

The module: Musculo-Skeletal System

Session: 1

Pectoral region

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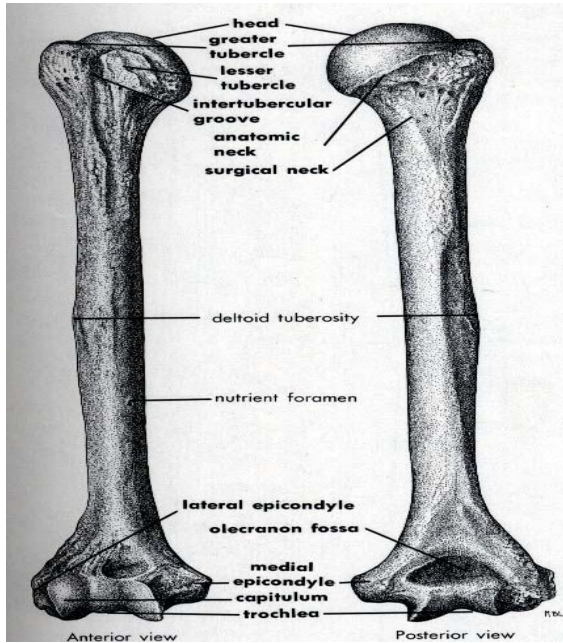
Pectoral region

Objectives:

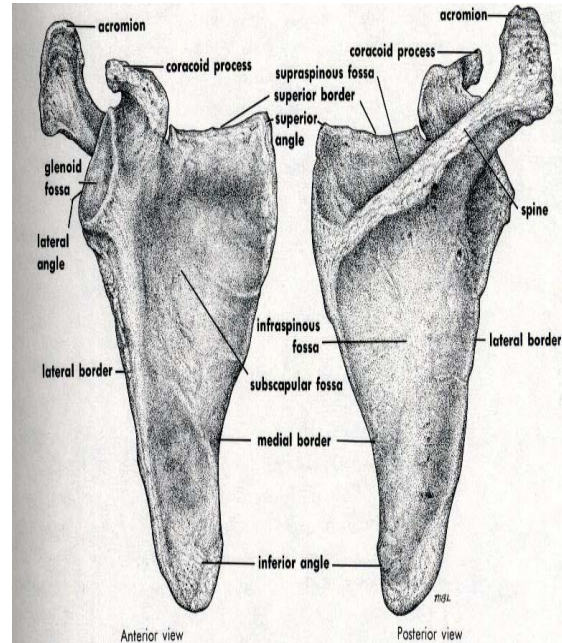
1. Identify pectoral girdle (bones)
2. Bony surface landmarks
3. pectoral muscles (location and function)
4. Pectoral muscles innervation and spinal root value
5. Clinical importance



Pectoral girdle



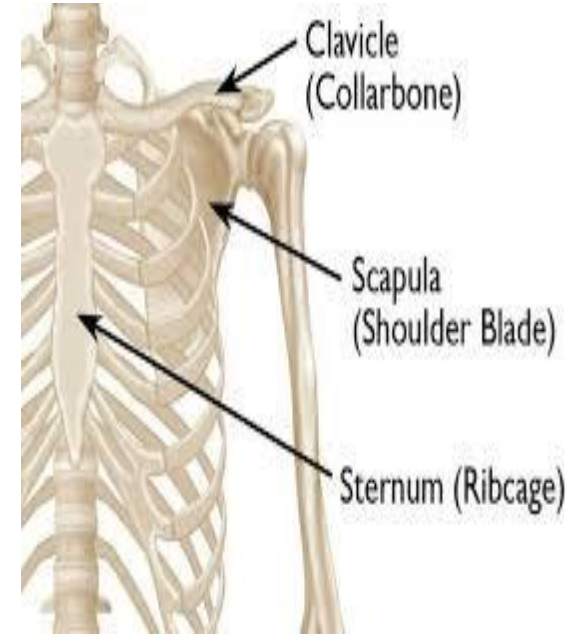
Humerus



scapula

Clavicle

LO1



Pectoral region

LO2

Bony landmark :

