

وسهلا



أهلا

يُمنع أخذ السلايدات بدون  
إذن المحرر واي اجراء  
يخالف ذلك يقع تحت طائلة  
المسؤولية القانونية  
جميع المعلومات للاستخدام  
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الواتس (أي استفسار)  
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# Muscles of the back

# Muscles of the back

**Trapezius**

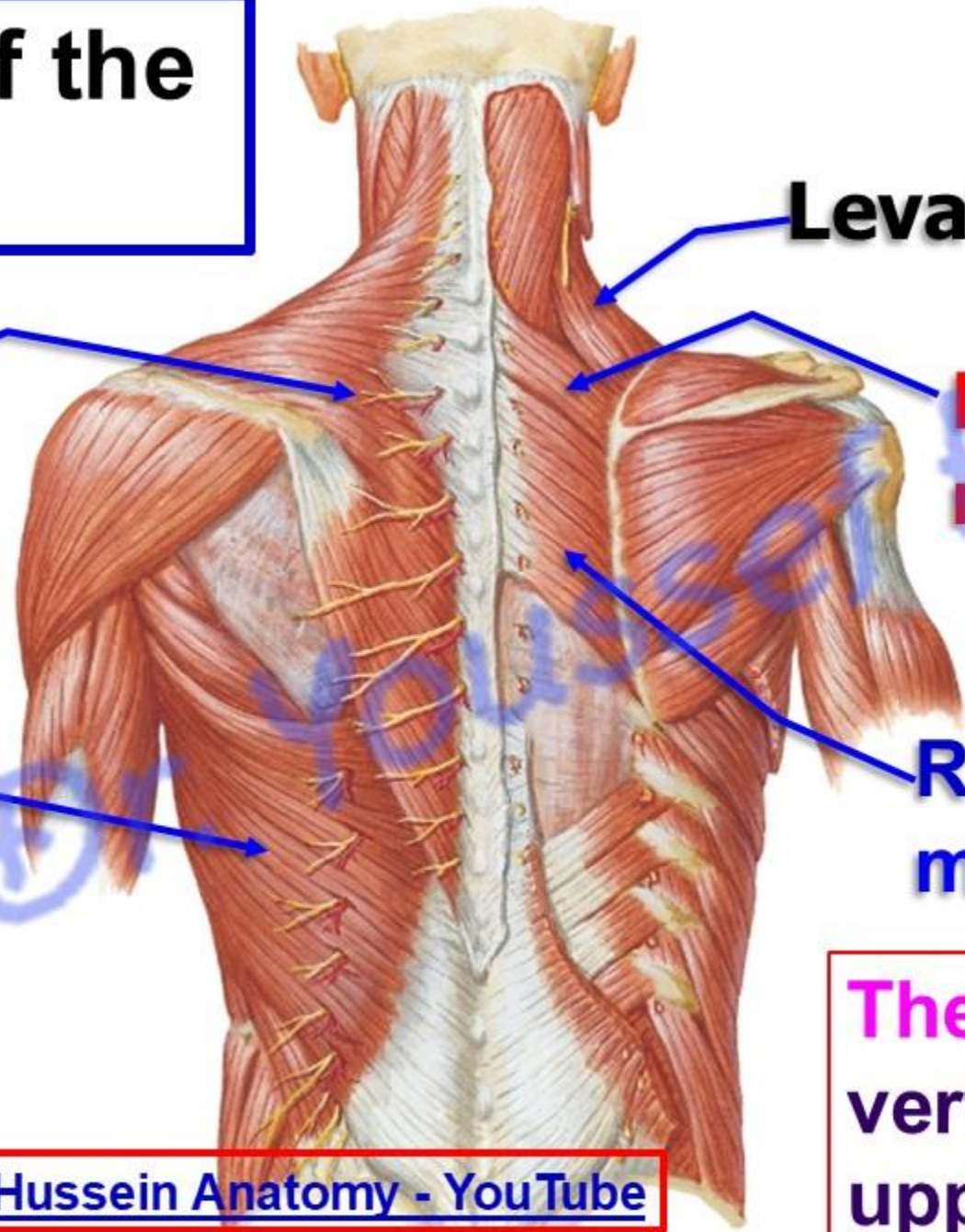
**Levator scapula**

**Rhomboideus minor**

**Latissimus dorsi**

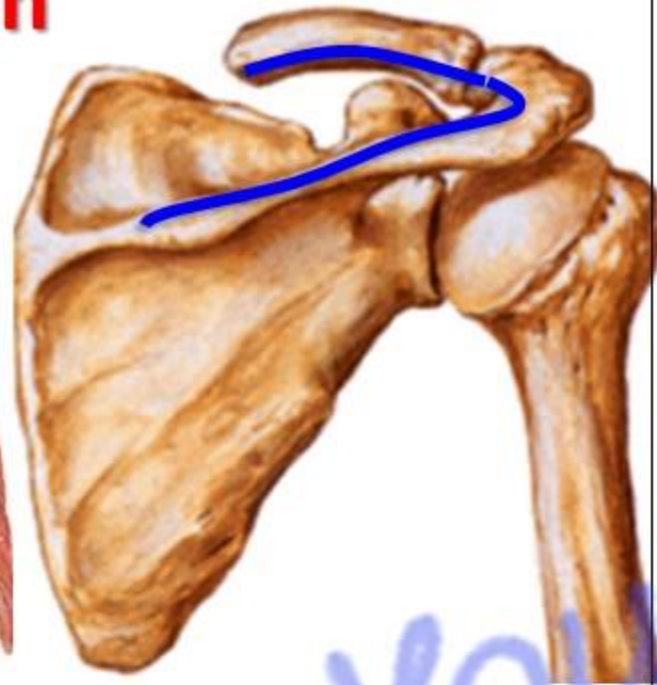
**Rhomboideus major**

**The muscles connect vertebral column with upper limb**



# Trapezius

## Origin



## Insertion

### • Trapezius شبه منحرفة

#### \*\* Origin:

- 1- **Back of the skull**; external occipital protuberance and medial 1/3 of superior nuchal line.
- 2- **Back of the neck**; ligamentum nuchae and spine of the 7th cervical.
- 3- **Back of the thorax**; all thoracic spines.

#### \*\* Insertion:

- 1- **Upper fibers** into posterior border of the lateral third of the clavicle.
