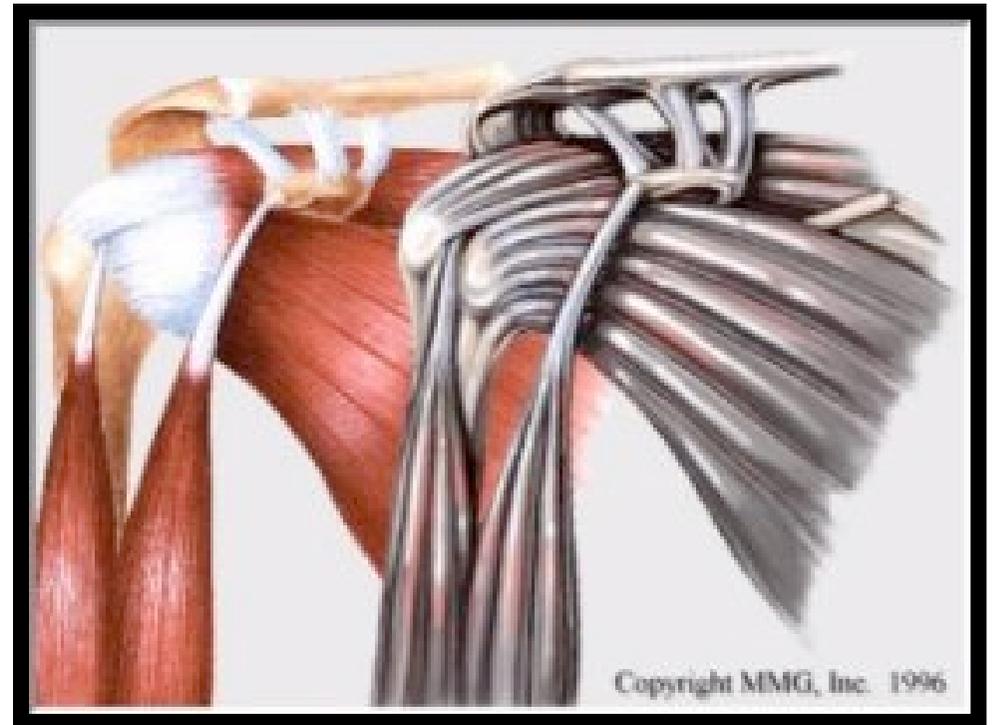


# Shoulder Muscles

## Chapter 5

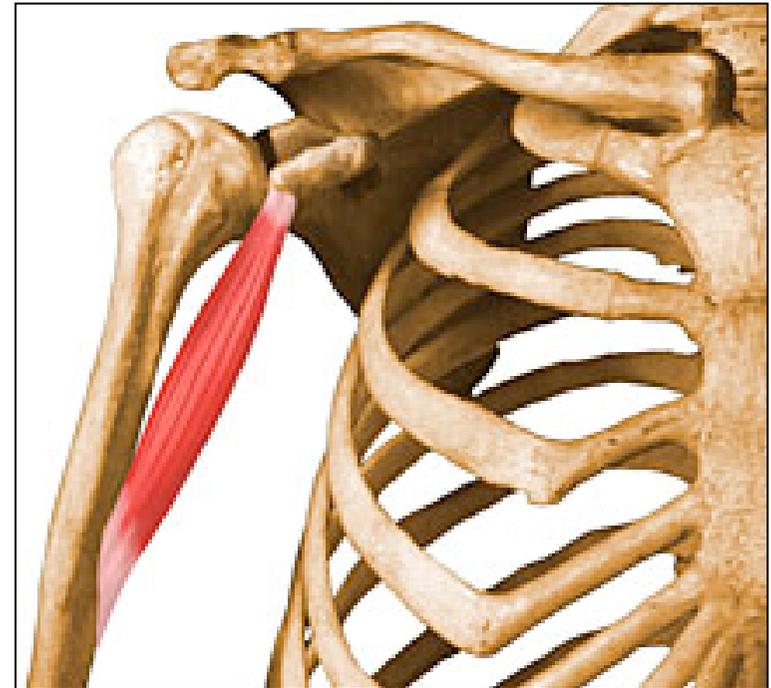
# Anterior Muscles

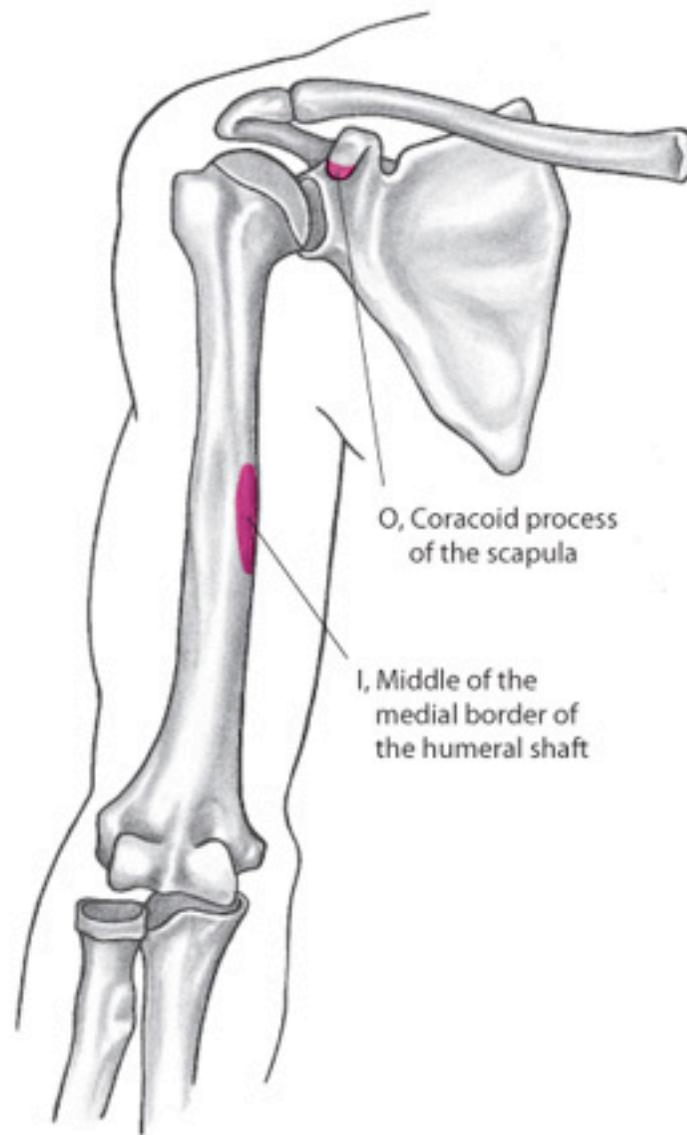
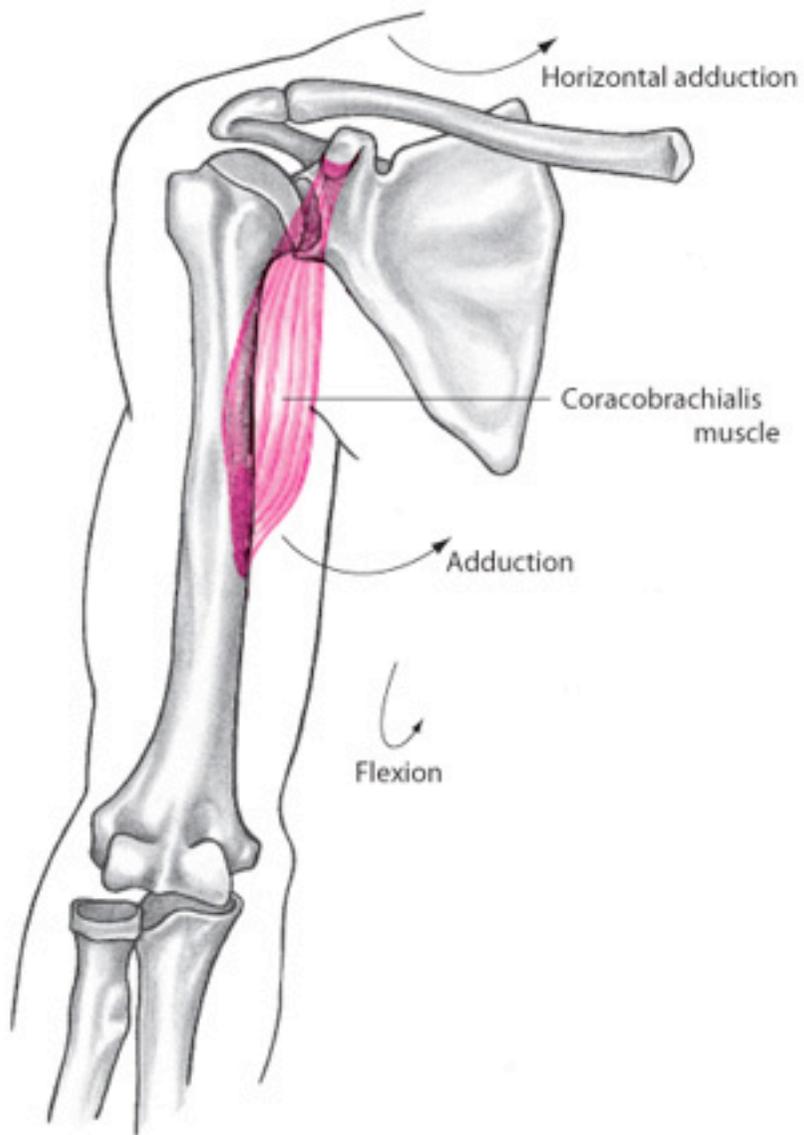
- Coracobrachialis
- Pectoralis major
- Subscapularis



