

# PECTORAL REGION

BASRA UNIVERSITY/ COLLEGE OF MEDICINE  
DEPARTMENT OF HUMAN ANATOMY

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# OBJECTIVES

**BONES**

**MUSCLES**

**FASCIA**

**BLOOD SUPPLY**

**SENSORY NERVES**

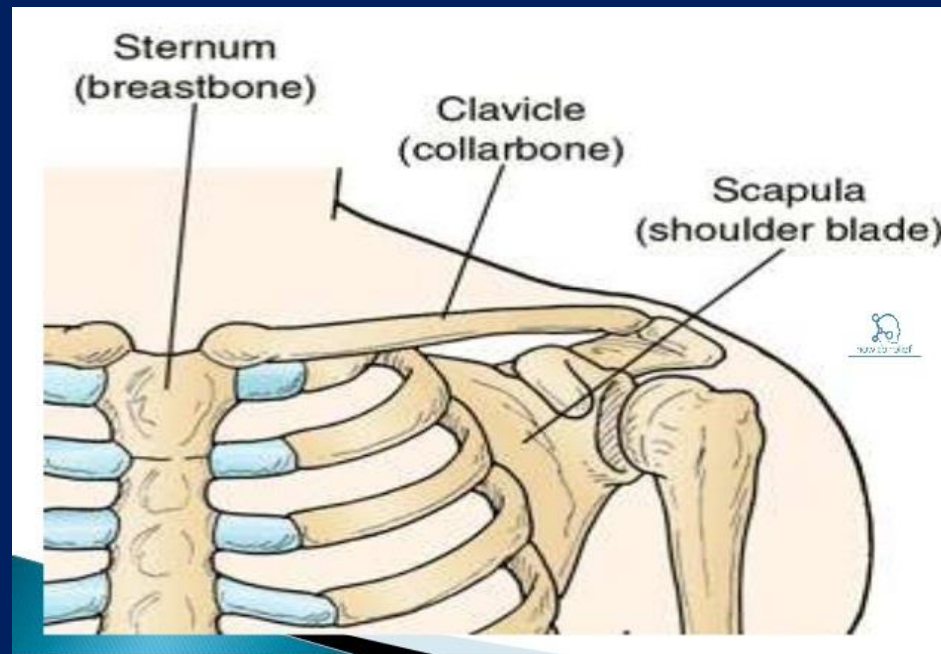
# BONES OF THE PECTORAL REGION

The shoulder girdle consists of the clavicle, the scapula, which articulate with one another at the *Acromioclavicular Joint (ACJ)*, and head of humerus.



# CLAVICALE

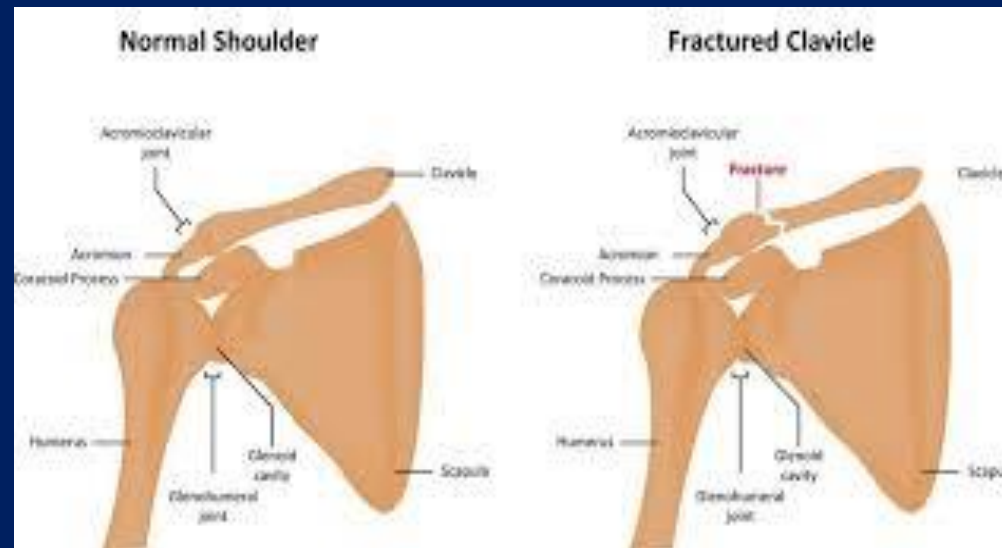
The clavicle “collarbone” is a long, slender bone that lies horizontally across the root of the neck just beneath the skin. It articulates with the sternum and 1st costal cartilage medially & with the acromion process of the scapula laterally.



# CLAVICALE

## *Function:*

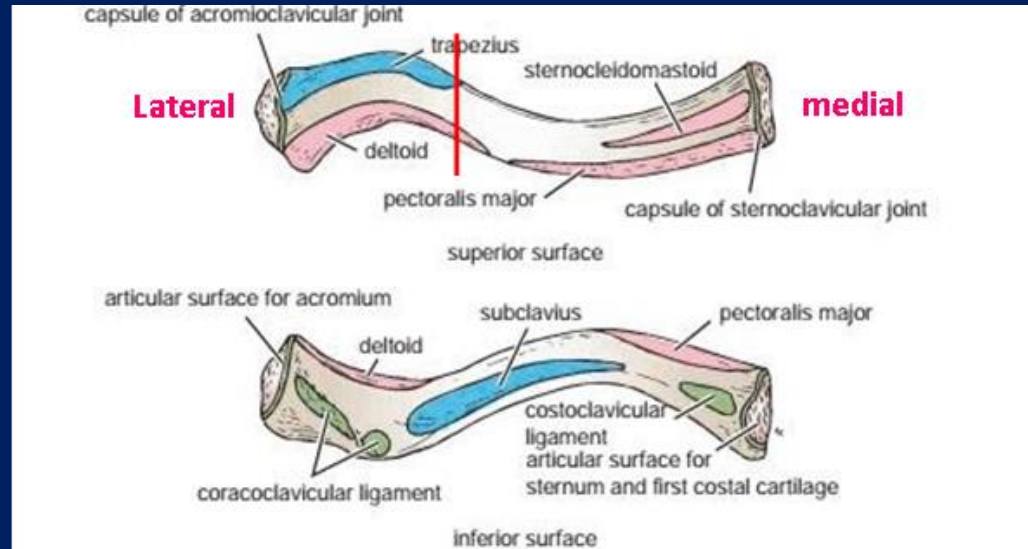
- It's acts as a strut that holds the arm away from the trunk.
- It's also transmits forces from the upper limb to the axial skeleton.
- It's one of the most commonly fractured bone in the body.