- 2- **Middle fibers** into medial border of the acromion of the scapula.
- 3- **Lower fibers** into upper lip of the spine of the scapula.

**\*\* Nerve supply (double)**

**1- Motor**; spinal part of accessory nerve.

**2- Sensory** (Proprioceptive sensation) from the cervical plexus.

**\*\* Actions:**

**1. Upper fibers** elevate the scapula.

**2. Middle fibers** retract the scapula.

**3. Lower fibers** Depress the scapula.

**4. Middle and lower fibers** Abduction of the arm

more than 90 degree (with lower 5 digitations of the serratus anterior).

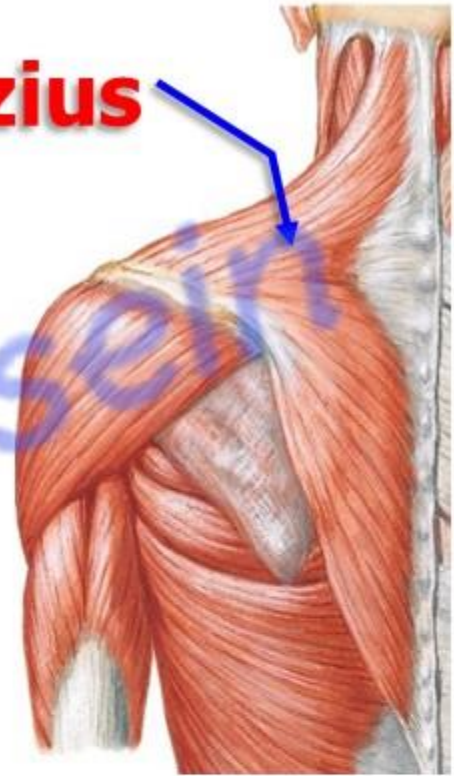
**N.B;** It is the **only muscle of upper limb**

a- Arises from the skull.

b- Not supplied by the brachial plexus.

- **Wasting of the muscles leading to loss the normal lateral slope of the neck with drop shoulder on affected side**

**Trapezius**



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# Latissimus dorsi

## • Latissimus Dorsi

### \*\* Origin:

1- From lower 6 thoracic spines under cover of the trapezius.