# Coracobrachialis

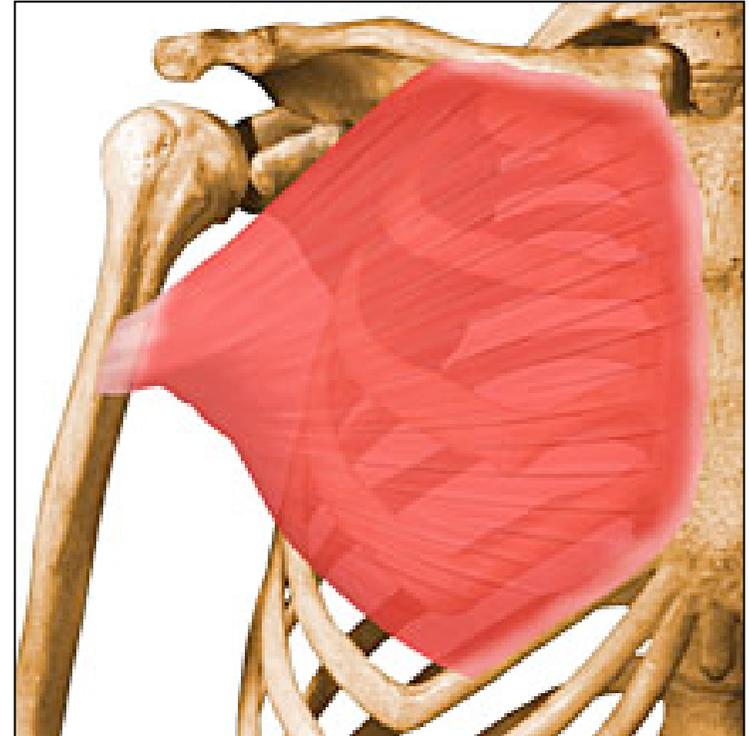
- Origin: coracoid process
- Insertion: medial humerus
- Actions:
  - flexion of the shoulder
  - adduction of the shoulder
  - horizontal adduction of the shoulder





# Pectoralis Major

- Origin:
  - Proximal clavical
  - Sternum
- Insertion: Intertubercular groove
- Actions:
  - Clavicular:
    - Internal rotation
    - Horizontal adduction
    - Flexion up to  $60^\circ$
    - Adduction below  $90^\circ$
    - Abduction above  $90^\circ$
  - Sternal
    - Internal rotation
    - Horizontal adduction
    - Extension to a neutral position
    - Adduction



- Pectoralis Major

## PECTORALIS MAJOR

### Description:

large, thick, fan-shaped muscle covering the superior part of the thorax.

### Two parts:

- clavicular head
- sternocostal head

### Origin:

- anterior surface of the medial half of clavicle
- anterior surface of sternum and costal cartilages of the upper seven ribs

### Insertion:

- intertubercular groove of the humerus

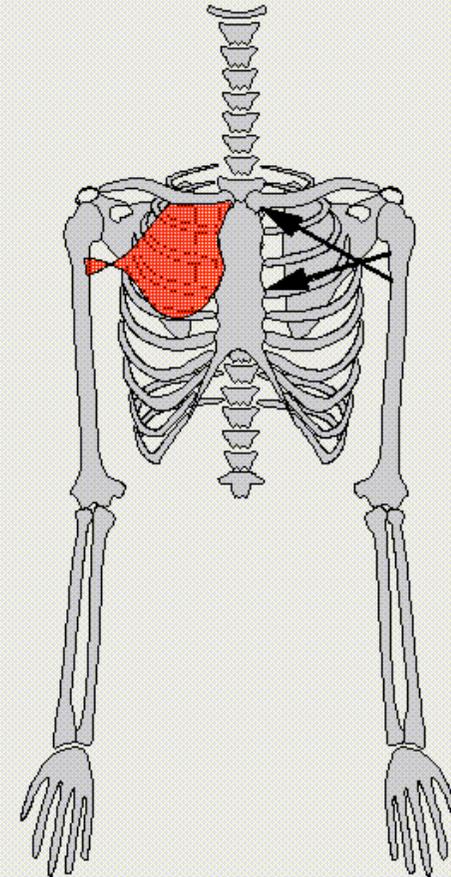
### Function:

- flexion of the humerus (clavicular head)
- adduction and medial rotation of the humerus (sternocostal head)

