# YouTube

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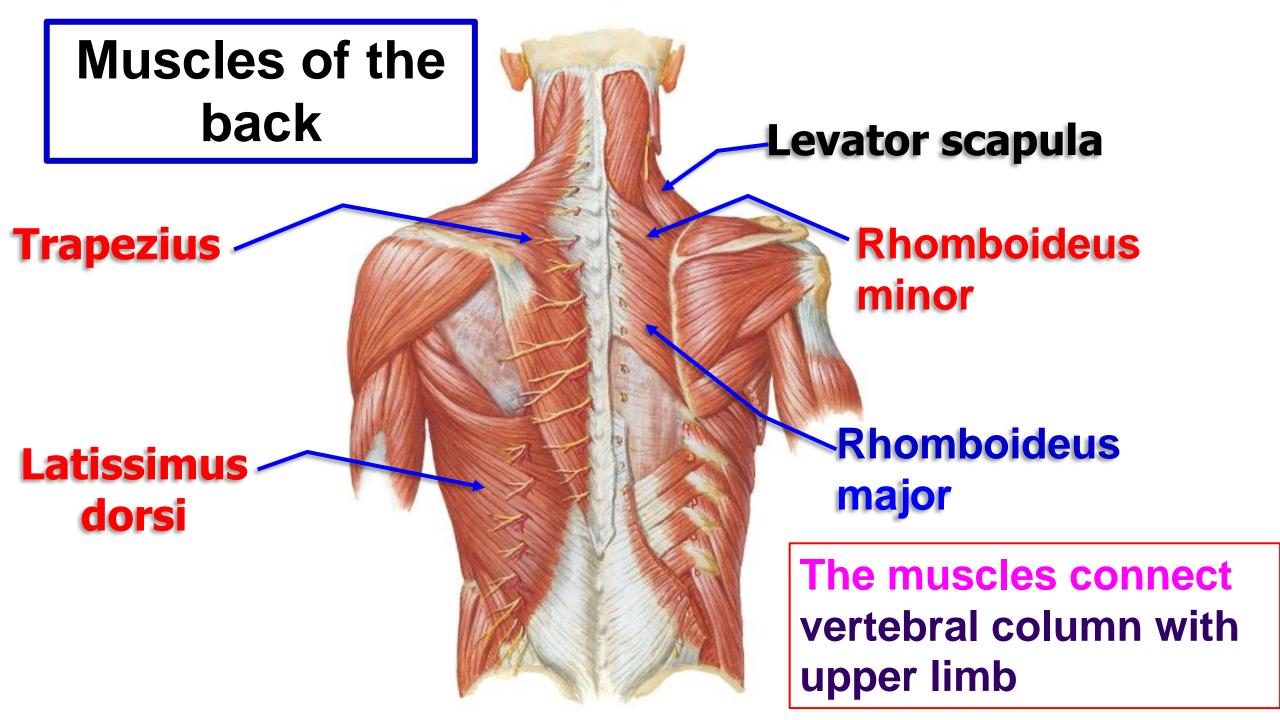
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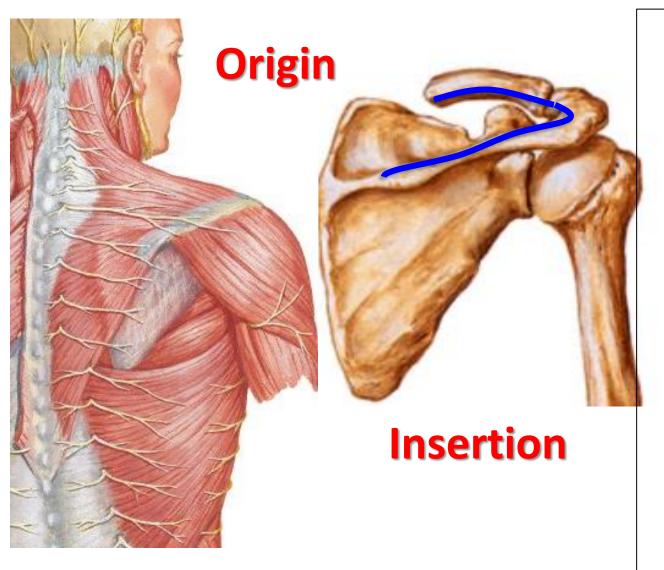
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Prof. Dr. Youssef Hussein Anatomy - Yo

## Muscles of the back



### Trapezius



### 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)

**Trapezius** 

- 1- Motor; spinal part of accessory nerve.
- 2- Sensory (Proprioceptive sensation) from the cervical plexus.

