

وسهلا

أهلا



الأستاذ الدكتور يوسف حسين

أستاذ التشريح وعلم الأجنة - كلية الطب - جامعة الزقازيق - مصر

رئيس قسم التشريح و الأنسجة و الأجنة - كلية الطب - جامعة مؤتة - الأردن

دكتورة من جامعة كولونيا المانيا

Dr. Youssef Hussein Anatomy اليوتيوب

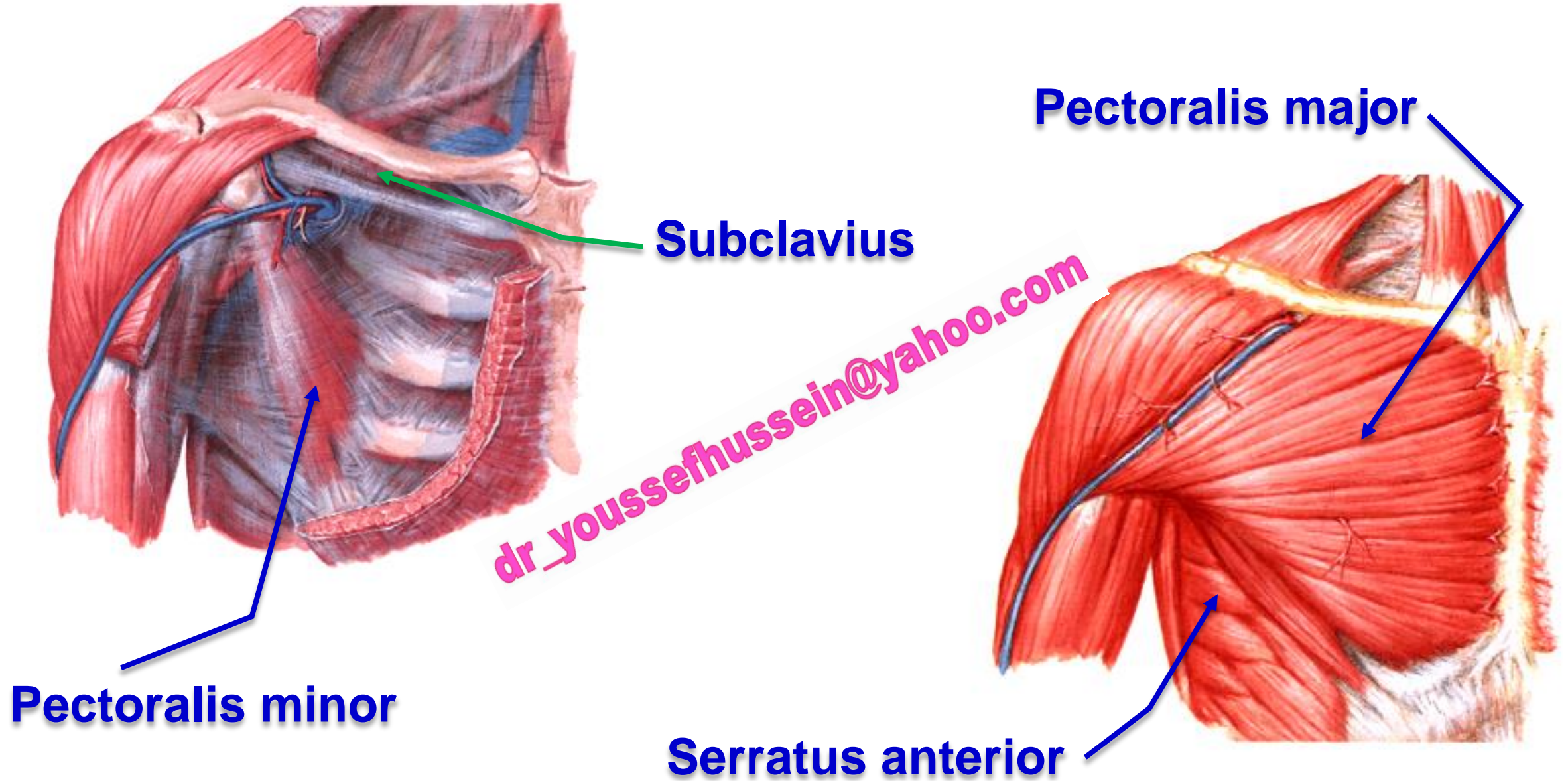
جروب الفيس د. يوسف حسين (استاذ التشريح)