# CLAVICALE

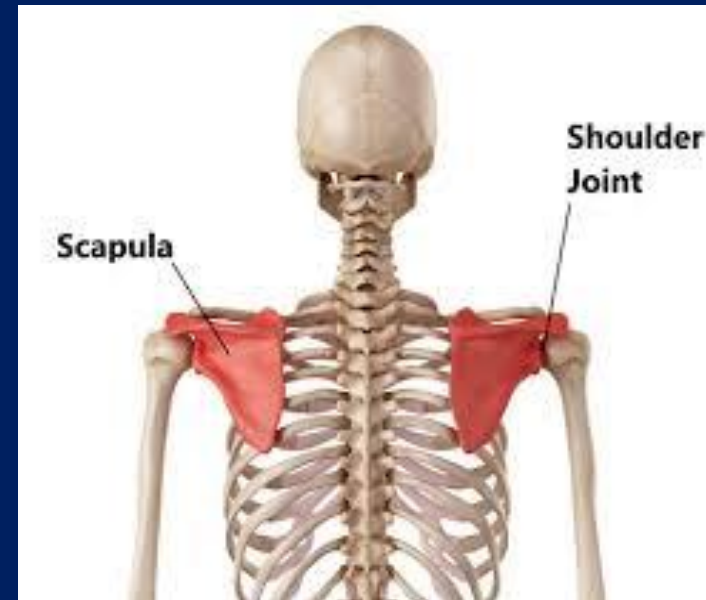
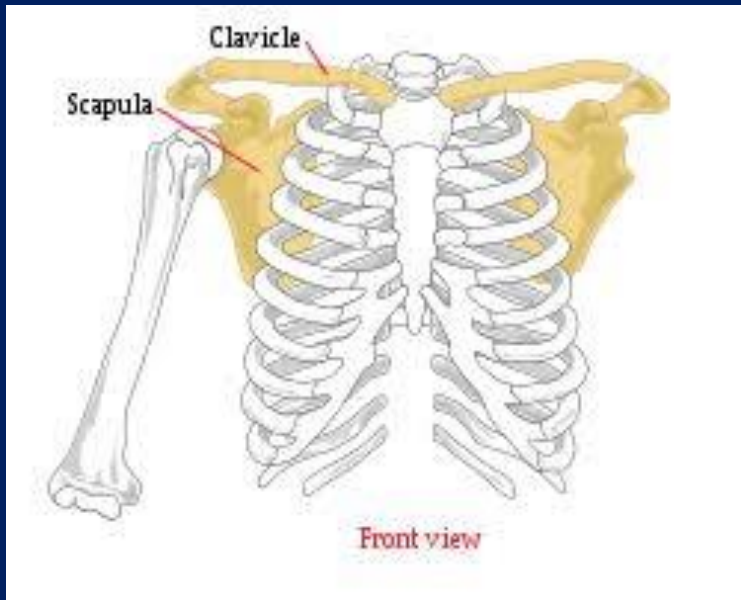
## Anatomically:

- It has many of anatomical landmarks and provides attachment for muscles.
- It's long bone with two ends (Medial & Lateral end).
- The medial two thirds of the clavicle is convex forward and its lateral third is concave forward.



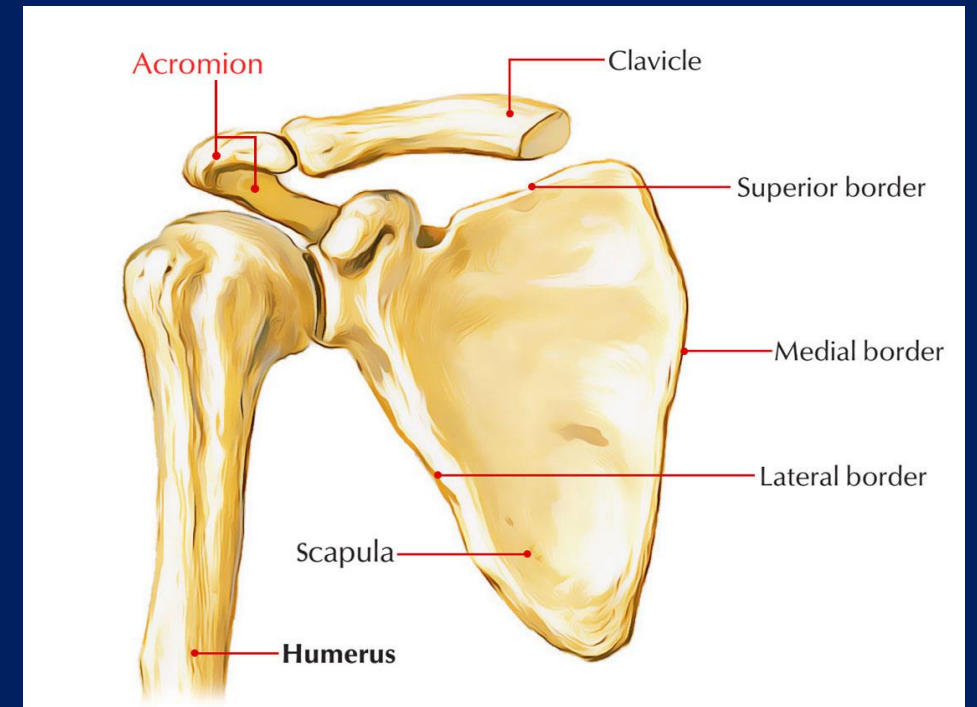
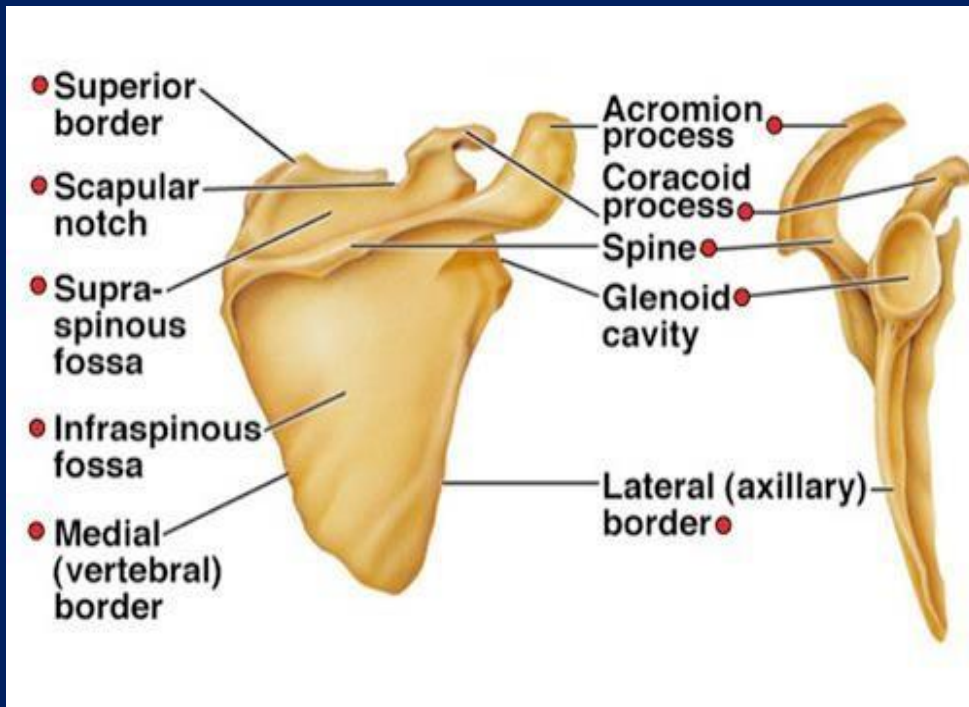
# SCAPULA

