-27).

Caution

- **If you are worried about being bitten, use a finger of the non-treating hand to press the cheek between the client's teeth.**
- **To suppress the gag reflex while working medially, have the client curl the tongue backward into the pharynx.**

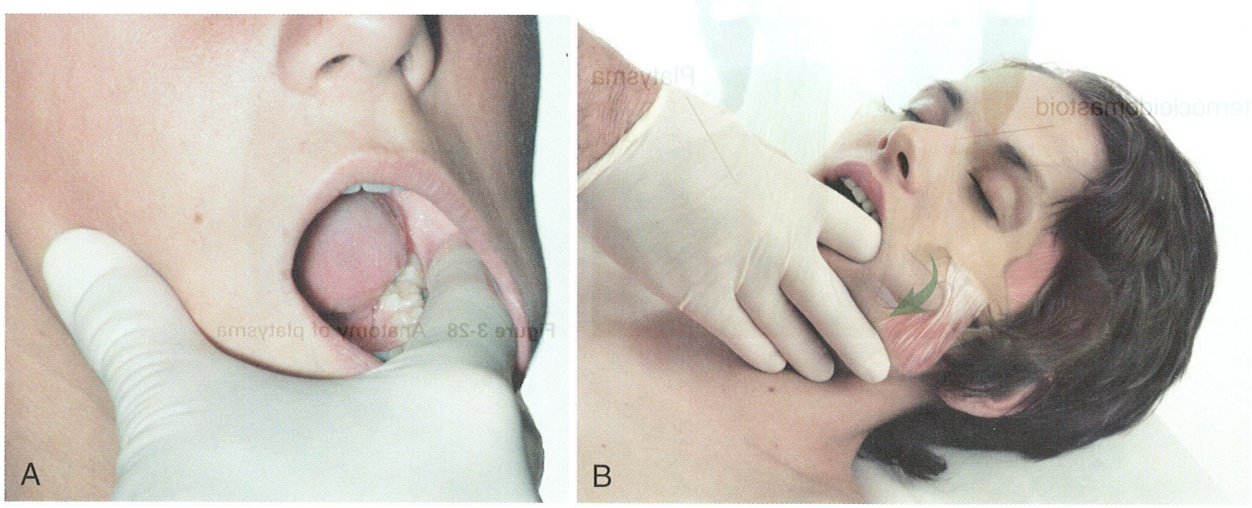

Figure 3-27 Intraoral moving compression of masseter: (A) intraoral view, (B) lateral view

Platysma

pla-TIZ-ma

Etymology Greek, a flatplate

Overview

Platysma (Fig. 3-28) is a thin, flat, subcutaneous muscle. It lies parallel to sternocleidomastoid, and its trigger points tend to occur in conjunction with that muscle.

Attachments

- Superiorly, to the corner of the mouth and the other facial muscles in that region, and to the lower aspect of the mandible
- Inferiorly, to the superficial fascia of the upper anterior chest

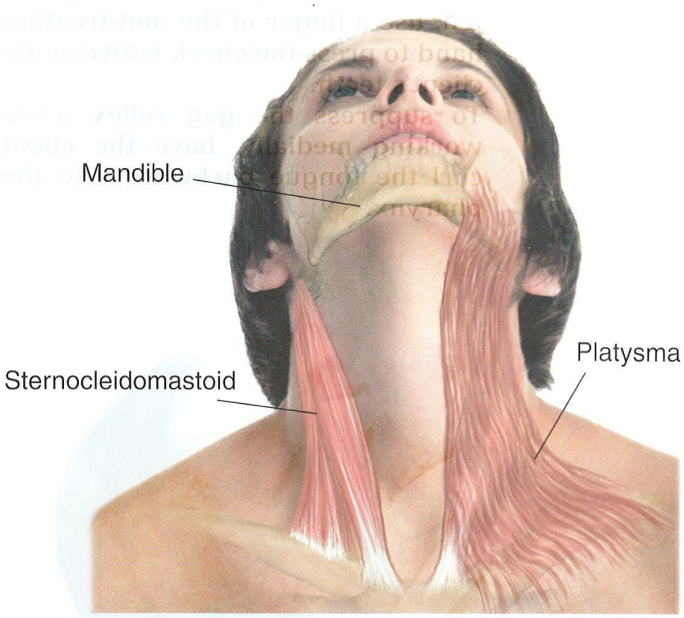

Figure 3-28 Anatomy of platysma

Actions

- Pulls the corner of the mouth downward and the skin of the chest upward.
- Tenses the skin of the neck (as in horror)