MUSCLES OF THE PECTORAL REGION

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

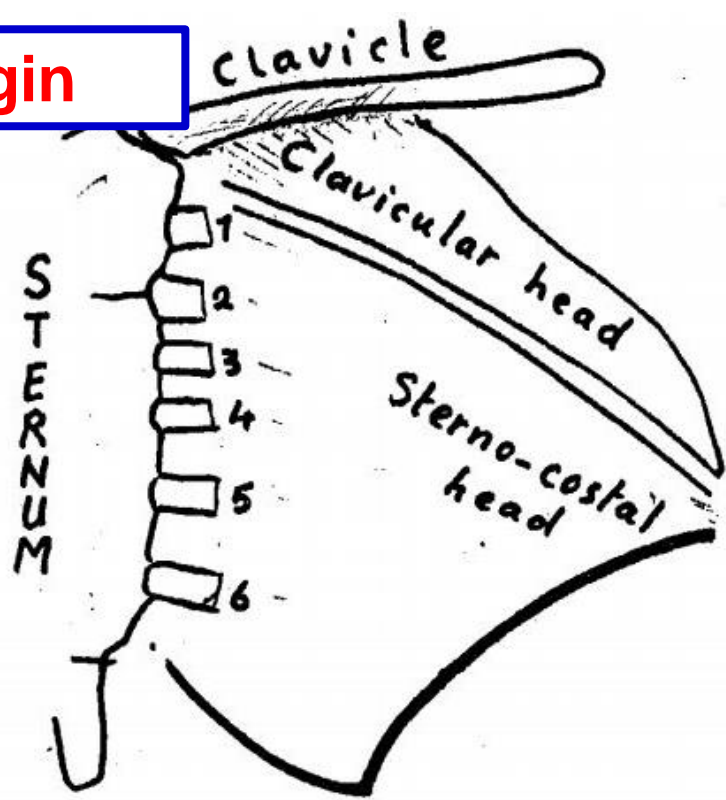
Muscles of the Pectoral region



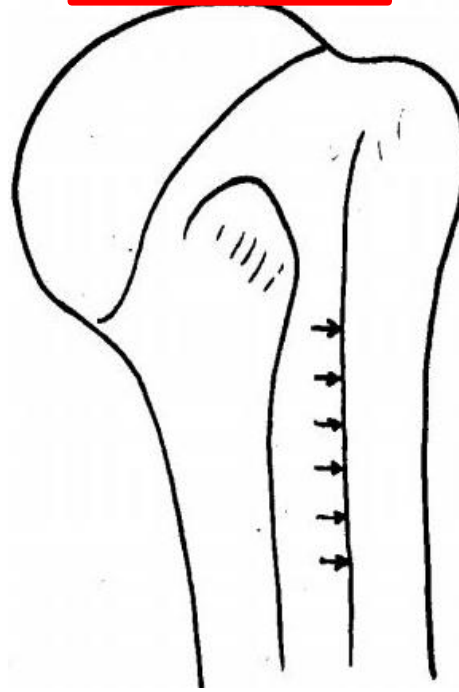


**Pectoralis Major
muscle**

Origin



Insertion



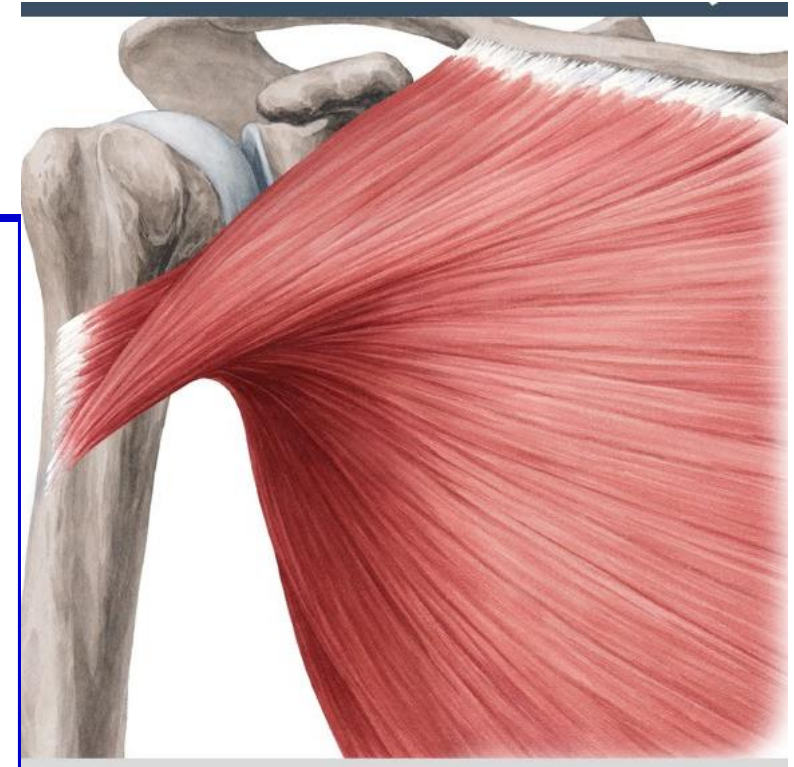
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Lateral lip of the bicipital groove

*** Origin: by two heads:**

A) Clavicular head: from anterior surface of the medial 1/2 of the clavicle.

B) Sternocostal head: 1) anterior surface of the sternum.
2) Upper 6 costal cartilages.
3) External abdominal oblique aponeurosis.