### Modelization:

two vectors from clavicle and sternum to intertubercular groove of humerus

### Notes:

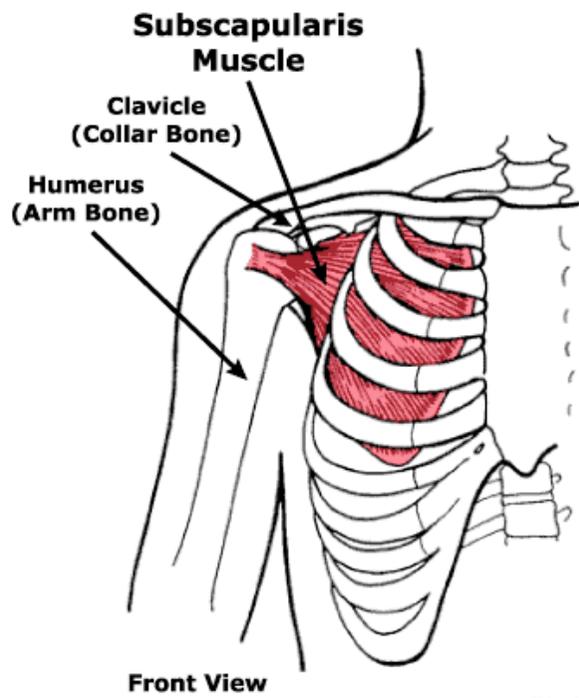


# Subscapularis

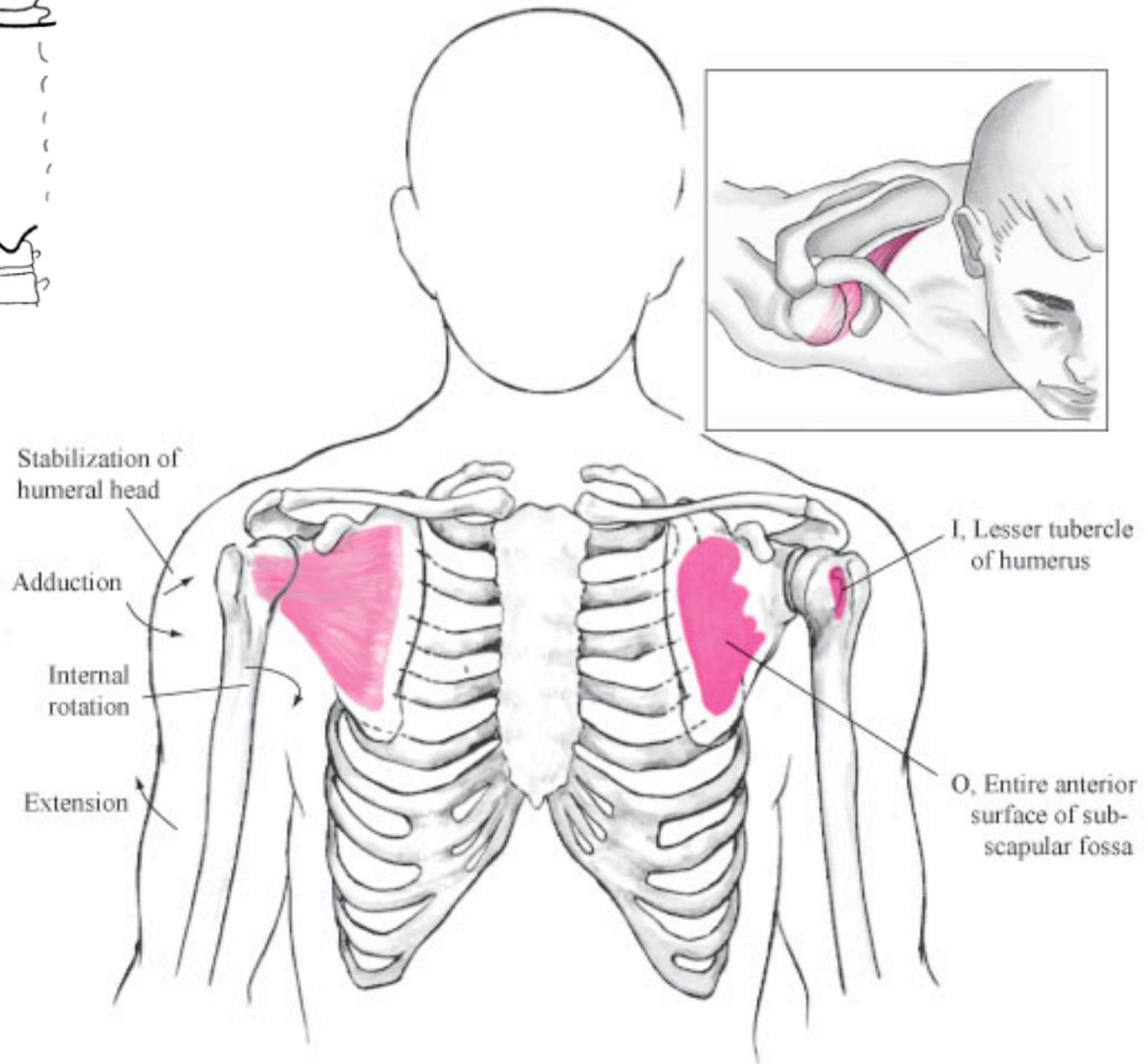
- Origin: subscapular fossa
- Insertion: lesser tubercle
- Actions:
  - Internal rotation
  - Adduction
  - Extension
- Other: anterior rotator cuff muscle



Note: the ribs are removed from this image



Front View

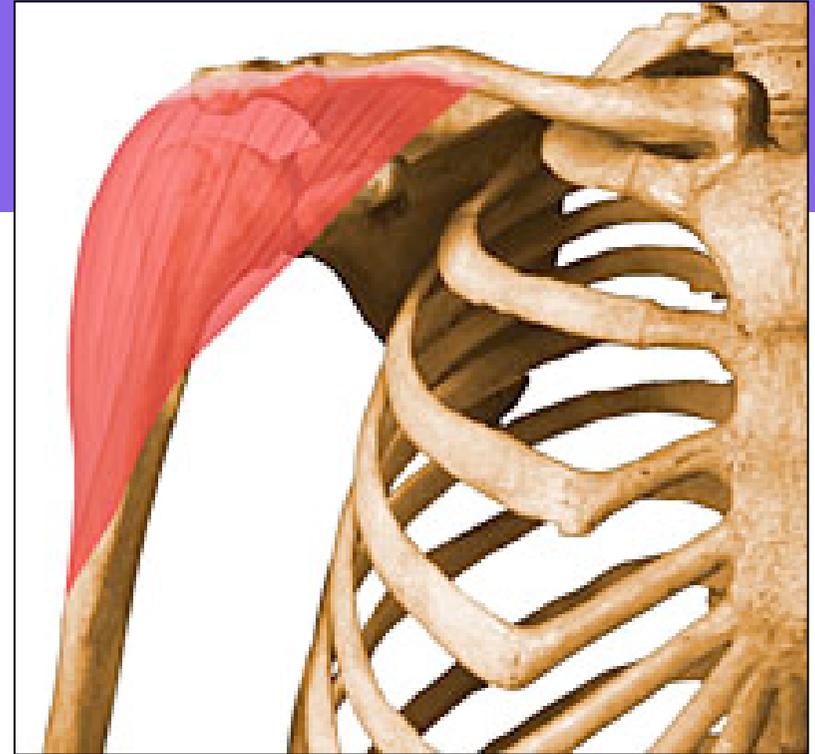


# Superior Muscles

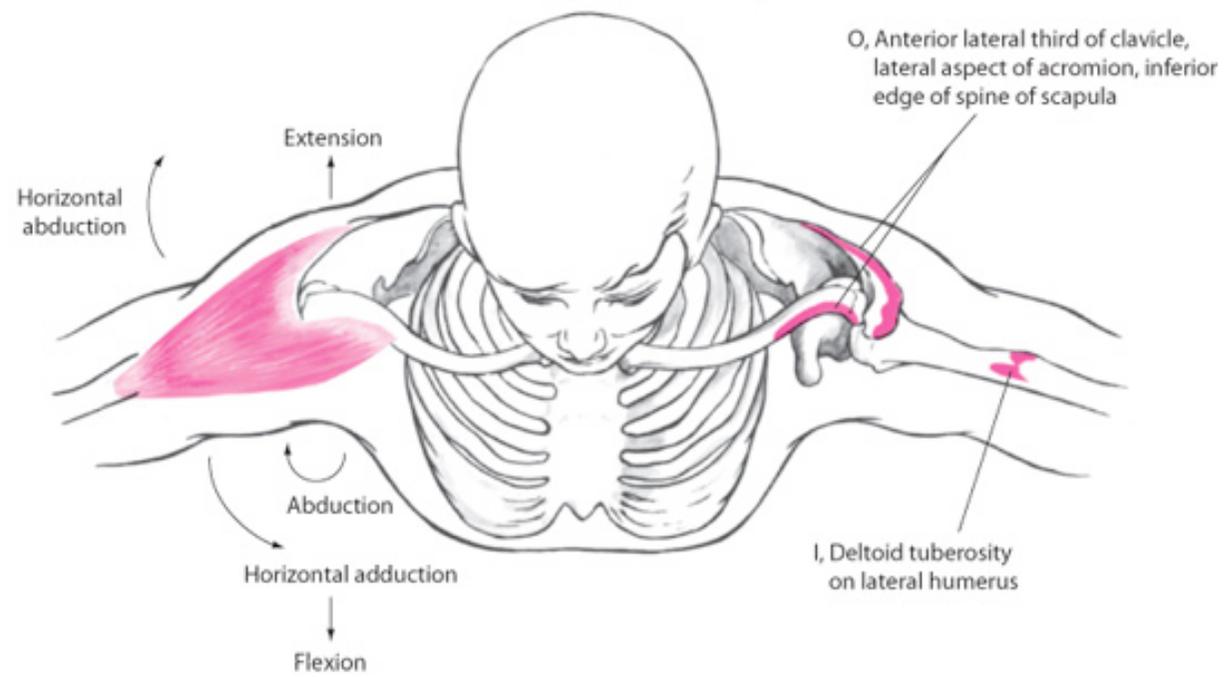
- Deltoid
- Supraspinatus

# Deltoid

- Origin:
  - Anterior: distal clavicle
  - Middle: acromion process
  - Posterior: spine of scapula
- Insertion:
- Actions
  - Anterior: flexion, abduction, internal rotation, horizontal adduction
  - Middle: abduction
  - Posterior: extension, abduction, external rotation, horizontal abduction

