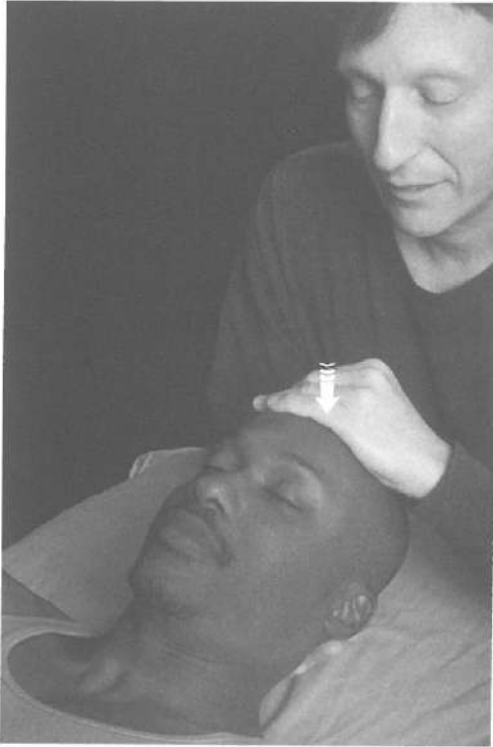


I. Neck

NECK FLEXION

Supine and Prone

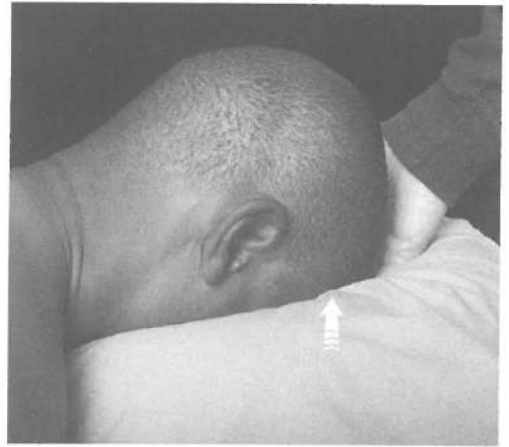


Therapist lifts and supports the head 3–4 inches off the table. If client can hold his or her head up, apply *light* resistance downward on the forehead while client resists up. Watch for breath holding, thrusting the chin up, or trying to curl the abdomen to complete the movement.

Core: *Cervical*

Antagonist: *Neck extensors*

Synergist: *SCMs, longus colli, abdominals, hip flexors*



Gently lift the head while the client presses down.

UNILATERAL STERNO-CLEIDOMASTOID (SCM)

SCM Attachment: Top of sternum, medial clavicle, and Mastoid process

Action: Flexion and rotation of the neck

Core: *Cervical*

Antagonist: *Neck extensors*

Synergist: *Abdominals, psoas, hip flexors*



This test is the same as the bilateral SCM test, with the client's head rotated 45° to one side. Pressure is applied on side of forehead above the eyebrow. *Be careful not to press too hard!*

LONGUS COLLI

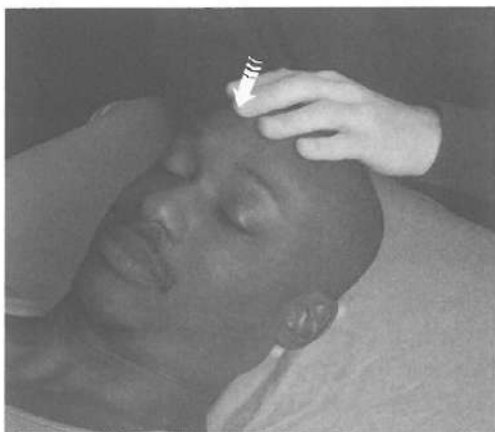
Longus Colli Attachment: C1 and C2 anterior and C3–C7 anterior

Action: Flexion of the neck

Core: *Cervical*

Antagonist: *Neck extensors*

Synergist: *Abdominals, psoas, hip flexors*



Support the client's head an inch or two off the table with one hand. Ask the client to hold a forward nod, chin tucked, while you gently try to tip the forehead back, as if to undo the nod. Watch out for the client trying to lift the chin to resist (uses SCMs not longus colli).