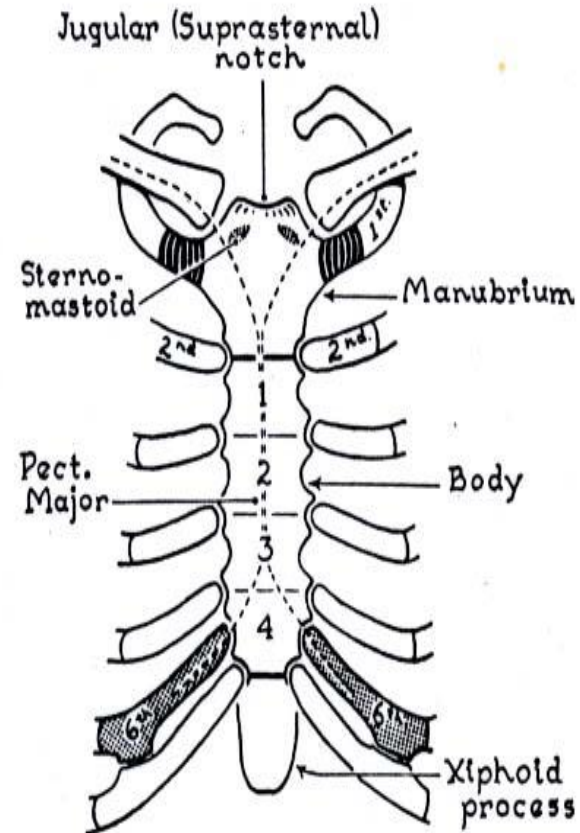
Sternum:

Jugular notch (body of T2)

Sternal angle of Louise (T4-5)

Xiphosternal joint (T9)

Ribs & costal cartilage



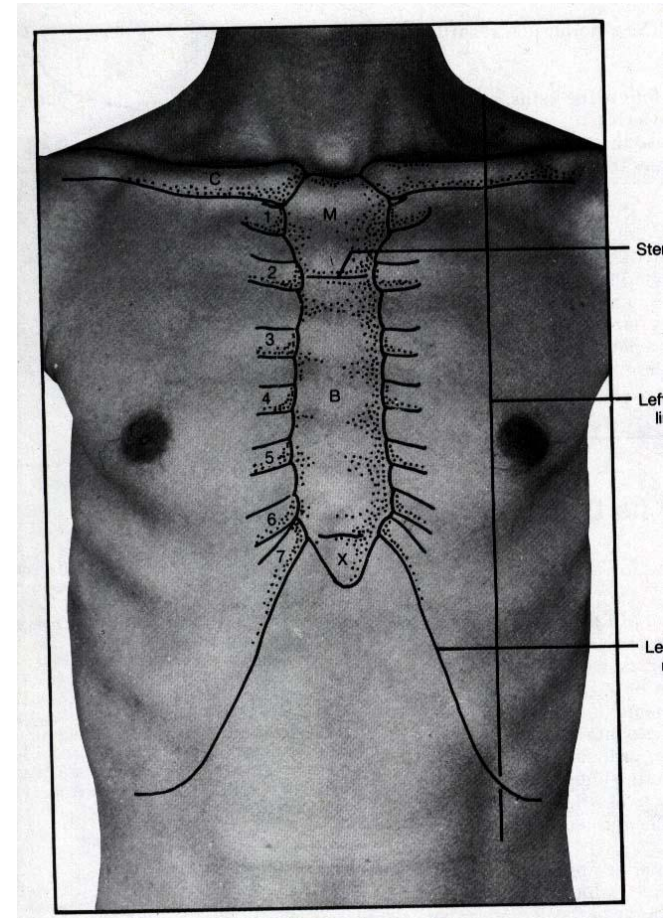
. Superficial structure

- ❖ skin & breast
- ❖ **Breast** : nipple, areolar, mammary gland (F)

