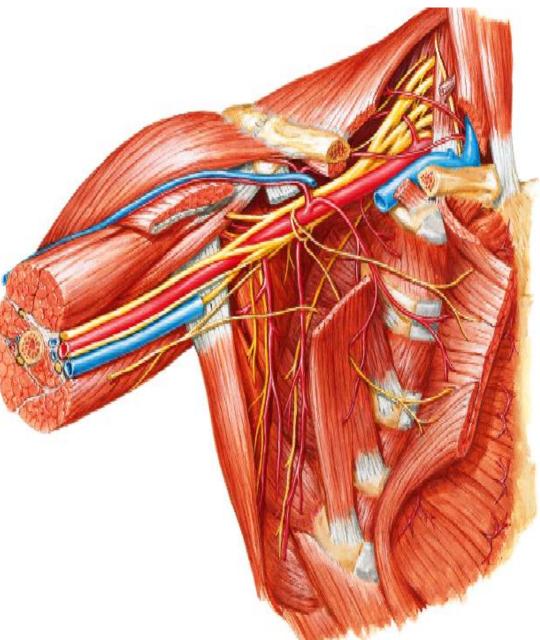
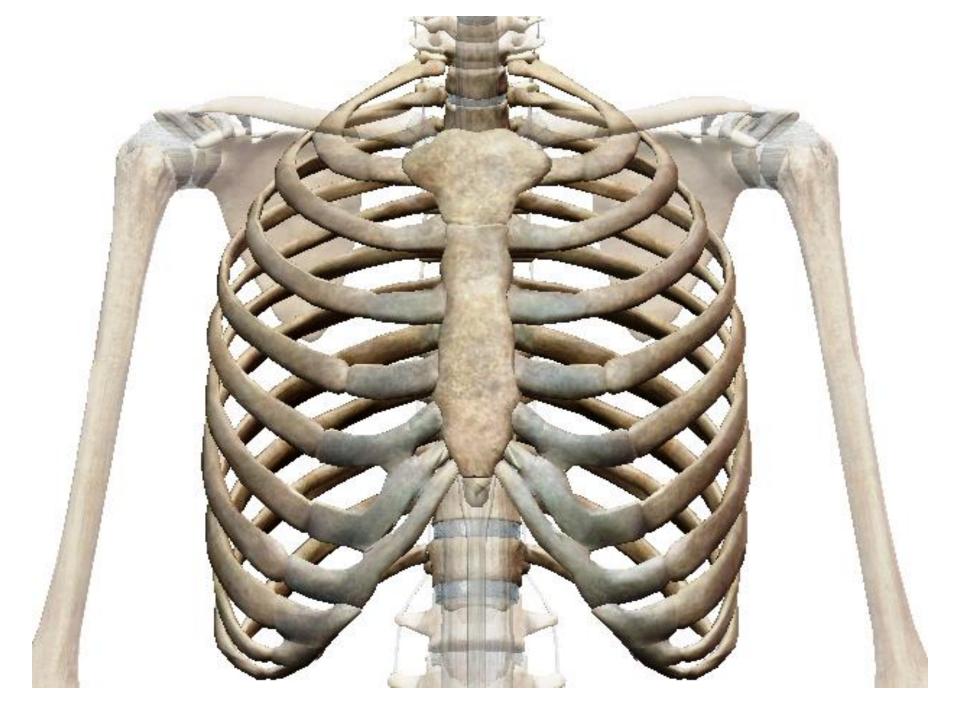