- The scapula is a flat triangular bone that lies on the posterior chest wall, between the 2<sup>nd</sup> and 7<sup>th</sup> ribs.



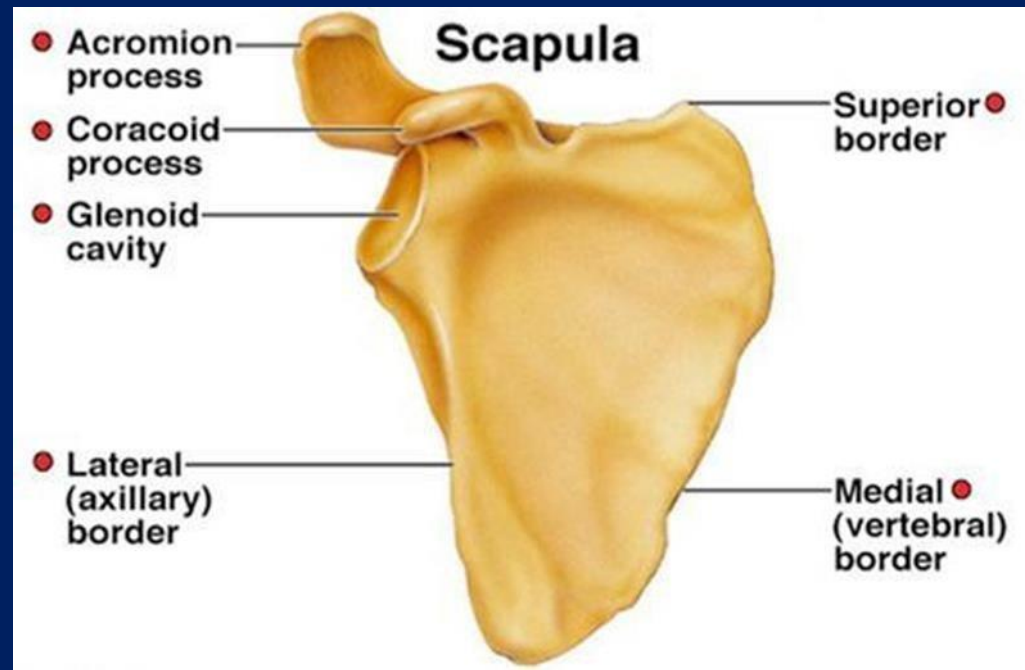
# SCAPULA

- The posterior surface is divided by the *spine* into the supraspinous fossa above and an infraspinous fossa below.
- The lateral end of spine is free & forms the *acromion process*, which articulates with the clavicle.



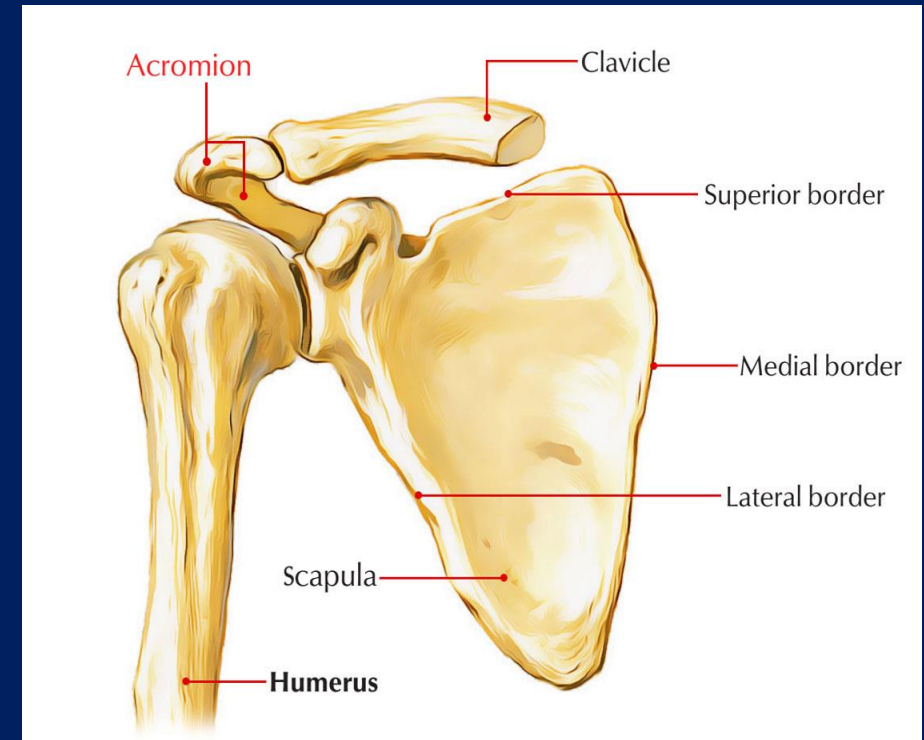
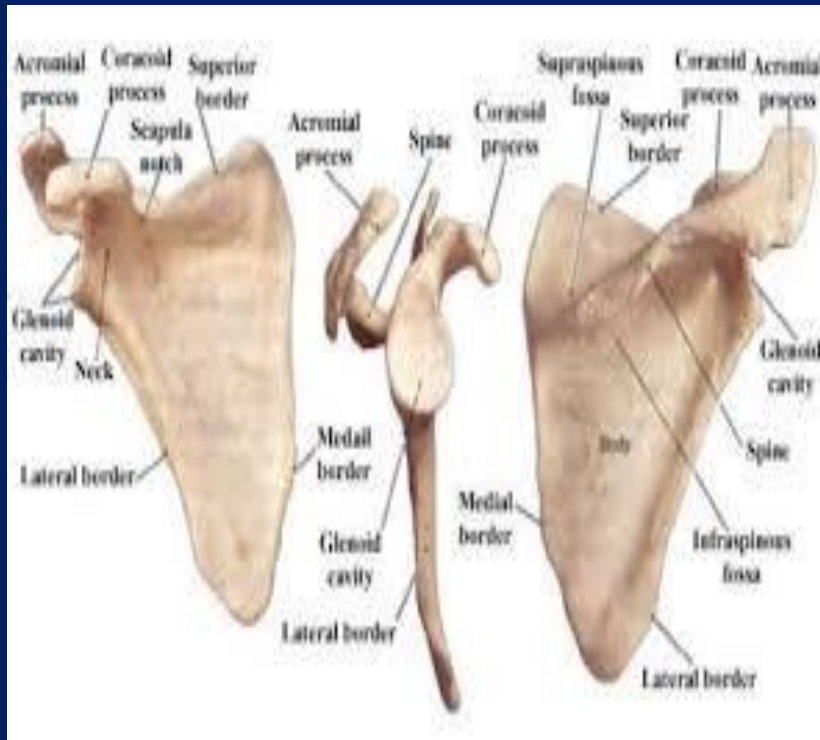
# SCAPULA