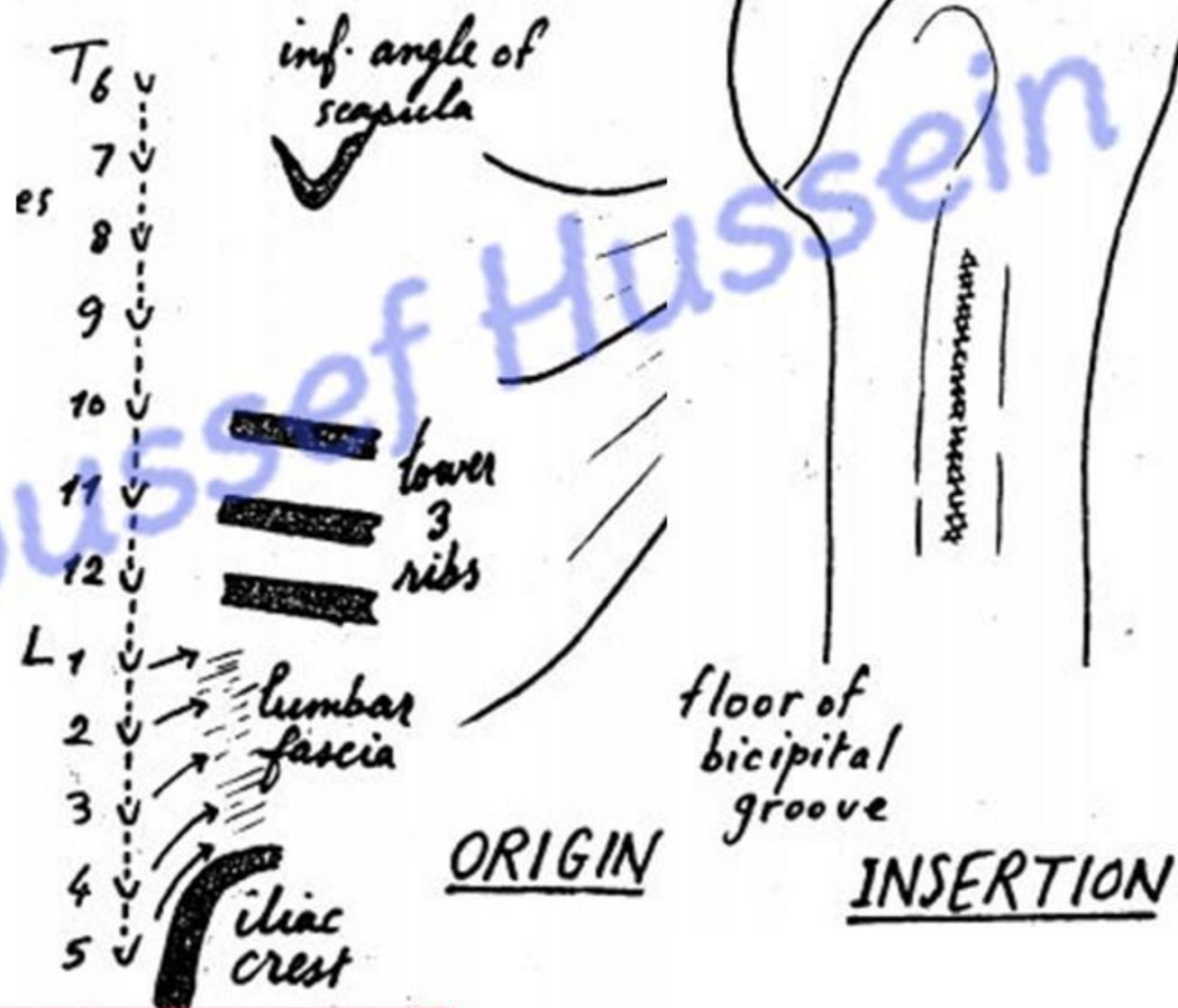
2- Lumbar fascia.

3- Posterior part of the outer lip of the iliac crest.

4- The lower 3 ribs.

5- The back of the inferior angle of the scapula.

\*\* **Insertion:** into the floor of the bicipital groove of the humerus.



- **Latissimus Dorsi**

- ❖ **Nerve supply:** nerve to latissimus dorsi (thoracodorsal nerve) from posterior cord of brachial plexus.
- ❖ **Actions:**
- ❖ Adduction, extension and medial rotation of the arm (as teres major) **Used in Swimming**
- ❖ It pulls the trunk towards the arm used in **climbing and Gymnastics** with pectoralis major, teres major and deltoid
- ❖ It assists in breathing (**cough**).



- ❖ The only muscles of upper limb has pelvic attachment
- ❖ Accessory muscle of expiration
- ❖ It has triple relations to teres major (it lies behind, below and finally in front).

