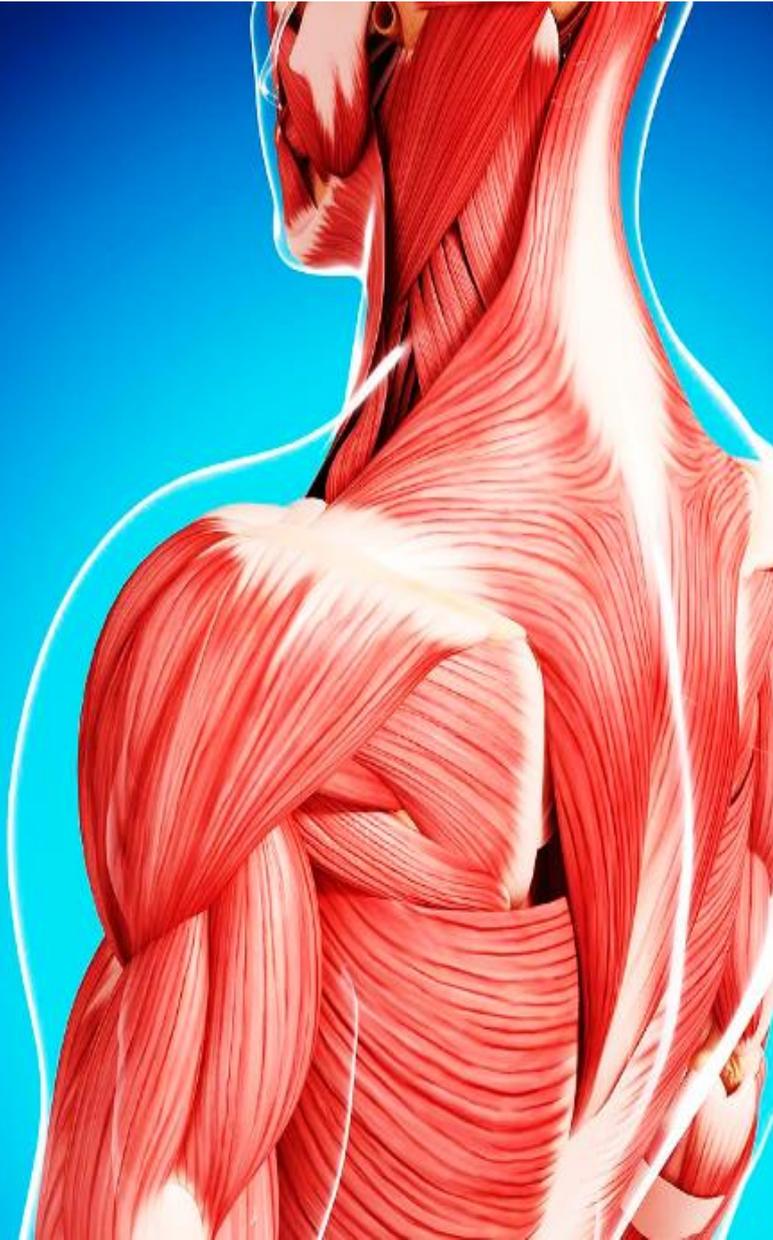
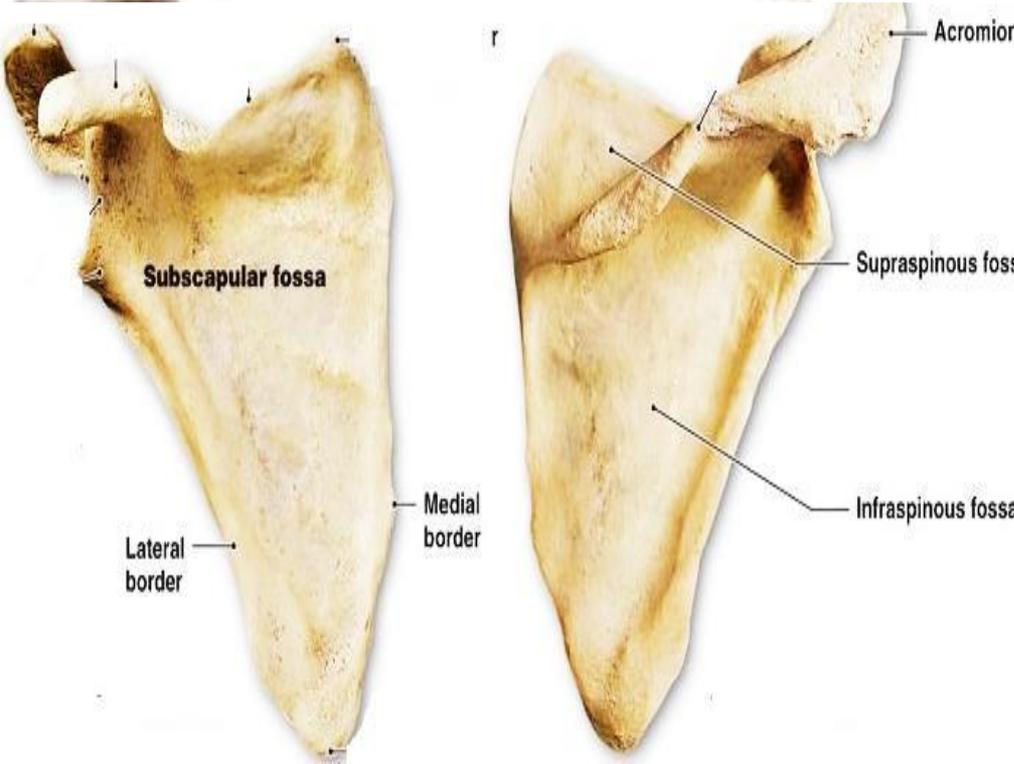
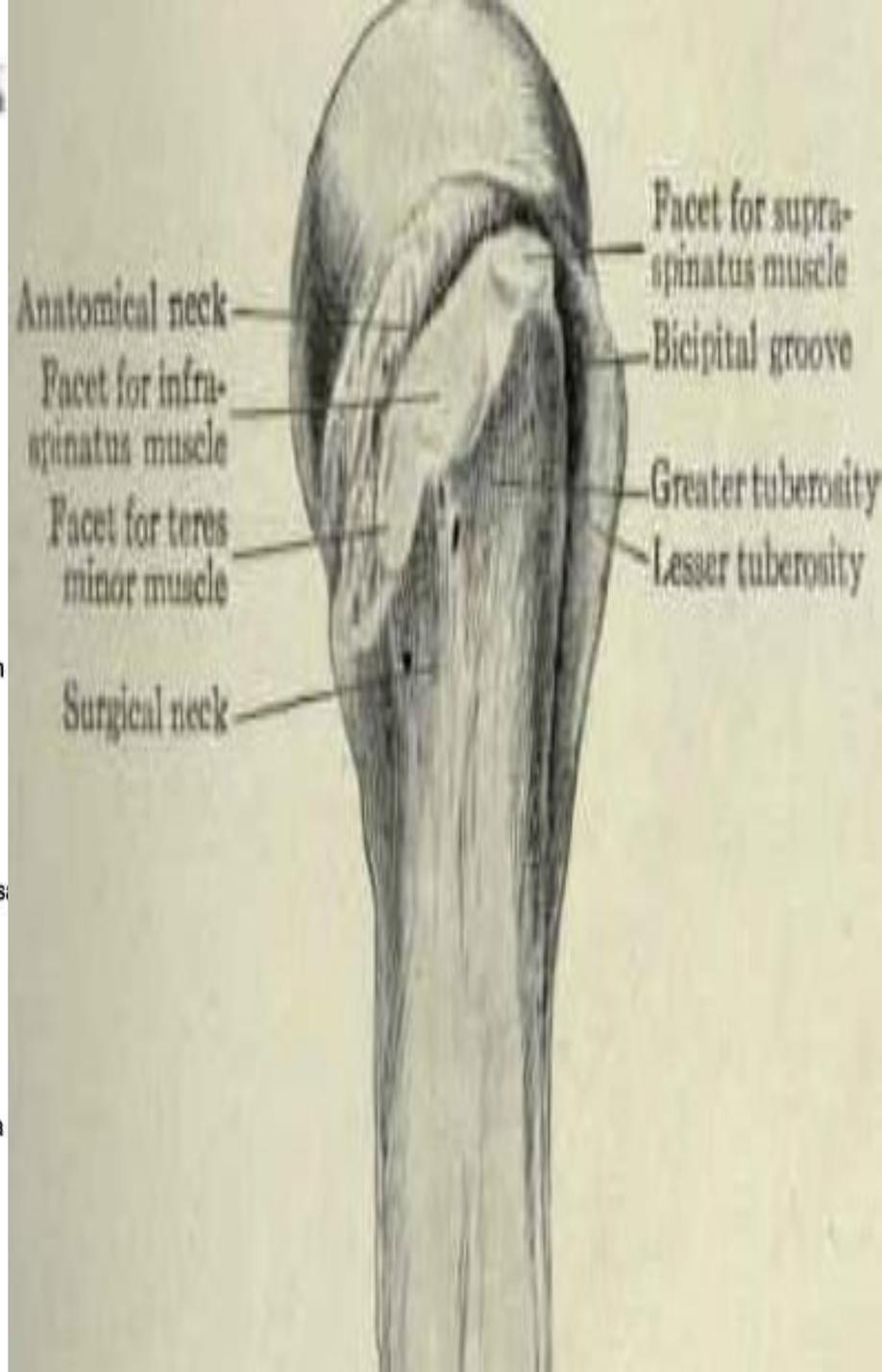


