



MED439



جامعة  
الملك سعود  
King Saud University

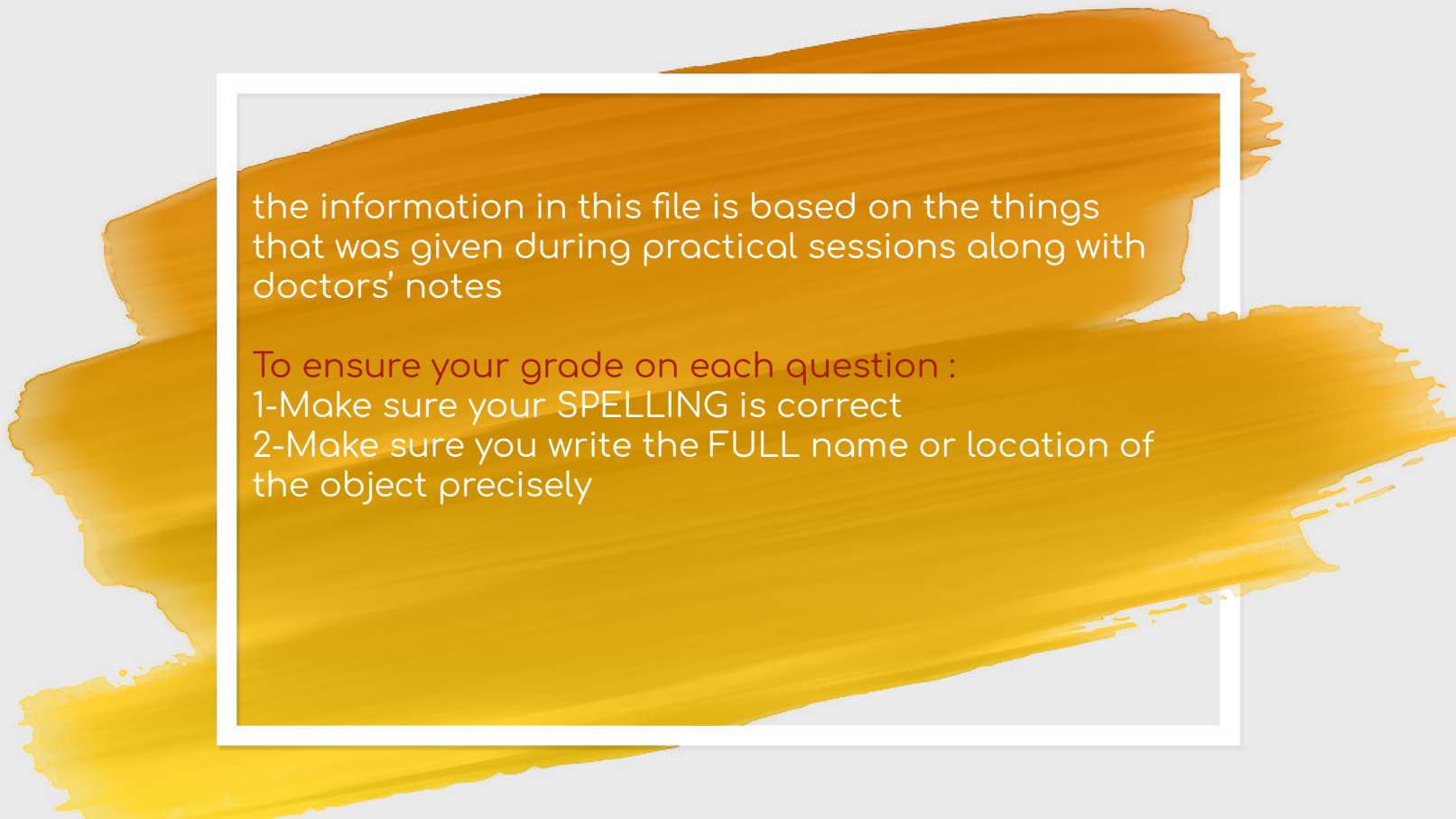


# Muscles of the back

Musculoskeletal Block



Anatomy Practical team - Med 439



the information in this file is based on the things that was given during practical sessions along with doctors' notes

To ensure your grade on each question :

1-Make sure your SPELLING is correct

2-Make sure you write the FULL name or location of the object precisely

# Muscles of the back

Muscles of the back can be classified into groups based on

1- Development (Intrinsic muscles - Extrinsic muscles)

2- Action

3-Site (Deep group - Intermediate group - Superficial group)

## Erector spine (Deep group).



Spinalis



Longissimus



Iliocostalis



From Medial to Lateral

# Intermediate group



Serratus posterior  
inferior



Serratus posterior  
superior

## Superficial group

# Trapezius

### Origin:

- 1- Back “external occipital protuberance” of the skull.
- 2- Ligamentum nuchae.
- 3- Spinous processes of vertebrae from C7 to T12.

