

Pectoral region is the region in front of the upper part of the chest, its Muscles connecting the chest wall to the arm

muscles of the pectoral region

pectoralis minor

origin: from the 3rd, 4th and 5th ribs
 insertion: superior surface of the coracoid process
 nerve supply: medial pectoral nerve
 actions: protraction the scapula (forward movement), depression the shoulder, elevates the ribs during deep inspiration

serratus anterior

origin: by fleshy digitations from the upper eight ribs. The first digitation takes origin from the 1st and 2nd ribs.
 insertion: anterior surface of the medial border of the scapula.
 nerve supply: long thoracic nerve (nerve of Bill C5, 6, &7) passes superficial to the muscle
 actions: Protraction of the scapula (pulls the scapula forward with pectoralis minor), Lower 5 digitations, Abduction of the arm above 90 degree, acting with the trapezius muscle, Fixation of the scapula during movement of the upper limb

pectoralis major

origin: by two heads
 Sternocostal head: anterior surface of the sternum, Upper 6 costal cartilages, External abdominal oblique aponeurosis.
 clavicular head: from anterior surface of the medial 1/2 of the clavicle.
 nerve supply (double): Lateral and medial pectoral nerves.
 insertion: The upper fibers are twisted and inserted downward forming the anterior lamina. The lower fibers are twisted and inserted upward forming the posterior lamina.
 actions: Adduction and medial rotation of the arm, Flexion of the arm by clavicular head, Elevates the ribs during deep inspiration. Sternocostal part acts together with latissimus dorsi, teres major and deltoid: draw the trunk up during climbing and gymnastic.

It is the only muscle of the upper limb supplied by 5 segments from brachial plexus.

SO the anterior fold of the axilla is higher than the posterior fold

Deltopectoral groove between deltoid and pectoralis major containing: 1- Cephalic Vein, 2- Deltoid branch of thoracoacromial Artery.

subclavius

origin: from the upper surface of first rib and first costal cartilage
 insertion: into subclavian groove on the lower surface of the clavicle
 nerve supply: nerve to subclavius from upper trunk of brachial plexus (C 5&6)
 action: fixation of the clavicle during movements of the shoulder girdle

please check out slide 13 ***

Injury of the long thoracic nerve

- It descends in the midaxillary line on the superficial surface of the muscle
- A protrusion of the medial border of the scapula away from the posterior chest wall.
- Winging of the scapula, due to paralysis of the muscle
- Test of the muscle: ask the patient to push the wall with the outstretched hand. If the muscle is affected the winging is increased

Clavipectoral Fascia

- Attachments:
- 1- Superiorly, it splits into two laminae which enclose subclavius and attached to the margins of subclavian groove.
 - 2- Inferiorly, it splits to enclose pectoralis minor, then fuse together to form suspensory ligament of the axilla. It attaches to the axillary fascia
 - 3- Medially, the first rib.
 - 4- Laterally, the coracoid process.

The structures pierced the fascia:

- a) Cephalic Vein
- b) Thoraco-acromial Artery
- c) Lateral pectoral Nerve
- d) Lymphatics vessels

deep relations of pectoralis major