# SHOULDER REGION



BY  
DR ABULMAATY MOHAMED  
ASSISTANT PROFESSOR  
ANATOMY & EMBRYOLOGY  
MUTAH UNIVERSITY



# SHOULDER REGION

## SUBSCAPULARIS

### Origin :

subscapular fossa

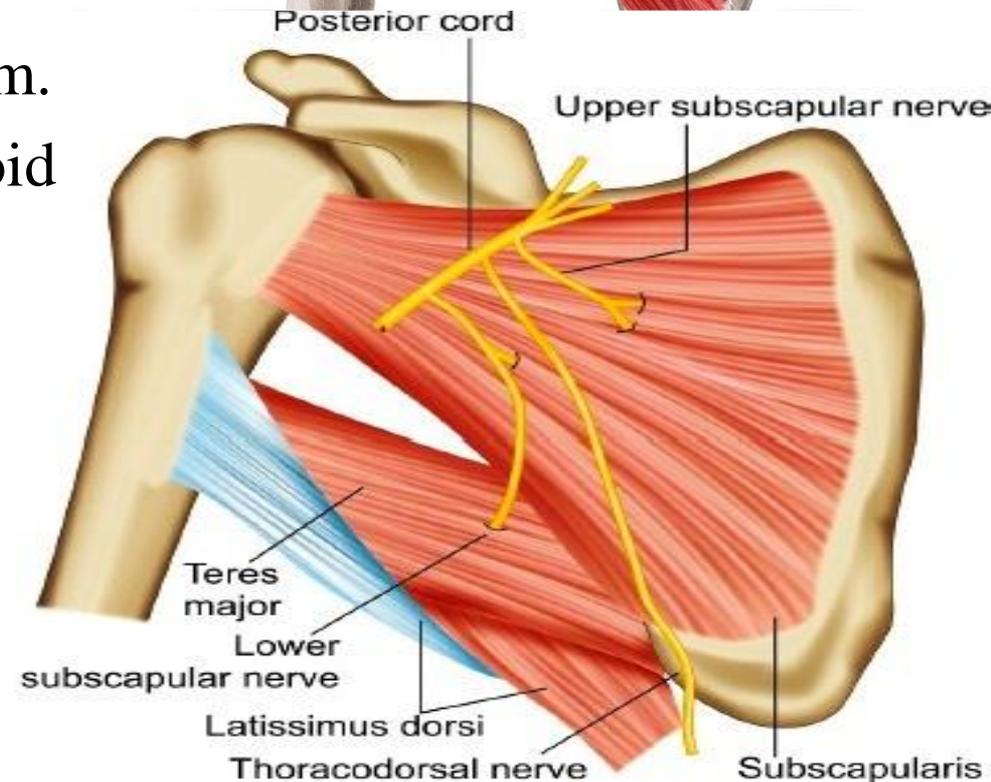
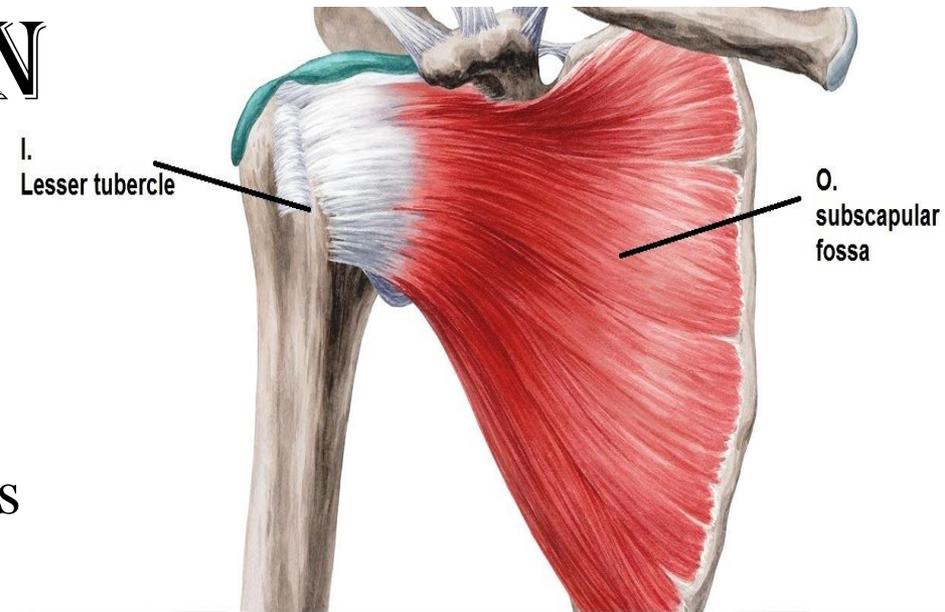
**Insertion:** Lesser tubercle of humerus

