

Upper Limb Muscles Muscles of Axilla & Arm

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1) Muscles around the axilla

A- Muscles connecting the upper to thoracic wall (4)

1- pectoralis major



Origin:- from the medial half of the clavicle from the sternum and from the upper six costal cartilages

Insertion:- the lateral of the bicipital groove of the humerus

Nerve supply:- medial & lateral pectoral nerve (medial & lateral cords)

Action:- adduction . flexion & medial rotation of the arm

2- pectoralis minor



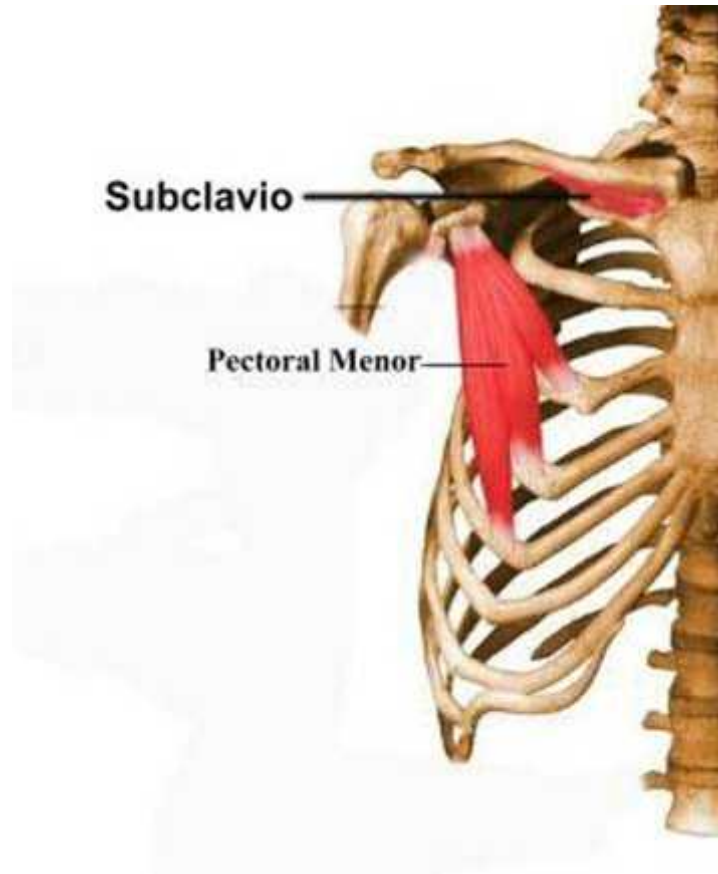
Origin:- from the third . fourth, & fifth ribs

Insertion:- the coracoid process of the scapula

Nerve supply:-medial pectoral nerve(**medial cord**)

Action:- depression & protraction of scapula

3- Subclavius



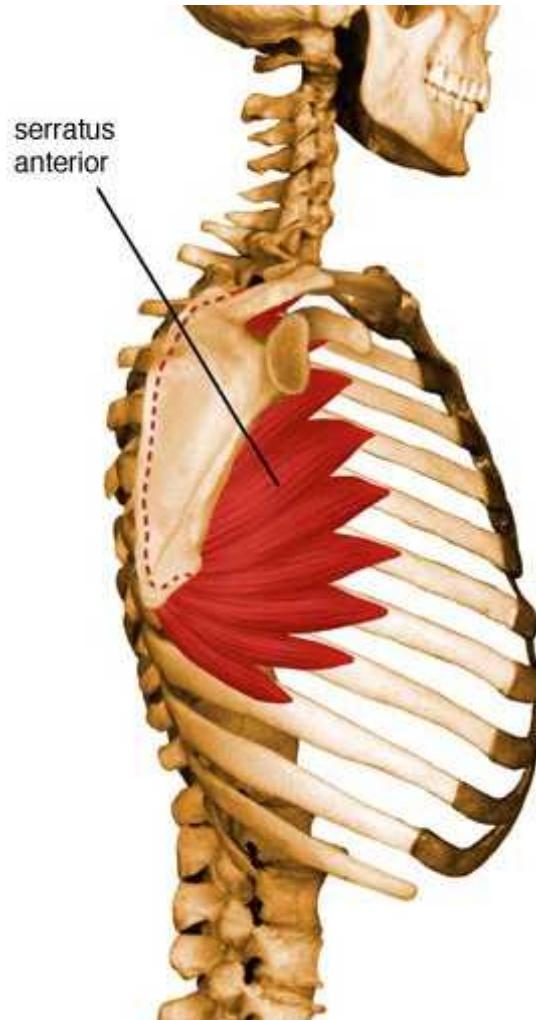
Origin:- from the first costal cartilage