- The coracoid process projects upward and forward above the glenoid cavity and provides attachment for muscles and ligaments.



# SCAPULA

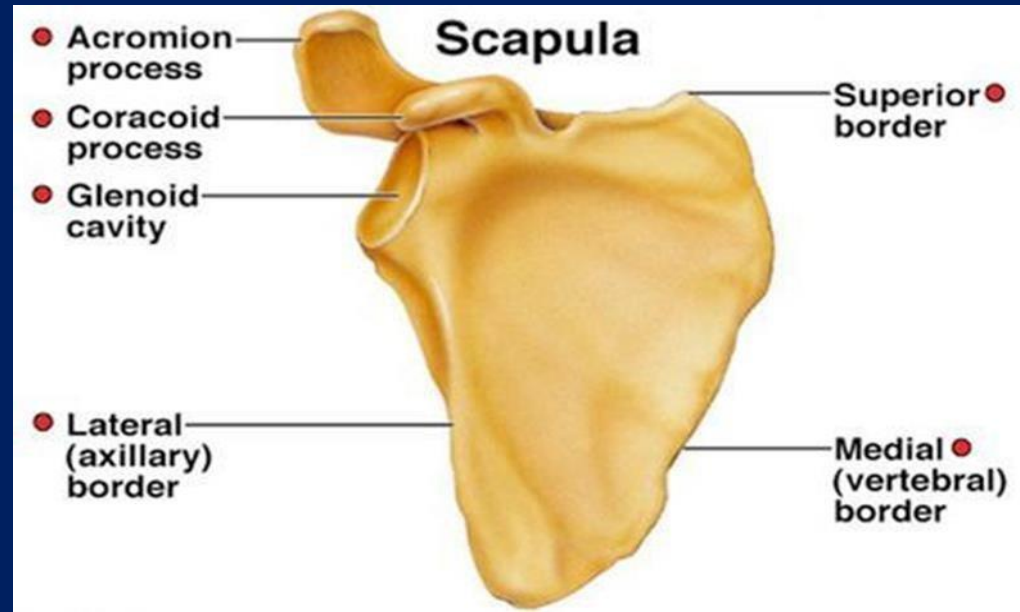
- The superolateral angle of the scapula forms the pear-shaped: *Glenoid Cavity*, which articulates with the head of the humerus at the shoulder joint.



# SCAPULA

- The anterior surface of the scapula is concave and forms the shallow subscapular fossa.

The inferior angle of the scapula can be palpated easily in the living subject and marks the level of the 7th rib and the spine of the 7th thoracic vertebra.



# MUSCLES OF THE PECTORAL REGION

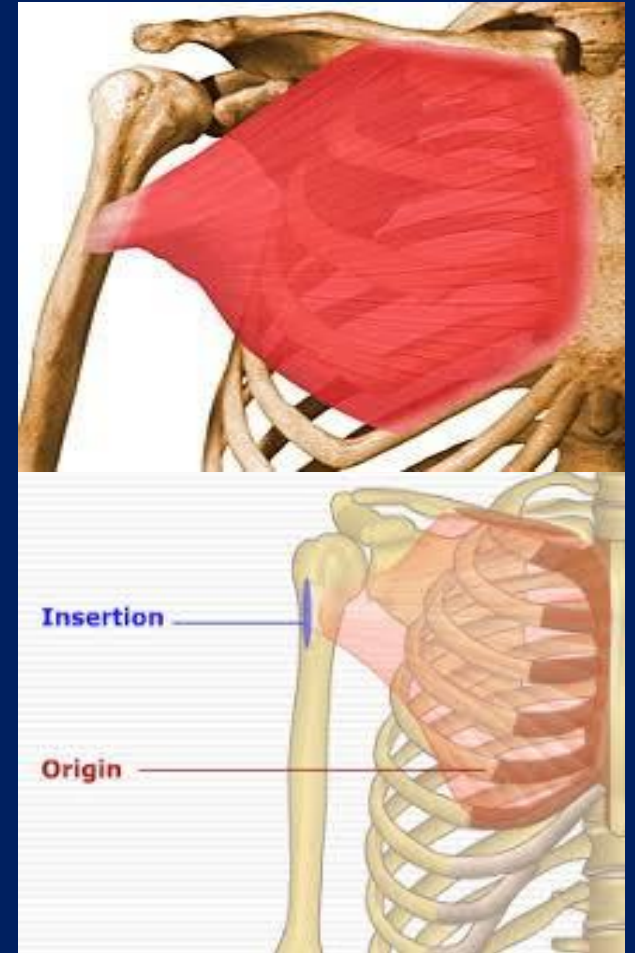
1.) **Pectoralis Major Muscle**: It's large fan-shaped muscle enclosed by pectoral fascia.