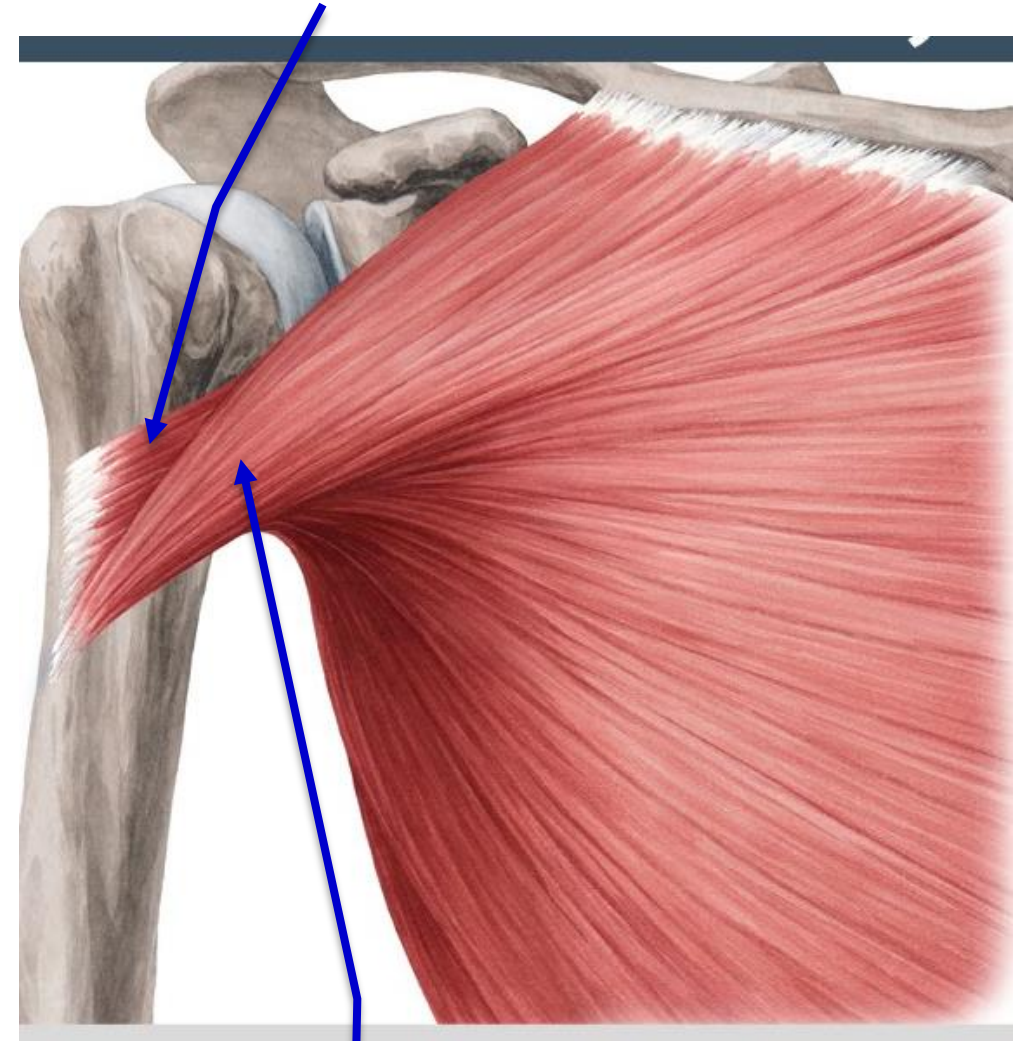


Pectoralis major muscle

- 1- The **upper fibers** are **twisted** and inserted **downward** forming the anterior lamina.
 - 2- The **lower fibers** are **twisted** and inserted **upward** forming the posterior lamina.
- **SO** the anterior fold of the axilla is **higher than** the posterior fold