Referral Area

Over the anterior neck in the area of the sternocleidomastoid; may also be a hot, prickly sensation to the upper chest

Other Muscles to Examine

Sternocleidomastoid

Manual Therapy

STRIPPING

- Place the fingertips on the chest 2 or 3 inches below the clavicle, just medial to the anterior deltoid.
- Pressing firmly into the tissue, glide the fingertips superiorly over the clavicle and up the neck, then over the mandible and halfway up the cheek.
- Shift the fingertips medially to the next uncovered area and repeat the procedure (Fig. 3-29), ending the stroke at the mouth.
- Repeat the procedure across the chest, with the last stroke beginning at the sternum.
- The same procedure may be performed from superior to inferior using the edge of the thumb.

Figure 3-29 Stripping platysma with fingertips

Muscles Attached to the Hyoid Bone

Etymology Greek, *hyoeides*, shaped like the letter upsilon (u- or v-shaped)

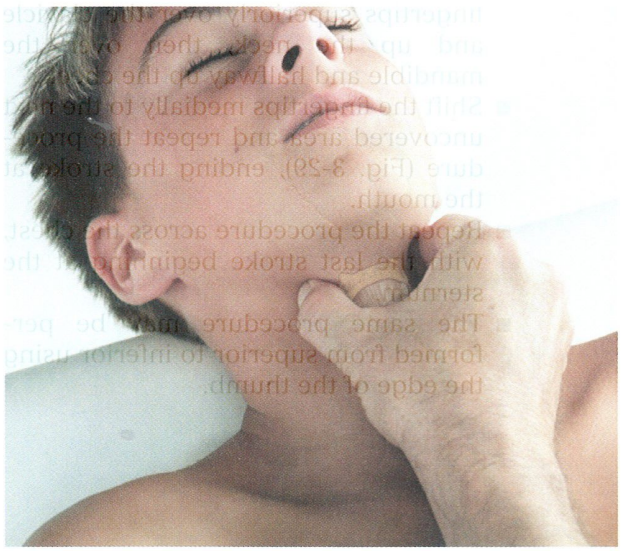

Figure 3-30 Locating the hyoid bone by palpation

Overview

The **hyoid bone** lies just superior to the thyroid cartilage at the level of the body of the third cervical vertebra. It is the first resistant structure below the chin. To find it, place your thumb and index finger on either side of the anterior neck below the chin about 3 or 4 inches apart. Squeeze gently. If you don't feel resistance, shift your fingers a little farther down and squeeze again. Repeat until you feel a resistant structure (Fig. 3-30). It may also help to ask the client to swallow, which will cause a palpable movement of the hyoid bone.

Many muscles attach to the hyoid bone (Fig. 3-31). Those superior to the hyoid bone are called **suprahyoid** muscles; those inferior, **infrahyoid** muscles. They fan out from the hyoid bone both above and below. It is not necessary in basic clinical massage therapy, and therefore this book, to distinguish them all; they can be worked as a group above and below. The principal muscle involved in pain referral and clinical treatment is the digastric muscle, which is discussed separately on page 88. Geniohyoid and sternothyroid are not illustrated because they lie deep to mylohyoid and sternohyoid; their anatomical details are not essential to the purposes of this book.

