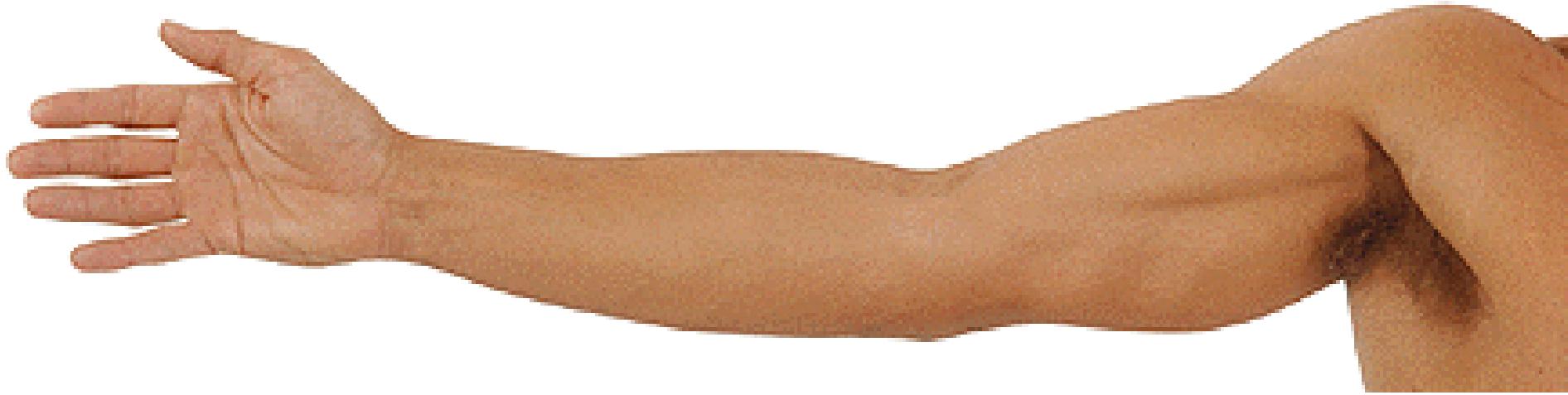


# **REGIONAL ANATOMY OF THE UPPER LIMB**



**Regio deltoidea, reg. axillaris, reg. brachii