SCALENE, MEDIAL

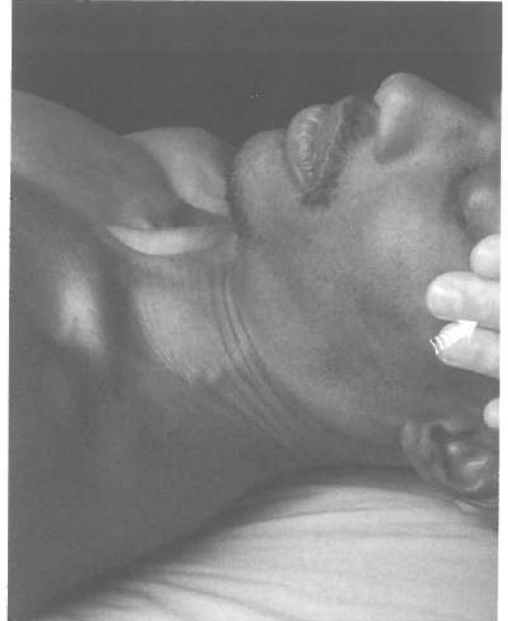
Attachment: C3–C7 and Anterior ribs
#s 1–2

Action: Neck flexion and lateral flexion

Core: *Cervical*

Antagonist: *Neck extensors, levator scapula*

Synergist: *Abdominals, psoas, deltoids, triceps, brachioradialis, wrist extensors, thumb extensors*



Resist at temple while client aims head toward shoulder.

SCALENE, ANTERIOR

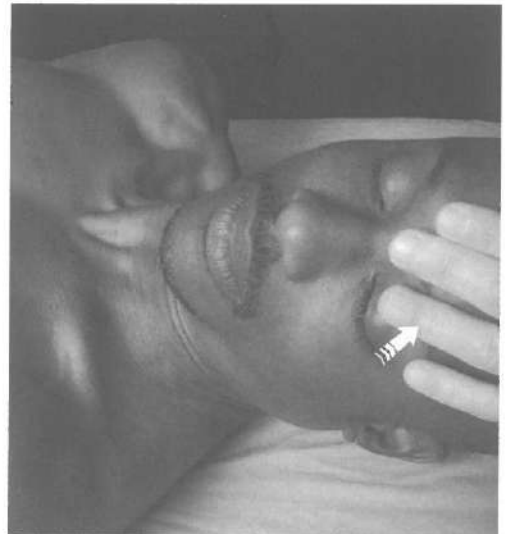
Attachment: Same as medial (above)

Action: Neck flexion and lateral flexion

Core: *Cervical*

Antagonist: *Neck extensors, levator scapula*

Synergist: *Abdominals, psoas, deltoids, triceps, brachioradialis, wrist extensors, thumb extensors*



Resist above eyebrow while client aims head toward shoulder.

