

# V. MUSCULAR SYSTEM/NECK

## ANTERIOR & LATERAL MUSCLES

CN: Except for B and E, use your lightest colors throughout the plate. (1) Begin with the diagrams of the triangles of the neck and the sternocleidomastoid (A, B, C). Color over all the muscles within the triangles. (2) Then work top and bottom illustrations simultaneously, coloring each muscle in as many views as you can find it. Note the relationship between muscle name and attachment.

The neck is a complex tubular region of muscles, viscera, vessels, and nerves surrounding the cervical vertebrae. The muscles of the neck are arranged in superficial and deep groups. Here we concentrate on superficial muscles. The superficial posterior and posterolateral muscle of the neck is trapezius (Plate 46). The deep posterior muscles are covered in Plate 41. The most superficial anterior muscle of the neck is platysma (Plate 38). The anterior and lateral muscle groups are divided into triangular areas by the *sternocleidomastoid* muscle.

### ANTERIOR TRIANGLE<sup>A</sup>

**SUPRAHYOID MUSCLES:**<sup>(D)</sup>  
**STYLOHYOID**<sup>D<sup>1</sup></sup> **DIGASTRIC**<sup>D<sup>2</sup></sup>  
**MYLOHYOID**<sup>D<sup>3</sup></sup> **HYOGLOSSUS**<sup>D<sup>4</sup></sup>  
**GENIOHYOID**<sup>D<sup>5</sup></sup>

**HYOID BONE**<sup>E</sup>

**INFRAHYOID MUSCLES:**<sup>(F)</sup>

**STERNOHYOID**<sup>F<sup>1</sup></sup> **OMOHYOID**<sup>F<sup>2</sup></sup>  
**THYROID**<sup>F<sup>3</sup></sup> **STERNOHYOID**<sup>F<sup>4</sup></sup>

The anterior region of the neck is divided in the midline; each half forms an *anterior triangle*. The borders of the anterior triangle of superficial neck muscles are clearly illustrated. The *hyoid bone*, suspended from the styloid processes of the skull by the stylohyoid ligaments, divides each anterior triangle into upper *suprahyoid* and lower *infrahyoid* regions.

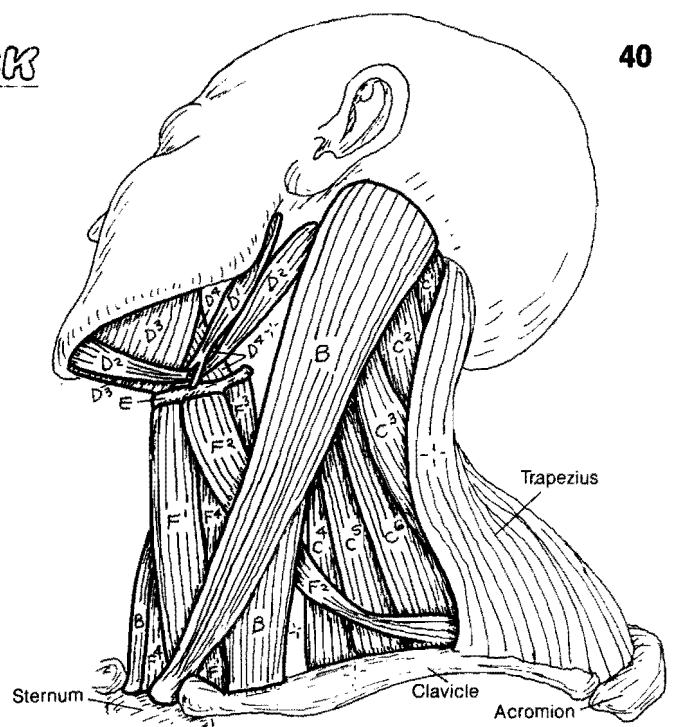
The *suprahyoid muscles* arise from the tongue (glossus), mandible (mylo-, genio-, anterior digastric), and skull (stylo-, posterior digastric) and insert on the hyoid bone. They elevate the hyoid bone, influencing the movements of the floor of the mouth and the tongue, especially during swallowing. With a fixed hyoid, the suprahyoid muscles, especially the digastrics, depress the mandible.