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# Deep muscles of the back

- **Levator Scapulae**

**\*\* Origin:** transverse processes of **C1-C4**

**\*\* Insertion,** dorsal surface of medial border of scapula from superior angle to the root of spine.

**\*\* Nerve supply (double):**

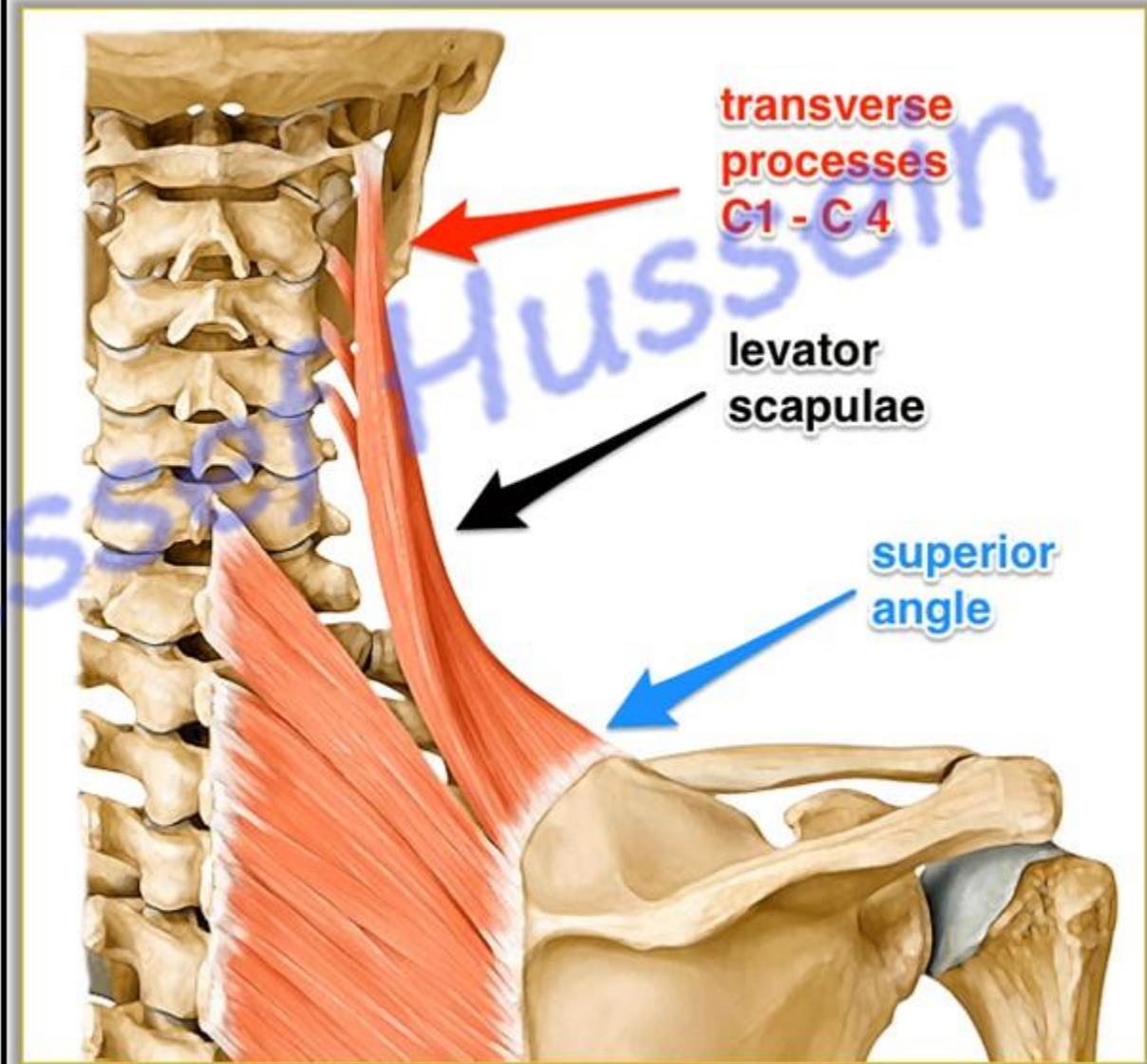
a- Dorsal scapular nerve (nerve to rhomboideus C5).

b- Nerve to levator scapulae from cervical plexus (C3&4)

**\*\* Actions:**

1- Elevates the scapula.

2- Tilts the neck to the same side when shoulder is fixed.



- **Rhomboideus Minor**

\*\* **Origin:** From the lower part of the ligamentum nuchae, spines of **C7 - T1**.

\*\* **Insertion:** dorsal aspect of medial border of scapula opposite root of spine.