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Posterior lamina

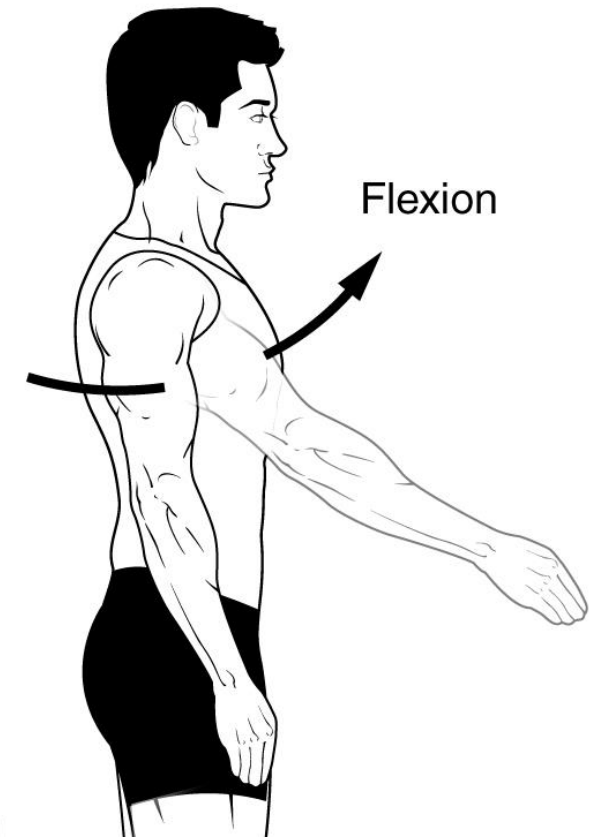


Anterior lamina

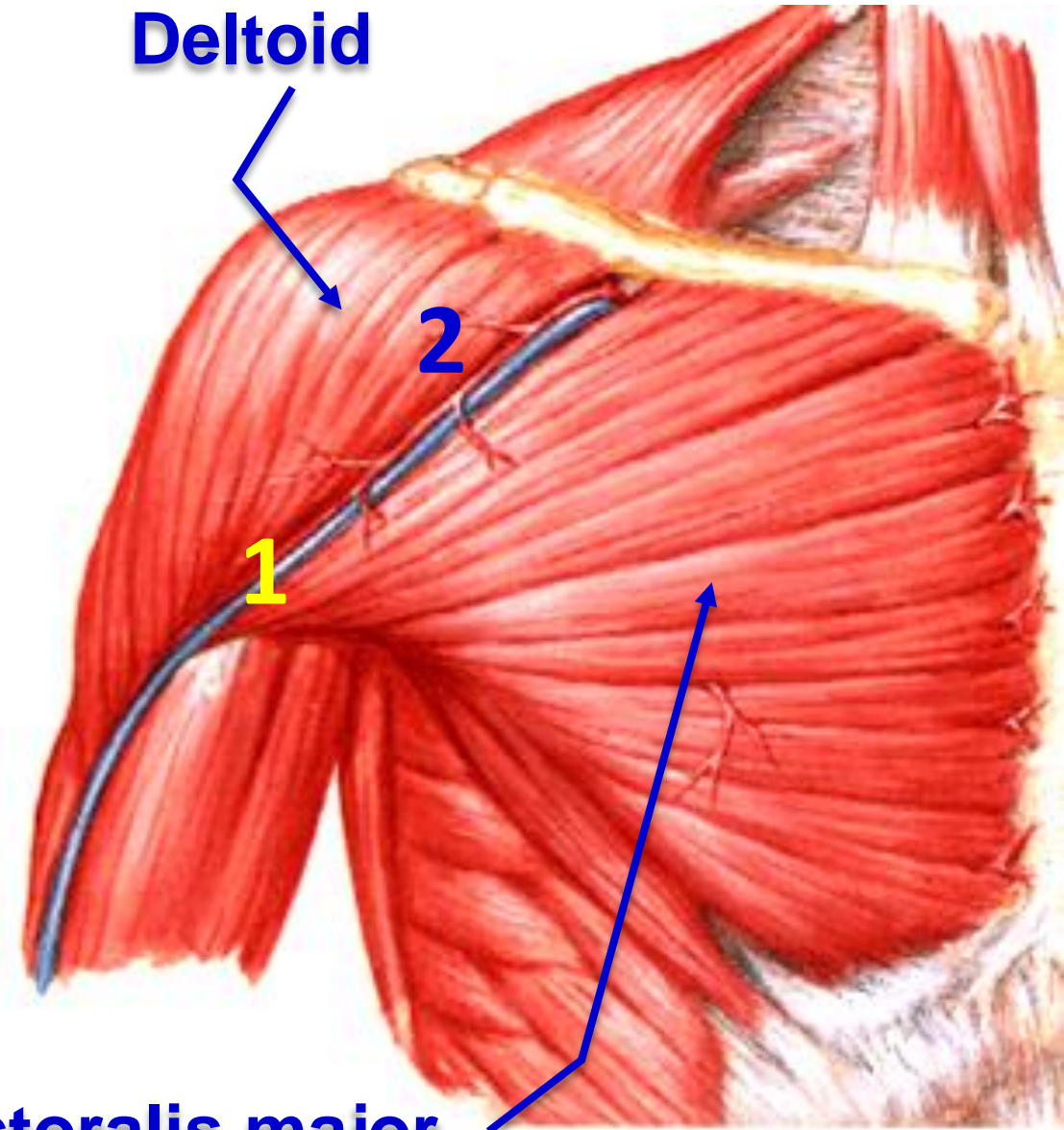
- **Nerve supply (double):** Lateral and medial pectoral nerves.
- It is the **only muscle** of the upper limb supplied by 5 segments from brachial plexus.

* **Actions:**

- 1- Adduction and medial rotation of the arm.
- 2- Flexion of the arm by **clavicular head**.
- 3- Elevates the ribs during deep inspiration.
- 4- **Sternocostal part** acts together with latissimus dorsi, teres major and deltoid: **draw the trunk up during climbing and gymnastic.**



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



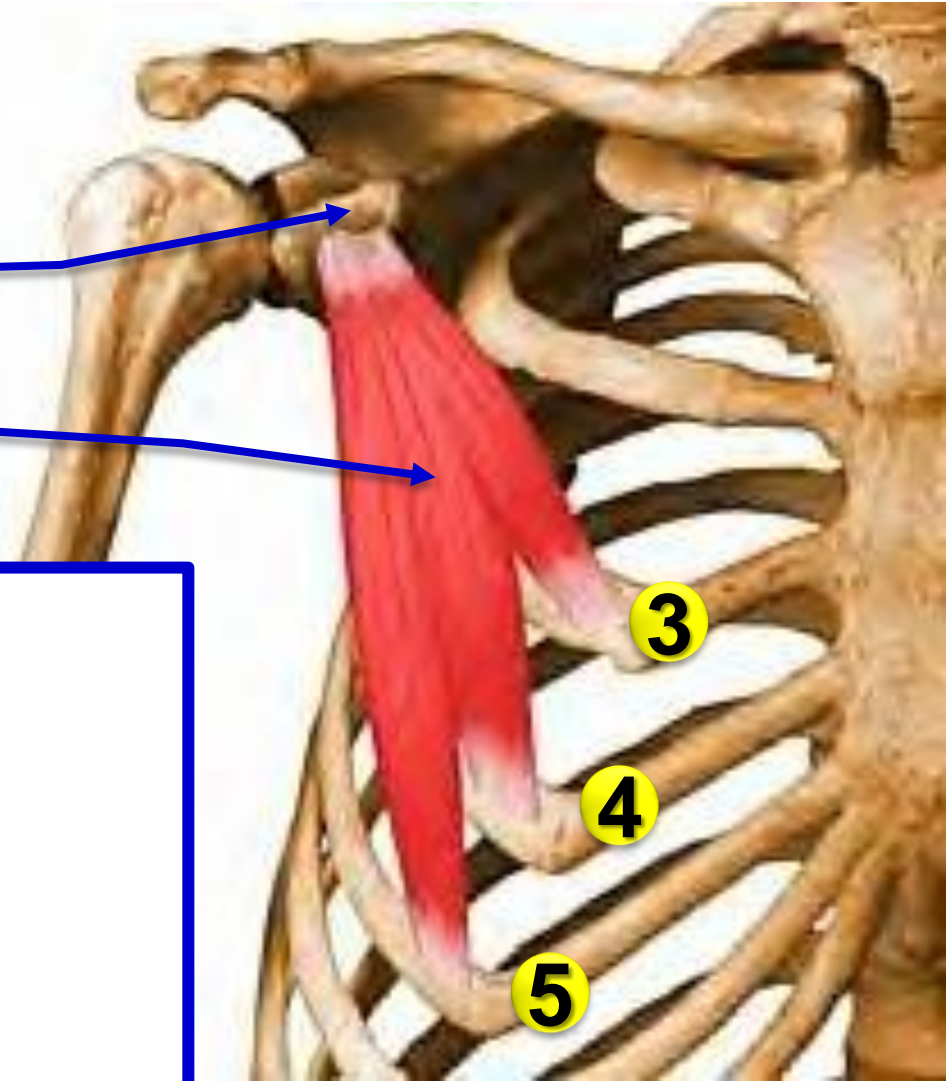
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Pectoralis major