Insertion:- groove on inferior surface of clavicle

Nerve supply:- nerve to subclavius (upper trunk)

Action:- steadies clavicle during movements of shoulder girdle

4- Serratus anterior



Origin:- from the outer surfaces of the upper eight ribs

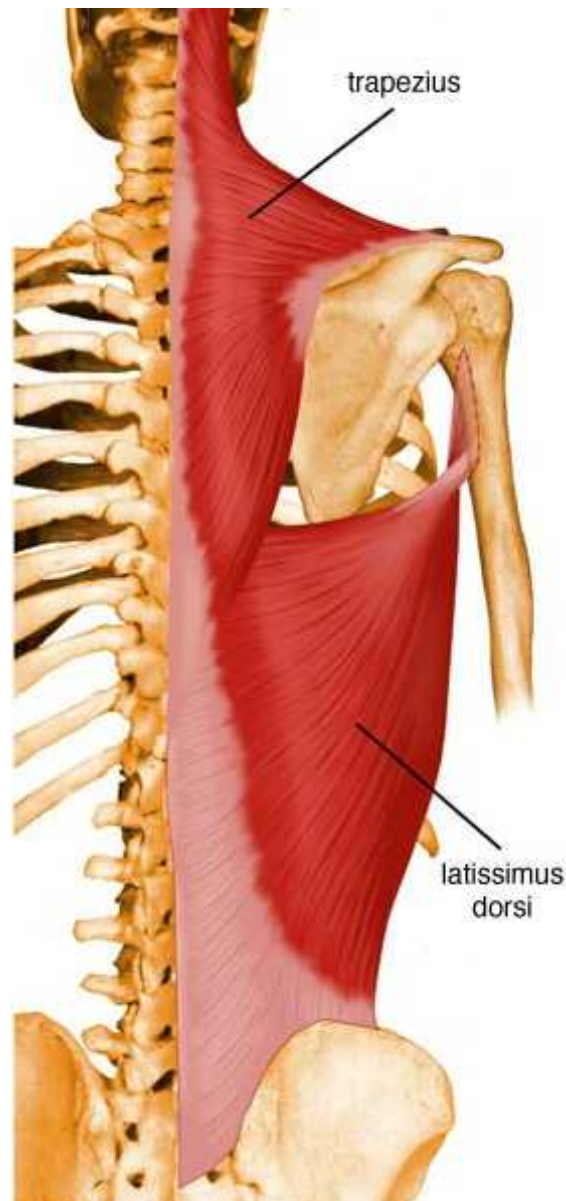
Insertion:- the medial border of the scapula. A great part of this muscles is inserted in the region of the inferior angle

Nerve supply:-long thoracic nerve (C5,6,7)

Action:- protraction of scapula

B-Muscles connecting the upper to vertebral column (5)

1- Trapezius



Origin:-

- medial third of superior nuchal line
- External occipital protuberance
- ligamentum nuchae
- spines of the seventh cervical. All thoracic vertebrae & their supraspinous ligaments

Insertion:-

- Upper fibers:-posterior border of lateral third of clavicle
- Medial fibers:-medial border of acromion & superior lip of crest of spine of scapula
- Lower fibers:-tubercle of crest of spine of scapula