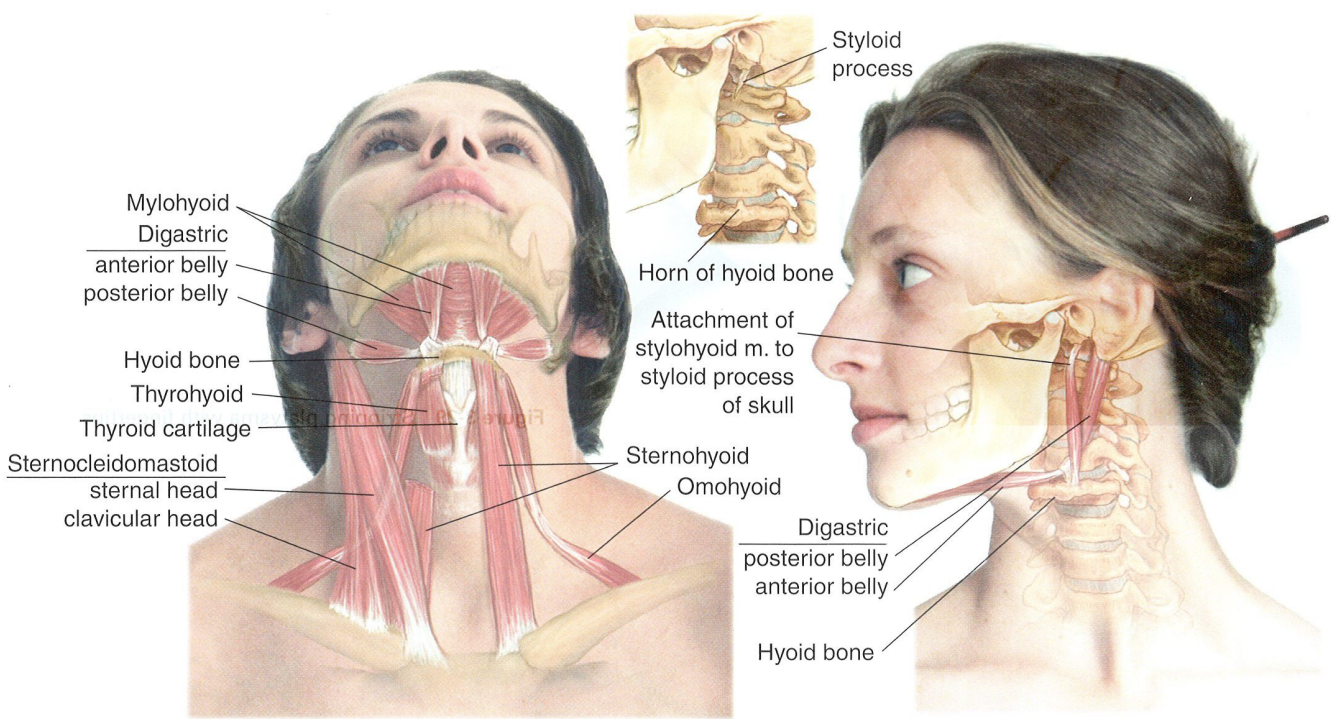

Figure 3-31 Anatomy of the hyoid bone and attached muscles

Figure 3-32 Stripping of suprahyoids

Figure 3-33 Stripping of infrahyoids

Suprahyoid muscles:

- Digastric (indirectly attached to the hyoid bone)
- Stylohyoid
- Mylohyoid
- Geniohyoid (not illustrated)

Infrahyoid muscles:

- Sternohyoid
- Thyrohyoid
- Omohyoid
- Sternothyroid (not illustrated)

Manual Therapy of the Suprahyoid Muscles

STRIPPING

- Locate the hyoid bone with your thumb and index finger.
- Place your thumb just superior to the hyoid bone medial to its horn (end) (Fig. 3-32).
- Pressing gently into the tissue, glide the tip of your thumb slowly superiorly to the inner surface of the mandible at the center.
- Starting again superior to the hyoid bone, place your thumb slightly lateral to the previous starting point.
- Slide the thumb slowly superiorly to the inner surface of the mandible, parallel to the first pass.
- Repeat the process, letting the path of your thumb fan out from the hyoid bone until it ends at the styloid process between the angle of the mandible and the mastoid process, just inferior to the ear.

Caution

Do not exert excessive pressure on the styloid process; it can be broken.