Pectoralis minor

Coracoid process

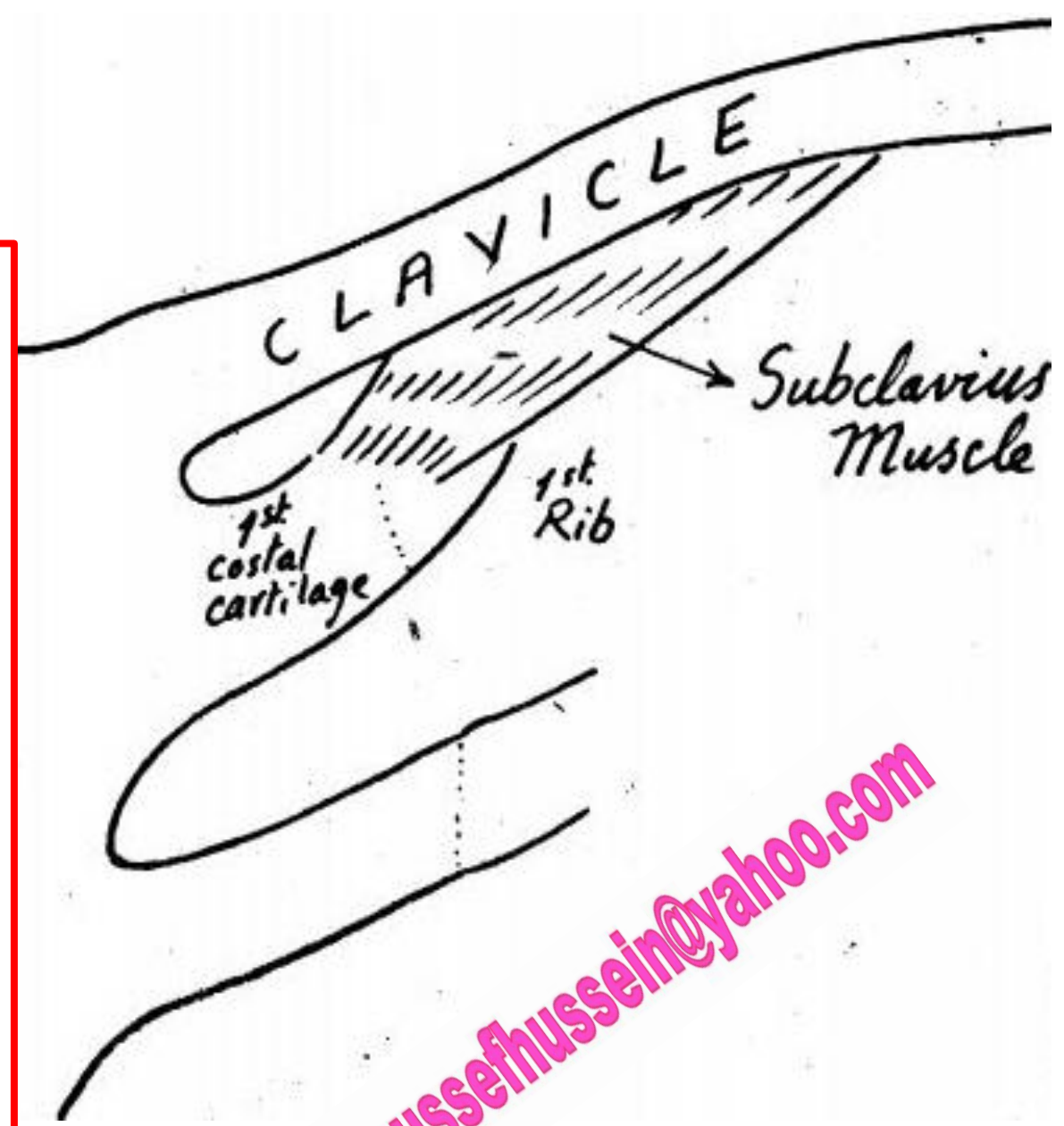
Pectoralis minor muscle



- * **Origin:** from the 3rd, 4th and 5th ribs.
- * **Insertion:** superior surface of the coracoid process.
- * **Nerve supply:** medial pectoral nerve.
- **Actions:**
 - 1) Protraction the scapula (forward movement).
 - 2) Depression the shoulder.
 - 3) Elevates the ribs during deep inspiration.

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.