Surface Anatomy (position) :

- ❖ **Nipple** : 4-5" from the midline, intercostal space 4

Breast – between rib 2-7



Pectoral muscles

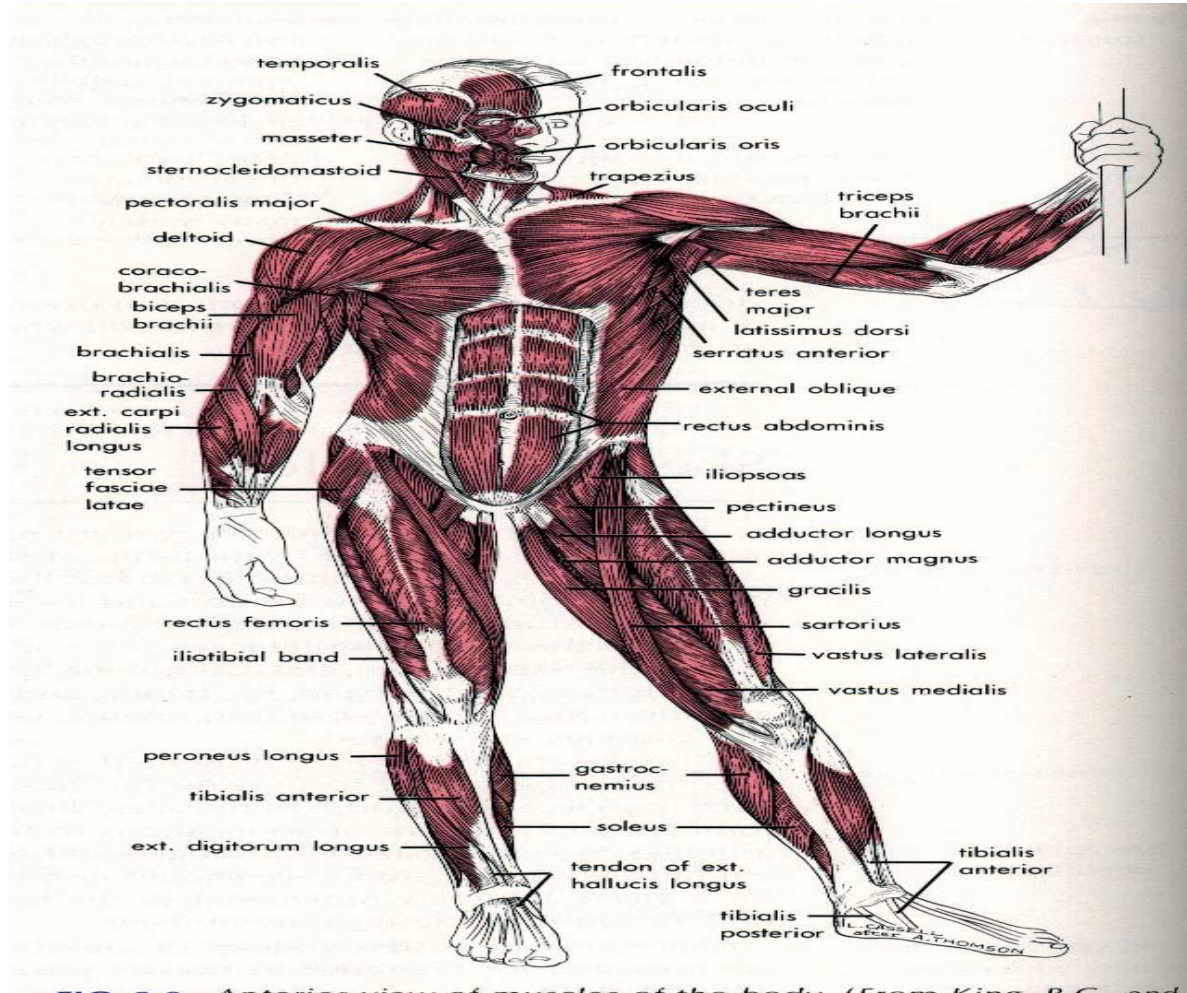
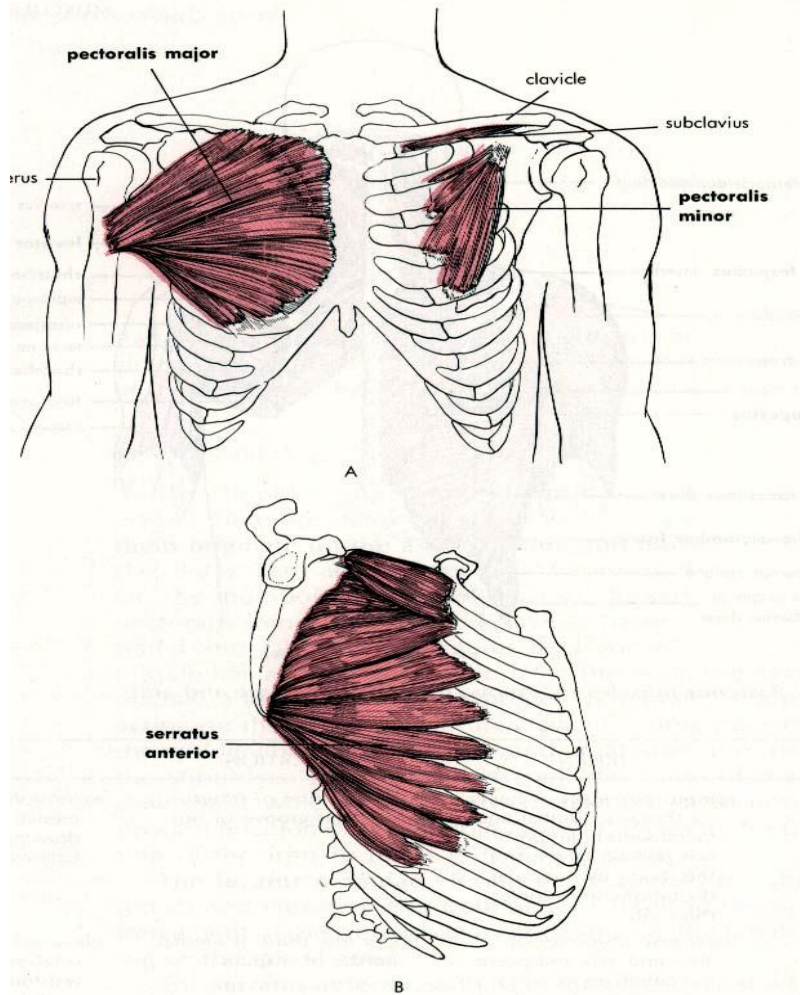