Manual Therapy of the Infrahyoid Muscles

STRIPPING

- With the side of one thumb or finger, gently press the thyroid cartilage laterally away from you.
- Place the thumb or fingertips of the other hand just superior to the manubrium next to the trachea.
- Pressing gently, glide the thumb or fingertips slowly up to the hyoid bone (Fig. 3-33). Place the tip of the thumb just over the clavicle slightly lateral to the sternal notch and repeat the above procedure.
- Repeat this procedure until you have covered a fan-shaped area extending to the clavicular attachment of sternocleidomastoid.

Digastric

die-GAS-trick

Etymology Greek *di,* two + *gaster,* belly

Overview

One of a group of muscles that attach to the hyoid bone, **digastric** (Fig. 3-34) is close to and difficult to distinguish from the **stylohyoid.** Digastric takes its name from its two bellies: one is between the mastoid process and the hyoid bone, the other between the hyoid bone and the mandible.

Attachments

- Inferiorly, both bellies attach to the hyoid bone.
- Superiorly, the posterior belly attaches to the mastoid process deep to longissimus capitis, splenius capitis, and sternocleidomastoid; the anterior belly attaches to the inferior edge of the mandible near the center.

Actions

- Lowers the mandible (opening the jaw)
- Raises the hyoid bone
- Retracts the mandible
- Participates in swallowing and coughing
- Steadies the hyoid in coughing, swallowing, and sneezing

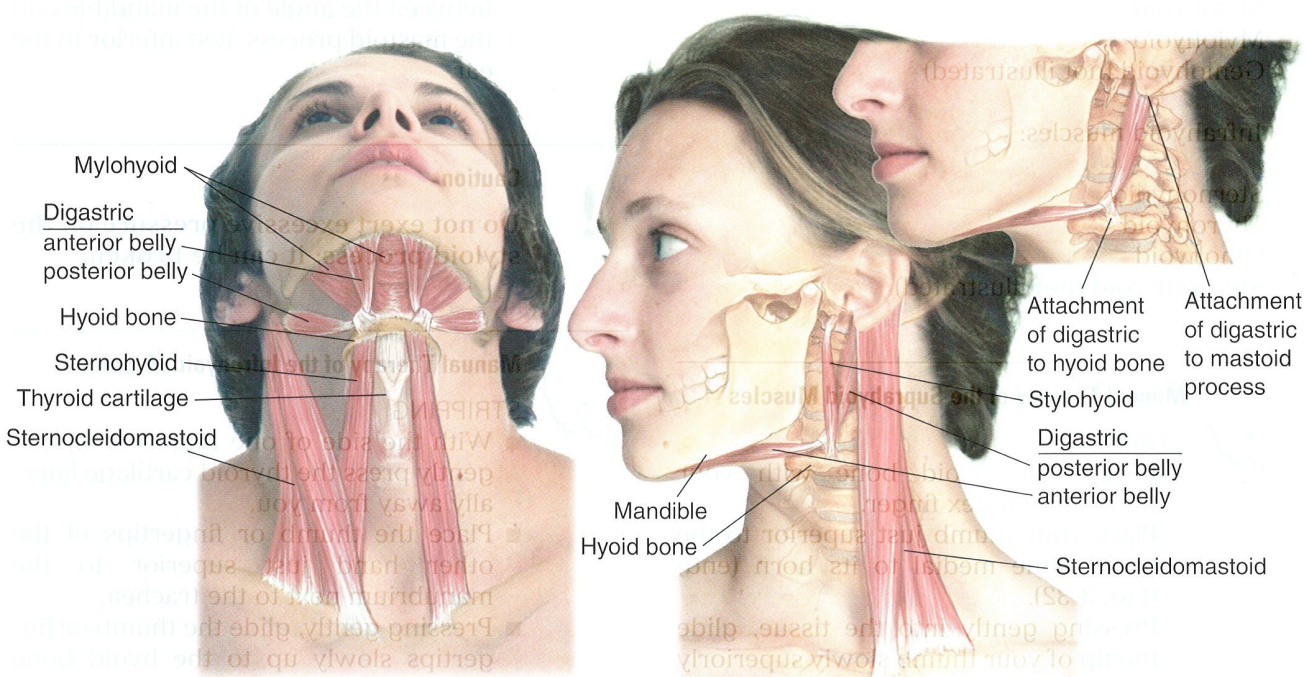

Figure 3-34 Anatomy of digastric and stylohyoid

Figure 3-35 Stripping of posterior belly of digastric

Referral Area

Posterior belly: inferior to, over, and behind the angle of the mandible; over the mastoid process; into the occipital region
Anterior belly: to the four lower incisors and directly inferior to them