### Action :

- Adduction & medial rotation of arm.
- stabilize head of humerus in glenoid cavity as a Rotator cuff muscle?

### Nerve supply:

Upper & lower subscapular nerves



# SHOULDER REGION

## SUPRASPINATUS

### Origin :

supraspinous fossa

### Insertion:

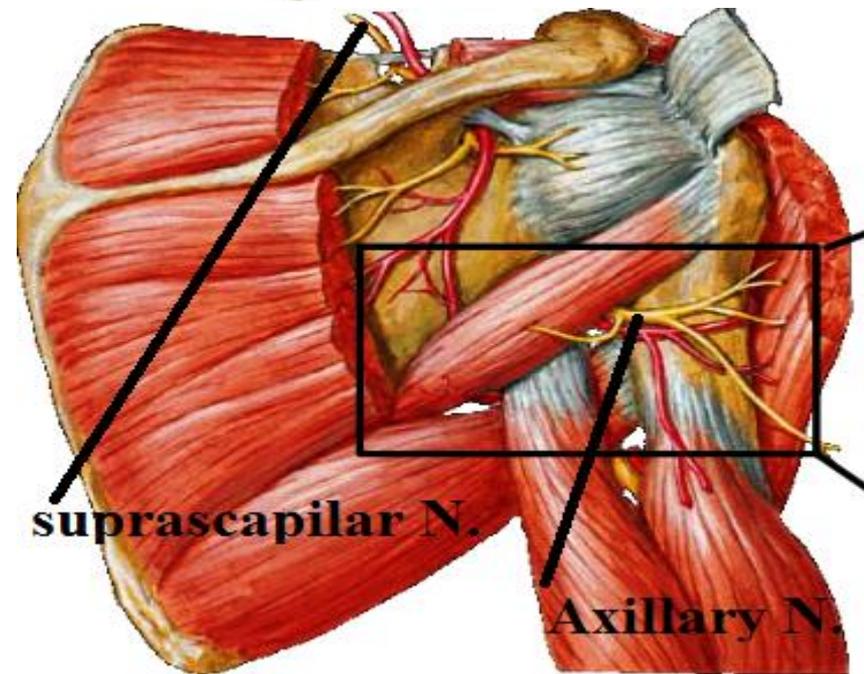
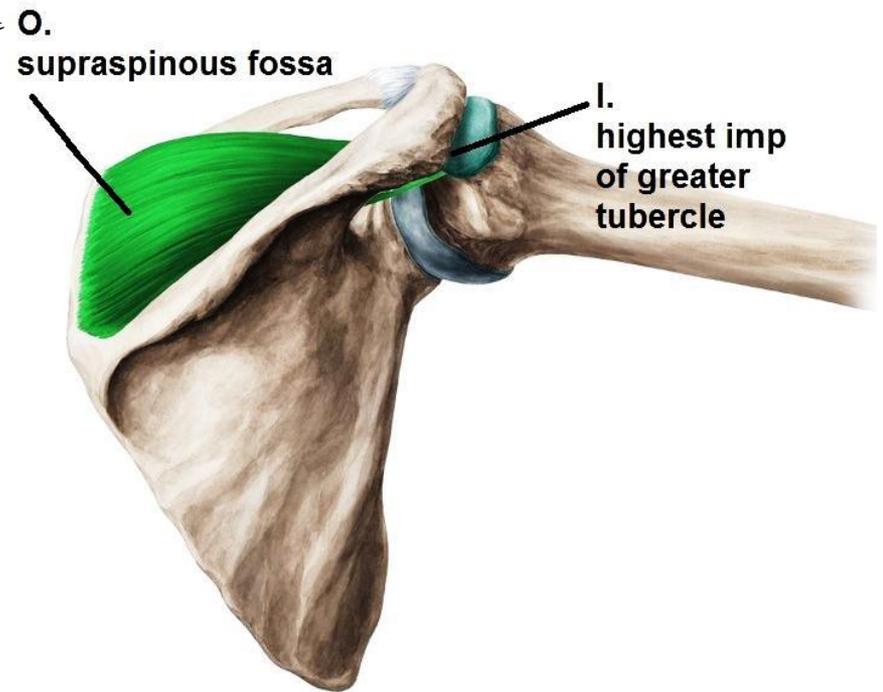
Highest impression  
of greater tubercle of humerus

### Action :

- start abduction(0-150)
- stabilize head of humerus in glenoid cavity As a Rotator cuff muscle?

### Nerve supply:

Suprascapular n.



