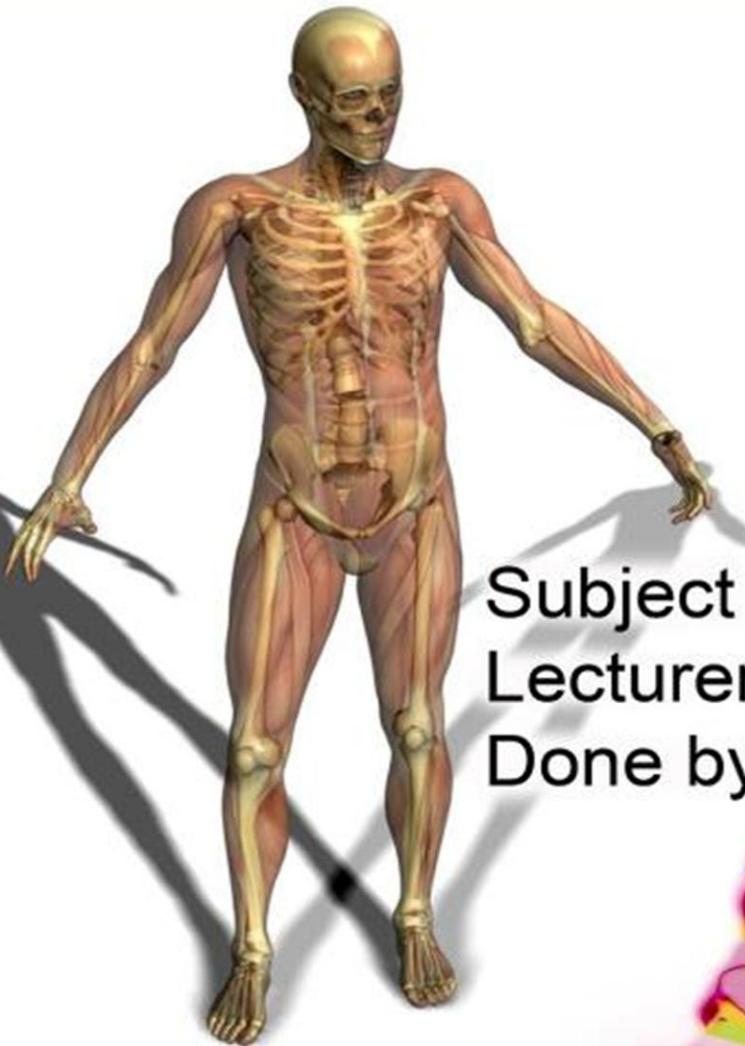




ANATOMY



Subject : *Introduction to anatomy*

Lecturer : *Dr. Maher Hadidi*

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Quick revision:

The body is built on the skeleton

The skeleton is divided into two parts >>>> axial skeleton (80 bones)

>>>> appendicular skeleton (126 bones)

Appendicular skeleton is divided into upper appendicular skeleton , lower appendicular skeleton

The shoulder girdle is made up of Clavicle and Scapula

Note : the bones will be covered in the lab

Muscles

- Muscles are attached to bones so they will perform **movement**.
- Each muscle has >>>> a beginning which is called **origin**.

>>>> an end which is called **insertion** .

- when the muscle performs its action (movement) *the end (insertion) will return back to its origin* .(muscles law)

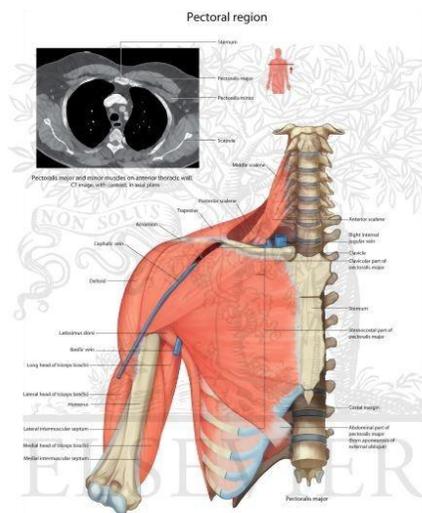
example : imagine the muscle as a rubber band the rubber is attached to a nail that is in the wall and you are pulling the rubber away from the wall now the origin of the rubber is the nail and the insertion is the end that you are pulling , now let the rubber it will move toward its origin ,same in the muscle .