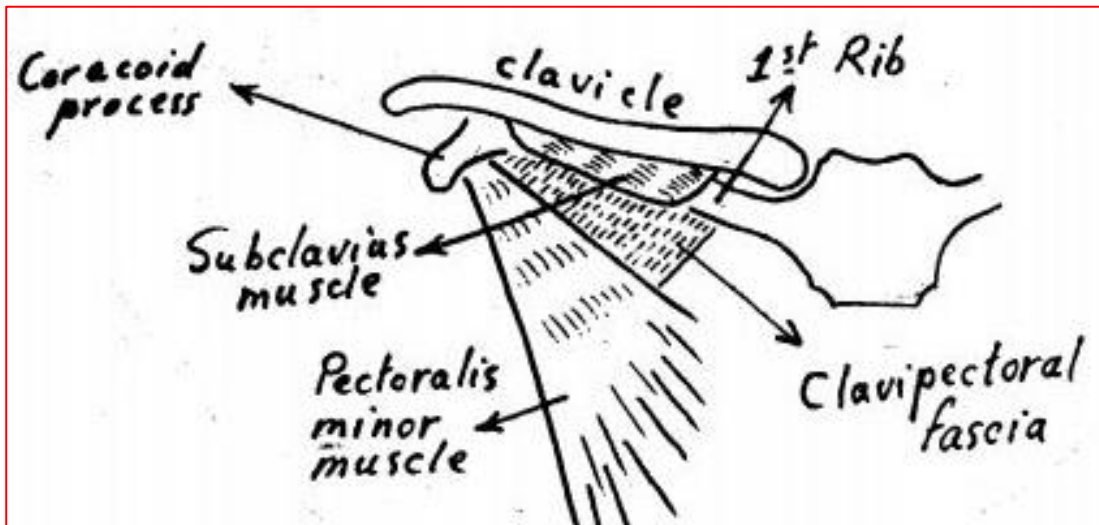
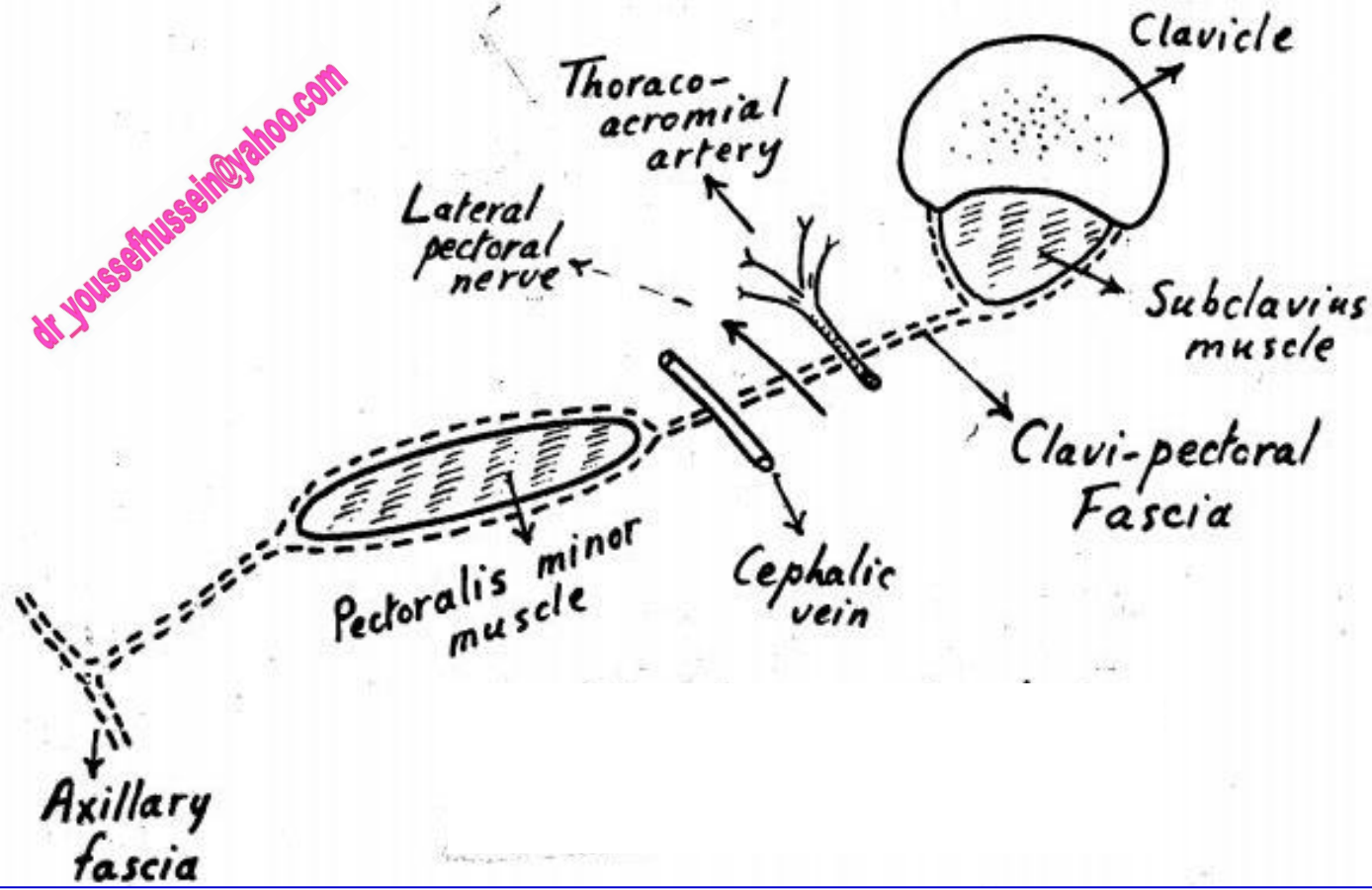


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**Clavipectoral
fascia**

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• 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.