# SHOULDER REGION

## INFRASPINATUS

### Origin :

infraspinous fossa

### Insertion:

middle impression

of greater tubercle of humerus

### Action :

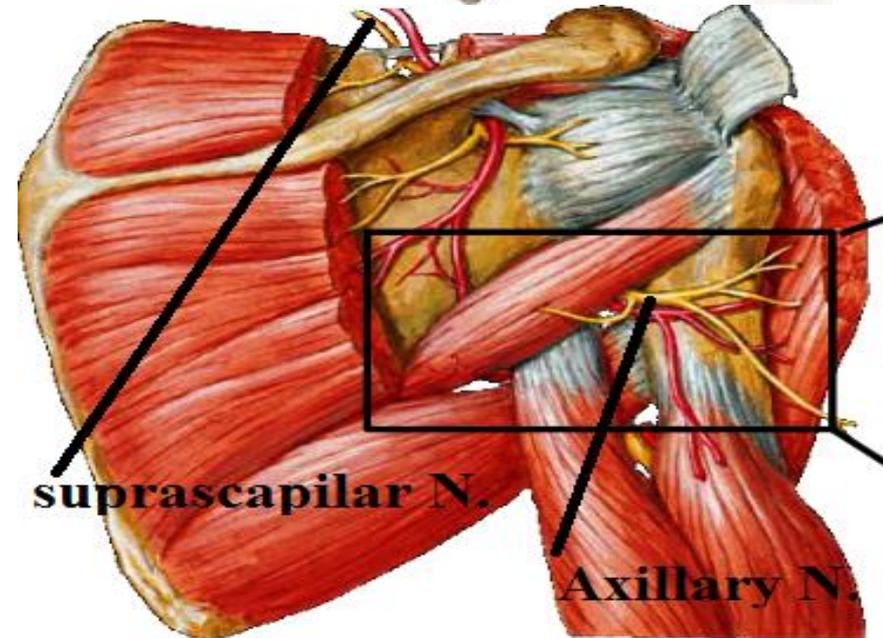
- Adduction & lateral rotation of arm
- Stabilize head of humerus in glenoid cavity as a Rotator cuff muscle?

### Nerve supply:

Suprascapular n.

O.  
infraspinous  
fossa

I.  
middle  
imp.  
of  
greater  
tubercle



# SHOULDER REGION

## TERES MINOR

### Origin :

upper 2/3 of back  
of lateral border of scapula

### Insertion:

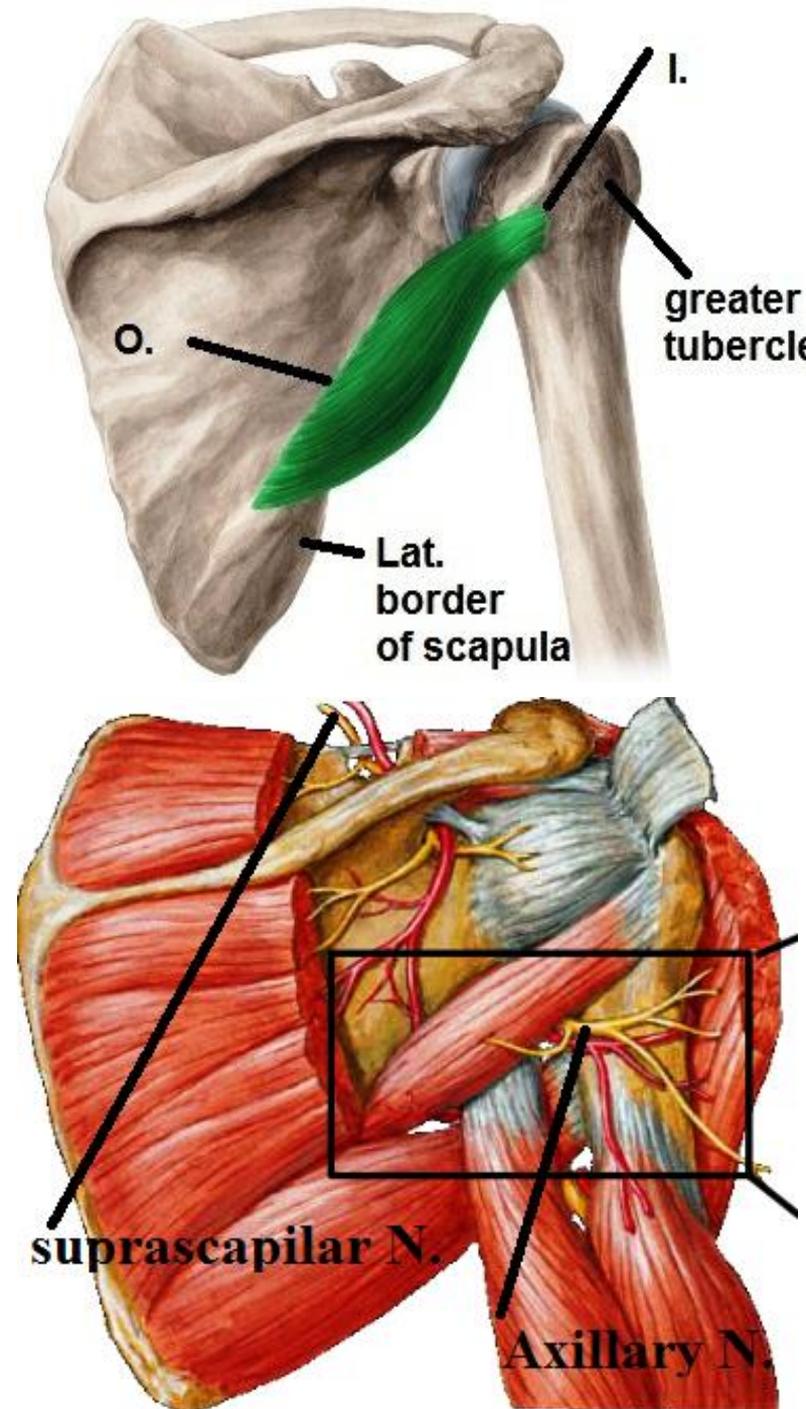
lowest impression  
of greater tubercle of humerus

### Action :

- Adduction & lateral rotation of arm
- Stabilize head of humerus in glenoid cavity As Rotator cuff muscle?