ant., reg. cubiti ant.,  
reg. antebrachii ant., palma manus**

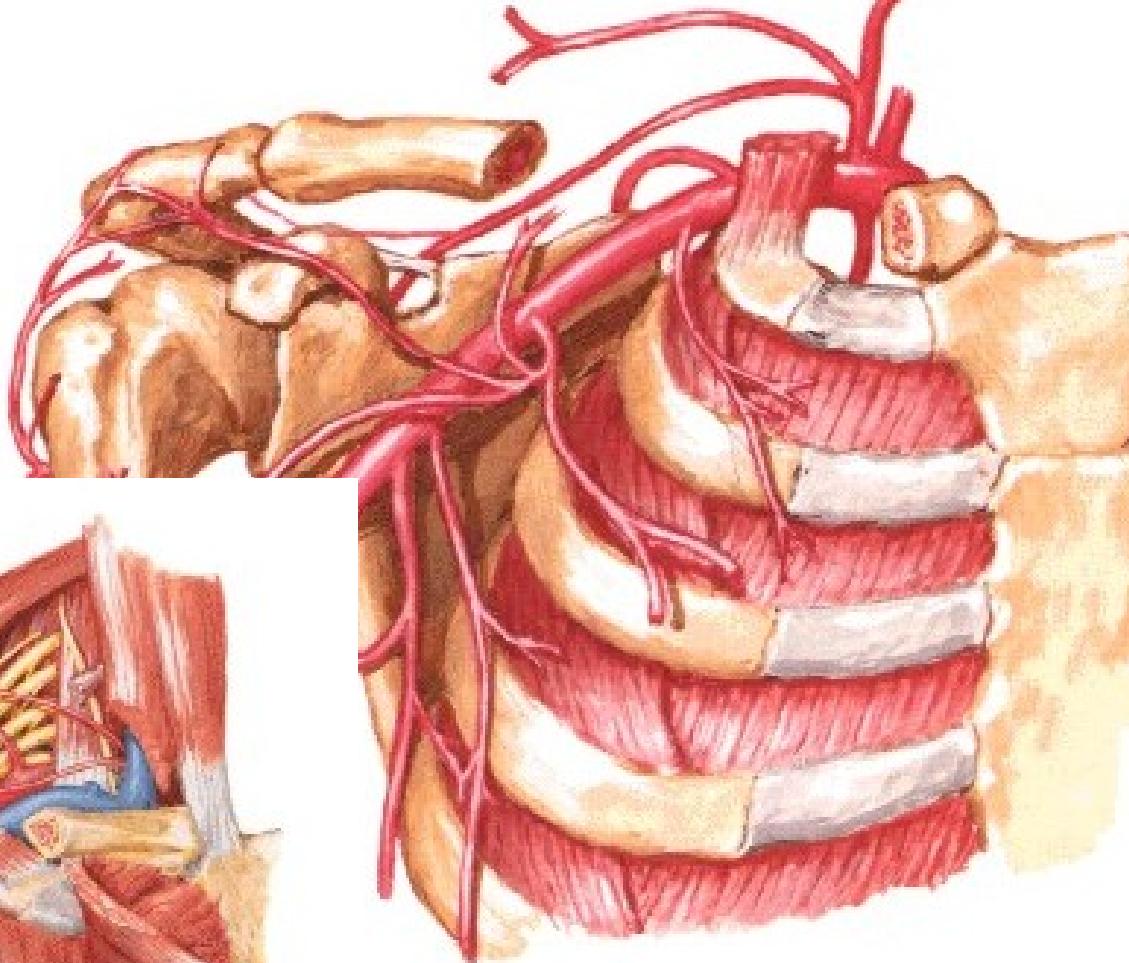
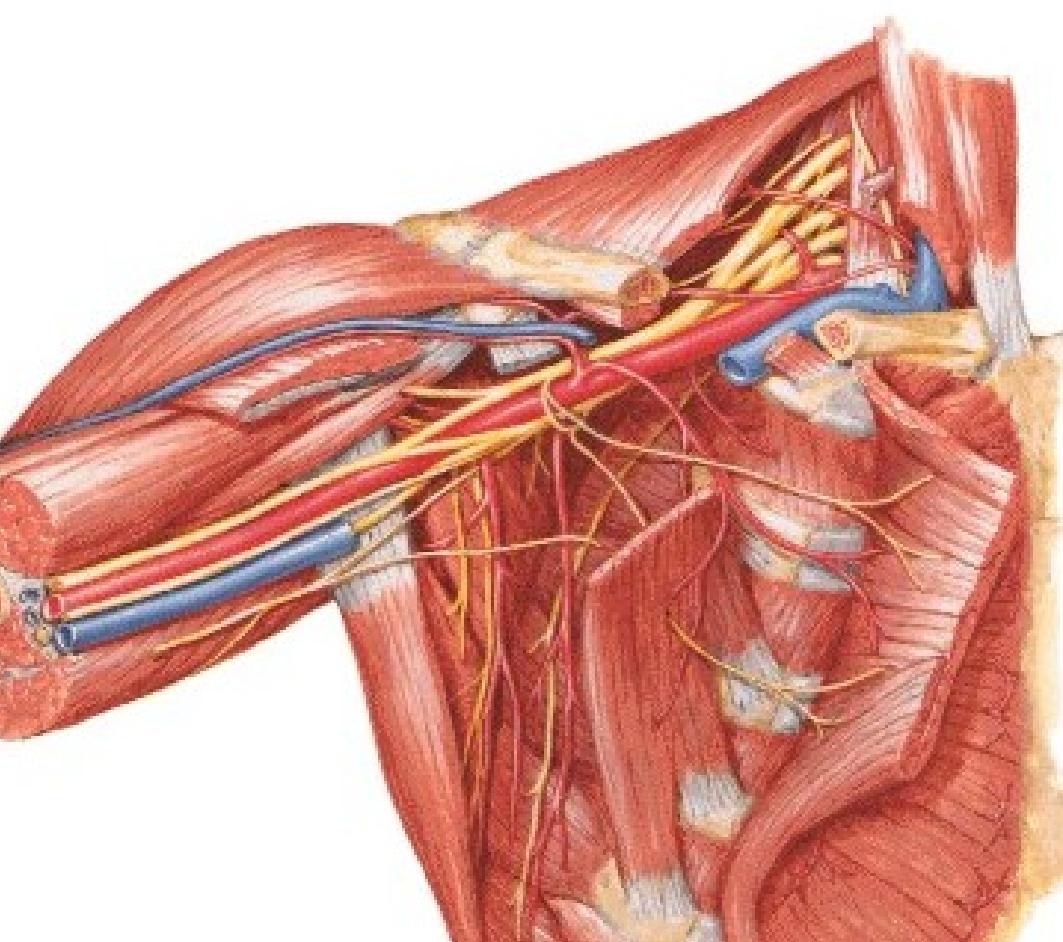