Other Muscles to Examine

- Other muscles of the anterior and lateral neck
- Occipitalis

Manual Therapy

STRIPPING

- Gently locate the hyoid bone using the tips of your thumb and index finger.
- Place the tip of the thumb or a finger just superior to one side of the hyoid bone.
- Pressing gently, follow the posterior belly to the mastoid process (Fig. 3-35).
- Starting at the same position, follow the anterior belly to a point just to one side of the center of the underside of the mandible.
- Pause where tenderness is found and wait for release.
- Repeat on the opposite side.

Sternocleidomastoid

STERN-o-KLIDE-o-MASS-toid

Etymology Greek: *sternon*, chest + *kleis*, clavicle + *mastos*, breast + *eidos*, resemblance

Overview

Sternocleidomastoid (usually abbreviated **SCM**) (Fig. 3-36) is a two-headed muscle with major responsibilities for stabilizing, turning, and flexing the head and neck. It is also a common site for many trigger points that cause a wide variety of headaches. Sternocleidomastoid should be examined carefully in all clients complaining of headaches. Its two heads are the **sternal**, which is more anterior, medial, and superficial; and the **clavicular**, which is more posterior, lateral, and deep. Note that the sternocleidomastoid also maintains posture by helping to compensate for tilting of the shoulder girdle.

Attachments

- Superiorly to the lateral surface of the mastoid process and the lateral half of the superior nuchal line of the occipital bone

Inferiorly:

- Sternal head: to the anterior surface of the manubrium
- Clavicular head: to the medial third of the anterior surface of the clavicle

Actions

Bilateral:

- Stabilizes the head and neck
- Resists neck hyperextension and backward movement of the head (whiplash)
- Flexes the neck
- Participates to some degree in swallowing and breathing

Unilateral:

- Rotates face to the opposite side
- Tilts face upward
- With trapezius, bends the head and neck to the side

Referral Area

- Sternal head: into the occipital region, in an arc over the eye, the top of the head, the cheek, and areas on and inferior to the chin
- Clavicular head: into the ear, behind the ear, and into the frontal region bilaterally

Other Muscles to Examine

All other muscles of the anterior, lateral, and posterior neck

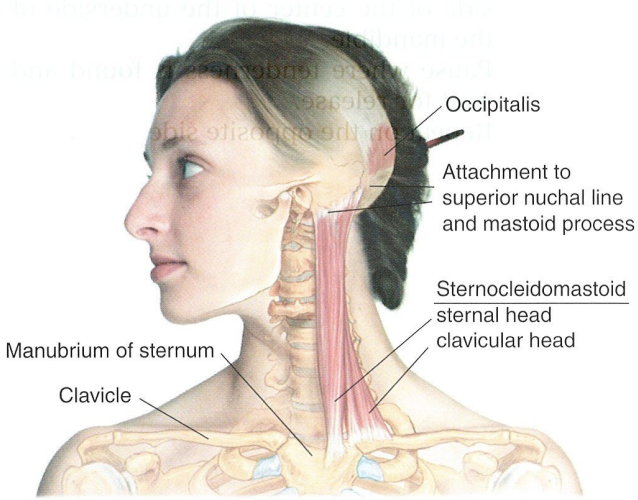

Figure 3-36 Anatomy of SCM

Figure 3-37 Stripping of sternal head of SCM

Manual Therapy

STRIPPING

- The client is supine. Hold the client's head in one hand and turn it slightly to the side opposite to the muscle you intend to work on.
- Place the thumb or fingertips of the other hand on the attachment of the muscle at the mastoid process.
- Pressing firmly into the tissue, slide the thumb or fingertips slowly down the sternal head all the way to the attachment at the manubrium, pausing at tender spots until they release (Fig. 3-37).