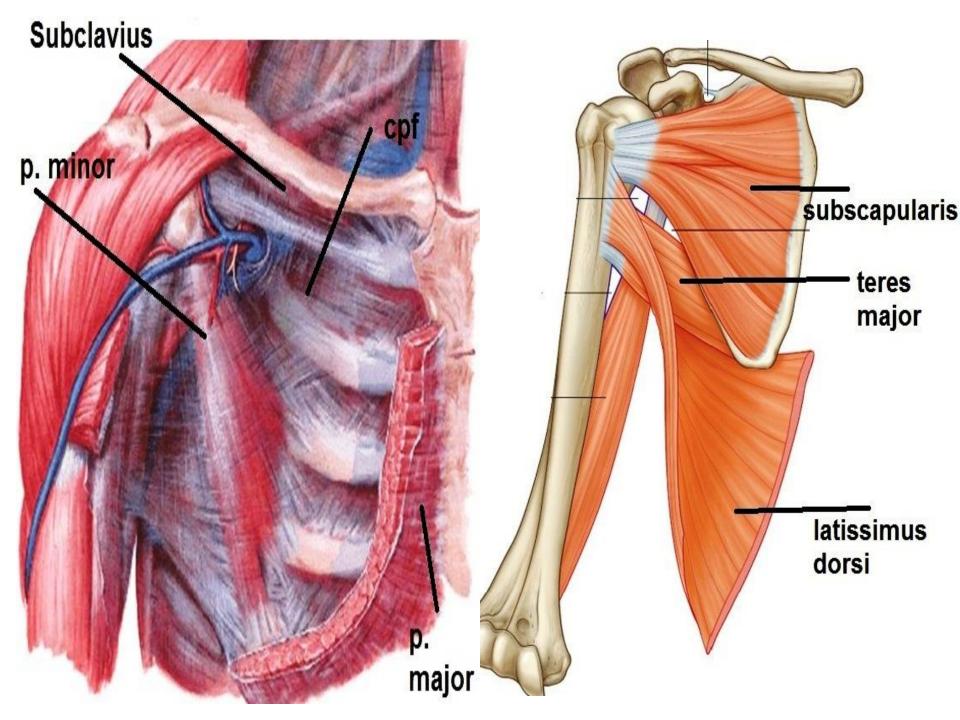
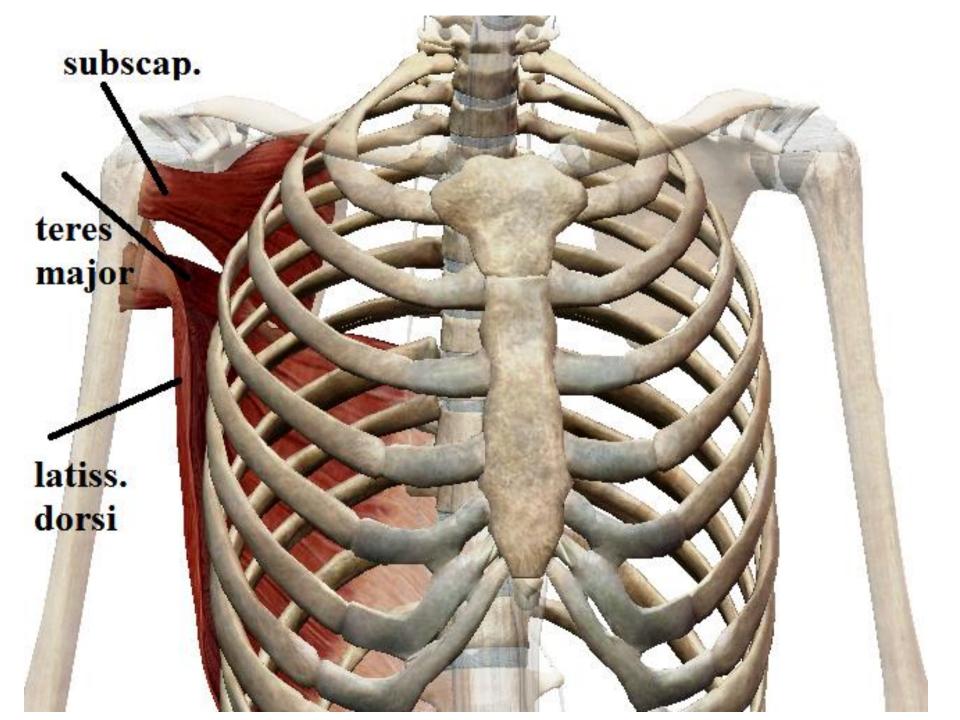
## **AXILLA & BRACHIAL PLEXUS**