FIG. 9.9 Anterior view of muscles of the body. (From King, P. C. and



. Muscles of pectoral region

a. Pectoralis Major

b. Pectoralis Minor

c. Serratus Anterior

d. Subclavius

a. Pectoralis Major

O. middle ½ clavicle, sternum, rib 1-5

I. lateral lip of bicipital groove of humerus

A. adduction, medial rotation of arm

b. Pectoralis Minor

O. rib 3-5

I. coracoid process of scapular

A. draw the scapular down / lift up the ribs

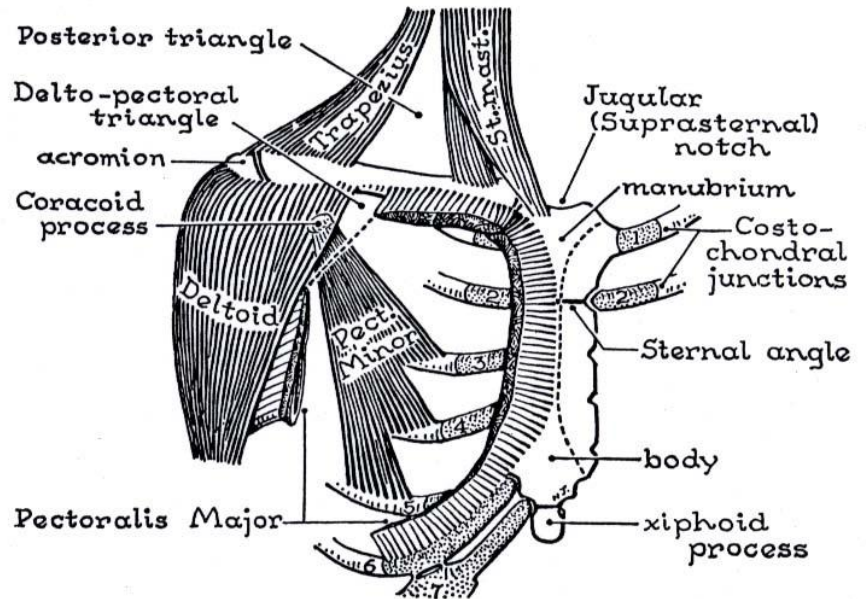
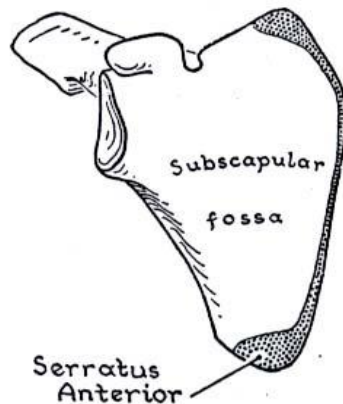
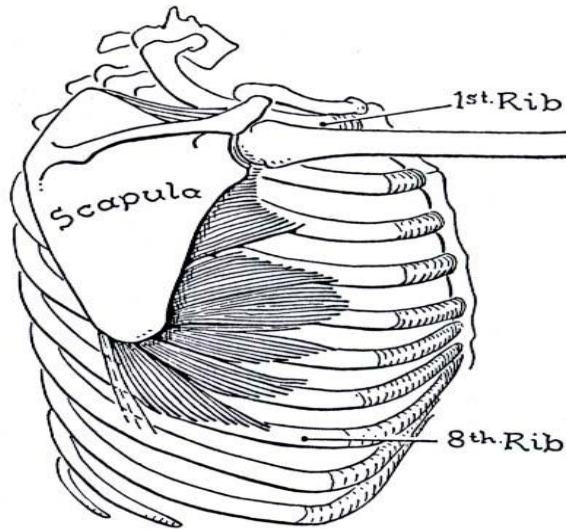


Figure 30.4. The pectoralis minor is the central feature of this region.



c. Serratus Anterior

O. half way of the anterior part of rib 1-8

I. medial border (anterior surface) of the scapular

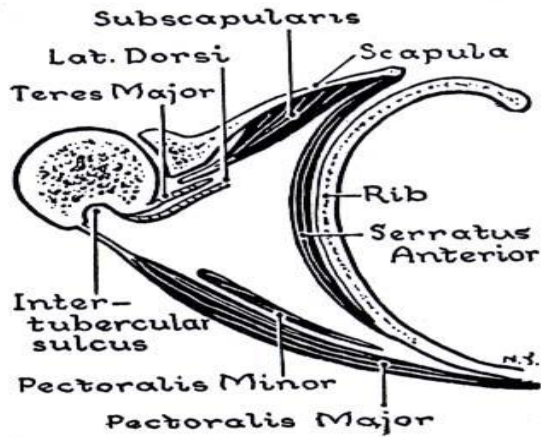
A. pull scapular to chest wall / lift up the ribs