***Origin:*** From clavicle, sternum, and upper six costal cartilages.

***Insertion:*** Into the lateral lip of bicipital groove of humerus.

***Nerve Supply:*** Medial and lateral nerves from brachial plexus.

***Function (Action):*** Adducts arm and rotates it medially;  
clavicular fibers also flex arm.





# MUSCLES OF THE PECTORAL REGION

2.) **Pectoralis Minor Muscle**: It's a thin triangular muscle that lies beneath the pectoralis major.

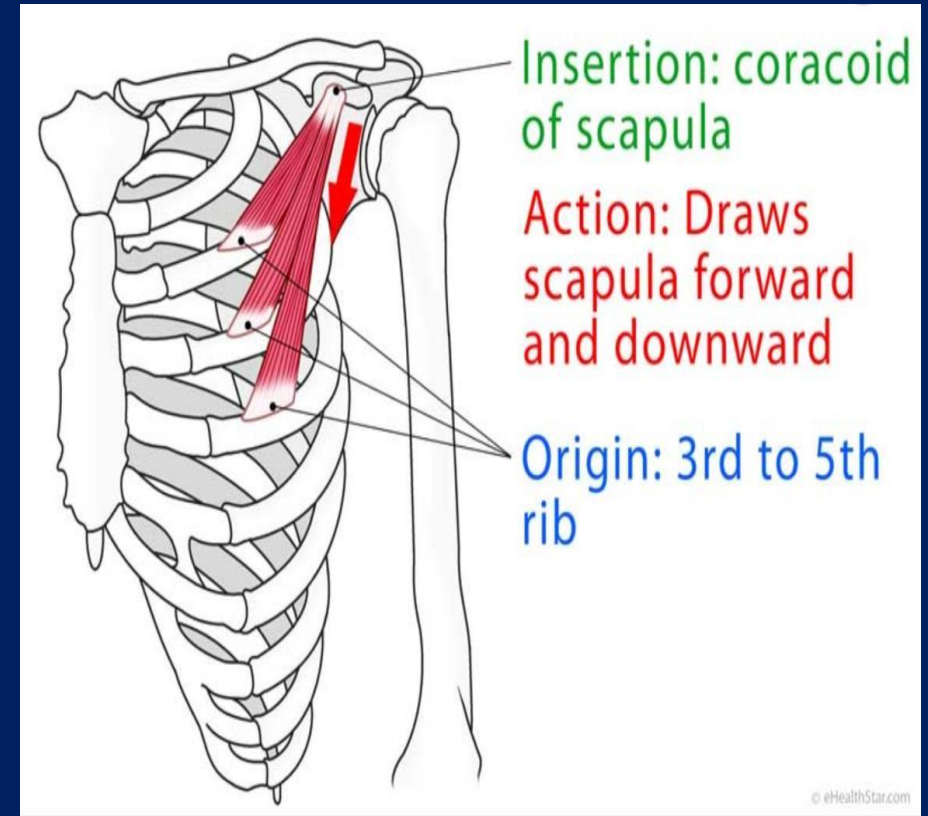
**Origin:** From 3rd, 4th, 5th ribs & runs upward and laterally.

**Inserted:** Into the coracoid process of the scapula.

**Nerve Supply:** Medial pectoral nerve from brachial plexus.

**Function (Action):**

- 1.) It stabilizes the scapula by drawing inferiorly and anteriorly against the chest wall.
- 2.) If the scapula is fixed, it elevates the ribs of origin





# MUSCLES OF THE PECTORAL REGION

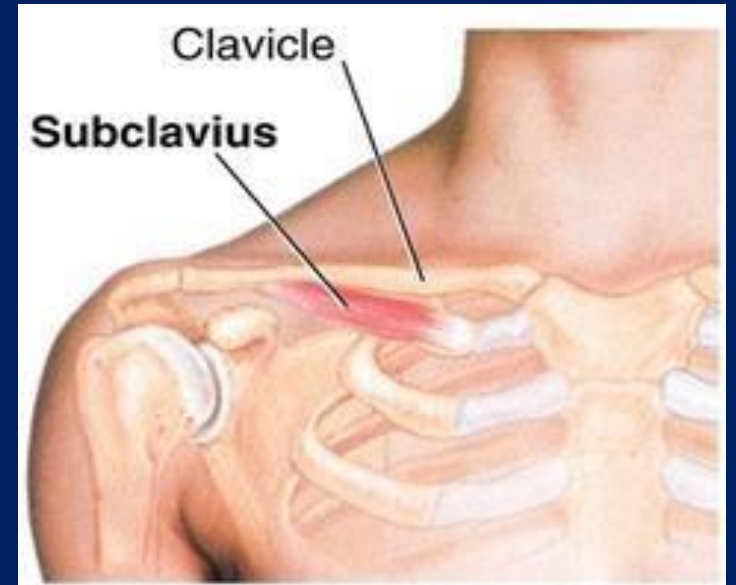
3.) Subclavius Muscle: It's small muscle under the clavicle.

*Origin:* From 1st costal cartilage.

*Insertion:* Into clavicle.

*Nerve supply:* Nerve to subclavius from upper trunk  
of brachial plexus.

*Function:* Depresses the clavicle and steadies this bone  
during movements of the shoulder girdle.



# MUSCLES OF THE PECTORAL REGION

4.) Serratus Anterior Muscle: It's a fan-shaped muscle at the lateral wall of the thorax.