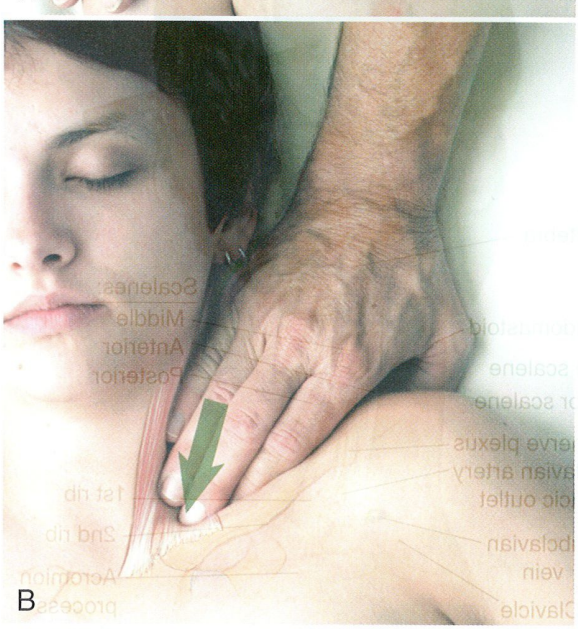

Figure 3-38 Stripping of clavicular head of SCM with thumb (A) and fingertips (B)

- Beginning at the superior attachment again, repeat the process on the clavicular head, all the way to the attachment on the clavicle (Fig. 3-38).
- Repeat the above process on the other side.

PINCER COMPRESSION

- Hold the client's head in one hand, firmly supporting the back of the head and base of the skull.
- Lift the head a few inches to induce sternocleidomastoid to stand out; turn the head slightly away from the side on which you intend to work.
- Starting as close as possible to the mastoid attachment, grasp the sternal head between your thumb and either the side of your index finger or the tips of your index and middle fingers (Fig. 3-39).
- Compress firmly but gently, asking the client for feedback about tenderness and/or pain referral. If there is tightness or tenderness, hold until release.
- Shift your fingers down slightly, repeating until you get as close to the manubrium as possible.
- Turn the client's head a little farther from the side you are working on, and repeat the above process with the clavicular head. Note that this head is more difficult to grasp, as it lies deeper than the sternal head.
- Repeat the entire process on the other side.

Figure 3-39 Pincer compression of SCM

Scaleni (Scalenes)

ska-LEN-ee

Etymology Greek, *skalenos*, uneven

Overview

The **scalenes** (Fig. 3-40) are known for their propensity to refer pain. Although they have the fairly simple function of tilting the head to either side, we also tend to use them to hold up the ribcage, and as inappropriate accessory muscles in paradoxical breathing (see Chapter 4, Muscles of Breathing). As a result, we subject the scalenes to substantial tension. Few people escape problems with these muscles.

The term **thoracic outlet** is used to refer to the entire area defined by scalenes and the first rib, or to the passage between the anterior and middle scalenes. On their way to the arm, the axillary (subclavian) artery and brachial plexus pass between these two muscles, then between the first rib and the clavicle. They can become entrapped at some point in this area by tightness in the anterior and middle scalenes. It is sometimes difficult to distinguish pain referred by the scalenes from pain resulting from entrapment of the brachial plexus.

NOTE: Scalenus minimus is not found in everyone, and often occurs on only one side. Although it can have a trigger point, it is difficult to isolate manually, and may be treated as an aspect of the anterior scalene.