Clavipectoral fascia

Clavicle

Thoracoacromial artery

Cephalic vein

Pectoralis minor muscle

Subclavius muscle

Clavipectoral fascia

Lateral pectoral nerve

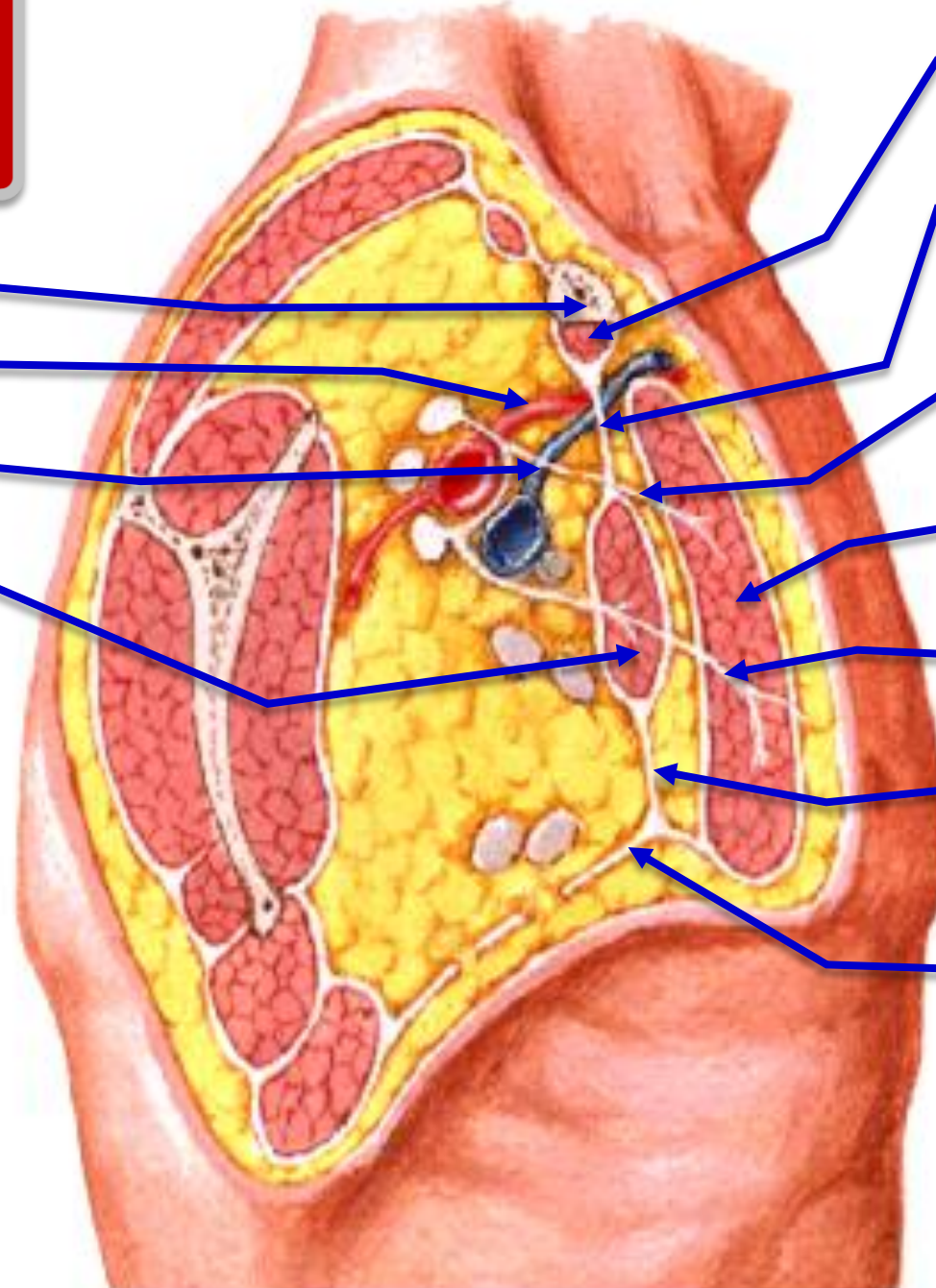
Pectoralis major

Medial pectoral nerve

Suspensory ligament of axilla

Axillary fascia

- Deep relations of pectoralis major
 - 1- Pectoralis minor.
 - 2- Clavipectoral fascia.
 - 3- Axilla and its contents



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Serratus anterior

- **Serratus Anterior Muscle**

* **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.

a) The first digitation: anterior surface of the superior angle.

b) The 2nd and 3rd digitations: anterior surface of medial border.

c) The lower five digitations: anterior surface of inferior angle.

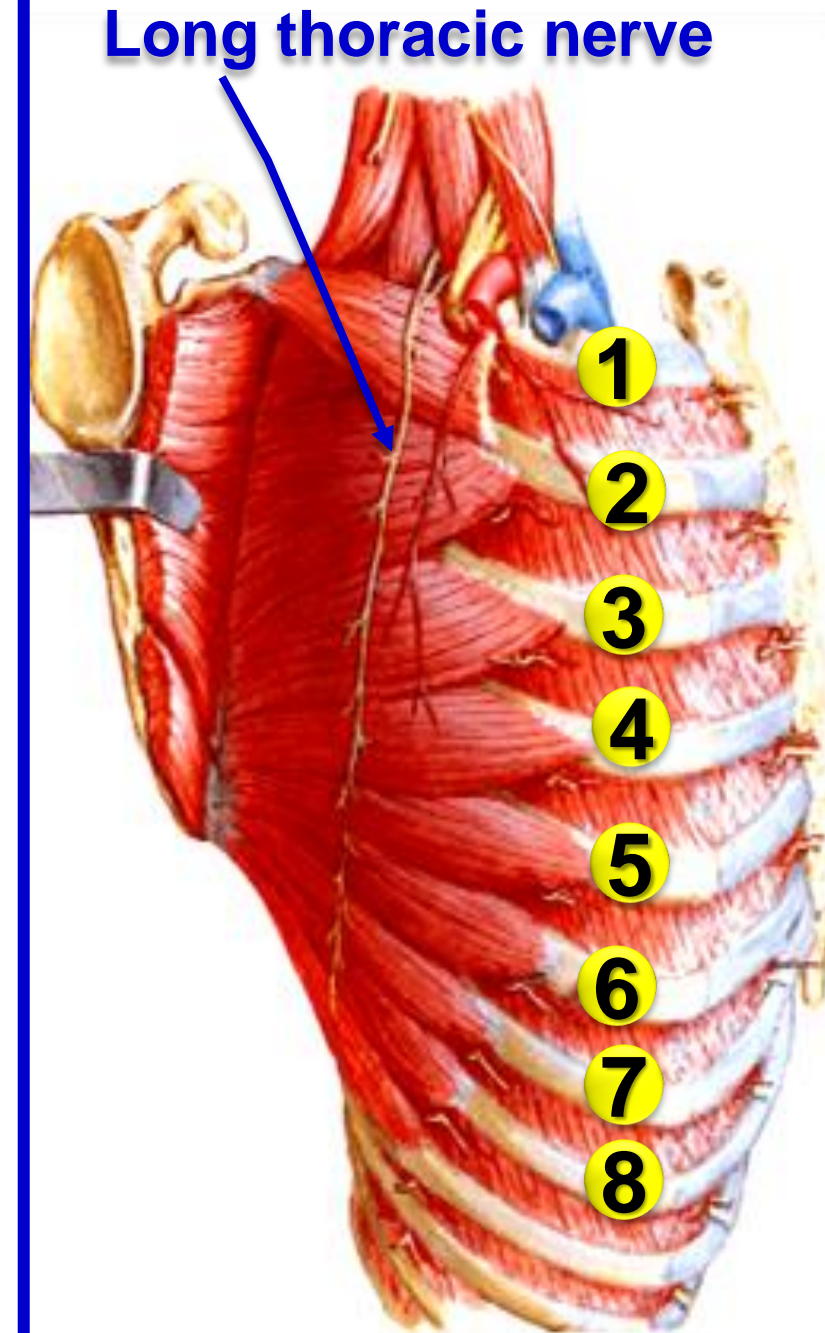
* **Nerve supply:** long thoracic nerve (**nerve of Bill C5, 6, &7**) passes superficial to the muscle.