- **Rhomboideus Major**

\*\* **Origin:** thoracic spines of **T 2, 3, 4, 5**.

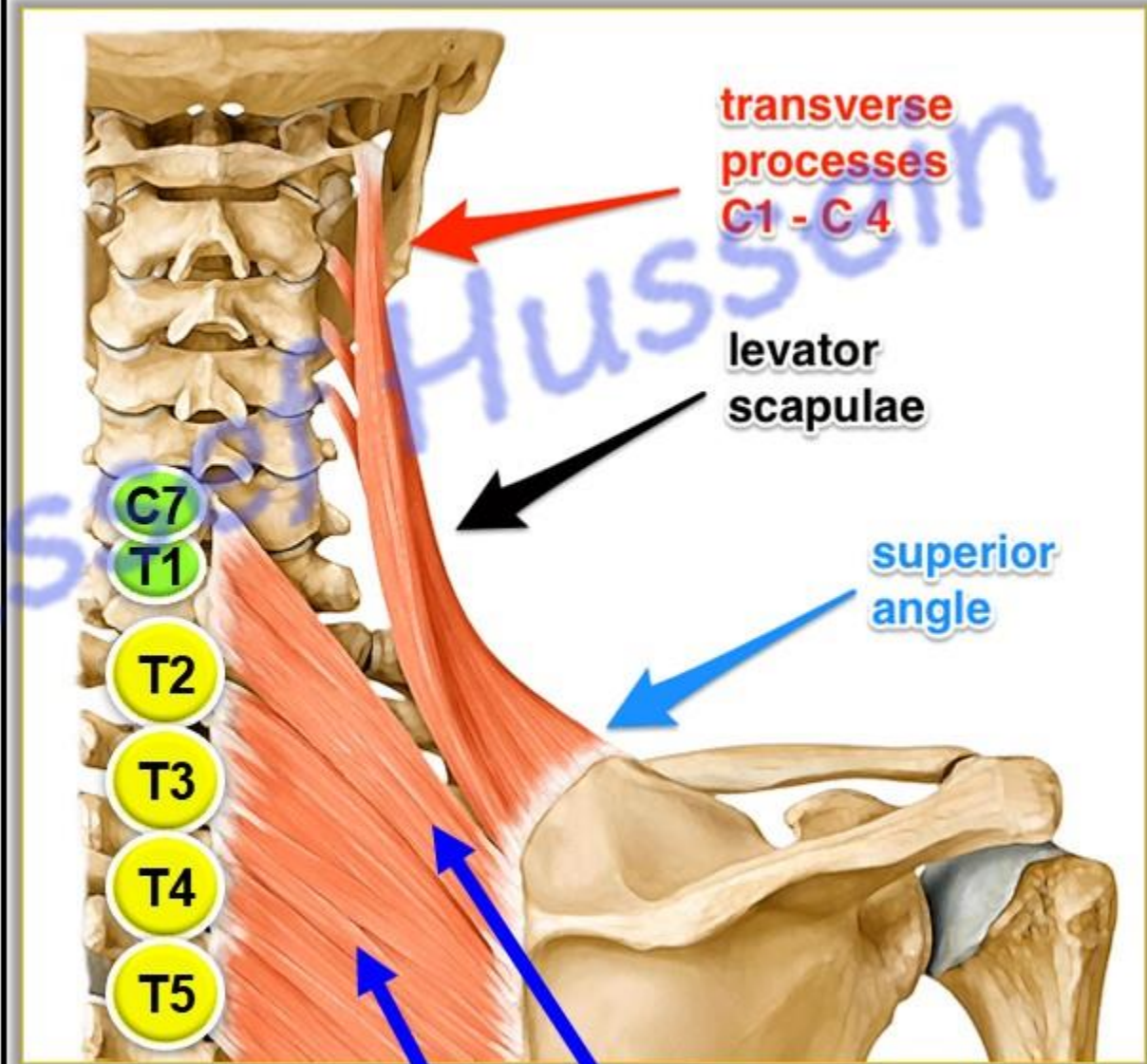
\*\* **Insertion;** dorsal aspect of medial border of scapula from spine to inferior angle.

- **Nerve supply**

- **Dorsal scapular nerve** (nerve to rhomboideus C5).

- **Action of Rhomboideus Minor and major**

- Retraction of the scapula.



