

An unusual variation of the levator scapulae muscle: a case report

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The levator scapulae muscle (LSM) is a triangular band-like muscle situated in lateral cervical region (posterior triangle of neck), deep to the sternocleidomastoid and trapezius muscles. It's been described as arising on the transverse processes of the first four cervical vertebrae and its attachment on scapula medial border, between the superior angle and the triangular smooth surface at the root of its spine. In addition, it may have tendinous expansions to the temporal and occipital bones, to rhomboid major, trapezius, serratus anterior and serratus posterior superior muscles. Other variations include the clavicle, the first and second ribs and the spinous processes of the thoracic vertebrae. The LSM elevates and assists in the retraction and adduction of the scapula. The knowledge of this muscle is important in head and neck reconstructive surgeries and in treatment of laterocollis cervical dystonia. Moreover, its variations have clinical importance by widening trigger points incidence, unchaining miofascial syndrome. A left-sided LSM muscle was found during dissection in a 58 years old Caucasian female with an atypical attachment. This muscle had beyond the usual superior attachment, others on the splenius cervicis muscle through four tendinous expansions. In addition, it had an inferior attachment on medial border of scapula and on two atypical places: one on the tendinous fibers of the rhomboid major muscle next the second thoracic vertebra spinous process; and other one, on the serratus anterior muscle fascia next to its origin on scapula's medial border. Further information will be described during the presentation of this research.

Keywords: levator scapulae muscle, anatomic variation, trigger points.