* **Actions:**

1- Protraction of the scapula (pulls the scapula forward with pectoralis minor).

2- Lower 5 digitations, **Abduction of the arm above 90 degree**, acting with the trapezius muscle.

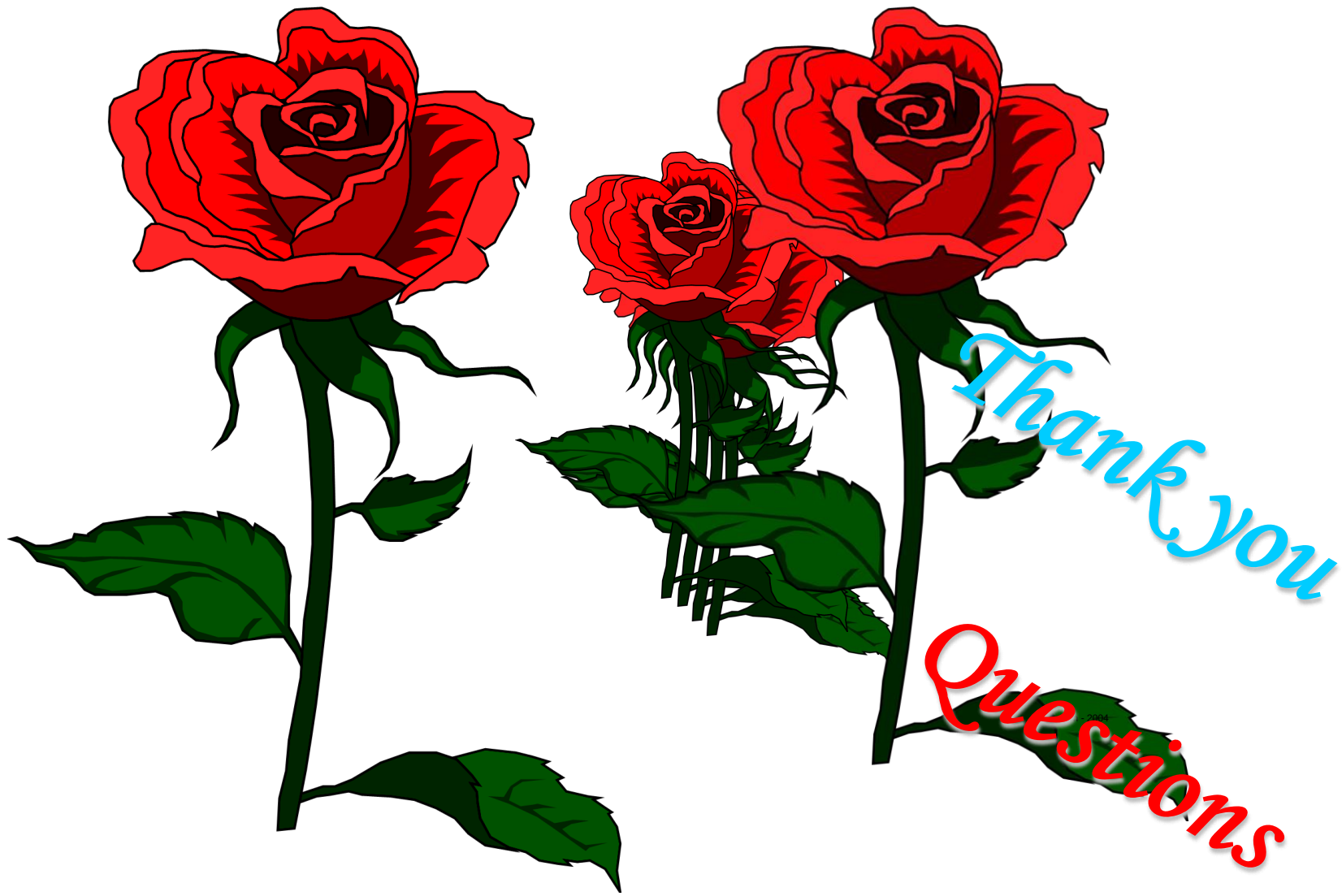
3- Fixation of the scapula during movement of the upper limb.



*“ Injury of the long thoracic nerve

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





Thank You

Questions