### Nerve supply:

Axillary nerve



# SHOULDER REGION

## TERES MAJOR

### Origin :

lower 1/3 of back  
of lateral border of scapula

### Insertion:

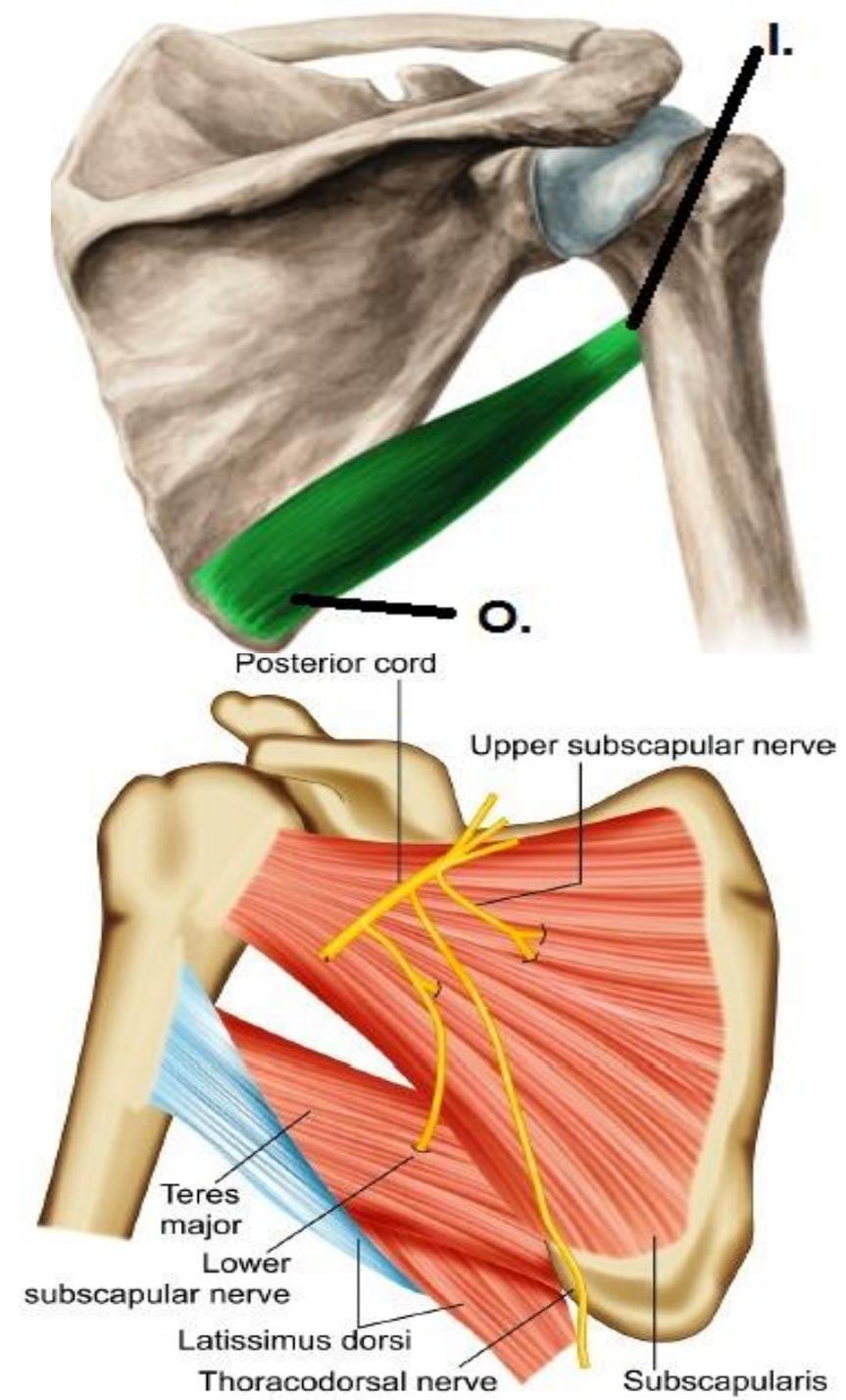
medial lip of intertubercular (bicipital)  
groove of humerus

### Action :

- Adduction & medial rotation of arm
- Extension of arm

### Nerve supply:

lower subscapular nerve



Muscle	O.	I.	A.	N.S.
<b>SUBSCAPULARIS</b>	Medial 2/3 of subscapular fossa	Lesser tubercle of humerus	<ul style="list-style-type: none"> <li>Adduction &amp; medial rotation of arm.</li> <li>Rotator cuff muscle?</li> </ul>	Upper & lower subscapular nerves.
<b>SUPRASPINATUS</b>	Medial 2/3 of Supraspinous fossa	Highest impression of greater tubercle of humerus	<ul style="list-style-type: none"> <li>start abduction (0-15°)</li> <li>Rotator cuff muscle?</li> </ul>	Supracapular n.
<b>INFRASPINATUS</b>	infraspinous fossa	middle impression of greater tubercle of humerus	<ul style="list-style-type: none"> <li>adduction &amp; lateral rotation of arm</li> <li>Rotator cuff muscle?</li> </ul>	Suprascapular n.
<b>TERES MINOR</b>	upper $\frac{2}{3}$ of back of lateral border of scapula	lowest impression of greater tubercle of humerus	<ul style="list-style-type: none"> <li>Adduction &amp; lateral rotation of arm.</li> <li>Rotator cuff muscle?</li> </ul>	n. to teres minor from axillary n.
<b>TERES MAJOR</b>	lower $\frac{1}{3}$ of back of lateral border of scapula	medial lip of intertubercular (bicipital) groove of humerus	<ul style="list-style-type: none"> <li>Adduction, &amp; medial rotation &amp; extension of arm.</li> </ul>	lower subscapular n.

# SHOULDER REGION

## **N.B: rotator cuff muscles:**

- 1- Subscapularis
- 2- supraspinatus
- 3- Infraspinatus.
- 4- Teres minor.

Support shoulder joint,  
they stabilize head of humerus  
in glenoid cavity



# SHOULDER REGION

## INTERMUSCULAR SPACES

1- Quadrangular space:

Boundaries:

**Above:** teres minor (in the back) or  
Subscapularis (in the front)

**Below:** teres major

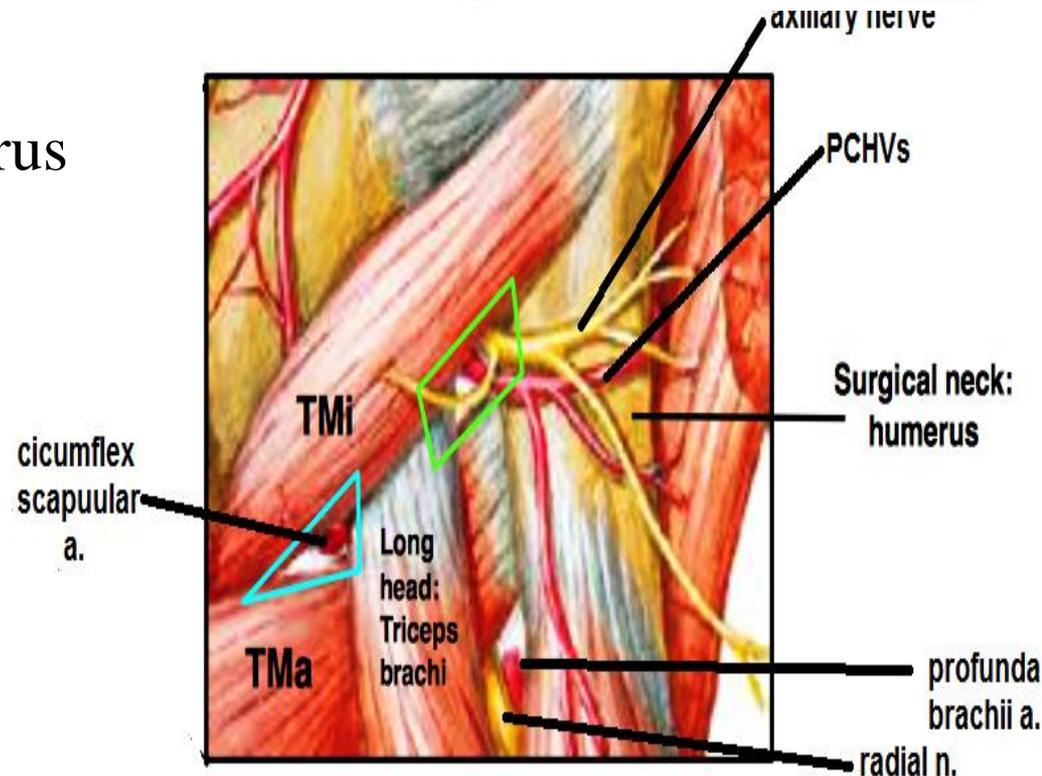
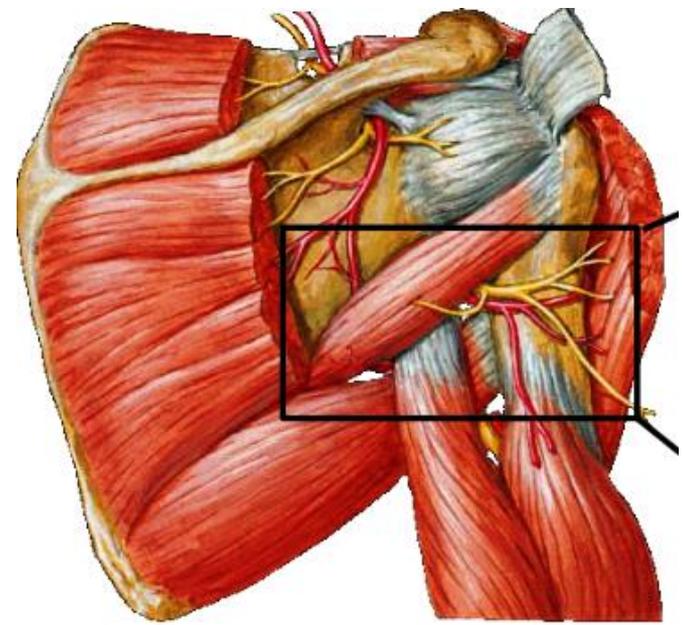
**Laterally:** surgical neck of humerus

**Medially:** long head of triceps.

Contents:

Axillary n.

Post. circumflex humeral vessels.



# SHOULDER REGION

## INTERMUSCULAR SPACES

### 2-Upper(medial) triangular space

#### Boundaries:

**Above:** teres minor (in the back) or  
Subscapularis (in the front)

**Below:** teres major

**Laterally:** long head of triceps.

#### Contents:

circumflex scapular vessels

### 3-lower(lateral) triangular space

#### Boundaries:

**Above:** teres major.

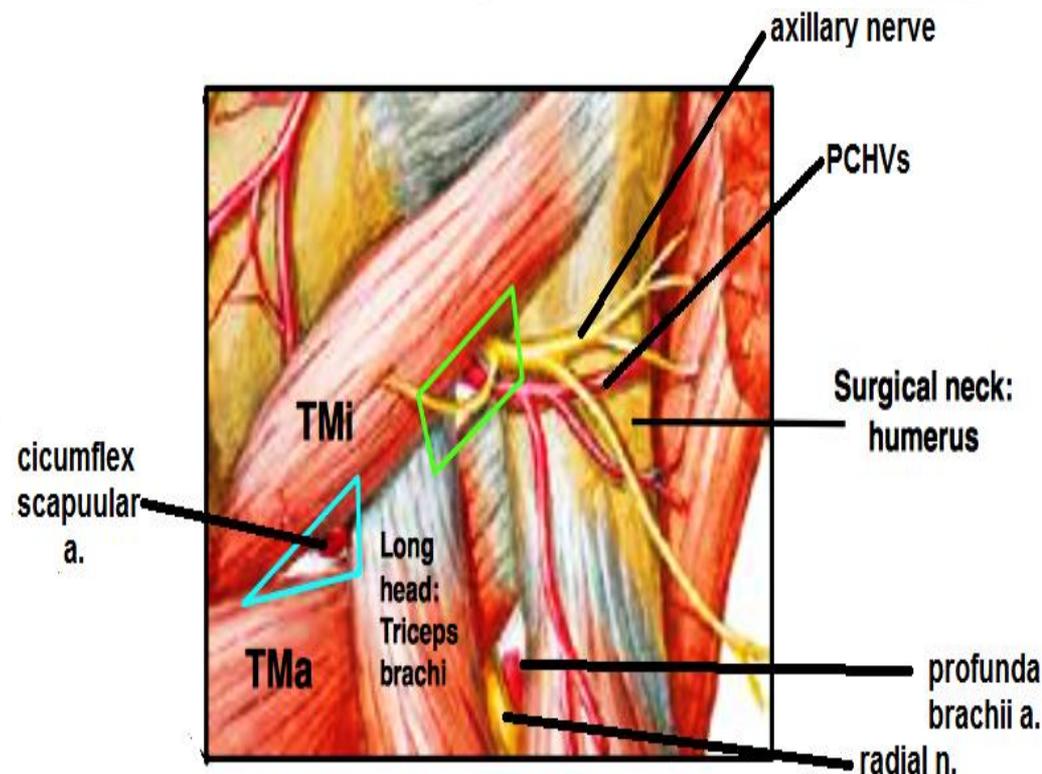
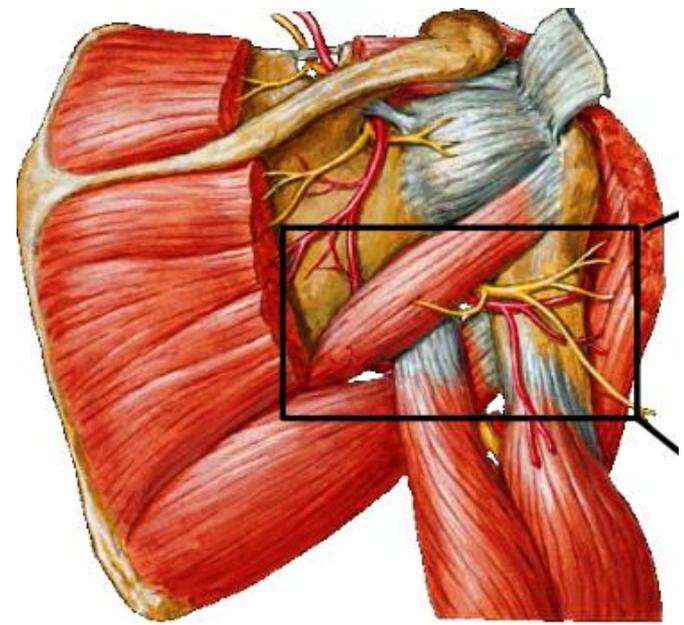
**Laterally:** spiral groove of humerus.