The *infrahyoid muscles* generally arise from the sternum, thyroid cartilage of the larynx, or the scapula (omo-) and insert on the hyoid bone. These muscles partially resist elevation of the hyoid bone during swallowing. *Thyrohyoid* elevates the larynx during production of high-pitched sounds; *sternohyoid* depresses the larynx to assist in production of low-pitched sounds.

### POSTERIOR TRIANGLE<sup>C</sup>

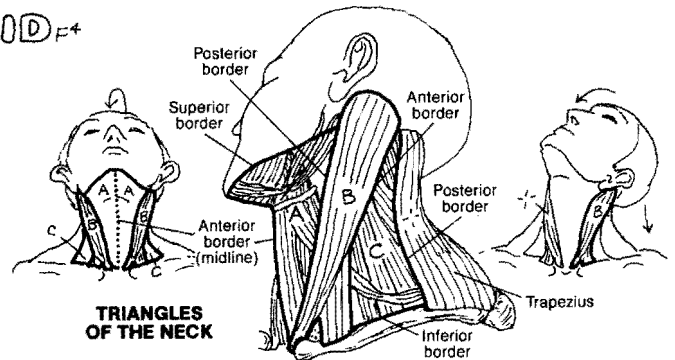
**SEMISPINALIS CAPITIS:**<sup>C<sup>1</sup></sup>  
**SPLIENIUS CAPITIS:**<sup>C<sup>2</sup></sup>  
**LEVATOR SCAPULAE:**<sup>C<sup>3</sup></sup>  
**SCALENUS:** ANT.<sup>C<sup>4</sup></sup> MED.<sup>C<sup>5</sup></sup> POST.<sup>C<sup>6</sup></sup>

The *posterior triangle* consists of an array of muscles covered by a layer of deep (investing) cervical fascia just under the skin between sternocleidomastoid and trapezius. The borders of the triangle are clearly illustrated. Muscles of this region arise from the skull and cervical vertebrae; they descend to and insert upon the upper two ribs (scalenes), the upper scapula (*omohyoid*, *levator scapulae*), and the cervical/thoracic vertebral spines (*splenius capitis*, *semispinalis capitis*). Visualizing their attachments, these muscles' function becomes clear.

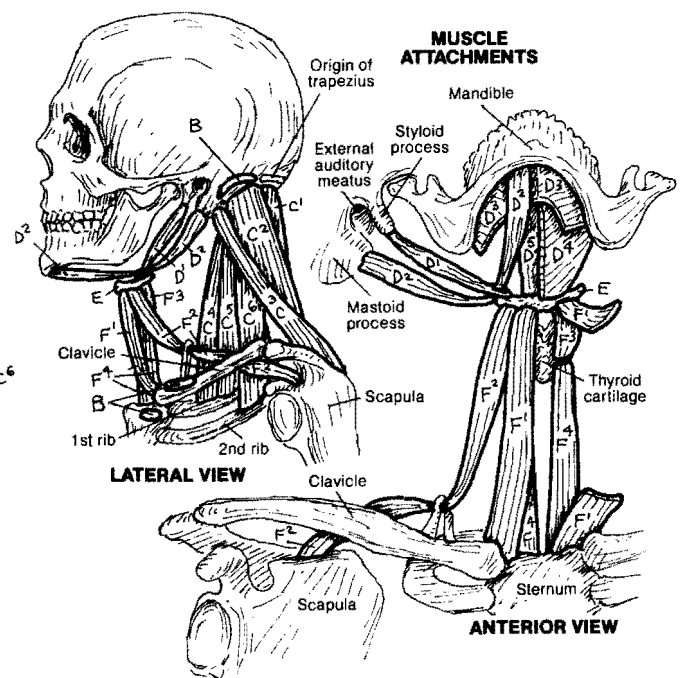


### STERNOCLEIDOMASTOID<sup>B</sup>

The *sternocleidomastoid* muscle, acting unilaterally, tilts the head laterally on the same side while simultaneously rotating the head and pulling the back of the head downward, lifting the chin, and rotates the front of the head to the opposite side. Both muscles acting together move the head forward (anteriorly) while extending the upper cervical vertebrae, lifting the chin upward.



TRIANGLES OF THE NECK



LATERAL VIEW

ANTERIOR VIEW

MUSCLE ATTACHMENTS