#### \*\* Actions:

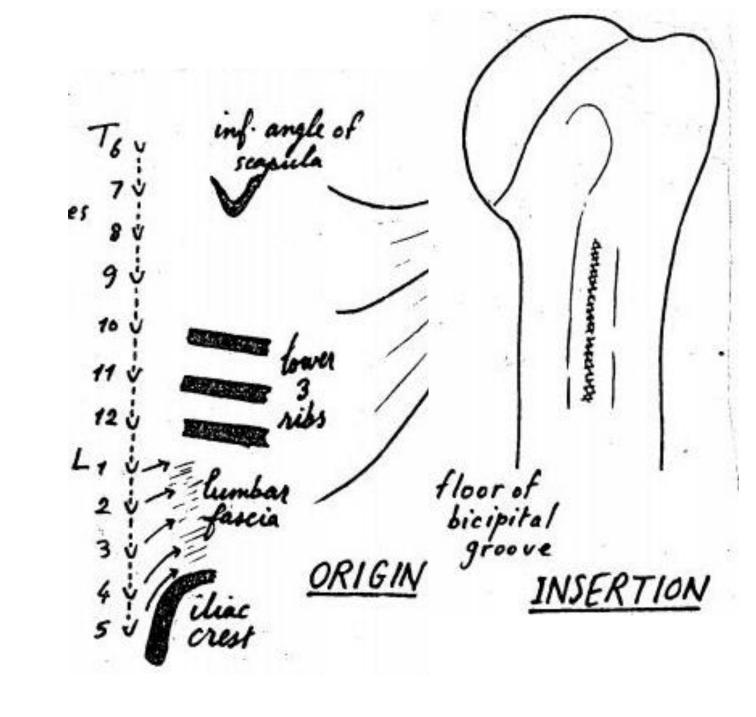
- 1. Upper fibers elevate the scapula.
- 2. Middle fibers retract the scapula.
- 3. Lower fibers Depress the scapula.
- **4. Middle and lower fibers** Abduction of the arm more than 90 degree (with lower 5 digitations of the serratus anterior).
- N.B; It is the only muscle of upper limb
- a- Arises from 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

# 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.

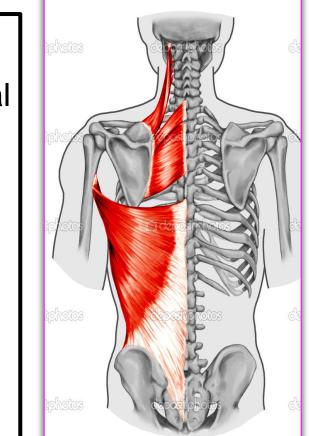


#### Latissimus Dorsi

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.
  - It assists in deep expiration (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).