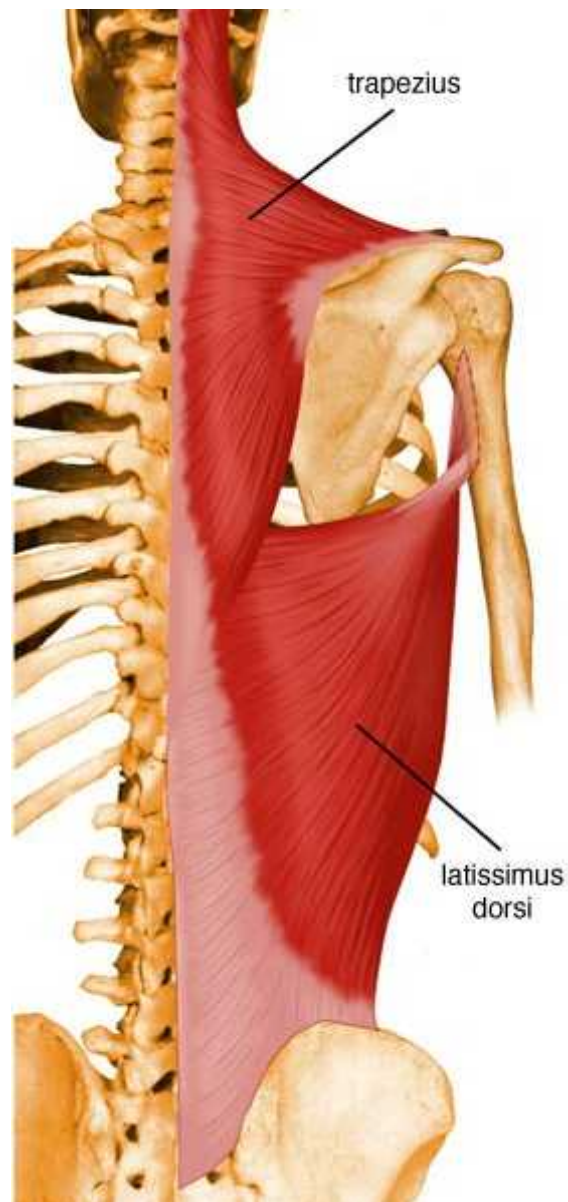
Nerve supply:-

- spinal root of accessory nerve (**motor**) & three. Four cervical nerve (**sensory**)

Action:-

- Upper fibers:- elevation of shoulder girdle
- Middle fibers:-retraction of the scapula
- Lower fibers:-depression of the scapula

2- Latissimus dorsi



Origin:-

- spines of lower 6 thoracic vertebrae & supraspinous ligaments & lower 4 ribs
- posterior layer of thoracolumbar fascia
- posterior part of outer lip of iliac crest
- back of inferior angle of scapula

Insertion:- floor of bicipital groove of humerus

Nerve supply:- thoracodorsal nerve (C6,7,8)

Action:- adductor, extensor & medial rotator of arm

3- Levator scapula



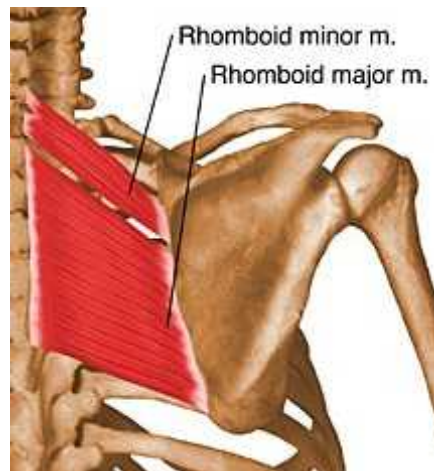
Origin:- transverse processes of upper four cervical vertebrae

Insertion:- the medial border of the scapula , from superior angle to root of its spine (above spine)

Nerve supply:- dorsal scapular nerve (C5) & third . fourth cervical nerve (cervical plexus)

Action:- elevation of the scapula & retraction of the scapula

4- Rhomboideus major



Origin:- from the second to the fifth thoracic spines & related supraspinous ligaments

Insertion:- the medial border of scapula from root of spine to inferior angle of scapula (below spine)

Nerve supply:- dorsal scapular nerve (C 5)

Action:- retraction of the shoulder

5- Rhomboideus minor



Origin:- From the lower part of ligamentum nuchae & the spines of the seventh cervical & first thoracic vertebrae

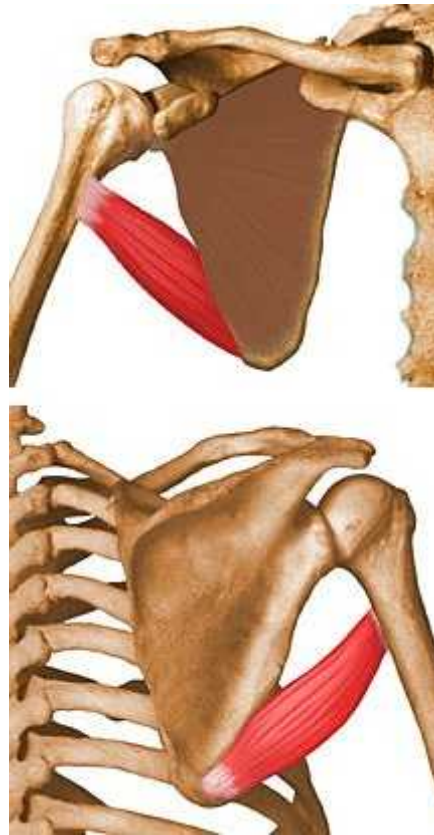
Insertion:- the medial border of scapula opposite root of the spine (against spine)

Nerve supply:- dorsal scapular nerve (C5)

Action:- retraction of the scapula

C-Muscles connecting the scapula to humerus (6)