**Regio scapularis, reg. brachii post., reg. cubiti post.,  
reg. antebrachii post., dorsum manus**

# **Regio axillaris**

# AXILLA

- inlet
- 4 sides
- floor

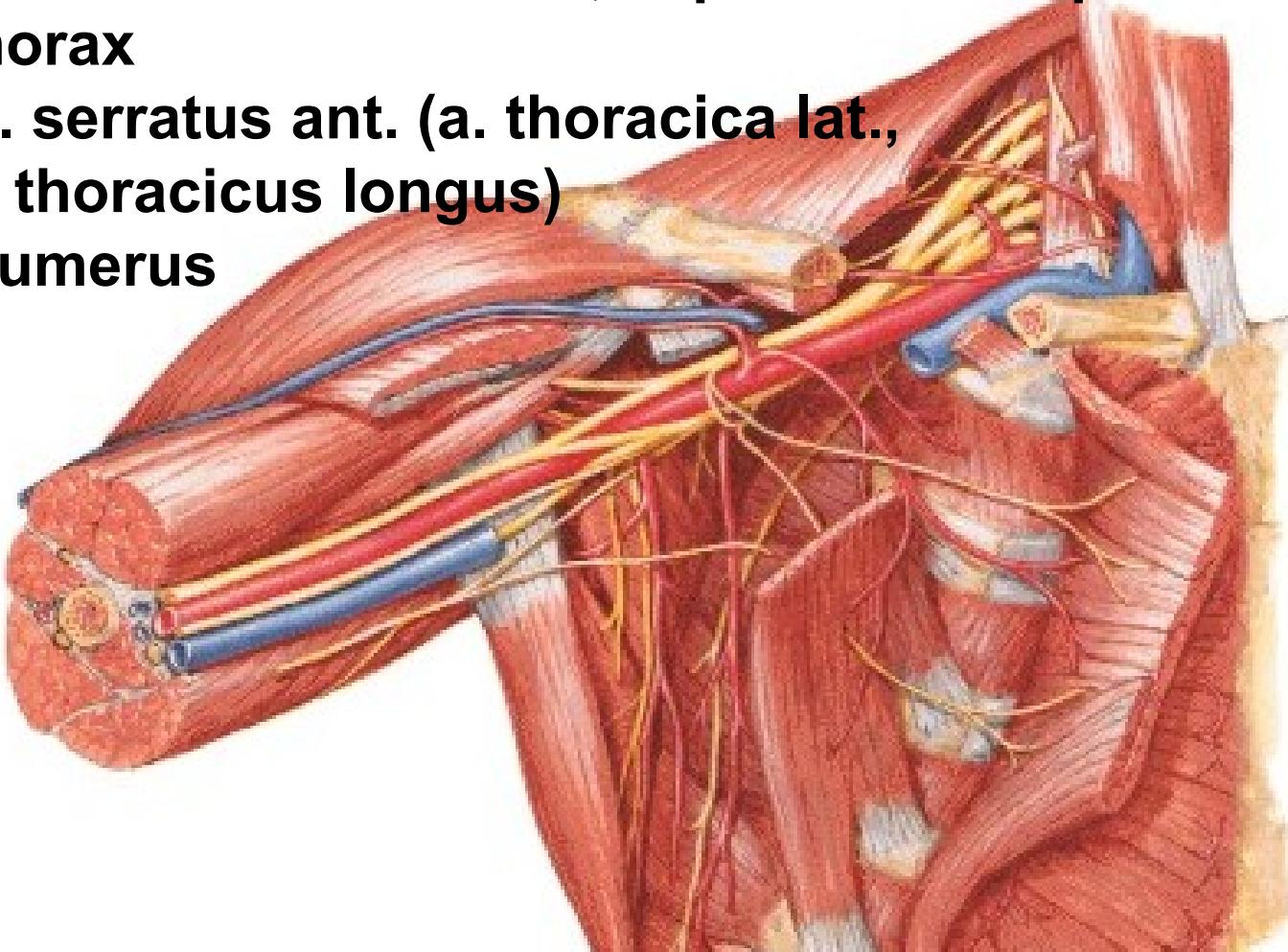


**Anterior wall:** m. pectoralis major (n. pectoralis med. et lat.)  
m. pectoralis minor (n. pectoralis med.)  
m. subclavius (n. subclavius)  
fascia clavipectoralis  
a. thoracoacromialis, a. pectoralis sup.

