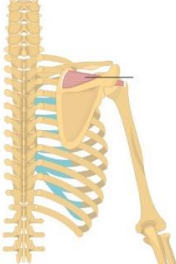

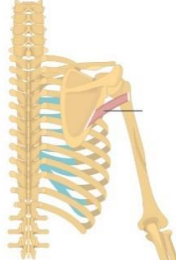
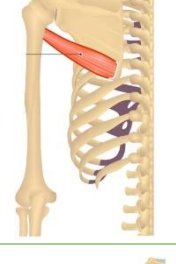

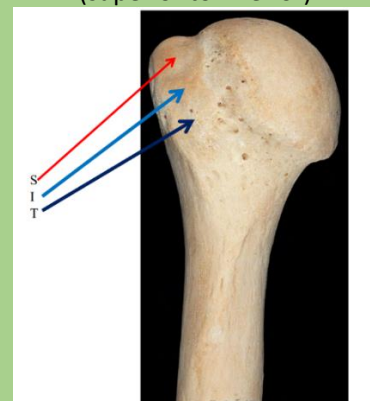


Muscle	Origin	Insertion	Innervation	Action	Image
POSTERIOR SCAPULAR REGION					
Supraspinatus	Supraspinous fossa of the scapula (above the spine) on the posterior surface of the scapula	They form tendons that insert on the greater tubercle of the humerus (upper facet)	Suprascapular Nerve	The supraspinatus initiates abduction of the arm(0-15degree)	
Infraspinatus	(It should be the infraspinatus fossa but it is not mentioned in the slides)	The tendon of the infraspinatus passes posteriorly to the glenohumeral joint and inserts on the middle facet of the greater tubercle	Suprascapular Nerve	The infraspinatus laterally rotates the humerus	
Teres minor	It is a cord-like muscle it originates from the lateral border of the scapula below the infraglenoid tubercle	inferior facet of the greater tubercle of the humerus	Axillary Nerve	laterally rotates the humerus	
Teres major	from a large oval region on the posterior surface of the inferior angle of the scapula	medial lip of the intertubercular sulcus on the anterior surface of the humerus	Lower subscapular Nerve	medially rotates and extends the humerus.	
Subscapularis (it is not considered one of the posterior muscles, it is found anteriorly on the scapula)	Subscapular fossa	Lesser tubercle	Upper and lower subscapular nerves.	Medial rotation of the arm	

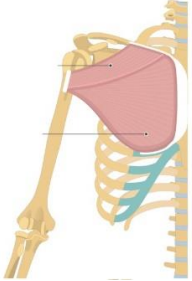


Additional notes:-

- The posterior scapular region also contains part of one additional muscle, the long head of the triceps brachii, which passes between the scapula and the proximal end of the forearm.
- for Supraspinatus:- The tendon of the supraspinatus passes under the acromion where it is separated from the bone by a subacromial bursa. The tendon Passes over the glenohumeral joint. Inserts on the superior facet of the greater tubercle
- Rotator cuff muscles of the shoulder :- are all of the above muscles except teres major, The tendons of these muscles flatten at their insertion and blend with the capsule of the shoulder joint. They act as a handcuff that strengthen shoulder joint (superior, posterior & anterior). But NOT inferior ? Why? not to compromise the arm's flexibility and range of motion

SIT: Supraspinatus, Infraspinatus and Teres minor are attached to the greater tubercle respectively (superior to inferior)

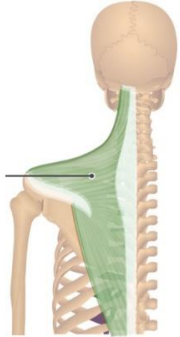

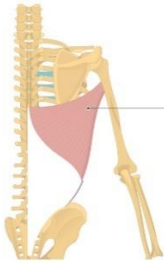



PECTOREAL REGION

Pectoralis major	1-The clavicular head originates from the medial half of the clavicle				
<p>It is the largest and most superficial muscle of pectoral region</p> <p>The muscle has two heads:</p> <p>1-The clavicular head</p> <p>2- The sternocostal head</p>	<p>2-The sternocostal head originates from the medial part of the anterior thoracic wall; anterior surface of sternum first seven costal cartilages sternal end of sixth rib aponeurosis of external oblique</p>	into the lateral lip of the intertubercular sulcus of the humerus.	by the lateral and medial pectoral nerves, which originate from the brachial plexus in the axilla.	Acting together, the two heads of the pectoralis major flex, adduct, and medially rotate the arm at the shoulder joint.	
Pectoralis minor	It is a small triangular-shaped muscle that lies deep to the pectoralis major muscle originates as three muscular slips from the anterior surfaces and upper margins of ribs 3 to 5	Insertion: into the coracoid process	medial pectoral nerve, which originates from the brachial plexus in the axilla.	protracts the scapula (by pulling the scapula anteriorly on the thoracic wall) and depresses the lateral angle of the scapula.	
Subclavius	is a small muscle that lies deep to the pectoralis major muscle and passes between the clavicle and rib I, It originates medially, as a tendon, from rib I at the junction between the rib and its costal cartilage	groove on the inferior surface of the middle third of the clavicle	Nerve to Subclavius , a small branch from the superior trunk of the brachial plexus.	The function of the subclavius is not entirely clear, but it may act to pull the shoulder down by depressing the clavicle and may also stabilize the sternoclavicular joint by pulling the clavicle medially.	