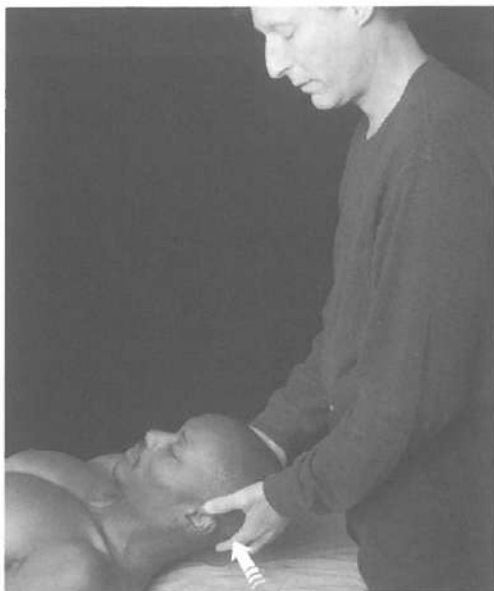
BILATERAL NECK EXTENSION

Supine and Prone

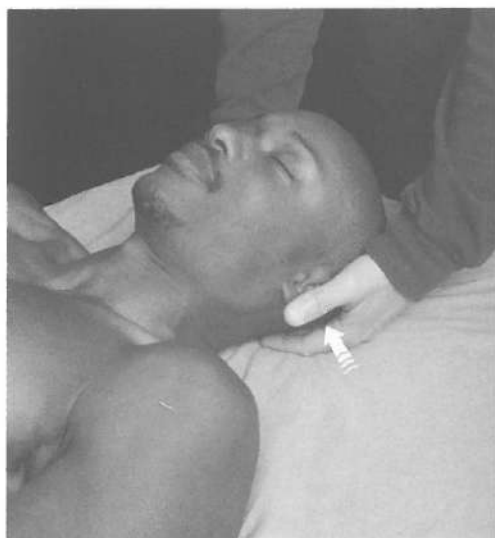
Core: *Cervical*

Antagonist: *Neck flexors*

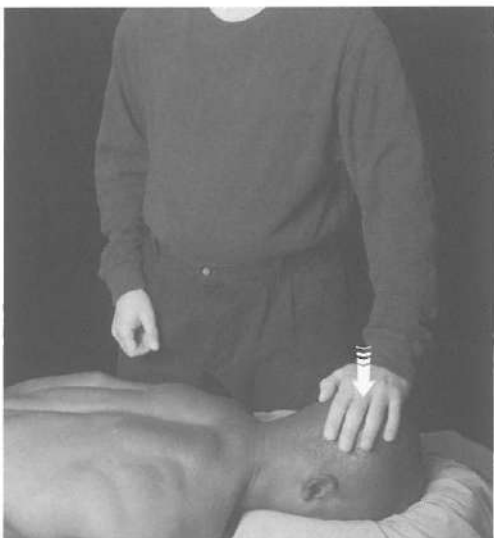
Synergist: *Thoracic erectors,
lumbar erectors, gluteus maximus
bilateral*



Raise client's head a few inches off the table and resist neck extension. This tests the upper neck extensors.



With client's head flat on table, resist neck extension. This tests the lower neck extensors.



Resist neck extension (shows full length of neck extensors). If head is lifted off table, this tests thoracic extension.

UNILATERAL NECK EXTENSION

Supine and Prone



Rotate head fully and resist extension. Prone position shows the full length of back extensors unilaterally.

Core: *Cervical*

Antagonist: *SCM*

Synergist: *Thoracic erectors, lumbar erectors, gluteus maximus unilateral*



ROTATION OF THE CERVICAL SPINE

Supine

Core: *Cervical*

Antagonist: *Opposite rotation*

Synergist: *Opposite thoracic, same-side lumbar rotation*



Resist above ear while client rotates head.

TRAPEZIUS, UPPER

Supine and Prone

Attachments: Occiput, C1-7 and Lateral clavicle, acromion

Action: Elevation and upward rotation of the scapula



Head straight. Resist lateral flexion of neck above ear while resisting shoulder elevation.

Core: *Upper thoracic, cervical*

Antagonist: *Latissimus dorsi, lower trapezius*

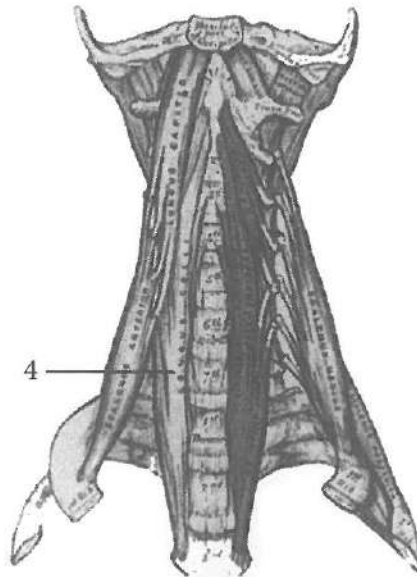
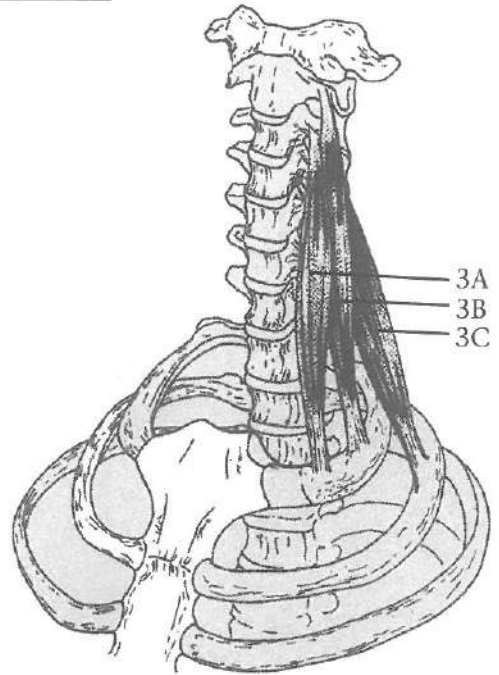
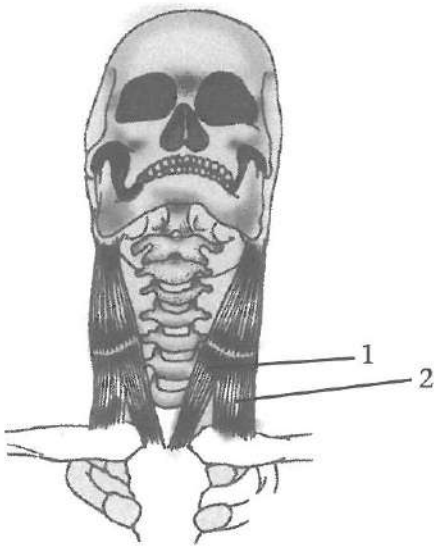
Synergist: *Obliques, quadratus lumborum, gluteus medius, tensor fascia latae*