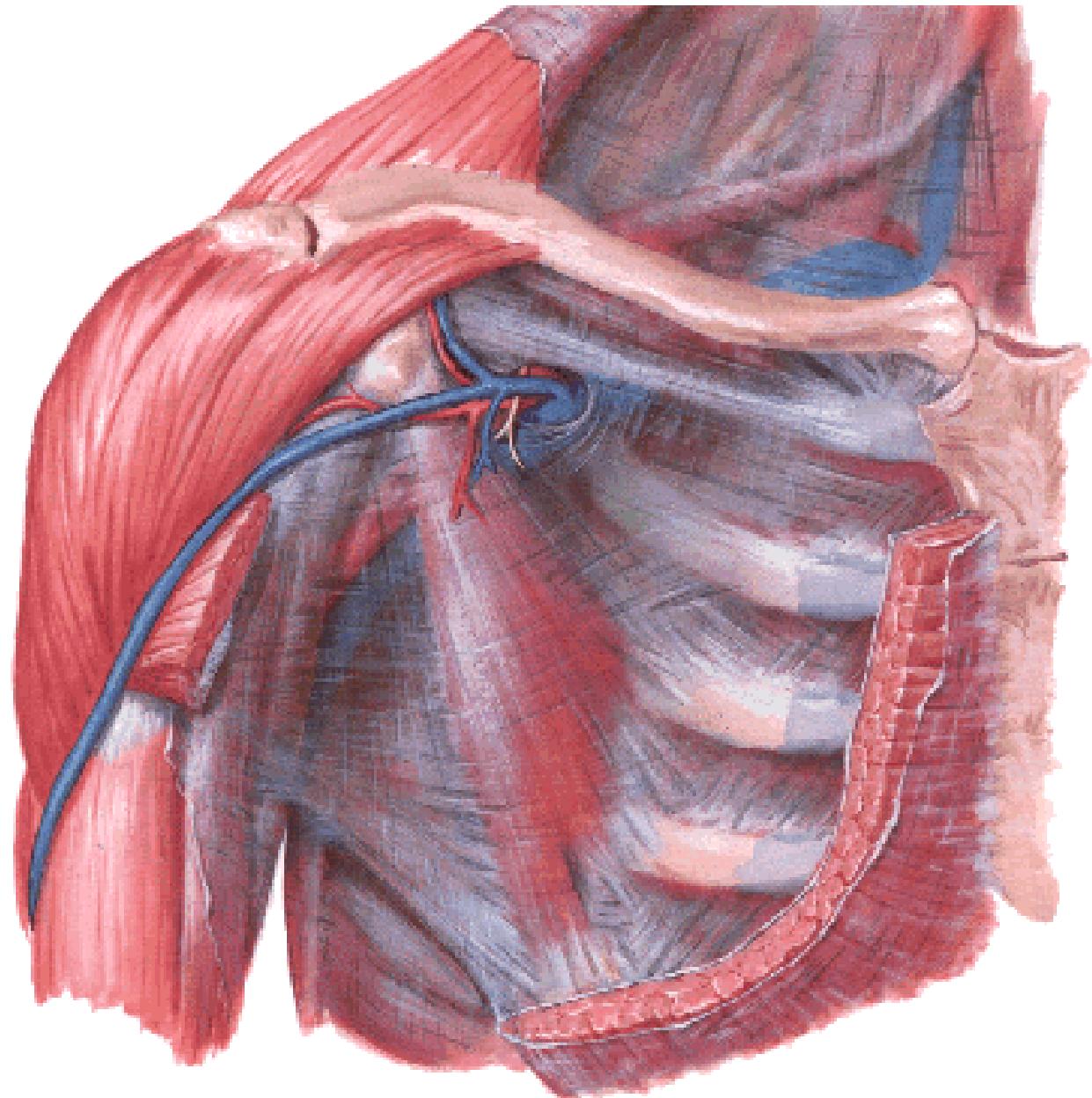
**Medial wall: thorax**

m. serratus ant. (a. thoracica lat.,  
n. thoracicus longus)

**Lateral wall: humerus**



# Fascia clavipectoralis



# Posterior wall: m. subscapularis, m. latissimus dorsi

## – foramen omotricipitale (trilaterum):

m. teres minor

m. teres major

caput longum m. tricipitis

A. circumflexa scapulae

## - foramen humerotricipitale

(quadrilaterum):