**Rh. Major**

**Rh. Minor**

- **Movements of the scapula**

- Movements of the clavicle occur at the sternoclavicular and acromioclavicular joints

**The scapular movements include:**

**1- Elevation:** by upper fibers of trapezius and levator scapulae.

**2- Depression:** by lower fibers of trapezius, pectoralis minor, and gravity.

**3- Protraction:** (forward movement) by pectoralis minor and serratus anterior.

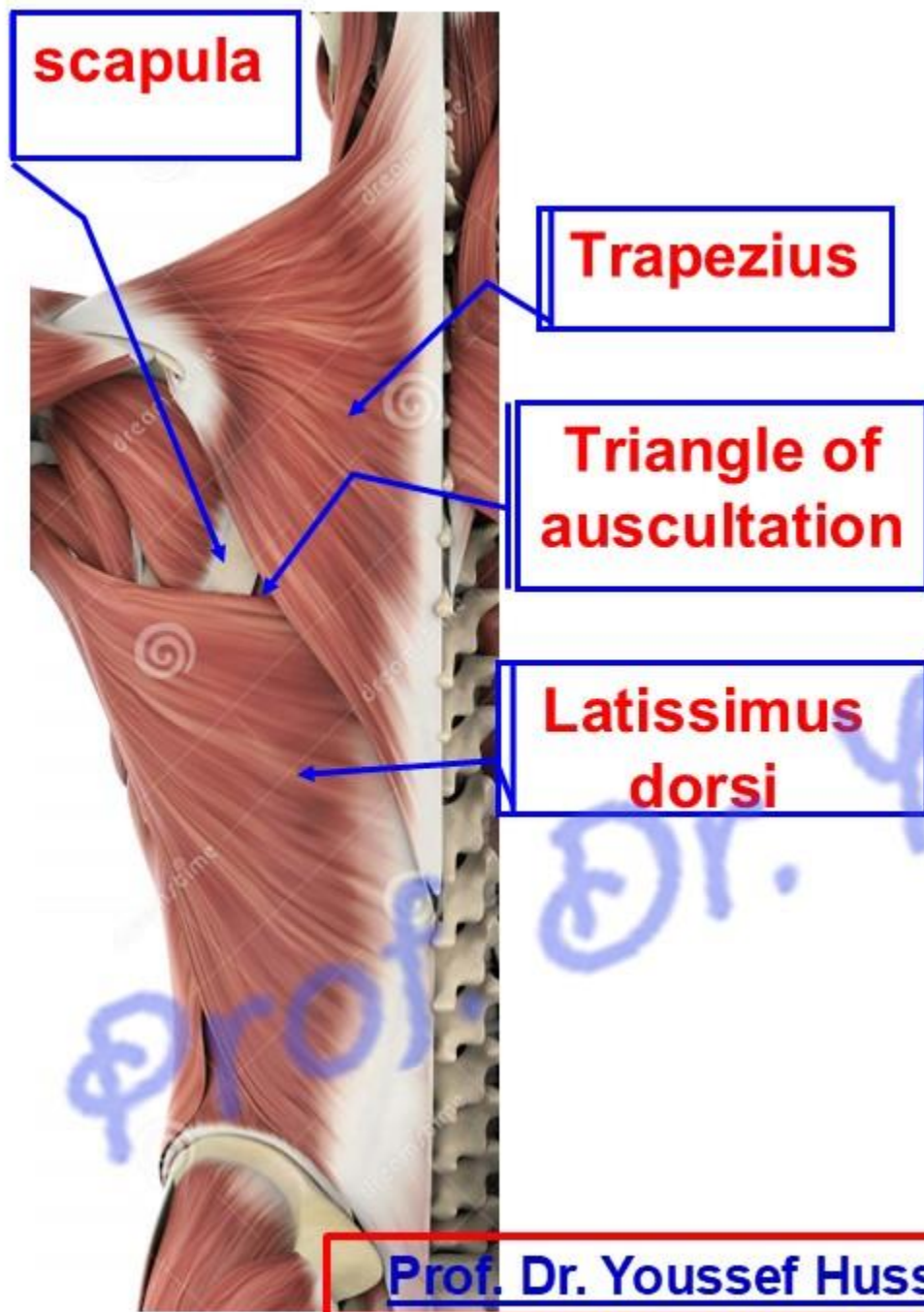
**4- Retraction:** by middle fibers of trapezius and rhomboideus minor and major muscles.

**5- Lateral rotation:** The glenoid cavity faces upward and lateral (during **abduction** of the shoulder **more than 90 degree**) by the middle and lower fibers of the trapezius and lower 5 digitations of the serratus anterior.