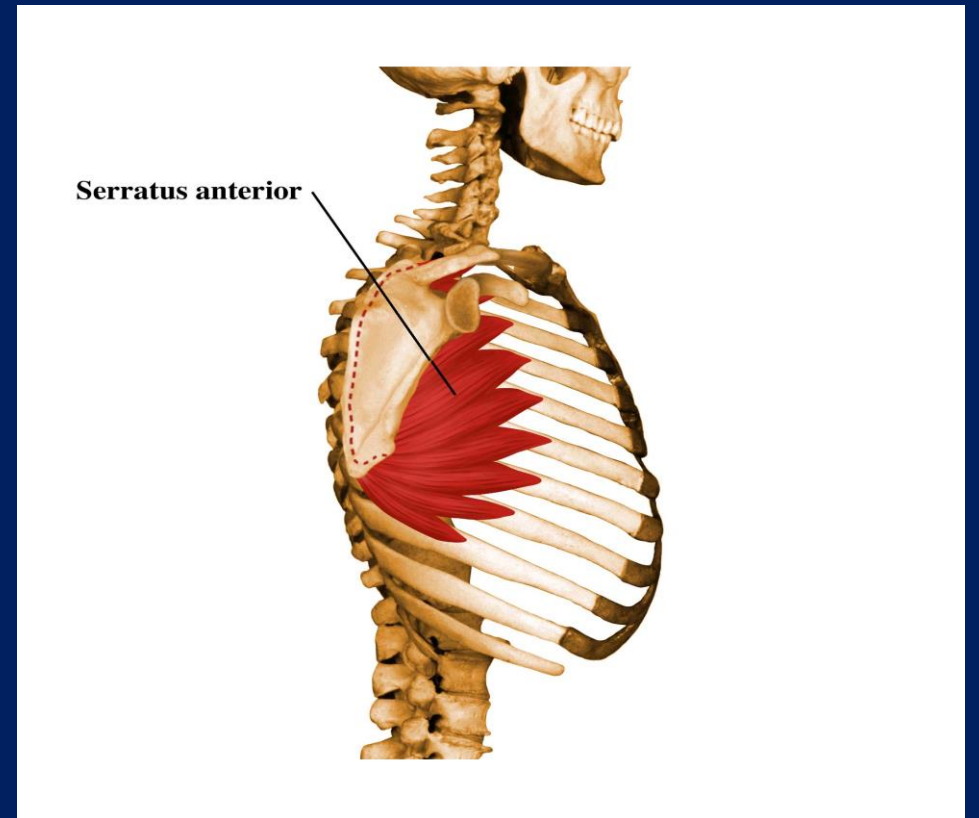
Origin: From the outer surface of the upper 8 ribs.

Insertion: Into costal aspect of medial border  
and inferior angle of scapula.

Nerve Supply: From long thoracic nerve (C5,C6,C7)

Function (Action):

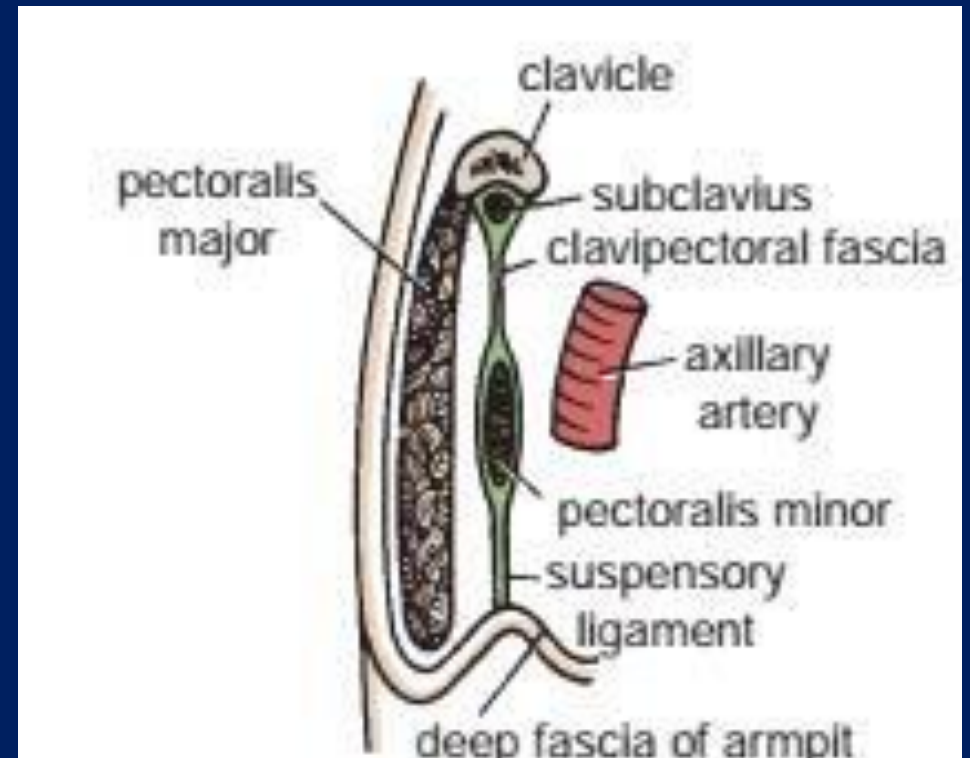
- Protrusion: draws the scapula forward  
around the thoracic wall
- Rotation of scapula.



# FASCIA OF THE PECTORAL REGION

## Clavipectoral Fascia:

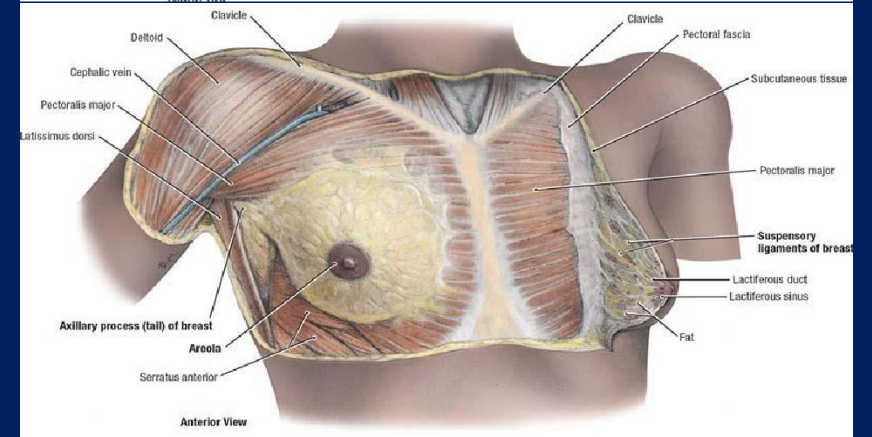
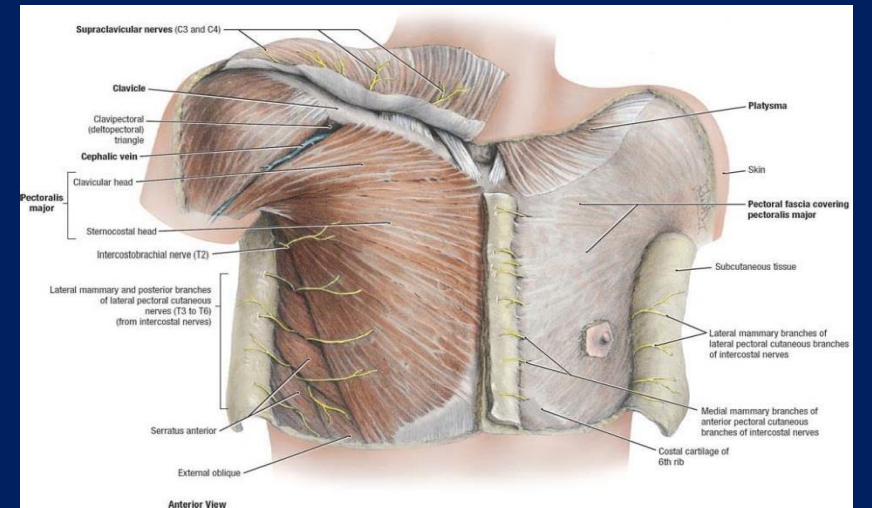
It's a strong sheet of connective that is attached above to the clavicle and below it splits to enclose the pectoralis minor muscle and then continues downward as the suspensory ligament of the axilla and joins the fascial floor of the armpit.