m. teres minor

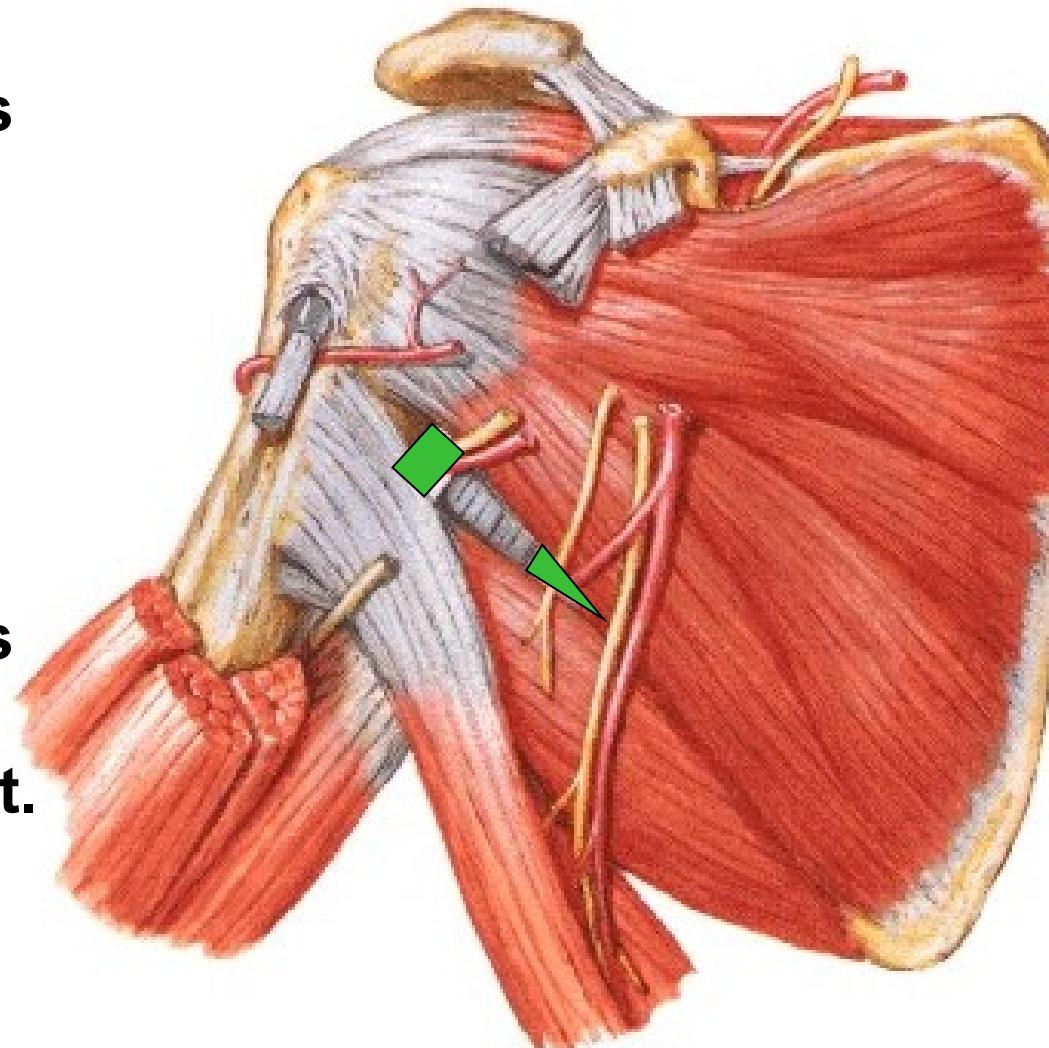
m. teres major

caput longum m. tricipitis

