Trapezius is a flat triangular muscle, which lies superficially over the back of the neck and upper trunk, overlapping the supero-medial part of latissimus dorsi. The pair forming the 'trapezium' from which it derives its name.

The triangle of auscultation is formed between its lower border, the medial border of the scapula and the upper border of latissimus dorsi, which has part of rhomboideus major as its floor.

The upper fibers form the posterior border of the posterior triangle of the neck.

Proximal Attachment

It arises by muscular slips from the medial-third of the superior nuchal line of the occipital bone, the external occipital protuberance, the ligamentum nuchae and the tips of the spinous processes and intervening supraspinous ligaments from C7 to T12; a triangular aponeurosis exists between C6 and T3 corresponding to a hollow seen in the living.

Distal Attachment

The superior fibers descend to attach to the posterior border of the lateral-third of the clavicle; the middle fibers pass horizontally to attach to the medial acromial margin and superior lip of the crest of the scapular spine; the inferior fibers ascend and become aponeurotic as they glide over the smooth triangular surface at the medial end of the scapular spine attaching to a tubercle at its lateral apex. The occipital attachment is by a fibrous lamina.

Nerve Supply

Trapezius receives motor innervation from the spinal part of the accessory (XI) nerve, which enters from the posterior triangle. Sensory (proprioception) is received from the ventral rami of C3, C4.

Action

Trapezius stabilizes the scapula during movements of the upper limb. The middle fibers retract the scapula and may be aided by the upper and lower fibers producing a resolved force towards the midline. The upper fibers elevate the pectoral girdle and maintain the level of the shoulders against gravity or a carried load. The lower fibers pull down (depress) the medial part of the scapula, for example using the hands to rise from sitting. Working together the upper and lower fibers produce lateral rotation of the scapula around a point close to the base of the spine, so that the glenoid fossa points upwards and forwards. With the scapula fixed trapezius extends the head and neck when working together, or produces lateral flexion when acting individually.

For more information on the shoulder see 'The Interactive Shoulder'.