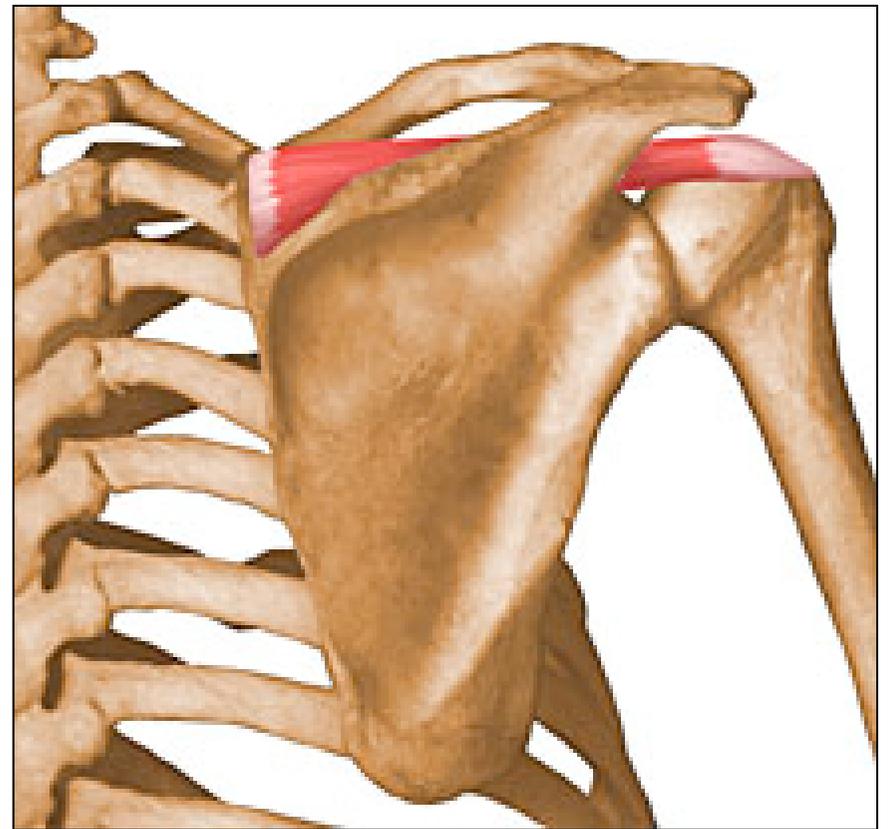


- Deltoid

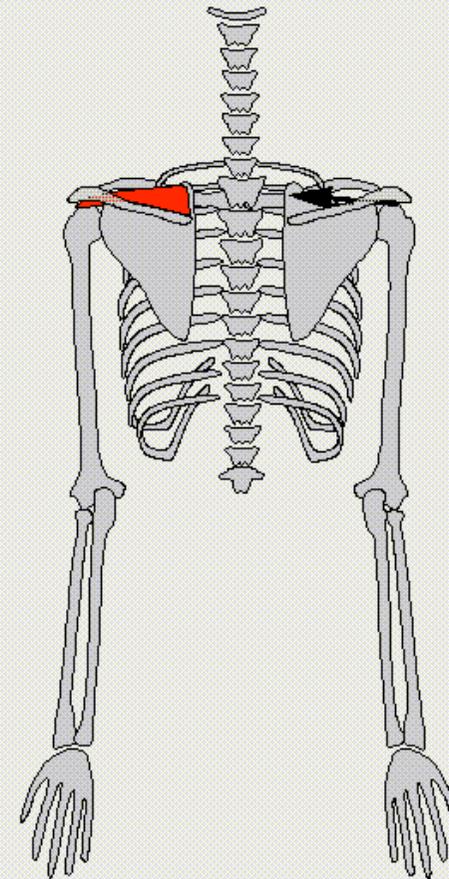
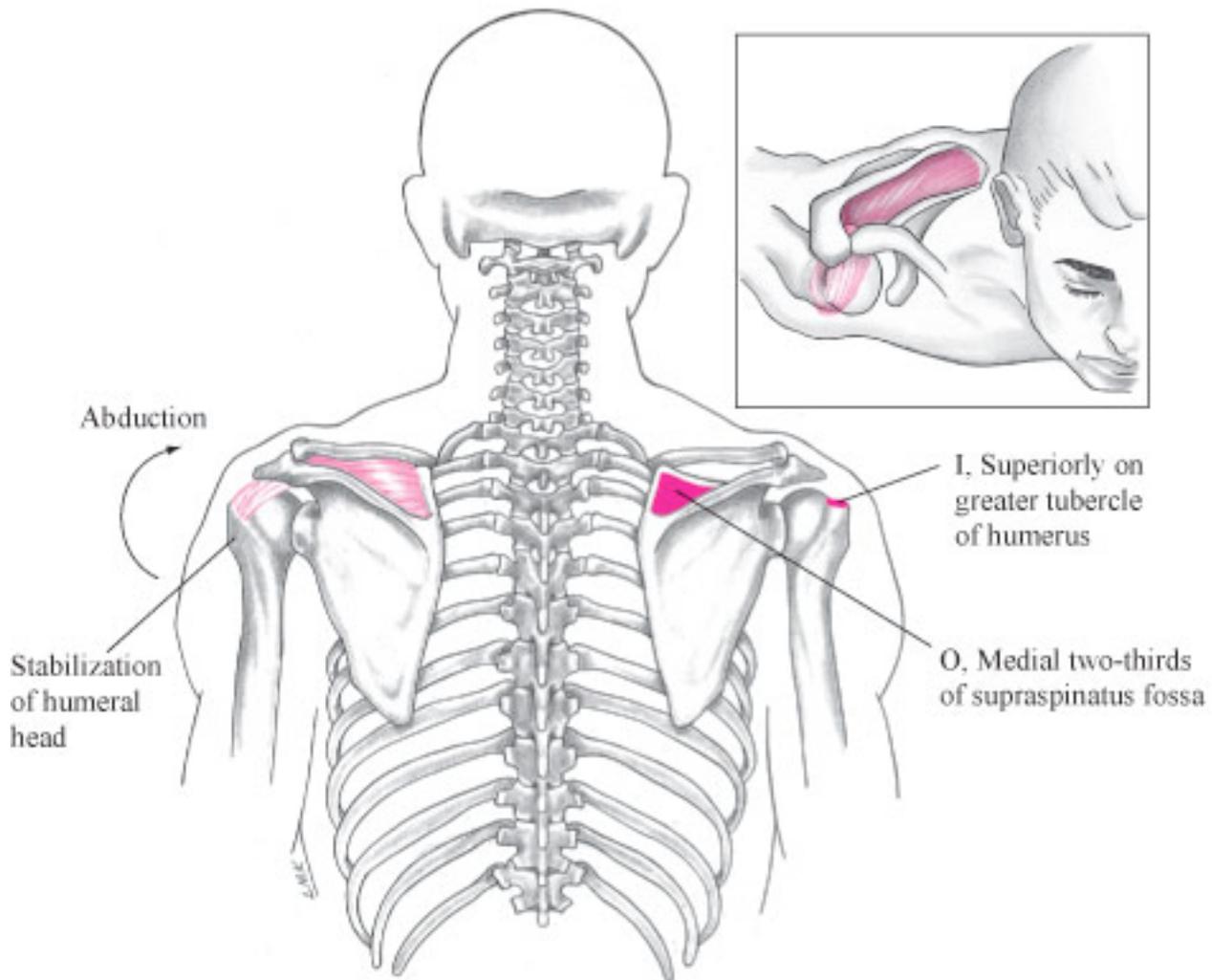


# Supraspinatus

- Origin: supraspinatus fossa
- Insertion: greater tubercle
- Action: abduction
- Other: rotator cuff muscle