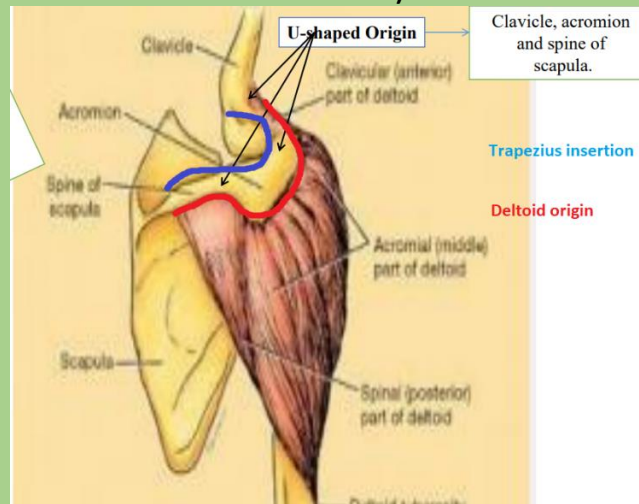
No additional notes here

Superficial Muscles of the shoulder

Trapezius	<p>has an extensive origin from the from: Skull spines of C1-T12 vertebrae. From C1 to CVII, the muscle attaches to the vertebrae through the ligamentum nuchae</p>	<p>(U-shaped insertion opposite to the origin of deltoid) Its fibers run in 3 directions:</p> <ol style="list-style-type: none"> 1) Down: Clavicle. 2) Horizontal: Acromion. 3) Up: Spine of scapula. 	<p>accessory nerve [XI] and the anterior rami of cervical nerves C3 and C4</p>	<p>powerful elevator of the shoulder and also rotates the scapula to extend the reach superiorly. Trapezius cooperates with other muscles in steadying the scapula, controlling it during movements of the arm Upper fibers elevate the scapula middle fibers pull scapula medially lower fibers pull medial border of scapula downward</p>	
Deltoid	<p>Clavicle, acromion and spine of scapula (U shaped)</p>	<p>Deltoid tuberosity</p>	<p>Axillary Nerve (branch of the posterior cord of the brachial plexus)</p>	<p>A muscle that performs three function because of the direction of its fibers:-</p> <ol style="list-style-type: none"> 1)Post: extend shoulder 2)Ant: flex shoulder 3)Middle: Abduct arm 15-90degree. 	
Latissimus dorsi	<ul style="list-style-type: none"> T7-T12, L1- L5 Sacrum & Iliac crest lower 3-4 ribs and inferior Angle of the scapula 	<p>Floor of biceptal groove</p>	<p>Thoracodorsal Nerve</p>	<p>extends, adducts and medially rotate humerus like in canoeing.</p>	
Serratus anterior	<p>from the lateral surfaces of ribs I to IX and the intervening deep fascia overlying the related intercostal spaces</p>	<p>insert primarily on the costal surface of the medial border of the scapula.</p>	<p>long thoracic nerve</p>	<p>Pulls the scapula forward over the thoracic wall(protraction) and facilitates scapular rotation. it also keeps the costal surface of the scapula closely opposed to the thoracic wall</p>	

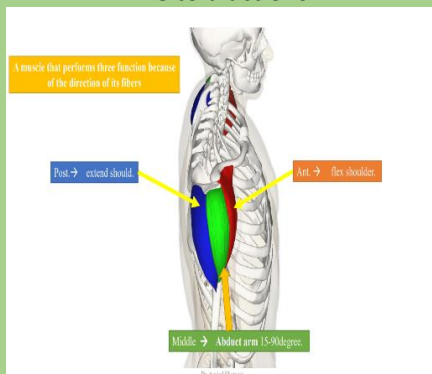
Additional notes

- Deltoid has a U shaped origin whereas Trapezius has a U shaped insertion, And is the same U (deltoid origin takes the outer border of the U and the trapezius insertion takes the inner border, see the photo below for further clarification)

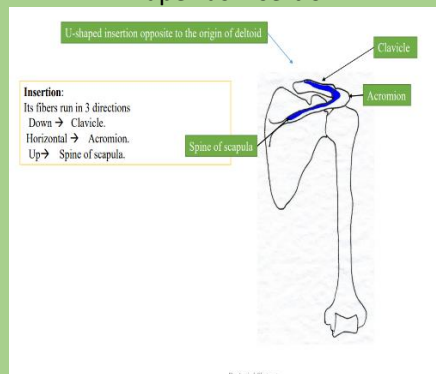


- Trapezius and Deltoid muscles Together, they provide the characteristic contour of the shoulder, the Trapezius attaches the scapula and the clavicle to the trunk, the deltoid attaches the scapula and the clavicle to the humerus
- The deltoid muscle is large and triangular in shape, with its base attached to the scapula and clavicle and its apex attached to the humerus
- Trapezius Connects the upper limb to vertebral column
- long thoracic nerve This nerve runs superficial to the Serratus anterior muscle and therefore it could be Injured during surgical interference on the axilla
- Injury to the long thoracic nerve may cause -> The position of the scapula on the posterior wall of the thorax is maintained by the tone and balance of the muscles attached to it. If one of these muscles is paralyzed, the balance is upset, as in **winged scapula** caused by paralysis of the serratus anterior.

Deltoid actions



Trapezius insertion



winged scapula



Done by:

Waseem Aldemeri

Contact me if there is a mistake in the summary or if you have any ideas. Good luck

Refrence:

Dr.Amjad slides