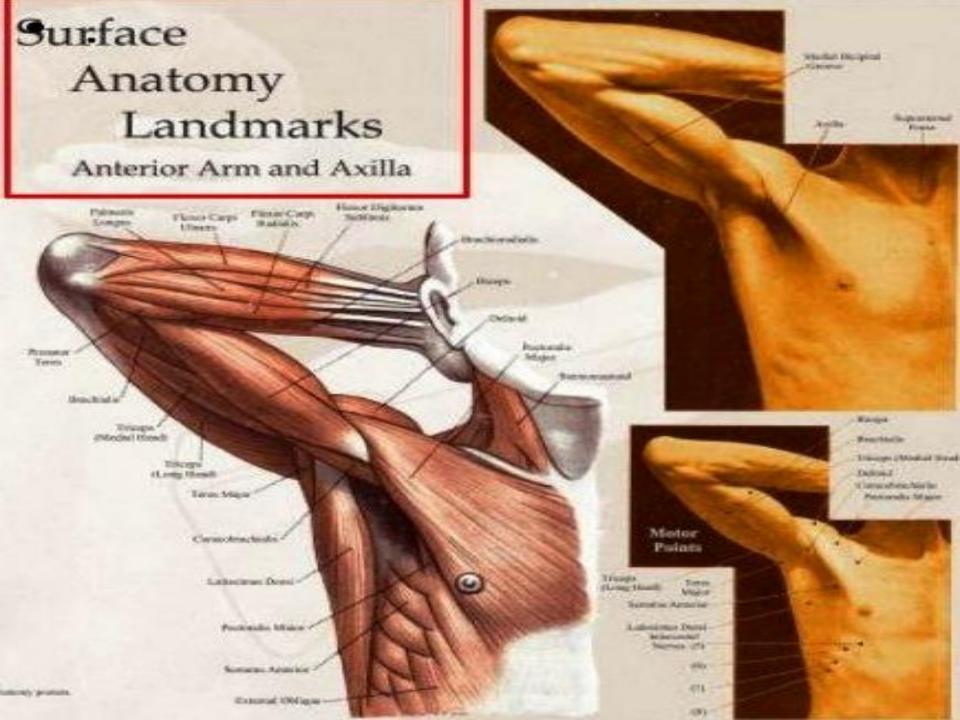


#### BÝ DR ABULMAATÝ MOHAMED ASSISTANT PROFESSOR ANATOMY & EMBRYOLOGÝ MUTAH UNIVERSITÝ



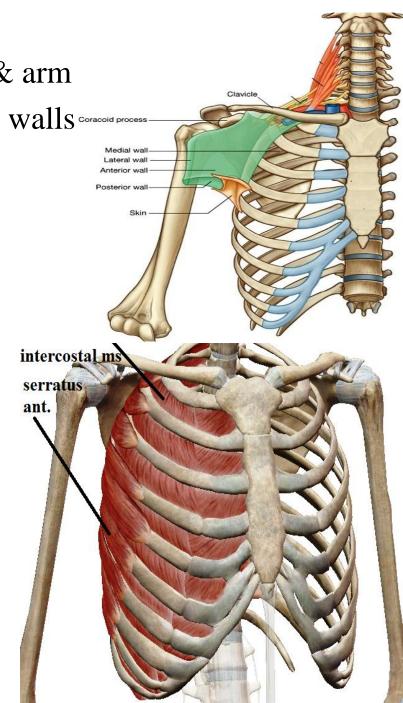






## AXILLA

- **Def.:** space between upper parts of chest & arm
- Shape: pyramidal with apex & base & 4 walls Coracoid process
- **Boundaries:**
- 1-medial wall:
- Formed by
- 1-upper 5 ribs
- 2- ,, ,, intercostal muscles.
- 3- ,, ,, digitations of serratus ant.



### **AXILLA** Boundaries:

- 2-post. wall:
- Formed by
- 1-Subscapularis
- 2-Teres major
- 3-Latissimus dorsi
- N.B.:-The lower border
- of the posterior wall
- is called post. axillary fold,
- formed by teres major & latissimus dorsi



## AXILLA

**Boundaries:** 

3-Lateral wall:

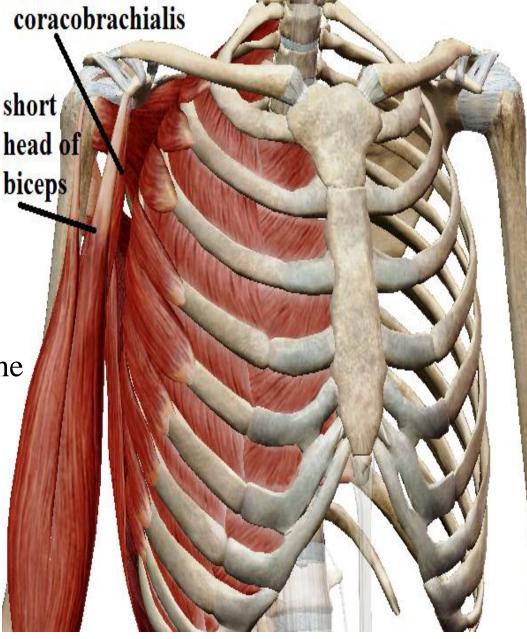
Formed by

1-upper part of humerus.

2-coracobrachialis.

3-short head of biceps.