**Medially:** long head of triceps.

#### Contents:

Radial n.

Profunda brachii vessels



# SHOULDER REGION

## Deltoid muscle

### Origin:

**Ant. Fibers** : ant. border of lateral 1/3 of clavicle

**Middle** ,, : lateral border of acromion

**Post.** ,, : lower lip of crest of spine of scapula

### Insertion :

deltoid tuberosity on lateral surface of humerus

### Action:

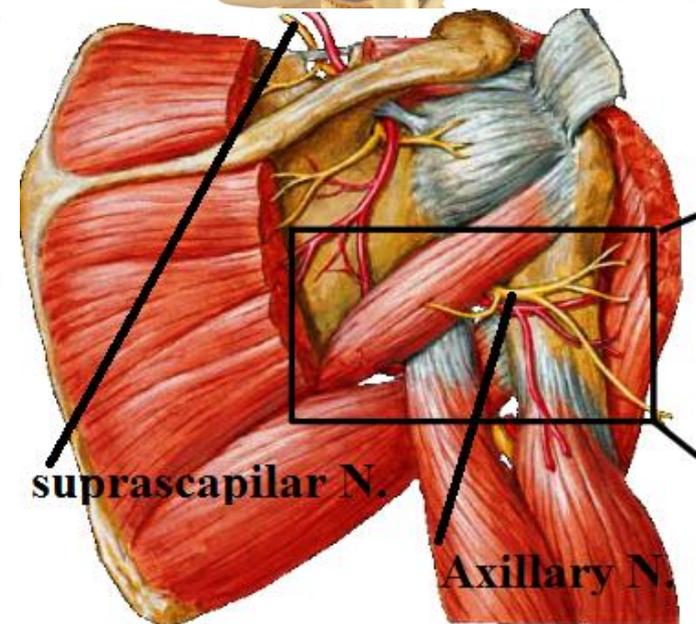
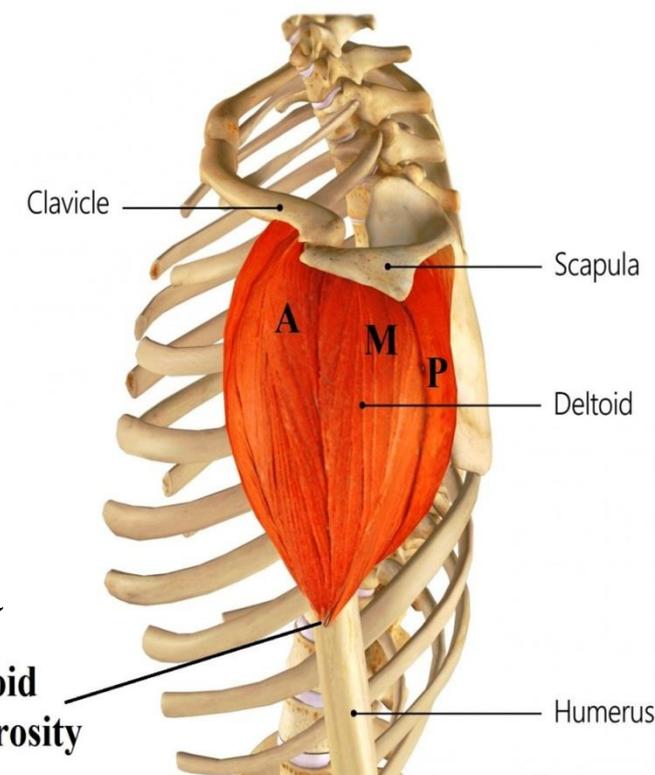
**Ant. fibers:** flexion of shoulder