Attachments

Anterior scalene (scalenus anterior):

- Superiorly, to the front of the transverse processes of C3 through C6
- Inferiorly, to the inner upper edge of the first rib

Middle scalene (scalenus medius):

- Superiorly, to the back of the transverse processes of C2 through C7
- Inferiorly, to the outer upper edge of the first rib

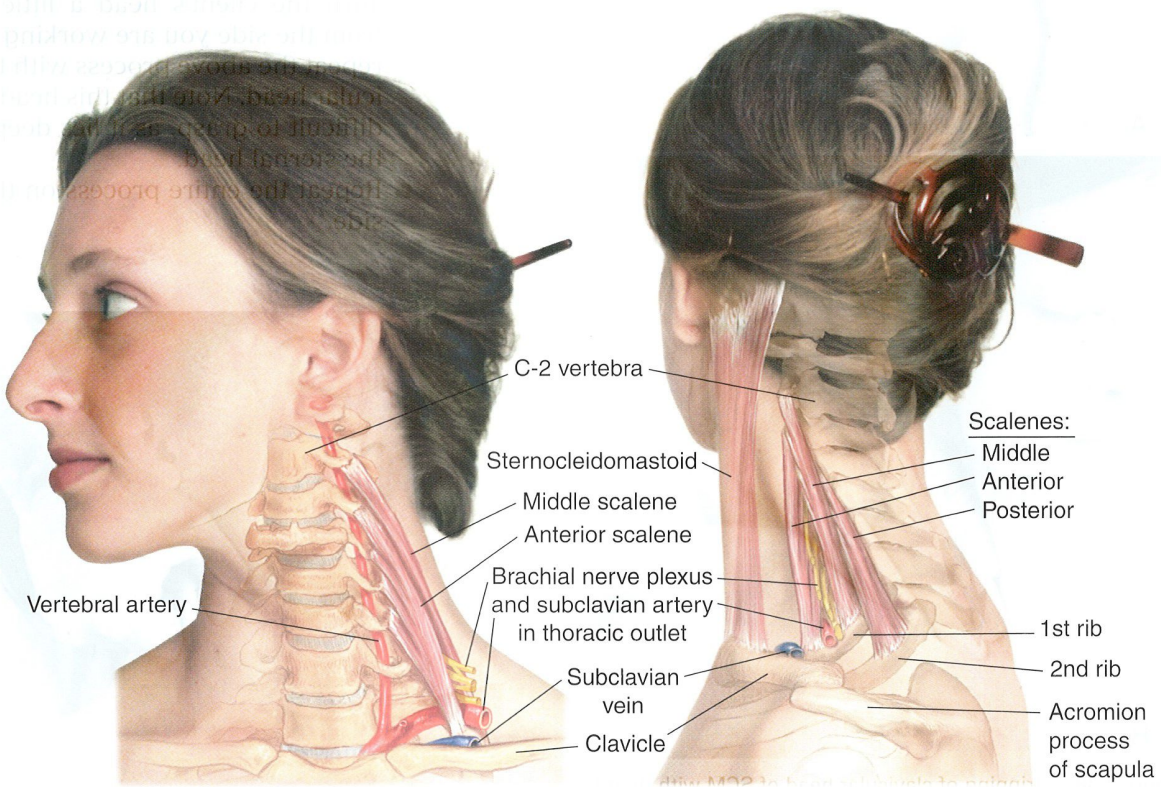

Figure 3-40 Anatomy of the scalenes and the thoracic outlet

Posterior scalene (scalenus posterior):

- Superiorly, to the back of the transverse processes of C5 or C6 and C7
- Inferiorly, to the lateral surface of the second rib, and sometimes also the third

Scalenus minimus (found in most, but not all, people):

- Superiorly, to the front of the transverse process of C7
- Inferiorly, to the top of the pleural dome and the inner edge of the first rib

Actions

- Primary lateral flexors of the cervical spine
- Anterior scalenes: bilaterally, assist in flexion of the neck
- Posterior scalenes: stabilizers of the neck, participate in inspiration, also tend to be involved in raising the ribcage in lifting and carrying

Referral Area

- Over the shoulder and down the medial side of the shoulderblade
- Over the upper anterior chest
- Down the front of the upper arm
- Down the radial half of the forearm and into the thumb and fingers, especially the index finger
- Scalenus minimus: dorsum of the forearm and hand