N.B.:- this wall is considered the dangerous wall of axilla as it's related to nerves & vessels of upper limb



## AXILA

#### **Boundaries:**

4-Ant. wall: Formed of 2 layers

Deep: 1- subclavius.

2- Clavipectoral fascia.

3- Pectoralis minor

Superficial: pectoralis major.

N.B.:-The lower border of the anterior wall is called ant. axillary fold, formed by **pectoralis major only**. It is higher in position than post. axillary fold

5-Base (floor): Formed by

1-Skin

2-superficial fascia

3-Axillary fascia

axillary fas<mark>cia</mark>

Anterior axillary fold

Subclavius

p. minor

Posterior axillary fold

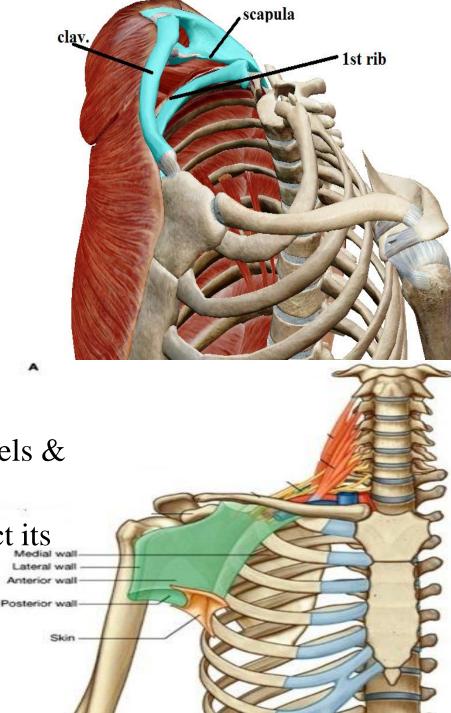
major

cpf

# **AXILLA**Boundaries:

#### 6-Apex:

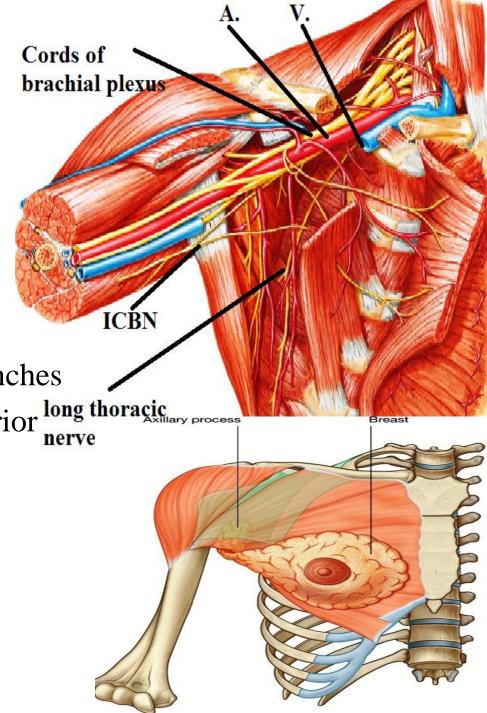
- connect axilla with the neck so called Cervicoaxillary canal
- **Boundaries:**
- Ant.:- middle part of clavicle
- Post. Upper border of scapula
- Medial: outer border of 1st rib
- Function: Passage for the axillary vessels & cords of brachial plexus.
- So all its boundaries are bony to protect its structures from compression.