## SUPRASPINATUS

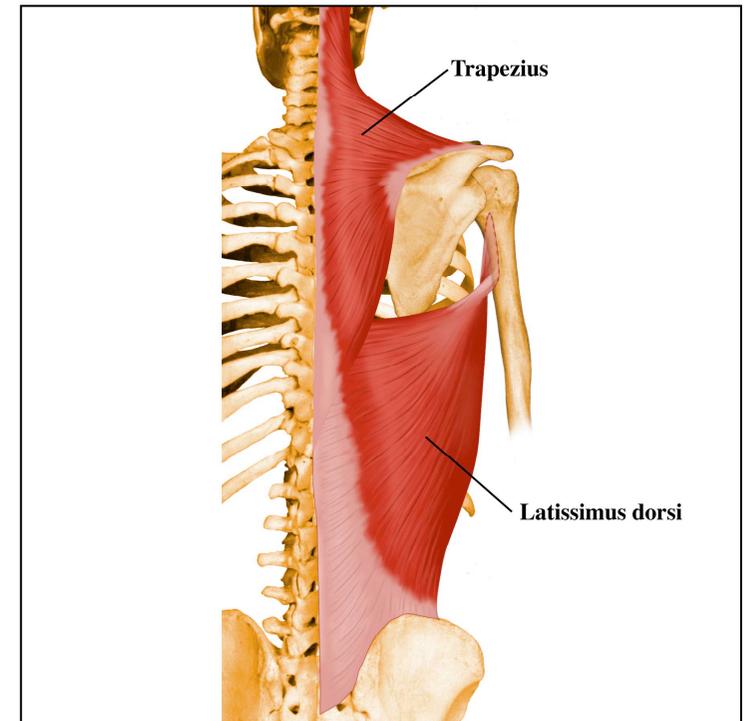


# Inferior Muscles

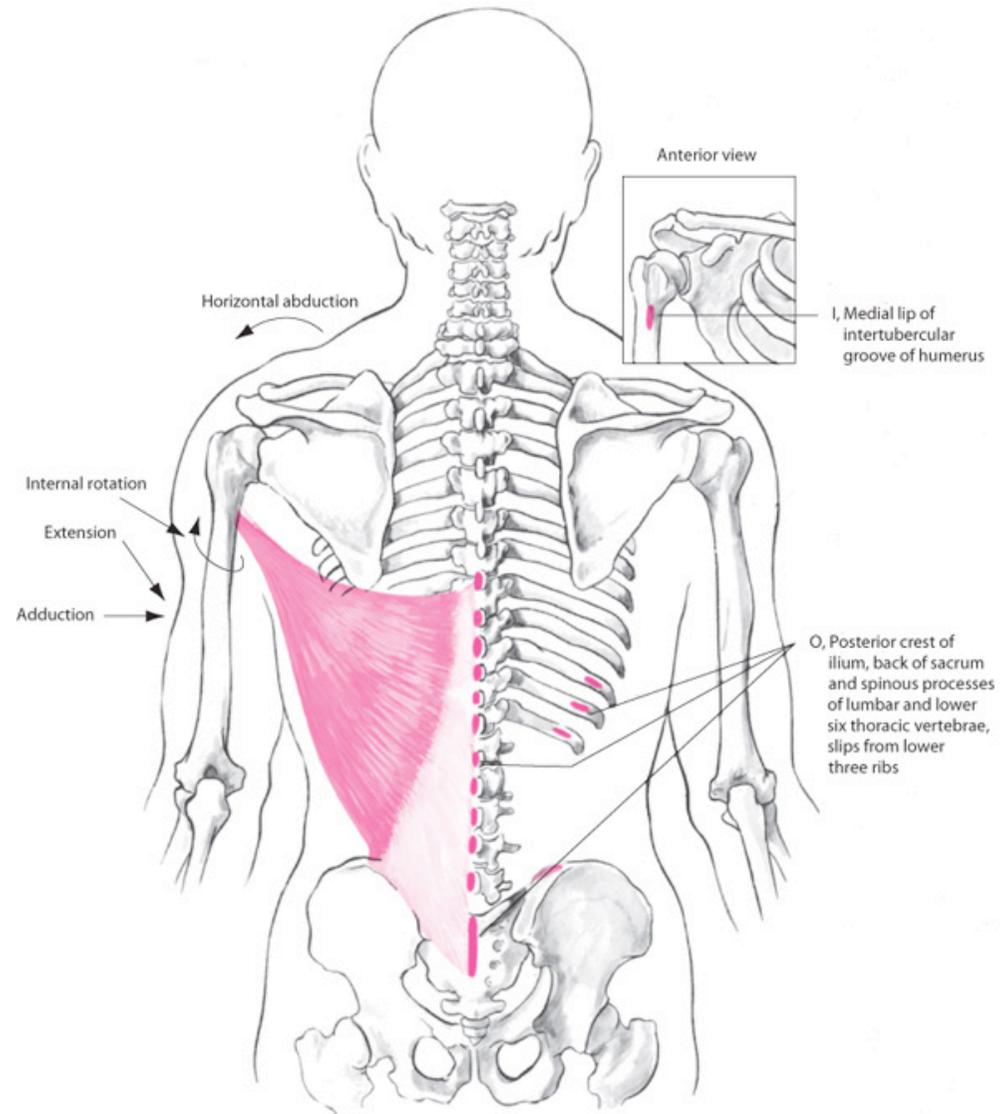
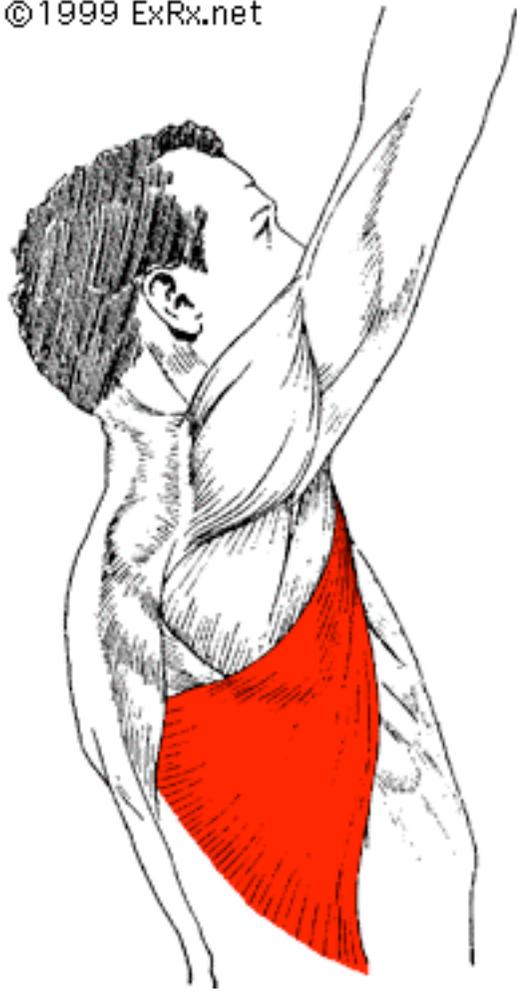
- Latissimus dorsi
- Teres major

# Latissimus Dorsi

- Origin:
- Insertion: intertubercular groove
- Actions:
  - adduction
  - internal rotation
  - extension
  - horizontal abduction
- “swimmer’s muscle”