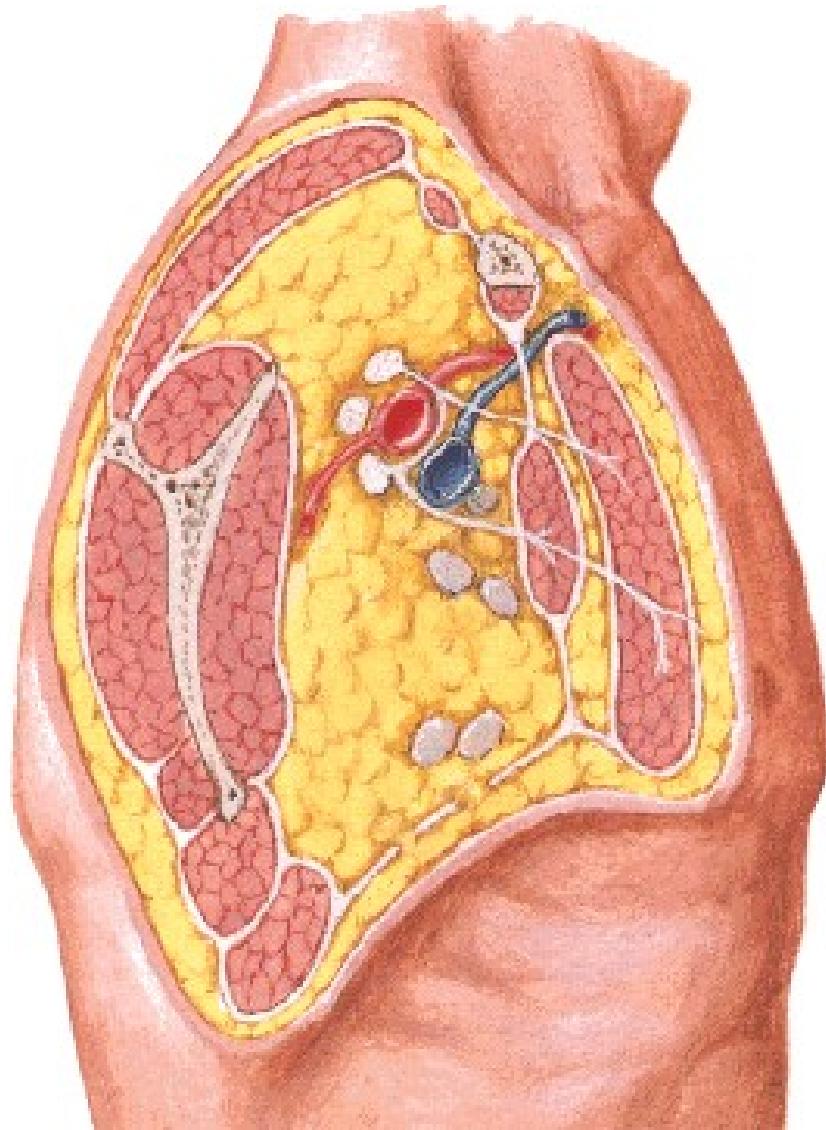
humerus

A. circumflexa humeri post.