### Insertion:

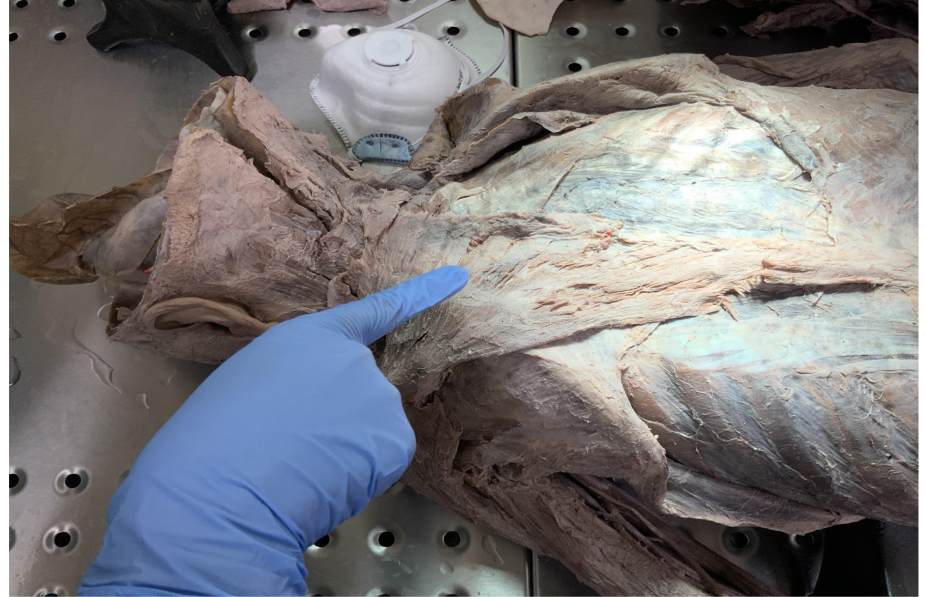
- 1- **Posterior** of lateral  $\frac{1}{3}$  of clavicle.
- 2- **Anterior** border of Acromion of scapula.
- 3- **Anterior** border of the Spine of scapula.

### Action:

- 1-Elevation of scapula by upper fibers.
- 2-Retraction of scapula by middle fibers.
- 3-Depression of scapula by lower fibers.

### Nerve supply:

- 1-Spinal root of accessory nerve (11th cranial nerve) **[MOTOR]**
- 2- Anterior rami of C3 & C4 of spinal nerves. **[SENSORY]**



## Superficial group

# Levator Scapulae

### Origin:

Cervical transverse processes C1 - C4.

### Insertion:

Medial border of dorsal surface of scapula  
**Above** the spine process..

### Action:

Elevation of the scapula.

### Nerve supply:

Dorsal scapular nerve.



## Superficial group

# Rhomboid Major

### Origin:

Thoracic spinous processes of T2 to T5 vertebrae.

### Insertion:

Medial border of dorsal surface of scapula  
**Below** the spine process.

### Action:

Retraction of scapula.

### Nerve supply:

Dorsal scapular nerve.





Superficial  
group

# Rhomboid Minor

**Origin:**

The spinous processes of C7 - T1 vertebrae.

**Insertion:**

Medial border of dorsal surface of scapula  
**Opposite** the spine process.

**Action:**

Retraction of scapula.

**Nerve supply:**

Dorsal scapular nerve.



## Superficial group

# Latissimus Dorsi

### Origin:

- 1- Spinous processes of T7 - T12 vertebrae.
- 2- Iliac crest.
- 3- Thoracolumbar fascia.
- 4- Inferior 3 or 4 ribs.
- 5- inferior angle of dorsal surface of scapula.