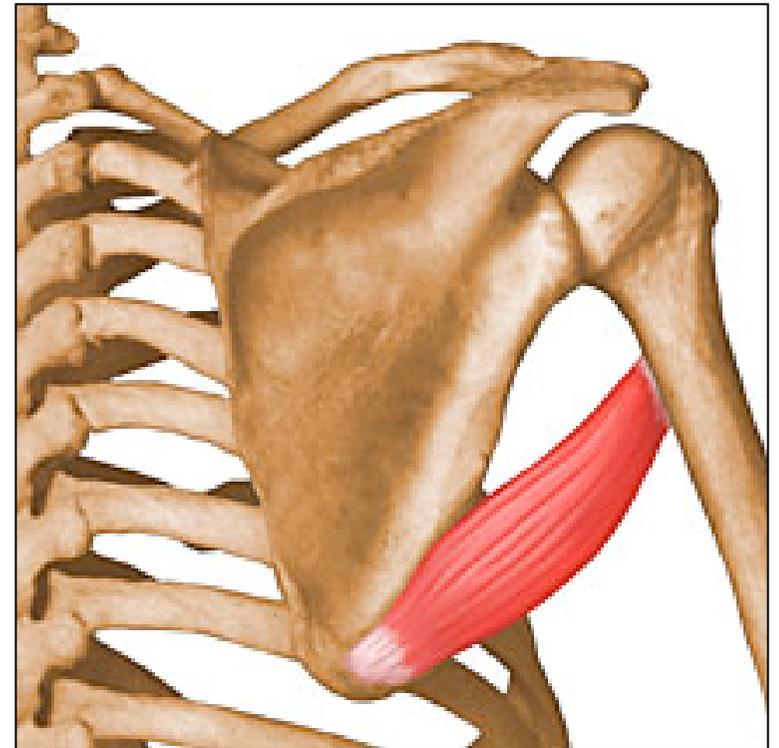


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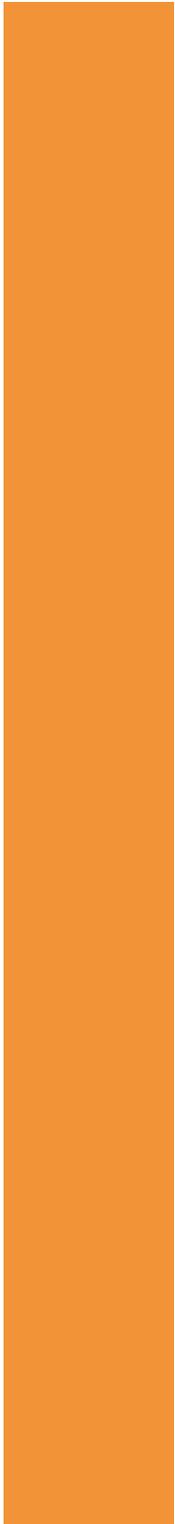
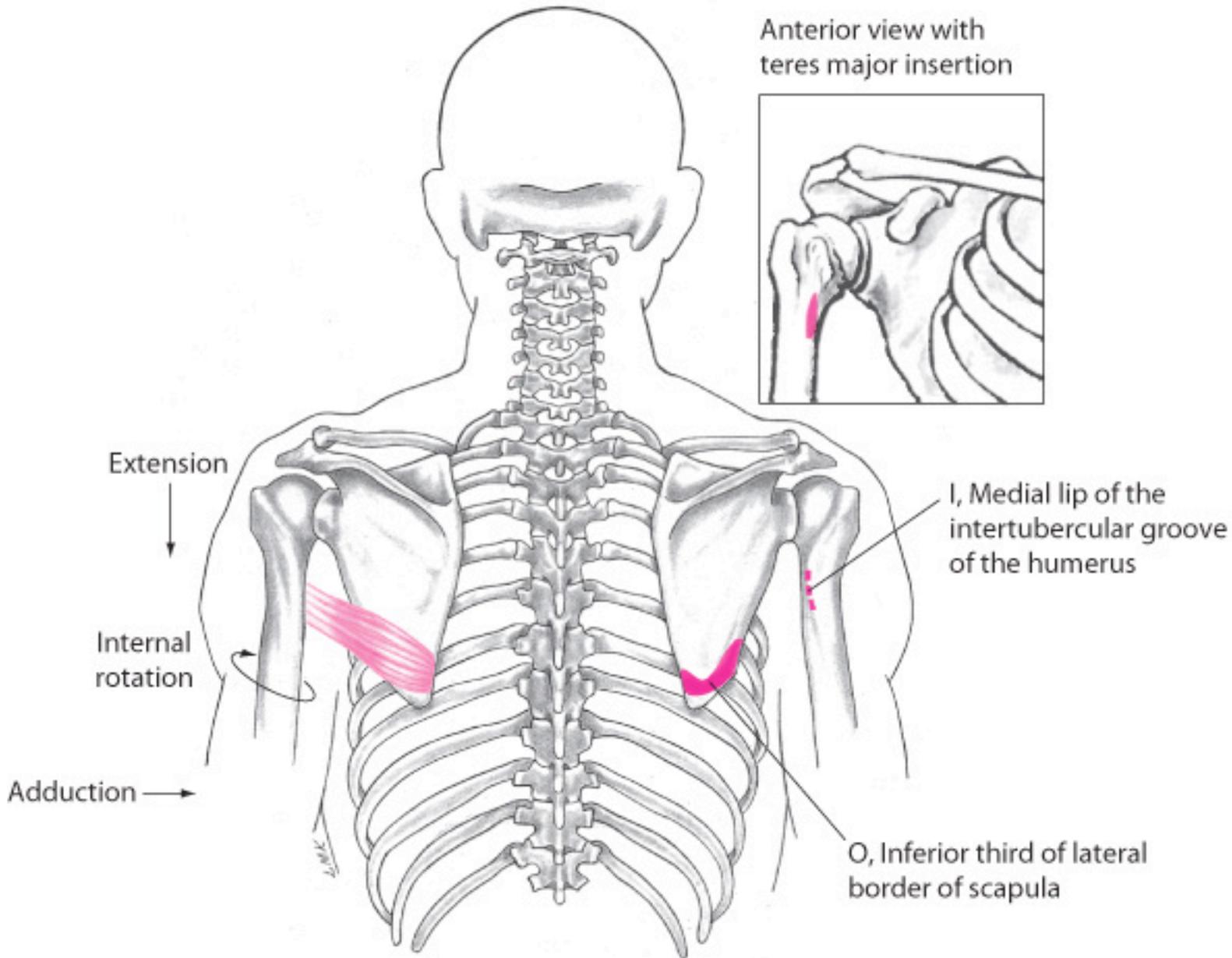


# Teres Major

- Origin: inferior angle
- Insertion: intertubercular groove
- Actions:
  - adduction
  - internal rotation
  - extension



“lats little helper”