**Middle** ,, : abduction of shoulder from 15 - 90

**Post.** ,, : extension of shoulder

**N.B.** it forms the rounded contour of shoulder

**Nerve Supply:** axillary n.





# SHOULDER REGION

## Deltoid muscle

### Deep relations

#### 1-Bones:

Head of humerus

Lesser & greater tubercles

Bicipital groove & its lips

Surgical neck

coracoid process

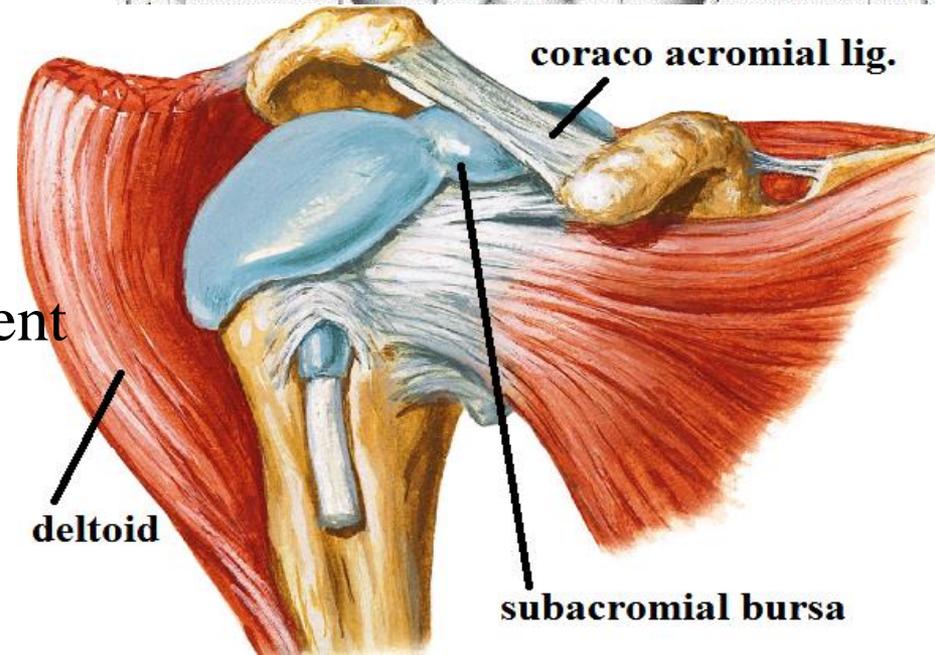
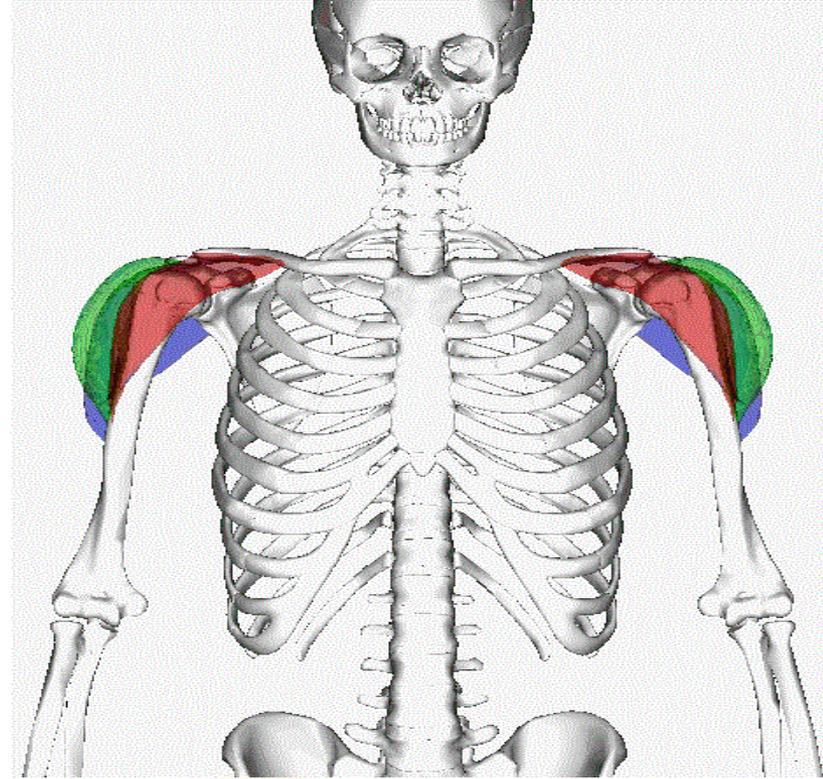
glenoid cavity

supra & infraglenoid tubercles

2-ligaments: - coracoacromial ligament

3- bursa:- sub acromial bursa

4-Joint: - shoulder joint



# SHOULDER REGION

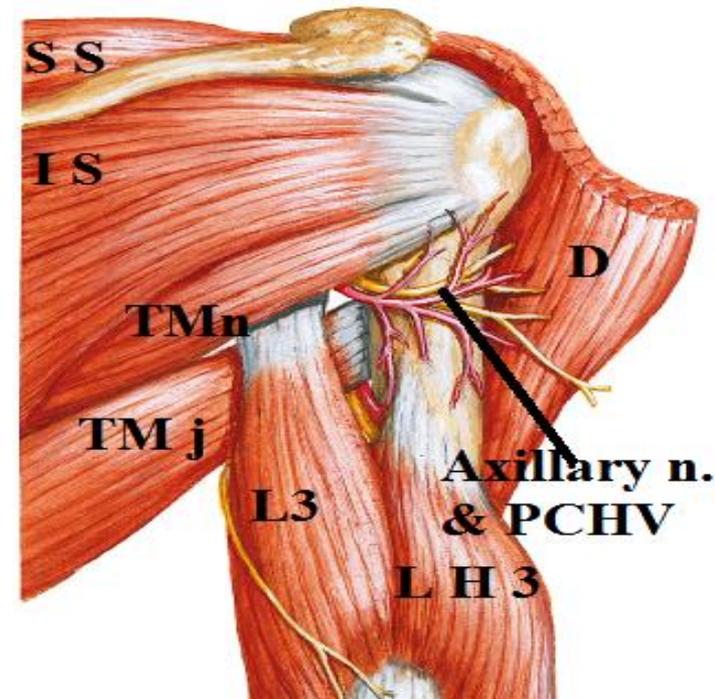
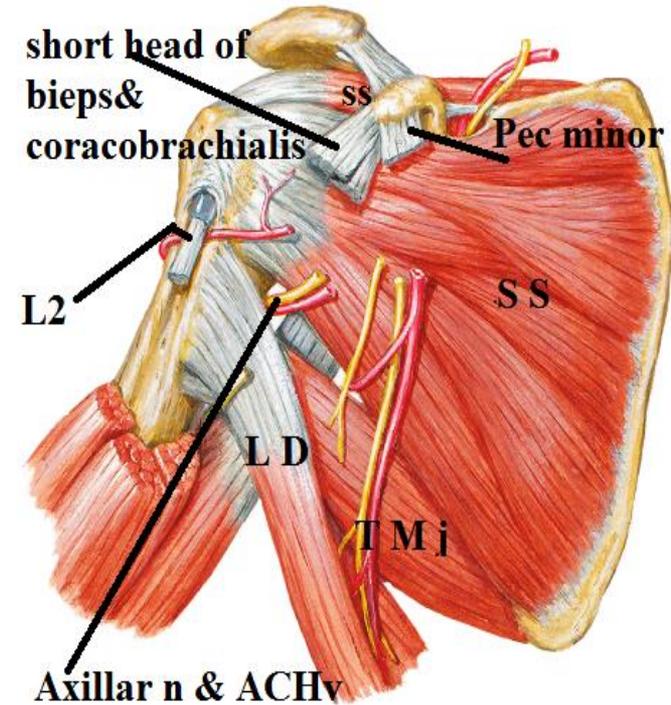
## Deep relations

### 5-muscles

- Subscapularis
- Supraspinatus + infraspinatus  
+ teres minor
- Pectoralis major + teres major  
+ latissimus dorsi
- Coracobrachialis & short head of biceps  
+ pectoralis minor
- Long head of biceps &  
long and lateral heads of triceps

### 6-vessels & nerve:

- Ant. & post. circumflex humeral vessels.
- Axillary (circumflex) n.



THANQ