### Insertion:

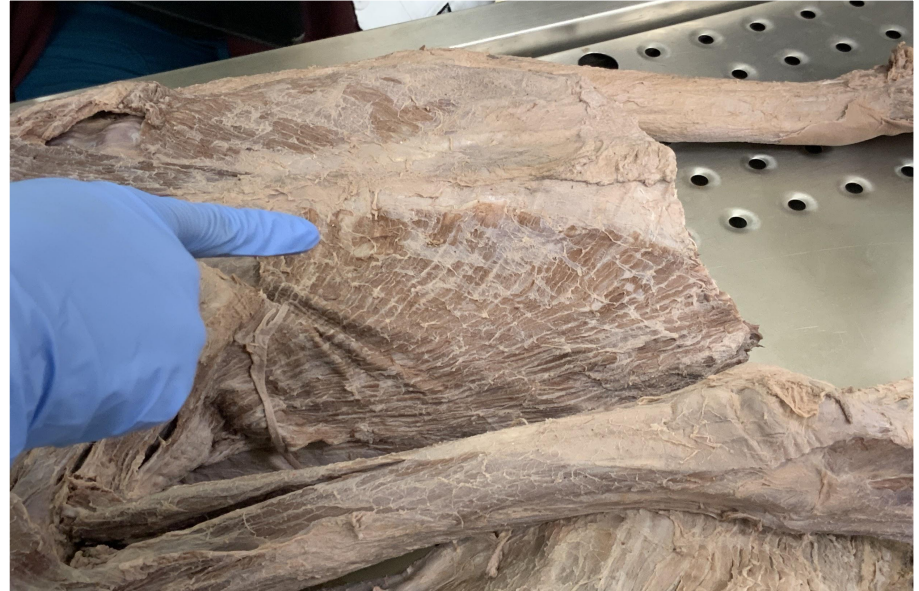
- Floor of Intertubercular (bicipital) groove of humerus (anterior surface).

### Action:

- 1- Adduction of upper limb.
- 2- Extension of upper limb.
- 3- Medial rotation of upper limb.

### Nerve supply:

Thoracodorsal nerve (C6,C7,C8) from posterior cord of brachial plexus.



# Superficial group



Trapezius

Levator scapulae

Rhomboid major

Rhomboid minor

## Insertion of muscles

Latissimus dorsi is inserted into the floor of intertubercular groove of humerus

Levator scapulae & **rhomboid minor** & **Rhomboid major** are inserted into the medial border of the scapula



The muscle	Origin	insertion	Action	Nerve supply
<b>Trapezius</b>	<ul style="list-style-type: none"> <li>- Back of the skull.</li> <li>- Ligamentum nuchae.</li> <li>- <u>C7 to T12.</u></li> </ul>	<ul style="list-style-type: none"> <li>- lateral 1/3 of clavicle.</li> <li>- Acromion and Spine of scapula.</li> </ul>	<ul style="list-style-type: none"> <li>- <u>Elevation</u> of scapula by <u>upper</u> fibers.</li> <li>- <u>Retraction</u> of scapula by <u>middle</u> fibers.</li> <li>- <u>Depression</u> of scapula by <u>lower</u> fibers.</li> </ul>	<ul style="list-style-type: none"> <li>- Spinal root of <b>accessory nerve</b> (11th cranial nerve)[<b>MOTOR</b>]</li> <li>- <b>C3 &amp; C4</b> of spinal nerves. [<b>SENSORY</b>]</li> </ul>
<b>Levator Scapulae</b>	Cervical transverse processes <u>C1- C4.</u>	Medial border of scapula	<u>Above</u> the spine	Elevation of the scapula.
<b>Rhomboid Major</b>	Thoracic spinous processes of <u>T2-T5.</u>		<u>Below</u> the spine	Retraction of scapula
<b>Rhomboid Minor</b>	spinous processes of <u>C7 - T1</u>		<u>Opposite</u> the spine	
<b>Latissimus Dorsi</b>	<ul style="list-style-type: none"> <li>- Spinous processes of <u>T7- T12.</u></li> <li>- Iliac crest.</li> <li>- Thoracolumbar fascia.</li> <li>- Inferior 3 or 4 ribs.</li> <li>- inferior angle of scapula.</li> </ul>	Intertubercular (bicipital) groove of humerus.	Adduction, Extension, Medial rotation of upper limb.	Thoracodorsal nerve (C6,C7,C8) from posterior cord of brachial plexus.

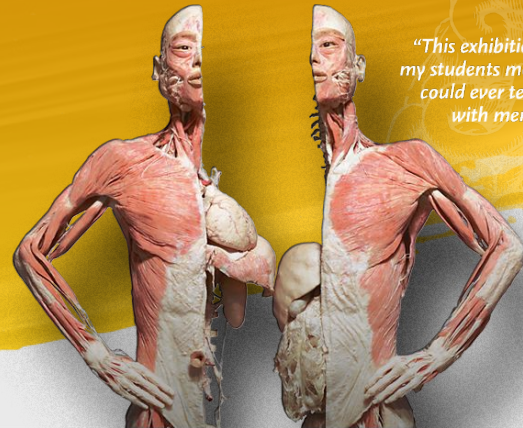
# Don't stop until you are proud.

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## Team Leaders:

- Renad Alhomaidi
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*"This exhibition taught my students more than I could ever teach them with mere words."*