# FASCIA OF THE PECTORAL REGION

## Superficial fascia:

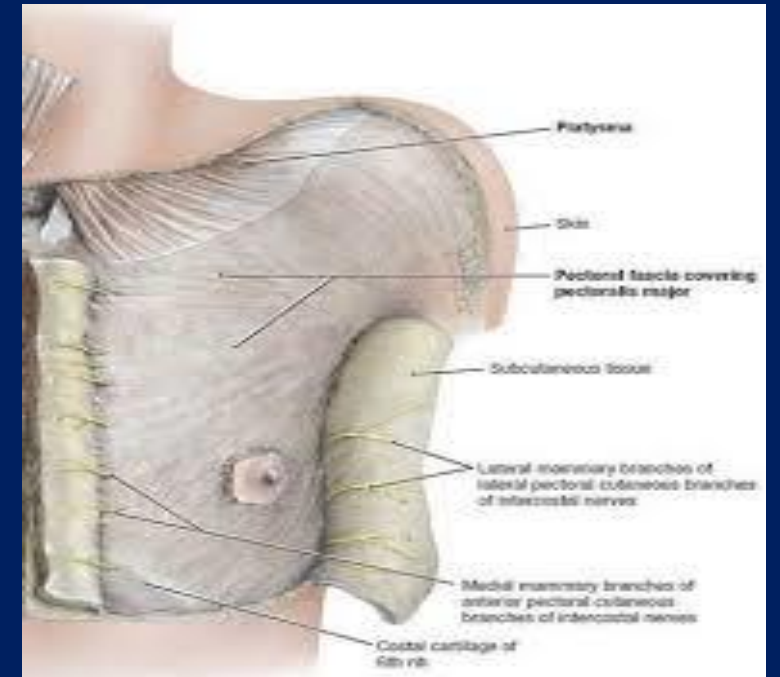
- It's contains the superficial vessels and nerves and continuous with the superficial fascia of lateral thoracic wall, the abdomen, the arm, and the neck.
- Tends to be thickest in male, in the region deep to the nipple and areola. In female it forms large masses between & around glandular tissue of the breast.



# FASCIA OF THE PECTORAL REGION

## Deep pectoral fascia:

- It's a thin lamina, covering the surface of the pectoralis major.
- Deep pectoral fascia, it's attached to clavicle superiorly & to the sternum medially. Laterally and below it's continuous with the fascia of the shoulder, axilla & thorax. Posteriorly, it's attached to spinous processes of the thoracic vertebrae.

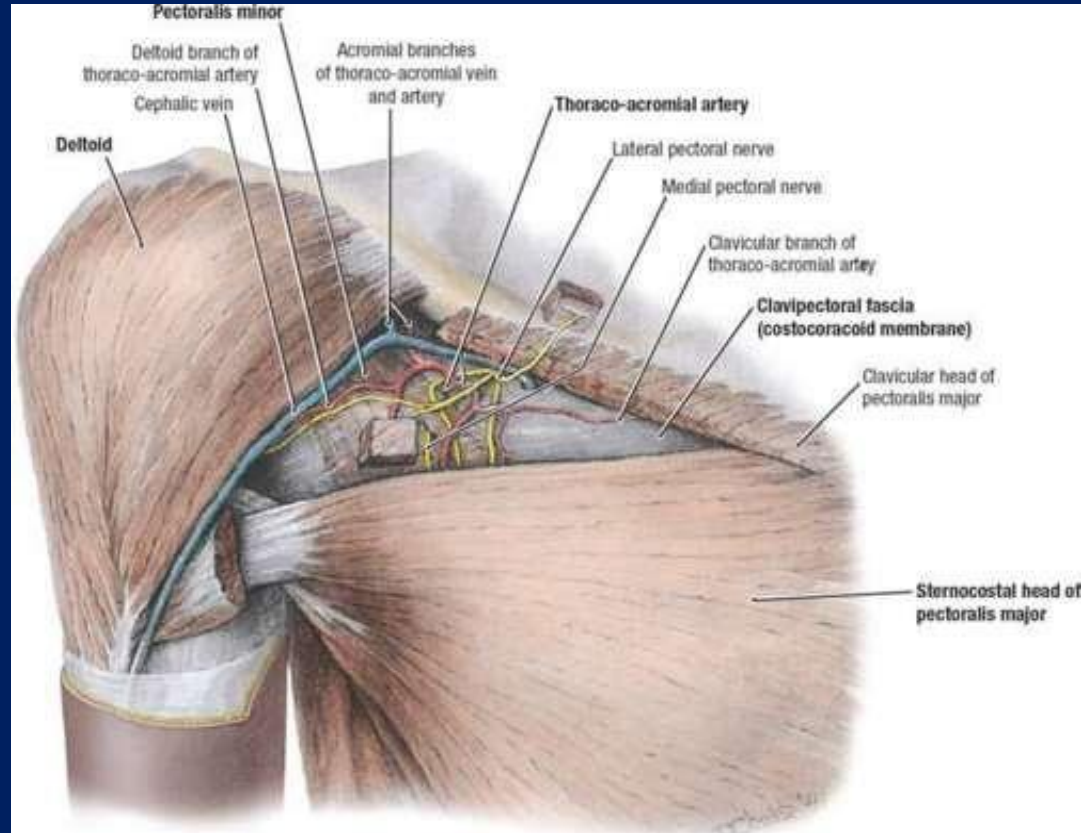


# DETOPECTORAL GROOVE

- It's between pectoralis major & deltoid muscles. Floored by the clavipectoral fascia.