1- Teres major



Origin:- from the lower third of the lateral border of the scapula

Insertion:- the medial lip of bicipital groove of the humerus

Nerve supply:- lower subscapular nerve (C5,6)

Action:- adduction & medial rotation of the arm

2- Teres minor



Origin:- from the upper two thirds of the lateral border of the scapula

Insertion:- the lower facet of the greater tuberosity of the humerus

Nerve supply:- axillary nerve (C5,6)

Action:- adduction and lateral rotation of arm & stabilization of shoulder joint

3- Deltoid



Origin:-

- anterior fibers :- from the lateral third of the anterior border of clavicle

- middle fibers:- from the lateral border of the acromion

Posterior fibers :- from the lower border of spine of scapula

Insertion :- deltoid tuberosity of the humerus

Nerve supply :- axillary nerve (C5,6)

Action:-

- anterior part:-flexion & medial rotation of the arm at the shoulder joint

-middle part:-abduction of arm from 15 to 90

-posterior part:- extension & lateral rotation of arm at shoulder joint

4. Supraspinatus



Origin:- from the supraspinous fossa of the scapula

Insertion:- the medial facet of the greater tuberosity of the humerus

Nerve supply:- suprascapular nerve (C5,6)

Action:- abduction of the arm from 0 to 15 & assists in stabilizing the head of the humerus in the glenoid cavity

5- Infraspinatus



Origin:- from the infraspinous fossa of the scapula

Insertion :- the lower facet of the greater tuberosity of the humerus

Nerve supply :- suprascapular nerve (C5,6)

Action :- adduction and lateral rotation of arm & stabilization of shoulder joint

6- Subscapularis



Origin:- from the medial two thirds of subscapular fossa

Insertion:- lesser tuberosity of the humerus

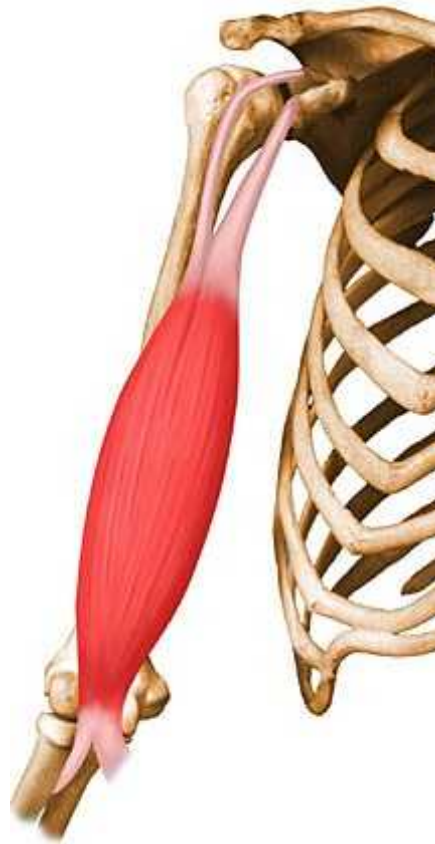
Nerve supply:- upper and lower subscapular nerve (C5,6)

Action:- adduction & medial rotation of the arm

2) Muscles of the arm

A- Muscles of anterior compartment

1- Biceps brachii



Origin:-

Long head:- from the supraglenoid tubercle of the scapula

Short head:- from the tip of the coracoid process of the scapula

Insertion:- the posterior part of the tuberosity of the radius

Aponeurosis:- into the deep fascia

Nerve supply:- musculocutaneous nerve (C5,6,7)

Action:- strong supinator of the forearm and flexor of the elbow joint and weak flexor of the shoulder.j

2- Brachialis



Origin:- from the front of the lower half of the humerus

Insertion:- the anterior surface of the coronoid process of the ulna

Nerve supply:- musculocutaneous nerve (C5,6,7)
& radial nerve

Action:- strong flexor of the elbow joint

3- Coracobrachialis



Origin:- from the tip of the coracoid process

Insertion:- the middle of the medial side of the shaft of the humerus

Nerve supply:- musculocutaneous nerve (C5,6,7)

Action:- flexion the arm & weak adduction

B-Muscles of posterior compartment

1- Triceps brachii



Origin:-

Long head:- from the infraglenoid tubercle of the scapula

Lateral head:- from the upper half of the posterior surface of the shaft of the humerus above the spiral groove

medial head:- from the posterior surface of the lower half of the shaft of the humerus below the spiral groove

insertion:- the upper surface of the olecranon process of the ulna

Nerve supply:- radial nerve (C5,6,7,8,T1)

-Action:- strong extensor of the elbow joint