# Deep muscles of the back

#### Levator Scapulae

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

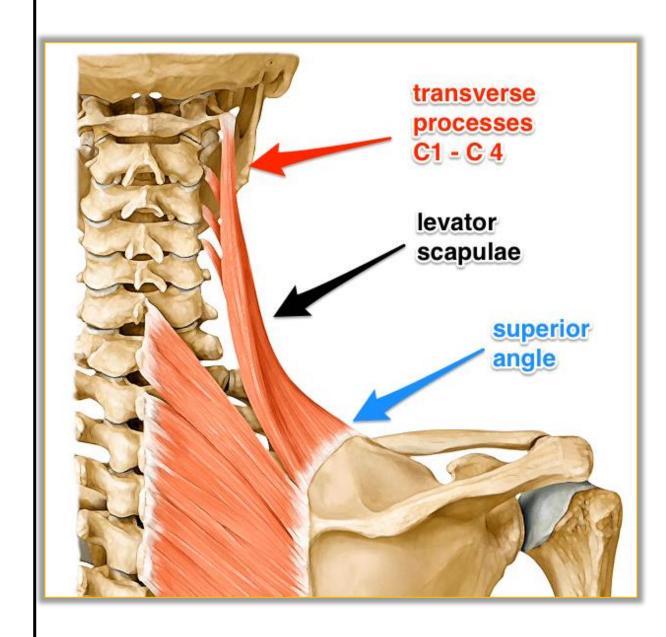
\*\* Insertion, dorsal surface of medial border of scapula from superior angle to the root of spine.

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

- a- Nerve to levator scapulae from cervical plexus (C3&4)
- b- Dorsal scapular nerve (nerve to rhomboideus C5).

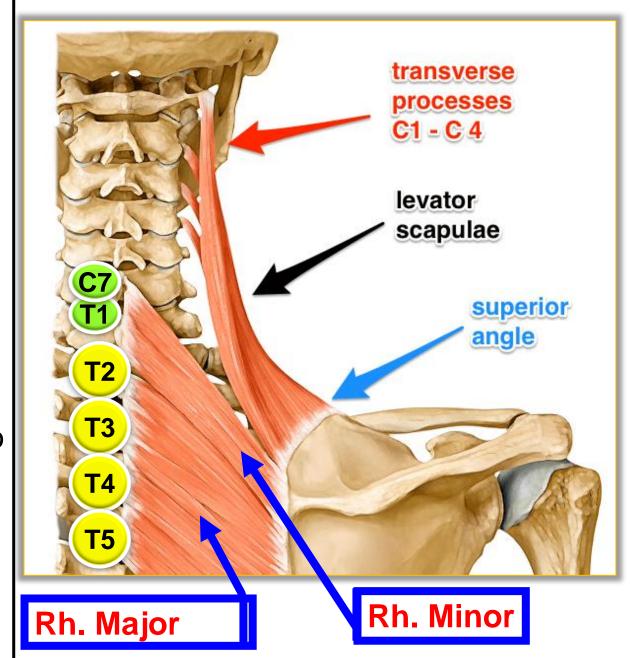
#### \*\* Actions:

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

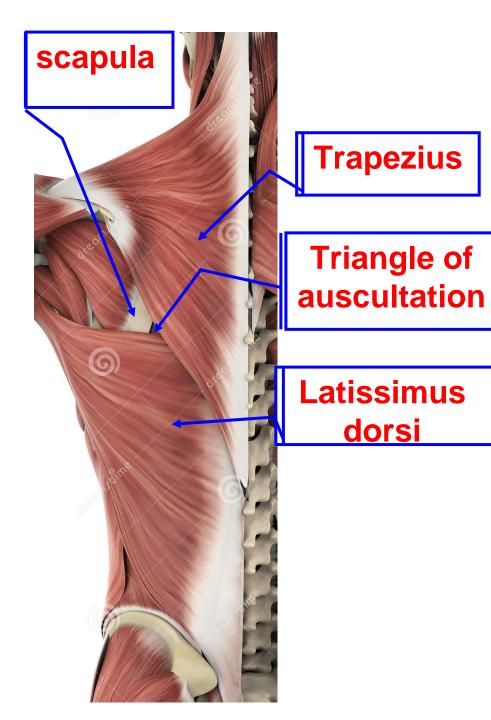


#### Rhomboideus Minor

- \*\* 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.