■ Muscle Group Actions of the Neck

NECK FLEXORS

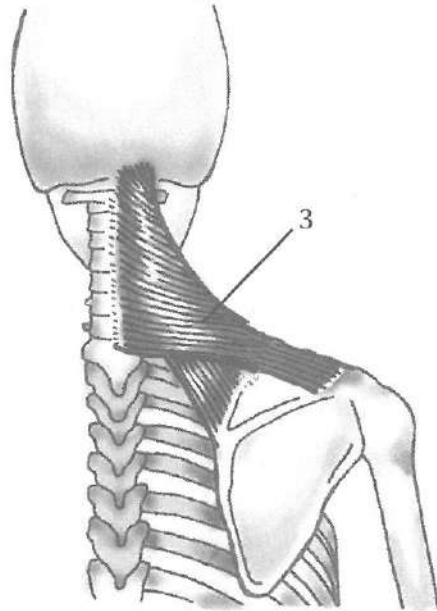
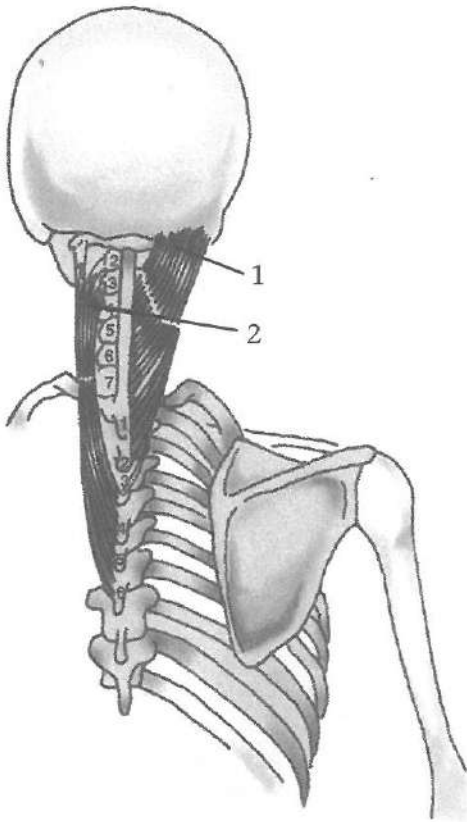
1. SCM—Sternal attachment
2. SCM—Clavicular attachment
3. Scalenes—A. Anterior; B. Medial;
C. Posterior
4. Longus Colli



NECK EXTENSORS

1. Splenius Capitus
2. Splenius Cervicis
3. Upper Trapezius

Erector Spinae—see Torso Extensors in the anatomy reference (“Muscle Group Actions”) at the end of Chapter III.