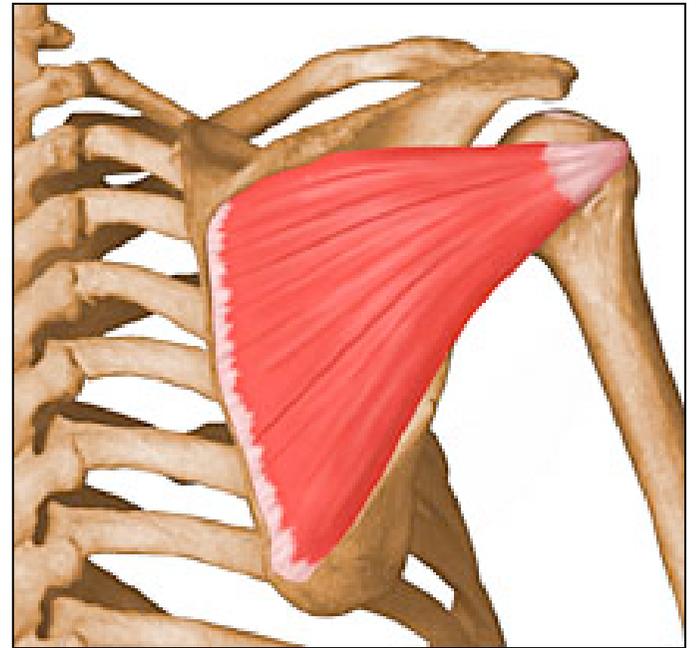


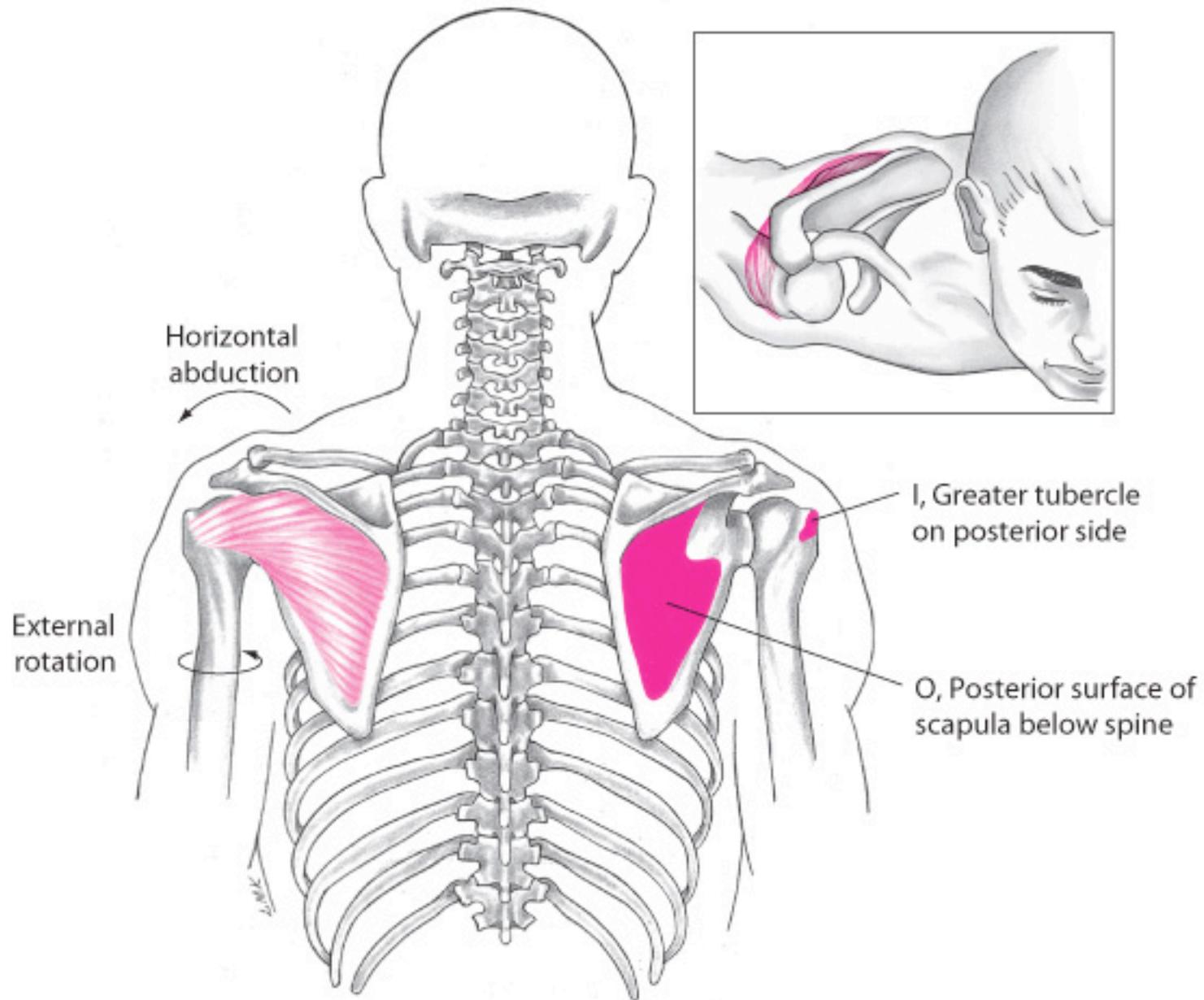
# Posterior Muscles

- Infraspinatus
- Teres minor

# Infraspinatus

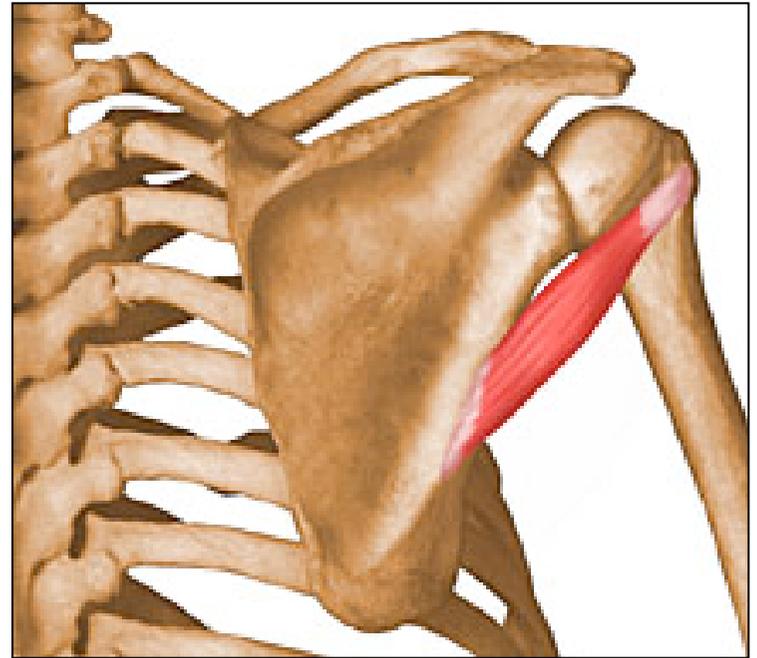
- Origin: infraspinus fossa
- Insertion: greater tubercle
- Actions:
  - extension
  - external rotation
  - horizontal abduction
- Other: rotator cuff muscle

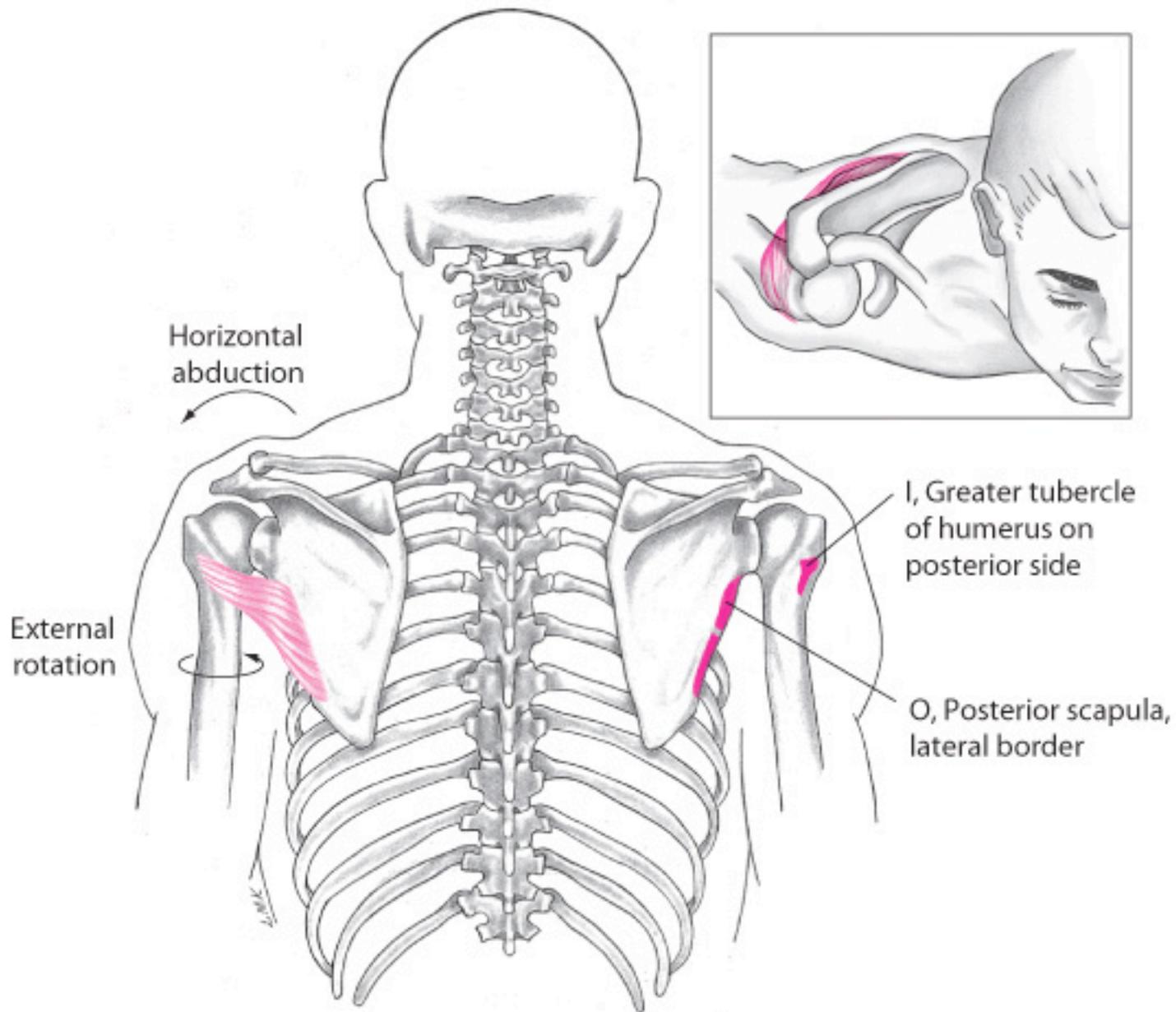




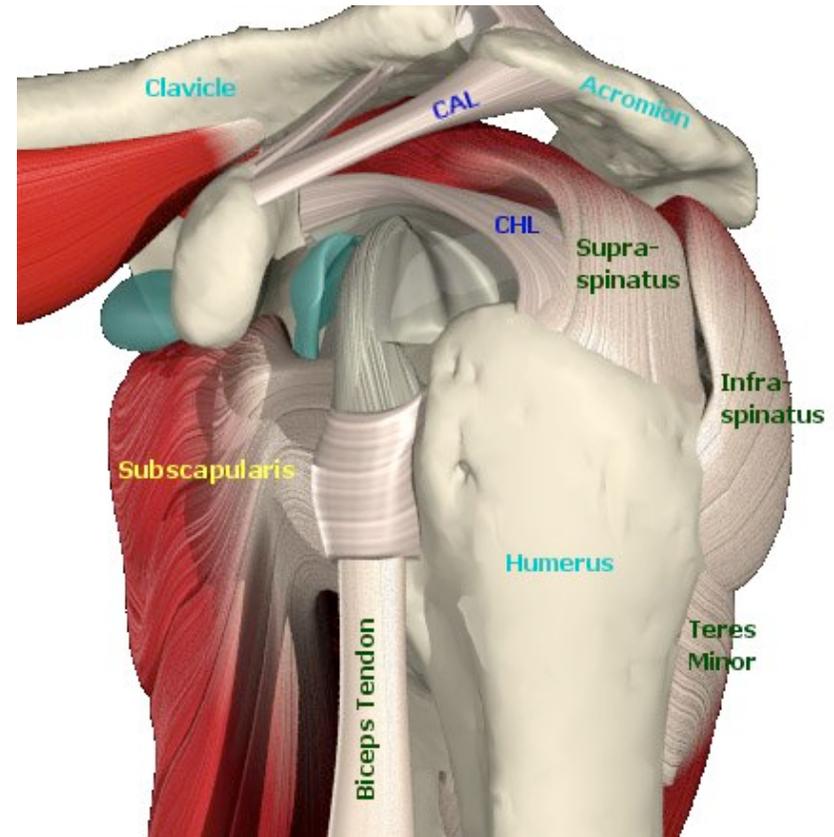
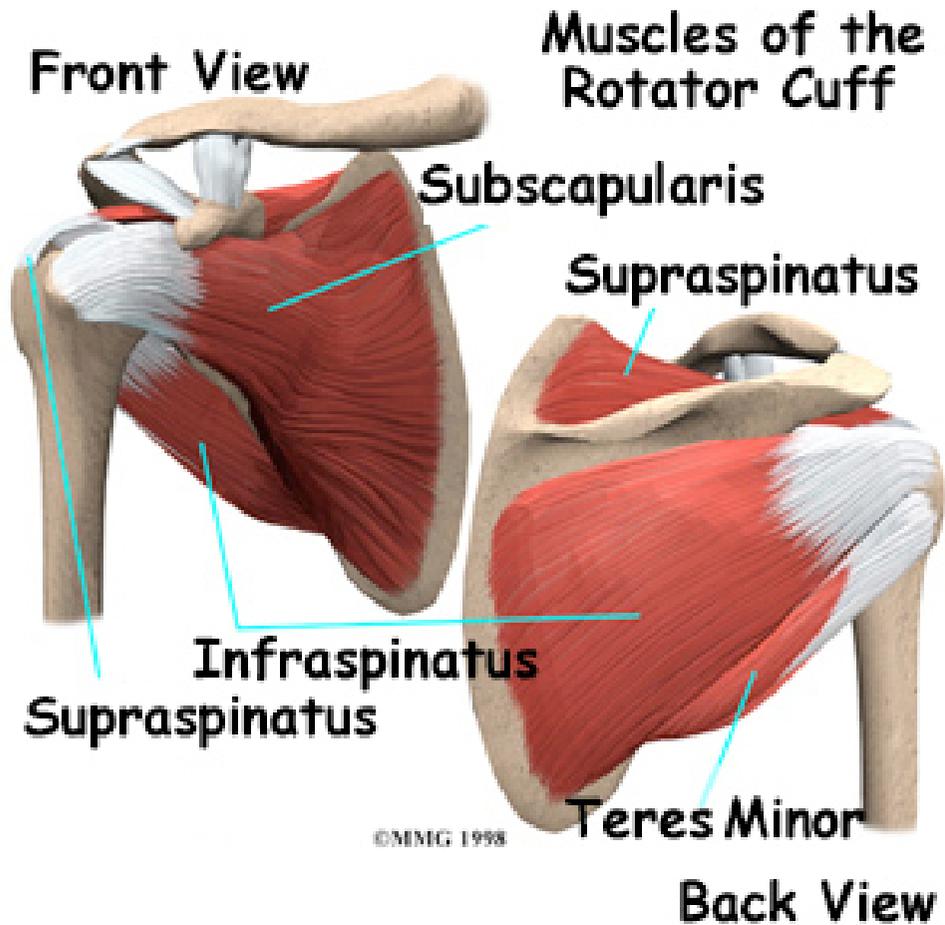
# Teres Minor