**6- Medial rotation:** the scapula **returns** from upward rotation to the rest position, mainly by gravity. If muscle action is needed, this movement is produced by the levator scapula, and rhomboideus muscles.

**N.B:** **subclavius muscle** plays an important role in **fixation** of the clavicle during movements of the shoulder girdle.

# Intermuscular spaces of back



## • Triangle of Auscultation

**\*\* Borders;**

- **Medially**; trapezius.
- **Laterally**; scapula.
- **Inferiorly**; latissimus dorsi.

**\*\* Its floor:** rhomboideus major.

**\*\* Clinical importance:**

- It facilitates auscultation of the **breath sound and heart sound**.
- In the left side, it is related to cardiac end of the stomach. **So** in case of **esophageal atresia**, can auscultate splash of fluid.



**Latissimus dorsi**

**External abdominal oblique**

**Lumbar triangle**

**Iliac crest**

## • Lumbar Triangle

**\*\* Borders:**

- **Medial**; latissimus dorsi.
- **Lateral**; external abdominal oblique muscle.
- **Base**, iliac crest.

**\*\* The floor**, internal abdominal oblique muscle.

**\*\* Clinical importance**; A lumbar hernia (**Pettit's hernia**)

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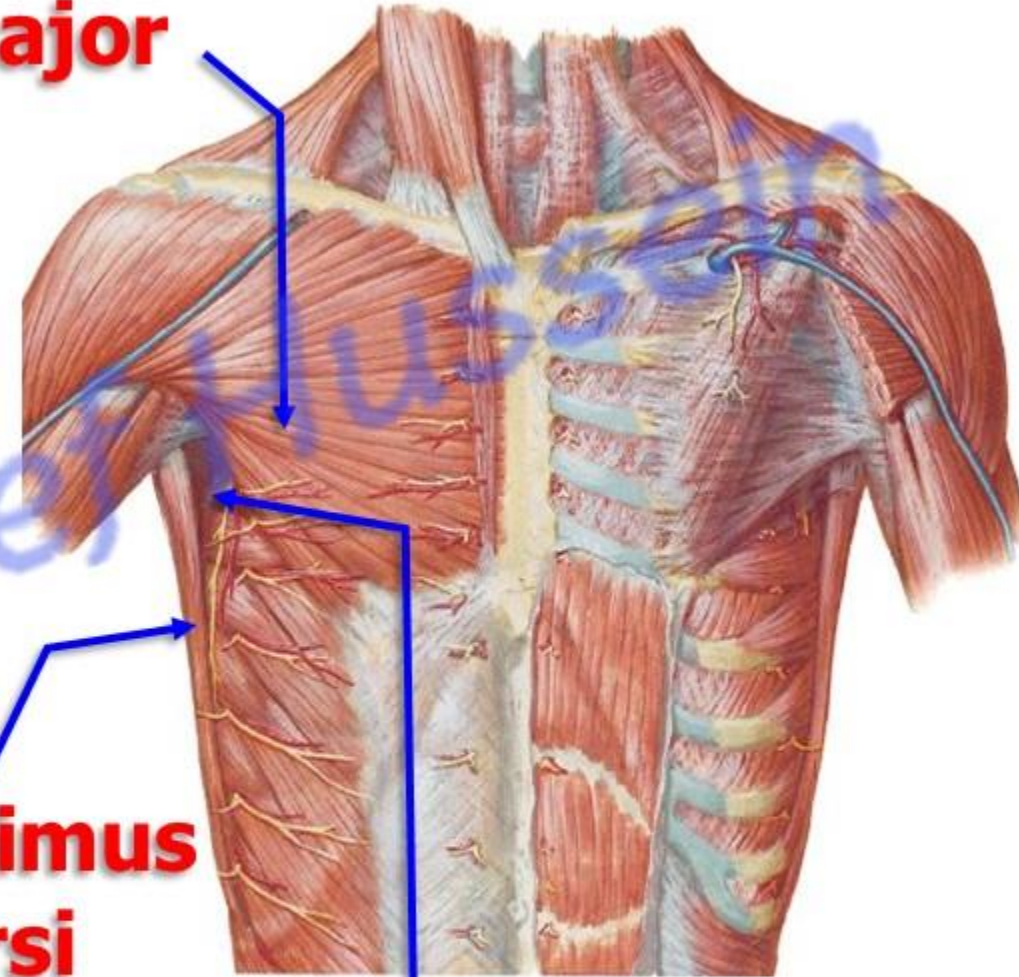
## ❖ Triangle of safety