N. axillaris



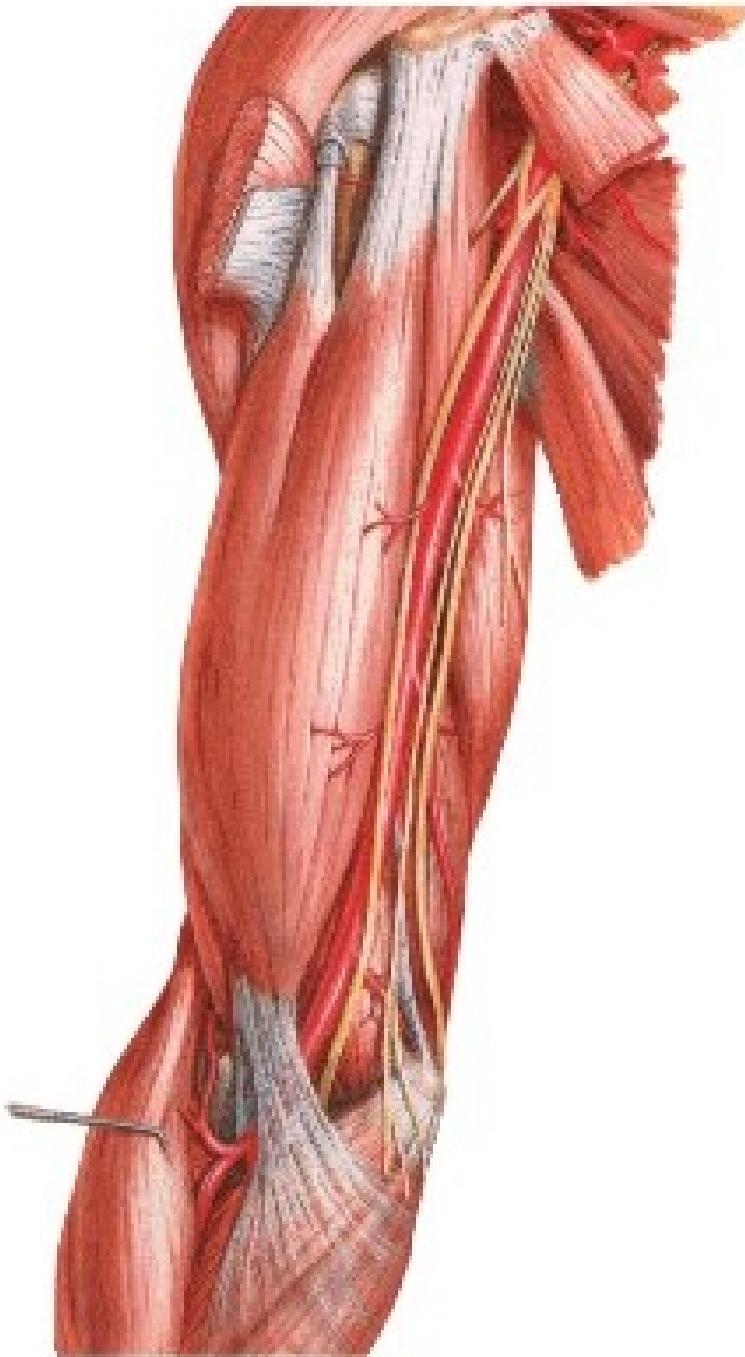
## Floor: Fascia axillaris



## **Contents:**