Other Muscles to Examine

All muscles of the rotator cuff, anterior chest, and arm

Manual Therapy

STRIPPING (1)

- The client lies supine.
- Stand at the client's head. Hold the head underneath with one hand.
- Place the fingers of the other hand under the client's neck, and with the thumb find the upper part of the anterior scalene (Fig. 3-41).
- Pressing firmly into the tissue, slide the thumb slowly along the muscle as far as you can reach, into the space behind the clavicle.
- Repeat the process, this time finding the middle scalene.
- Repeat the process, this time finding the posterior scalene and following it as far as you can into the space just anterior to the edge of trapezius (Fig. 3-42).
- Repeat the entire process on the other side.

As an alternative to the above procedure, you can use the fingertips rather than the thumb (Fig. 3-43).

Figure 3-41 Stripping of anterior scalene

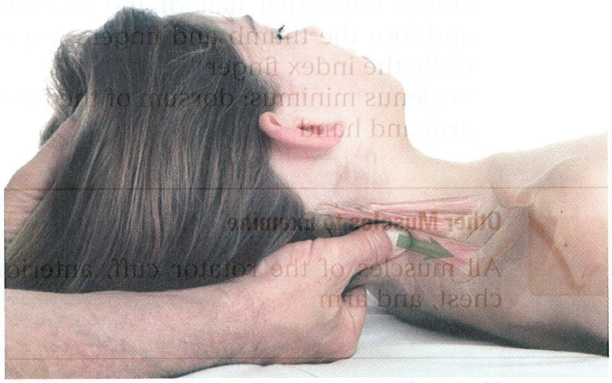

Figure 3-42 Stripping of posterior scalene with thumb

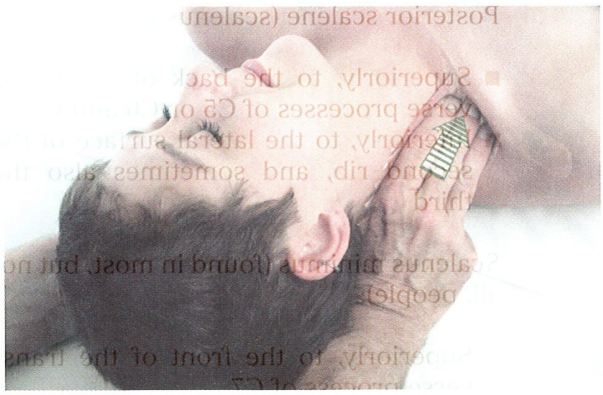

Figure 3-44 Deep compression of scalenes

DEEP COMPRESSION

- The client lies supine.
- Stand or sit at the client's head. Place the fingertips on the scalenes at the base of the neck. Press deeply into the tissues in a diagonal direction toward the chest on the opposite side of the client. Hold until the muscles release (Fig. 3-44).

COMPRESSION

- The client lies prone.
- Stand beside the client facing the client's head. Place your hand at the base of the client's neck, with the heel of the hand resting over trapezius and levator scapulae.
- Curl the fingers over trapezius so that they grasp the scalenes at the base of the neck.

Figure 3-43 Stripping of scalenes with fingertips

- Squeeze, at first gently, then with increasing firmness, as you feel the scalenes release.

STRIPPING (2)

- The client lies prone.
- Stand at the client's head facing the client.
- Holding the head steady with one hand, find the superior portion of the middle scalene with the other thumb.
- Pressing firmly into the tissue just anterior to the edge of trapezius (Fig. 3-45), slide the thumb along the anterior scalene as far as it will go.
- Repeat for posterior scalene.
- The previous procedure may also be performed using the knuckles (Fig. 3-46).

STRIPPING (3)

- The client is seated.
- Stand behind seated client.
- Place the thumb on the middle scalene at its superior attachment (Fig. 3-47).
- Pressing deeply into the tissue, glide the thumb along the muscle to its inferior attachment.
- Repeat above procedure for anterior and posterior scalenes.

POSTERIOR NECK MUSCLES

Overview

Because of the large number of overlapping muscles in the posterior neck, it is difficult to isolate them and their tender points manually. When you