❑ Pierced by 4 structures:

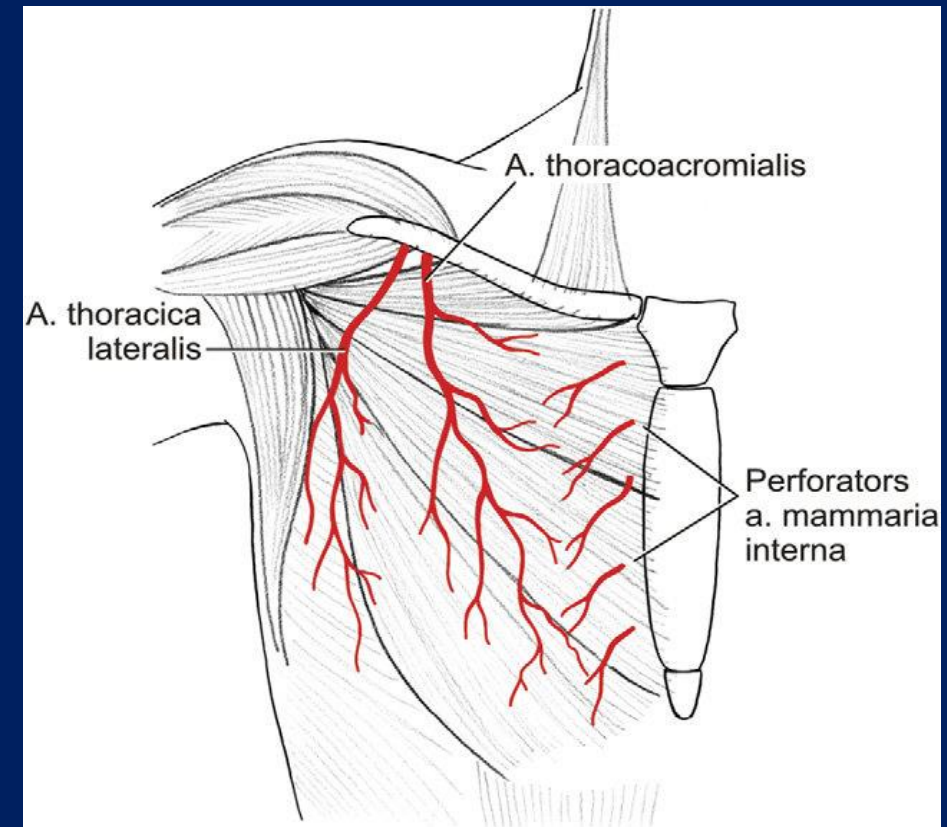
- 1- Lateral pectoral nerve.
- 2- Cephalic vein.
- 3- Acromiothoracic trunk.
- 4- Lymphatics.



# BLOOD VESSELS OF THE PECTORAL REGION

- The three chief arteries of the pectoral region are branches of axillary artery:

- **Thoracoacromial Artery**: which pierces the clavipectoral fascia and give rise four branches: clavicular, pectoral, deltoid, and acromial arteries.
  - **Lateral thoracic Artery**: runs downward along the anterolateral aspect of the chest wall.
  - **Anterior perforating branches of internal thoracic.**
- These arteries are all accompanied by veins.



# CUTANEOUS INNERVATION

The skin of Pectoral Region supply by:

## 1.) Branches of the *supraclavicular nerve*.

Medial branch

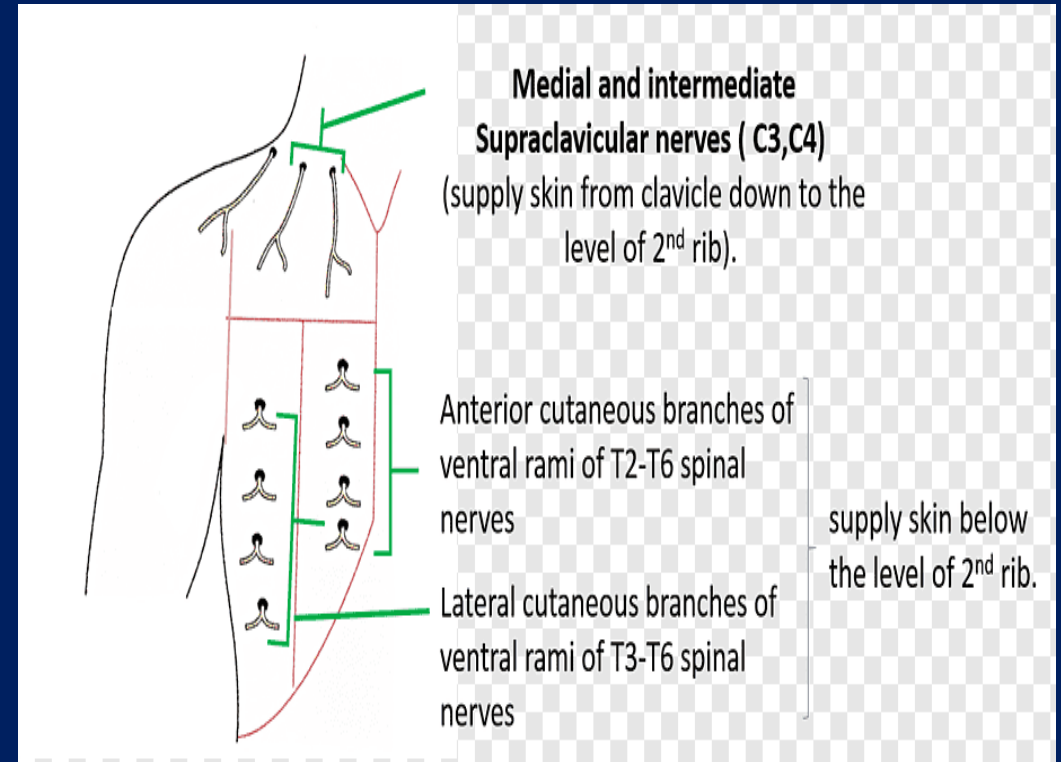
Intermediate branch

Lateral branch

## 2.) Branches of the *intercostal nerves*.

Anterior cutaneous branches

Lateral cutaneous branches



thank  
you