d. Subclavious

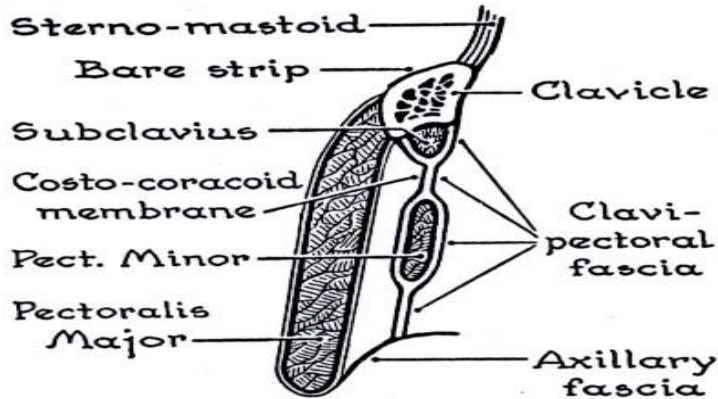
O. 1st costal cartilage

I. inferior surface of clavicle

A. protecting structures underneath the clavicle



Pectoral Girdle : clavicle,
scapular, ribs



Clavipectoral fascia / Costocoracoid membrane

- deep fascia separating the pectoralis and the subclavius

-Blood supply to the pectoral region

1. Axillary artery

2. Perforating branches of the **internal thoracic a.**

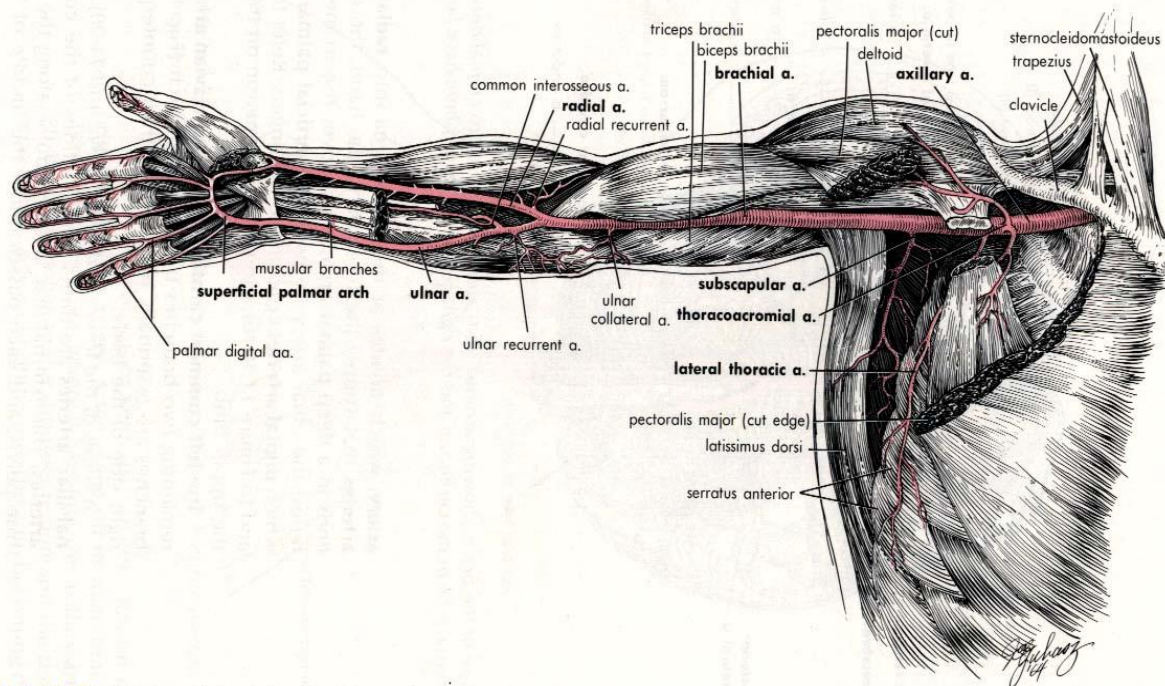
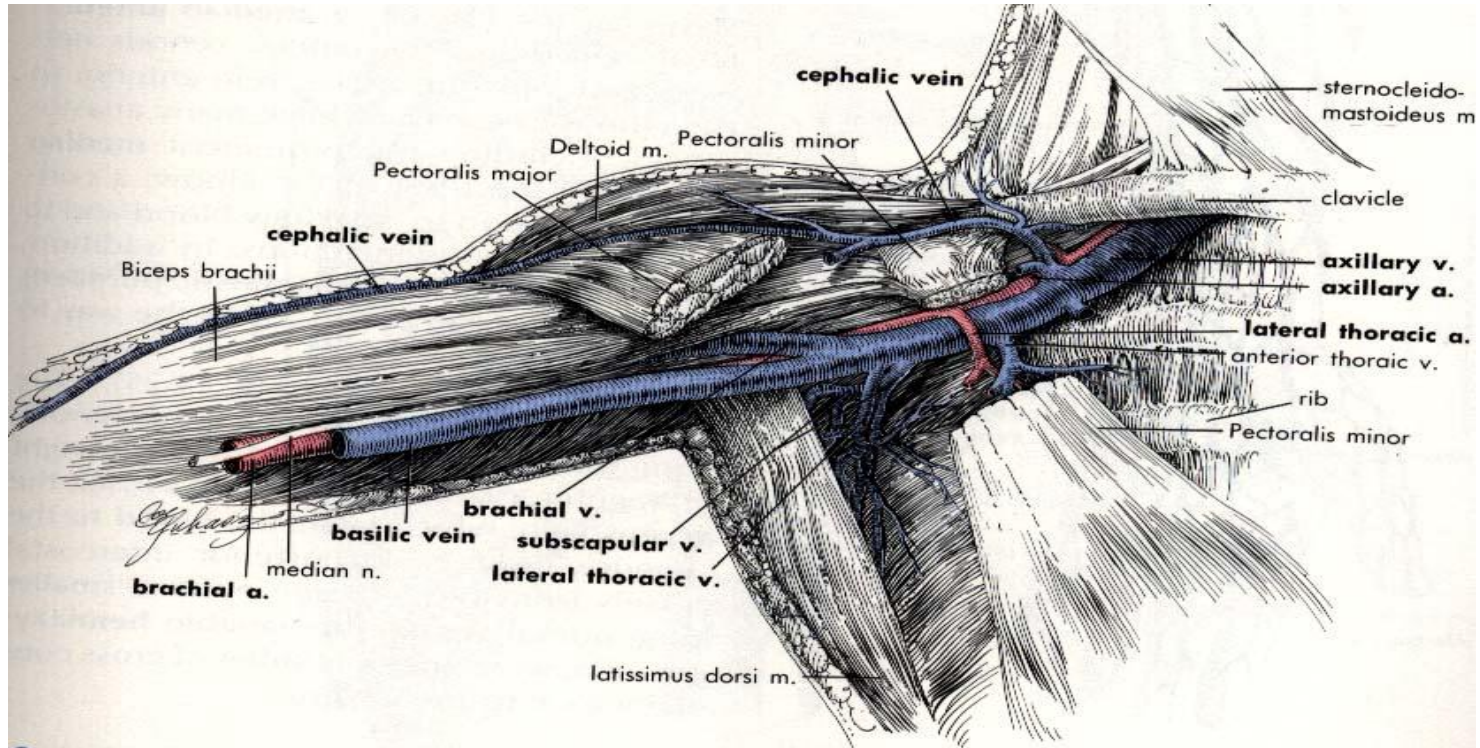