- Origin: lateral border
- Insertion: greater tubercle
- Actions:
  - extension
  - external rotation
  - horizontal abduction
- Other: rotator cuff

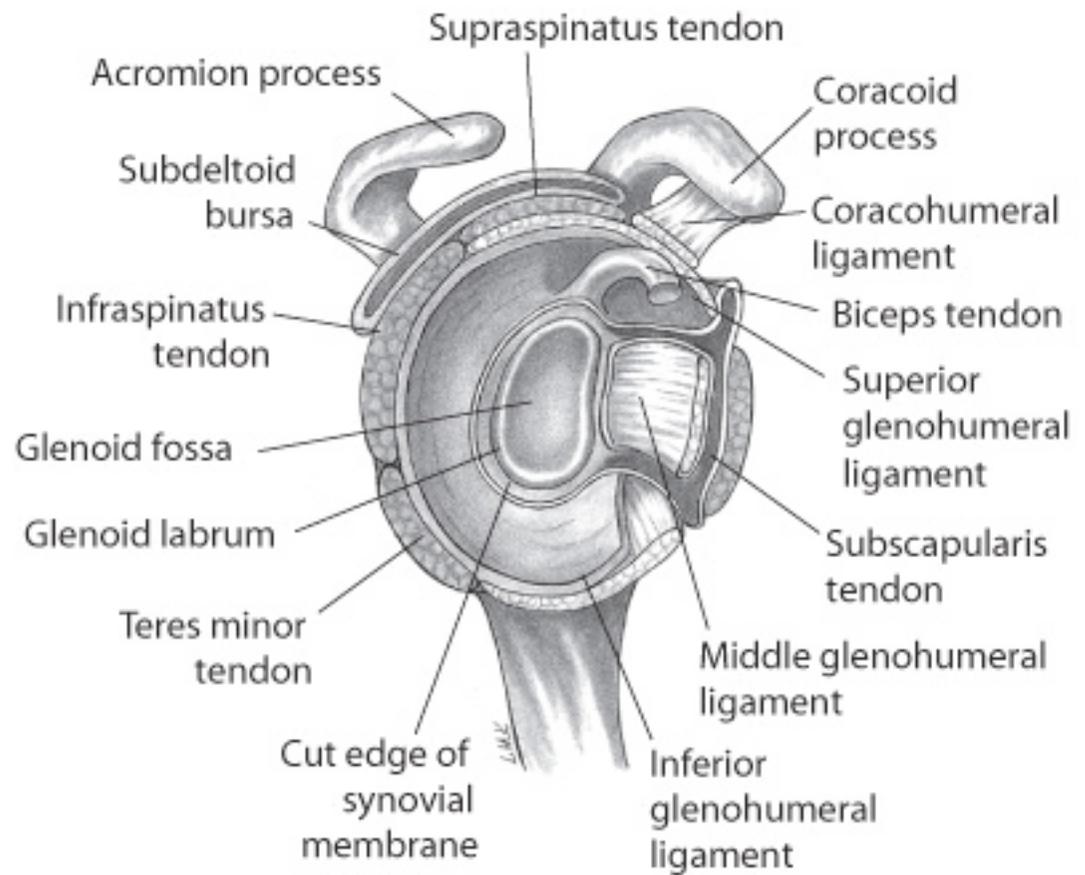
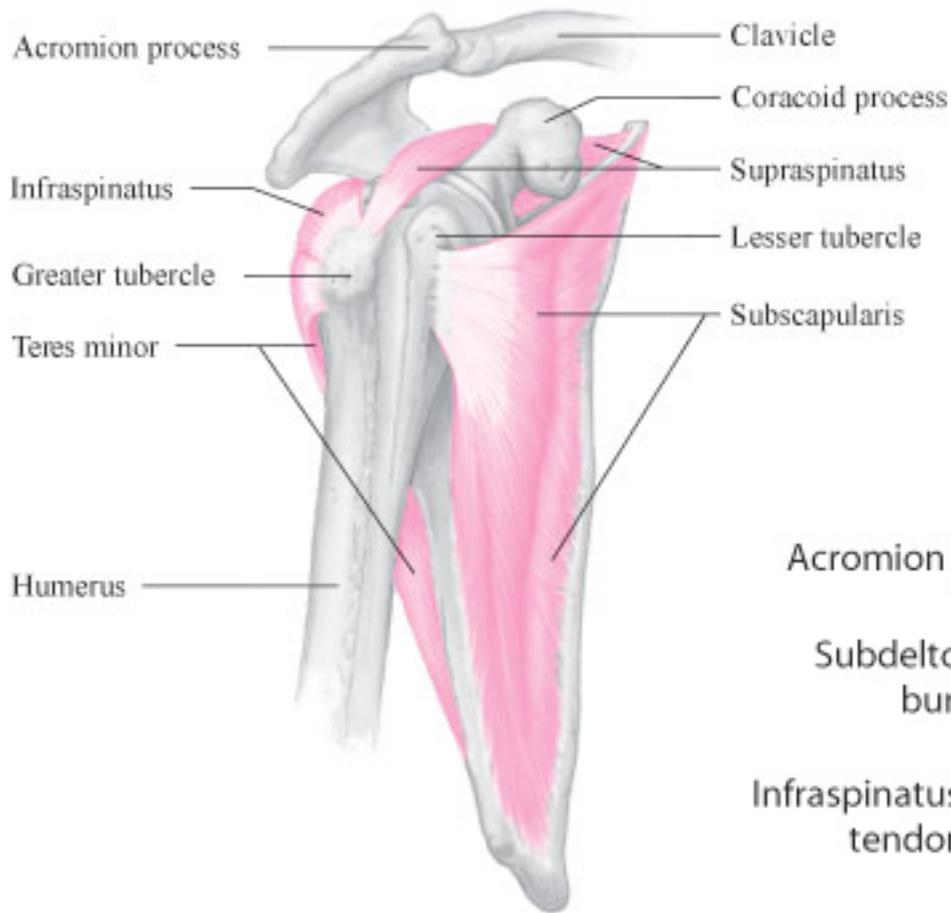




# Rotator Cuff Muscles



S.I.T.S





- List the horizontal adduction muscles
  - pectoralis major (upper and lower fibers)
  - corachobrachialis
  - ant. deltoid

- List the horizontal abduction muscles
  - post. deltoid
  - infraspinatus
  - teres minor
  - lat. dorsi

- List the flexor muscles
  - coracobrachialis
  - pect major (upper fibers)
  - ant. deltoid

- List the extensor muscles
  - lat dorsi
  - teres major
  - post. deltoid
  - pect. major (lower fibers)

- List the adductor muscles
  - pect major (upper and lower fibers)
  - coracobrachialis
  - lat. dorsi
  - teres major

- List the abductor muscles
  - deltoid (all fibers)
  - supraspinatus

- List the internal rotator muscles
  - subscapularis
  - lat dorsi
  - teres major
  - ant. deltoid

the end