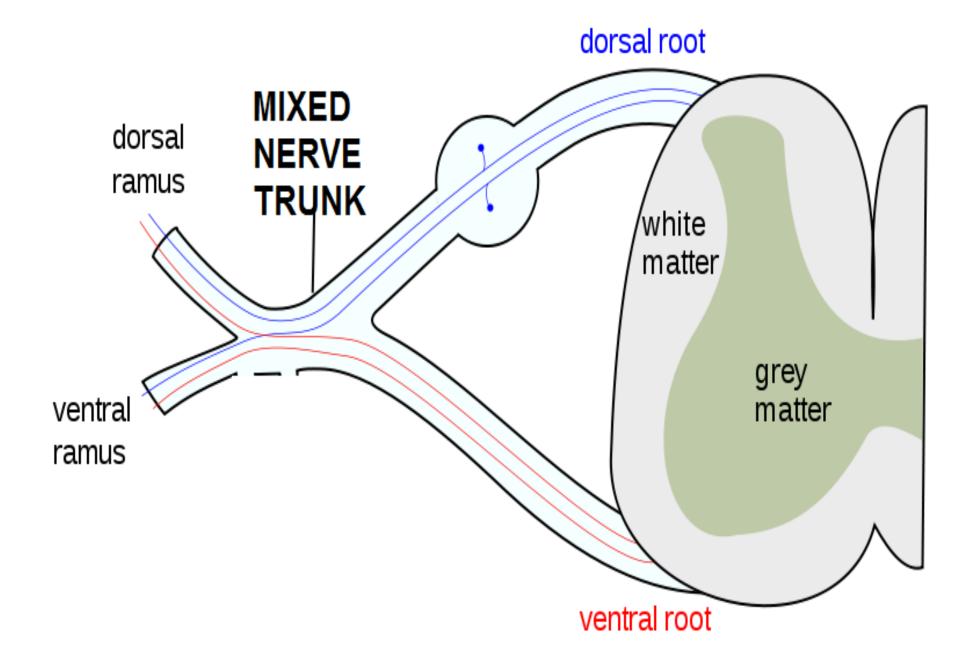


## AXILLA

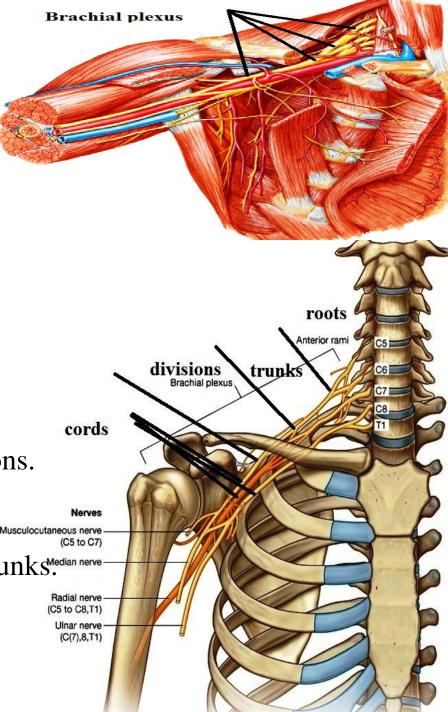
#### Contents

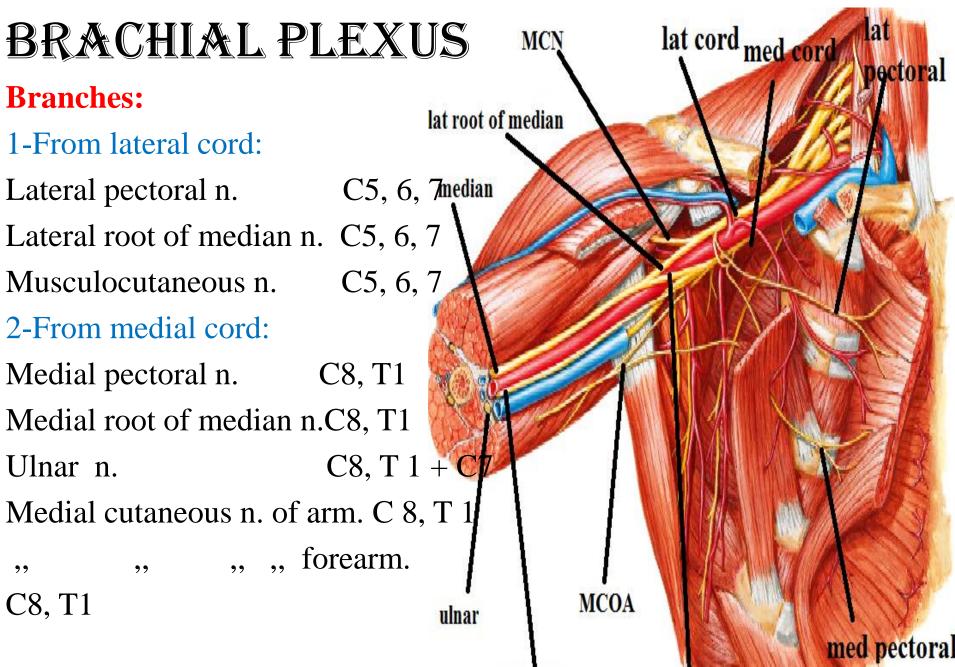
- 1-axillary fat
- 2-axillary artery & its branches
- 3- axillary v. & its tributaries
- 4-axillary L.Ns
- 5-axillary tail of female breast.
- 6-cords of brachial plexus & its branches
- 7-long thoracic n.:- on serratus anterior long the nerve
- 8-intercosto-brachial n.:-
- crosses the axilla to supply its floor