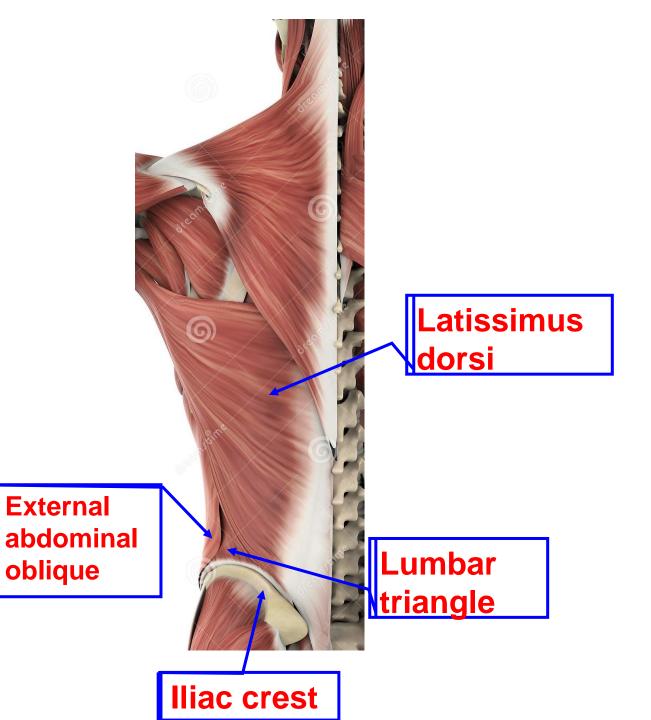


### Intermuscular spaces of back



#### Triangle of Auscultation

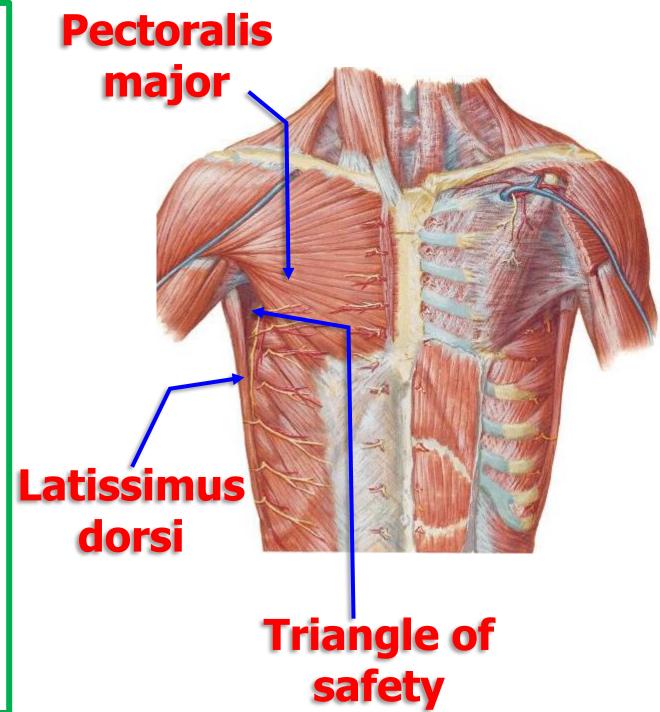
- \*\* Borders;
- **Medially**; lateral border of the **trapezius**.
- Laterally; Medial border of the scapula.
- Inferiorly; Upper border of latissimus dorsi.
- \*\* Its floor: rhomboideus major.
- \*\* Clinical importance:
- It facilitates auscultation of the breath sound and heart sound.
- In the left side, it is related to cardiac end of the stomach. So in case of esophageal atresia, can auscultate splash of fluid.



- Lumbar Triangle
- \*\* Borders:
- Medial; latissimus dorsi.
- Lateral; external abdominal oblique muscle.
- Base, iliac crest.
- \*\* The **floor**, internal adnominal oblique muscle.
- \*\* Clinical importance; A lumbar hernia (Pettit's hernia)

#### Triangle of safety

- Boundaries
- Medially: lateral border of Pectoralis major
- Laterally: Anterior border of latissimus dorsi
- Base: horizontal line passes through 5<sup>th</sup> intercostal space (nipple in the 4<sup>th</sup> intercostal space)
- Apex: below axilla
- 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



#### 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.

#### https://www.youtube.com/channel/UCVSNqbibj9UWYaJdd\_cn0PQ