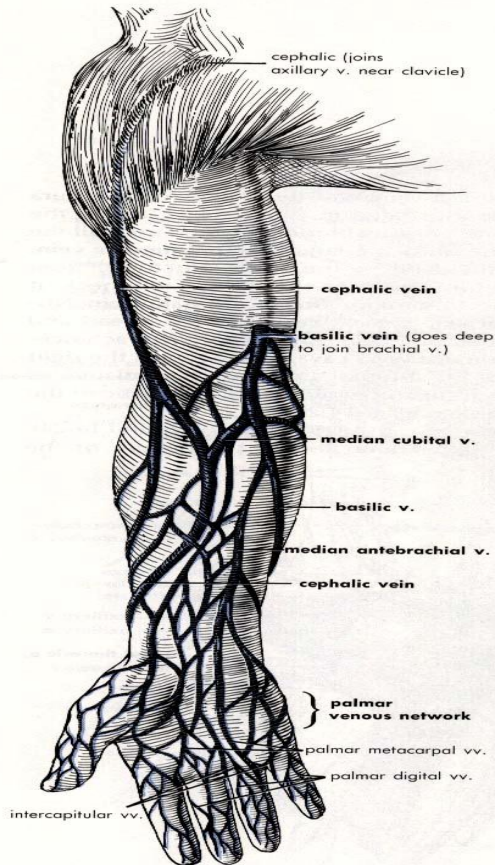
FIG. 14-19. Arteries of the right shoulder and upper extremity.

Venous drainage at the pectoral region

Deep veins - **axillary v.** \leftarrow from the muscles



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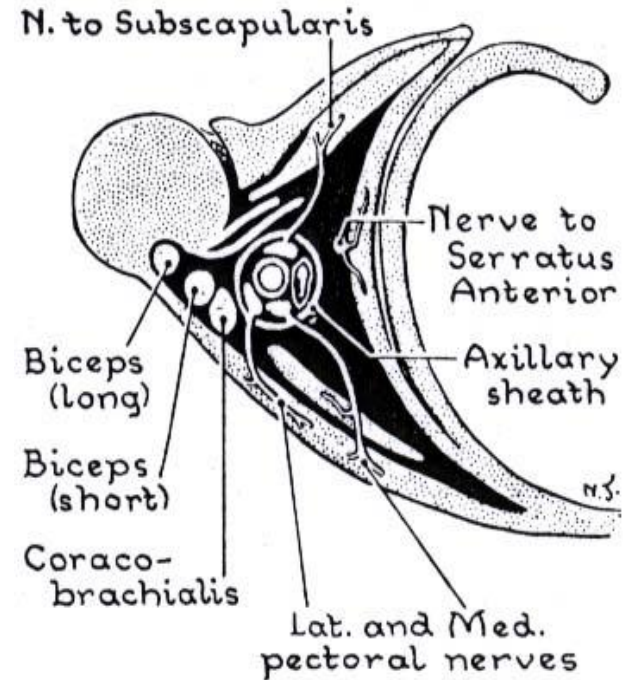
Superficial veins

- **cephalic v.** (from upper limb) at the deltopectoral triangle, it pierces the clavipectoral fascia (or infraclavicular fossa) into the **axillary v.**

-from mammary gland, it drains into deep veins => **internal thoracic v. and lateral thoracic v.**

Nerve Supply of the pectoral region –

- 1.*****Medial & lateral pectoral nerve**
(terminal branches from the cords of the **Brachial plexus (C5-8 & T1)**)
2. **Nerve to subclavius** (a branch from upper trunk of the **Brachial plexus**)
3. **Long thoracic nerve** (nerve roots from C5-6-7 of the **Brachial plexus**)



Clinical Relevance

- ⊖. **Chest wall** – heart /lung sound
- ⊗. **Clavipectoral fascia**
 - protection of the vessels and nerves underneath
 - limit spreading of the abscess from upper limb to the neck
- ⊙. **Fracture of clavicle**
 - common site is at 1/3 from the lateral
- ⊘. **Breast cancer**
 - structural abnormality
 - lymphatic drainage & metastasis
 - mastectomy

Thank you