II. Upper Extremities

TRAPEZIUS, MIDDLE

Supine and Prone

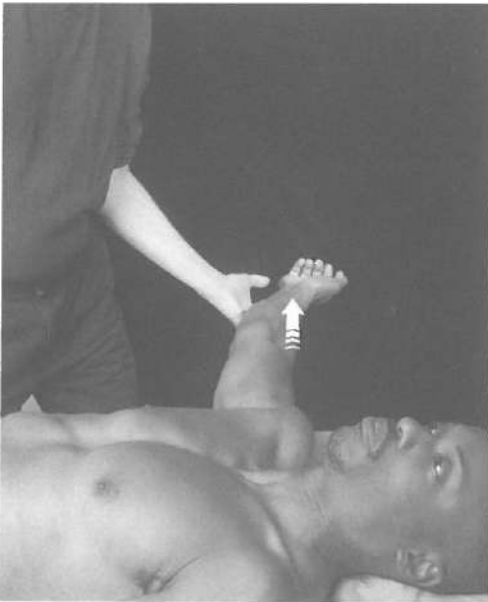
Attachment: C7 to T5 and Spine of scapula

Action: Retraction of scapula

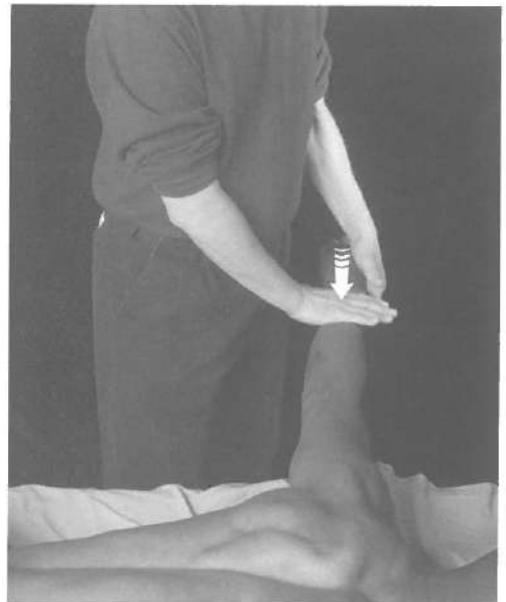
Core: Thoracic

Antagonist: Pectoralis clavicular, pectoralis minor, serratus anterior

Synergist: Rhomboid, posterior deltoid, triceps, wrist extensors



Humerus is abducted 90°, elbow locked. Place hand on posterior forearm superior to the wrist and resist downward movement.



Humerus is abducted 90°, elbow locked. Place your hand on anterior forearm superior to the wrist to support client's arm. Place other hand on posterior forearm above the wrist and resist upward movement gently!

TRAPEZIUS, LOWER

Supine and Prone

Attachment: T5–I2 and Root of spine
of scapula

Action: Depression and upward rotation
of scapula

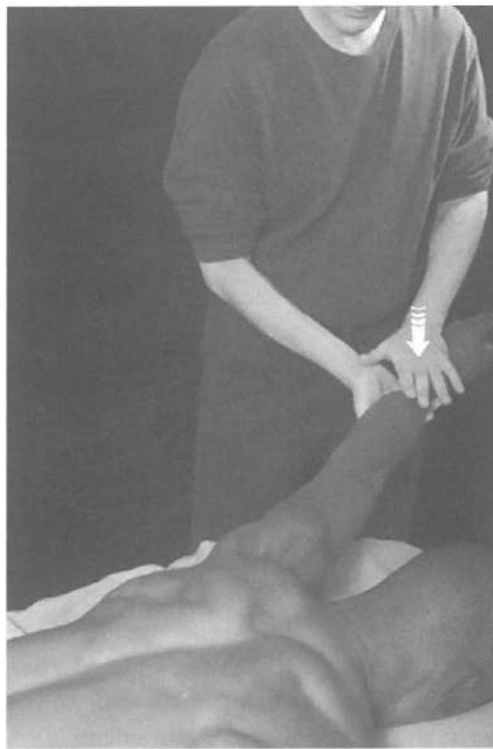
Core: *Thoracic*

Antagonist: *Pectoralis sternal,
upper trapezius, levator scapula,
rhomboid, pectoralis minor*

Synergist: *Wrist extensors, triceps,
posterior deltoid, latissimus dorsi,
teres minor, infraspinatus*



Humerus is abducted 135° with elbow locked. Place hand on posterior forearm superior to the wrist. Resist downward movement.



Humerus is abducted 135°, elbow locked. Place one hand on anterior forearm superior to the wrist to support the arm, and the other on the posterior forearm superior to the wrist. Resist upward movement gently!