BRACHIAL PLEXUS **Def.:** network of nerves descend from neck to axilla supply upper limb. **Formation:** 4 stages 1-Stage of Roots (in the neck) Ventral rami of C5, 6, 7, 8 & T1 nerves. 2-Stage of Trunks (in the neck): Upper trunk: formed by union of C5 & 6 Middle ,, : formed as continuation of C7 Lower ,, : formed by union of C8 & T1 3-Stage of divisions (behind the clavicle): Each trunk divides into ant. & post. divisions. 4-Stage of cords (in the axilla): Posterior cord: formed by union of post. divisions of all trunks.<sup>Median nerve</sup> Lateral cord: formed by union of ant. divisions of upper & middle trunks. Medial cord: ant. division of lower trunk.





MCOF

med root of median

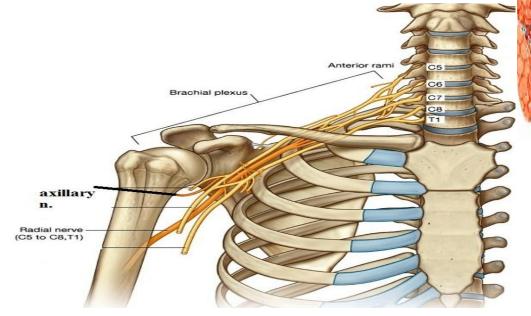
## BRACHIAL PLEXUS upper subscapular

lower subscapular

n. to latiss.

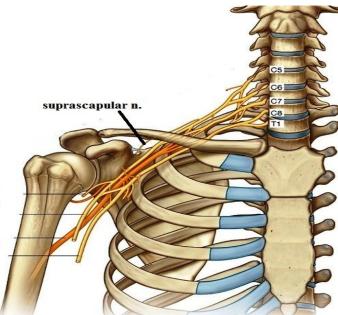
#### **Branches:**

- 3-From posterior cord:
- Upper subscapular n. C5, 6
- Lower ,, ,,. C5, 6
- N. to latissimus dorsi (thoracodorsal n.)
- Axillary n. C5, 6



## BRACHIAL PLEXUS suprascapular n. Branches:

- 4-From trunks: (from upper trunk only)
- N. to subclavius. C5, 6
- Suprascapular n. C5, 6
- 5-From roots:
- N. to serratus ant. (long thoracic n.) C5, 6, 7
- N. to Rhomboids (dorsal scapular n.) C5.



long thoracic n.

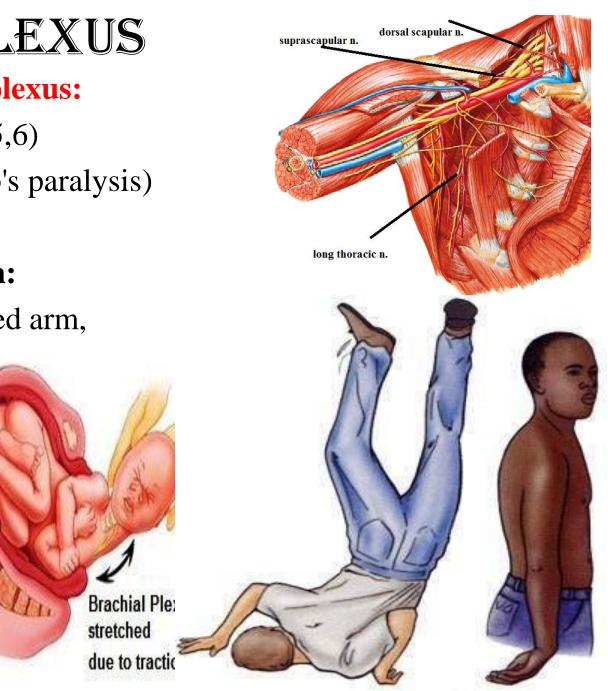
dorsal scapular n.

**BRACHIAL PLEXUS Injury of the brachial plexus:** injury of upper trunk (C5,6) (Erb's paralysis)

Deformity:

#### **Policeman's tip position:**

Adducted medially rotated arm, extended elbow, pronated forearm.



## BRACHIAL PLEXUS

**Injury of the brachial plexus:** 

injury of lower trunk (C8 & T1 nerves)

(Klumpkes' paralysis)

Deformity

#### claw hand

extension of metacarpo- phalangeal joints flexion of inter phalangeal joints