Same in the biceps it moves from its insertion to its origin .

while performing its work

- we can't study the the thorax, especially thorax, which is called

upper limb without studying the upper anterior part of the the pectoral region .



Thorax(Latin) =chest

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- The layers in the pectoral region :1- skin
 - 2- superficial fascia
 - 3- breast which is located in the superficial fascia
 - 4- deep fascia it holds the muscle together
 - 5- 3 muscles

Muscles of the pectoral region ...

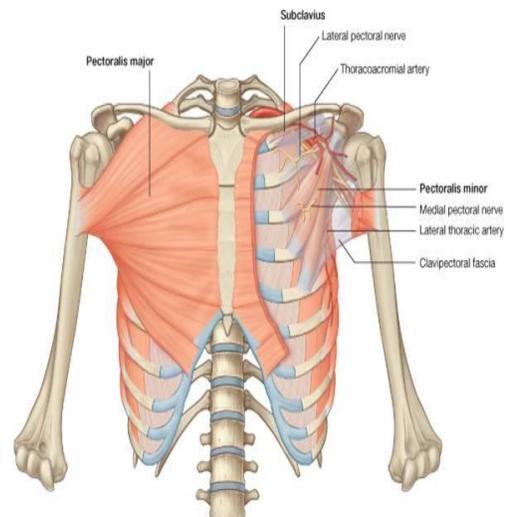
- **Pectoralis major**
- ori. : clavicle and sternum
- ins. : humerus (Lateral lip of the intertubercular groove)
- Ac. : adduction and medial rotation
- Ns. : medial and lateral pectoral nerves. (LM)
- triangular in shape
- loc.: under the deep fascia in the pectoral region

- **Pectoralis minor**
- ori. : 3rd, 4th and 5th ribs
- ins.: coracoid process
- Ac.: pulls the scapula downward and forward (like a rope of a tent)
- Ns.: medial pectoral nerve (M)
- loc.: Below Pectoralis major

- **Subclavius**
- ori.: 1st rib
- ins. : inferior surface of clavicle
- Ac.: acts as a cushion to protect the underlying structures going to and from the upper limb (arteries,nerves,veins)
- Ns.: nerve to subclavius
- loc.: below the clavicle

Abbreviations :

1. Origin = ori.
2. Insertion = ins.
3. Action = Ac.
4. Nerve supply =Ns.
5. Location = loc.



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- Muscles connecting the **upper limb** to the **scapula** :

1- *Deltoid* :” Delta” is as the Nile’s delta (triangle) and “oid “ means like

Ori. : spine of scapula (posteriorly) and the acromion (laterally) and the clavicle (interiorly)

Ins. : deltoid tuberosity which is in the humerus

Ac.: abduction from 15-90 degree

Ns.: Axillary nerve

When a patient can’t perform the abduction from 15-90 degree that means that there is a problem in the axillary nerve.

2- *Supraspinatus*:

Ori. : supraspinus fossa

Ins. : greater tubercle of the humerus

Ac. : abduction from 0-15 degrees (initiates the abduction)

Ns. : suprascapular nerve

*Full abduction of the arm is performed by both Deltoid & Supraspinatus

3- *Infraspinatus*:

Ori. : infraspinus fossa

Ins. : greater tubercle of the humerus

Ac. : lateral rotation of the arm

Ns. : suprascapular nerve

Loc : under the spine

Shape : triangular shape

4- *Teres minor* :

Ori. : lateral border of the scapula

Ins. : greater tubercle of the humerus

Ac. : lateral rotation of the arm

Ns. : axillary nerve

5- *Teres major* :

Ori. : lateral border of scapula

Ins. : humerus (medial lip of the intertubercular groove)

Ac. : medial rotation and adduction

Ns. : lower subscapular nerve

Teres major and Pectoralis major are similar in the action and they help each other .

Revision qs:

1- How many muscles are inserted to the greater tubercle ? SIT (supraspinatus, infraspinatus &teres minor)

2- How many muscles are supplied by axillary nerve ? (Deltoid and Teres minor)

3- How many muscles abduct the arm ? (Supraspinatus & Deltoid)

4- How many muscles are supplied by suprascapular nerve ?

Introduction to anatomy
Lecture # 2