- **Boundaries**
  - **Medially:** Pectoralis major
  - **Laterally:** latissimus dorsi
  - **Base:** horizontal line passes through 5<sup>th</sup> intercostal space (nipple in the 4<sup>th</sup> intercostal space)
- **Importance:** site of chest tube to the pleural cavity (thoracostomy) in the 4<sup>th</sup>, or 5<sup>th</sup> intercostal space anterior to the midaxillary line just above the rib

## Pectoralis major

## Latissimus dorsi

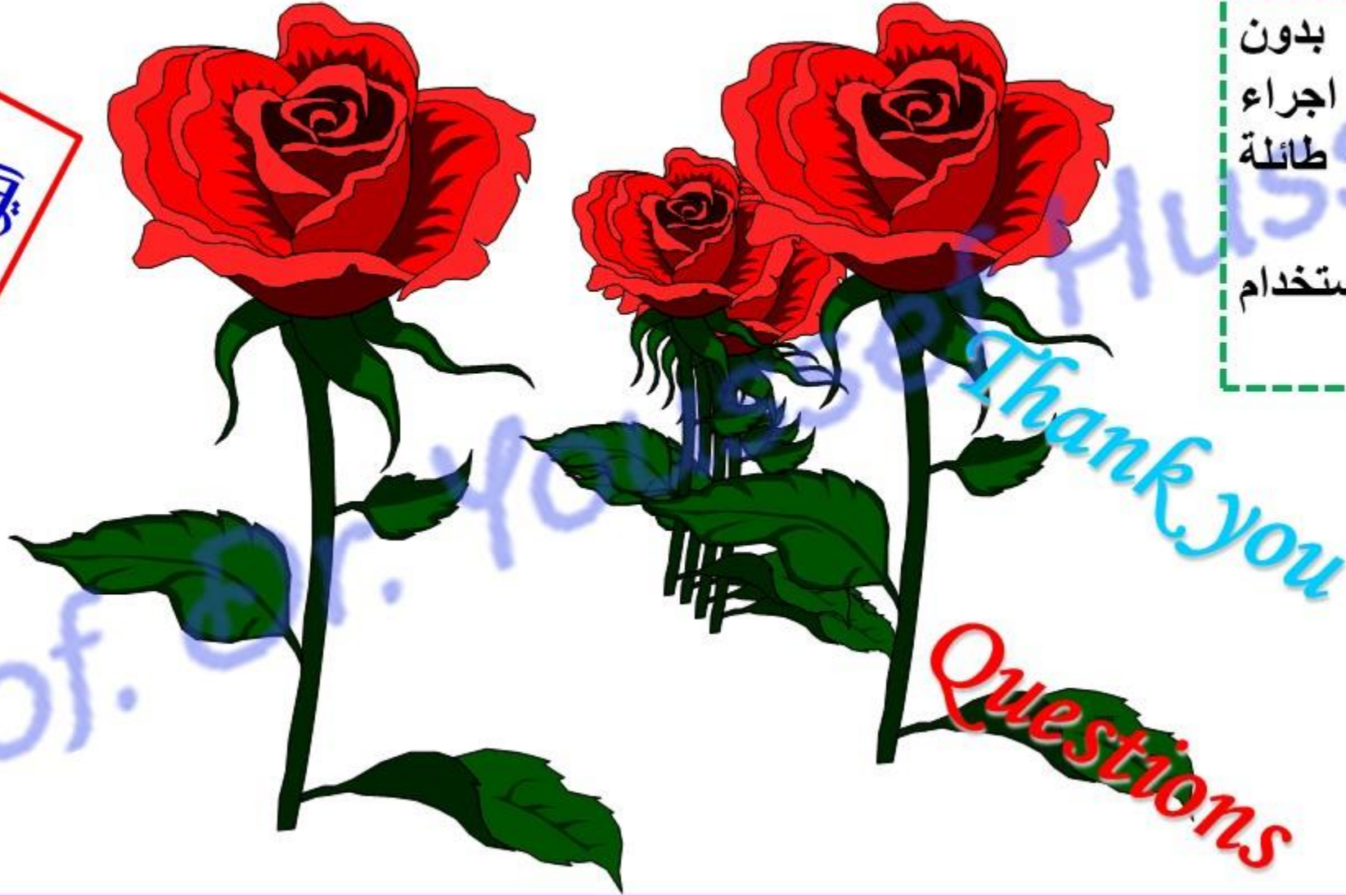
## Triangle of safety



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