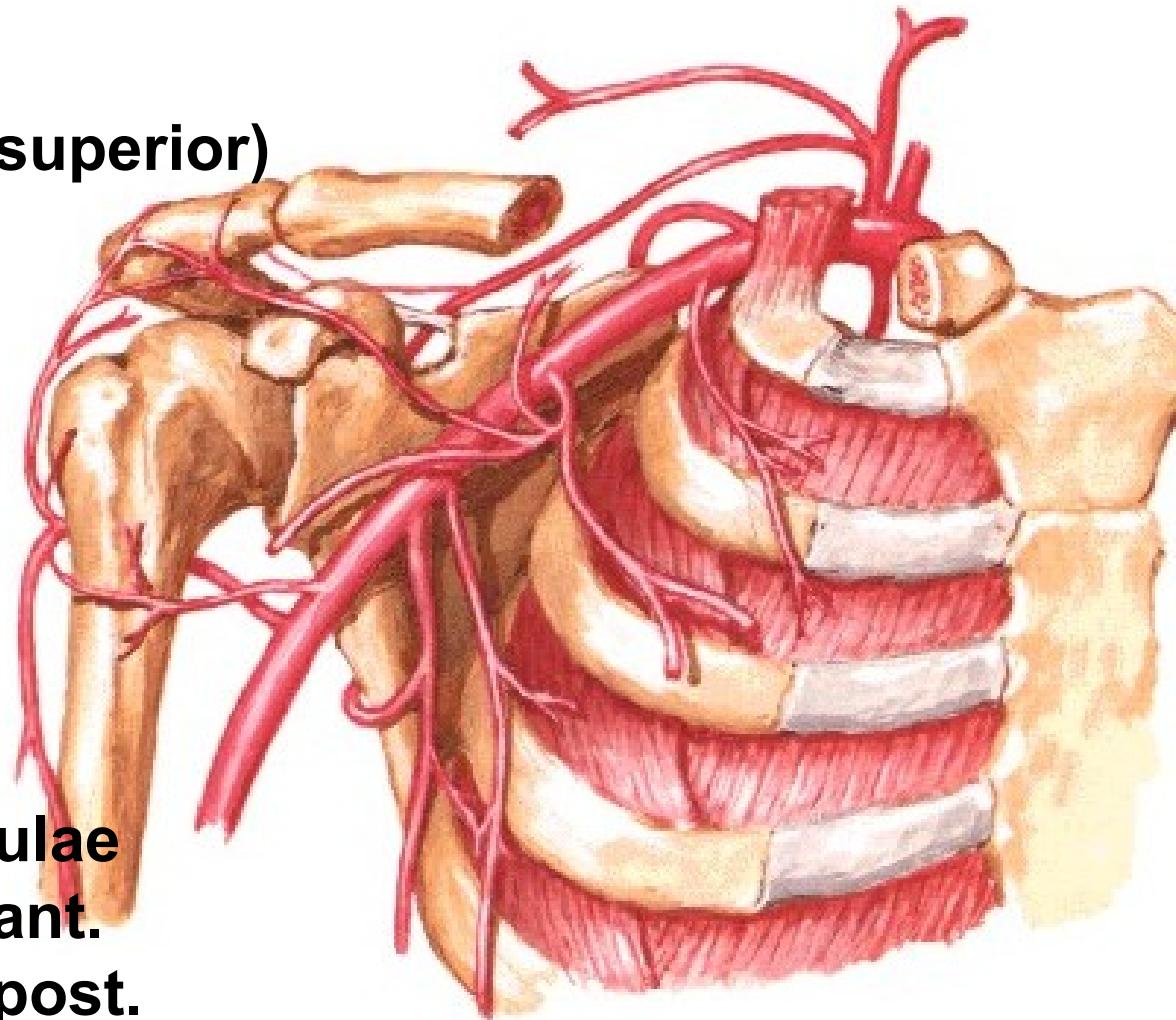
**M. biceps brachii**

**M. coracobrachialis**



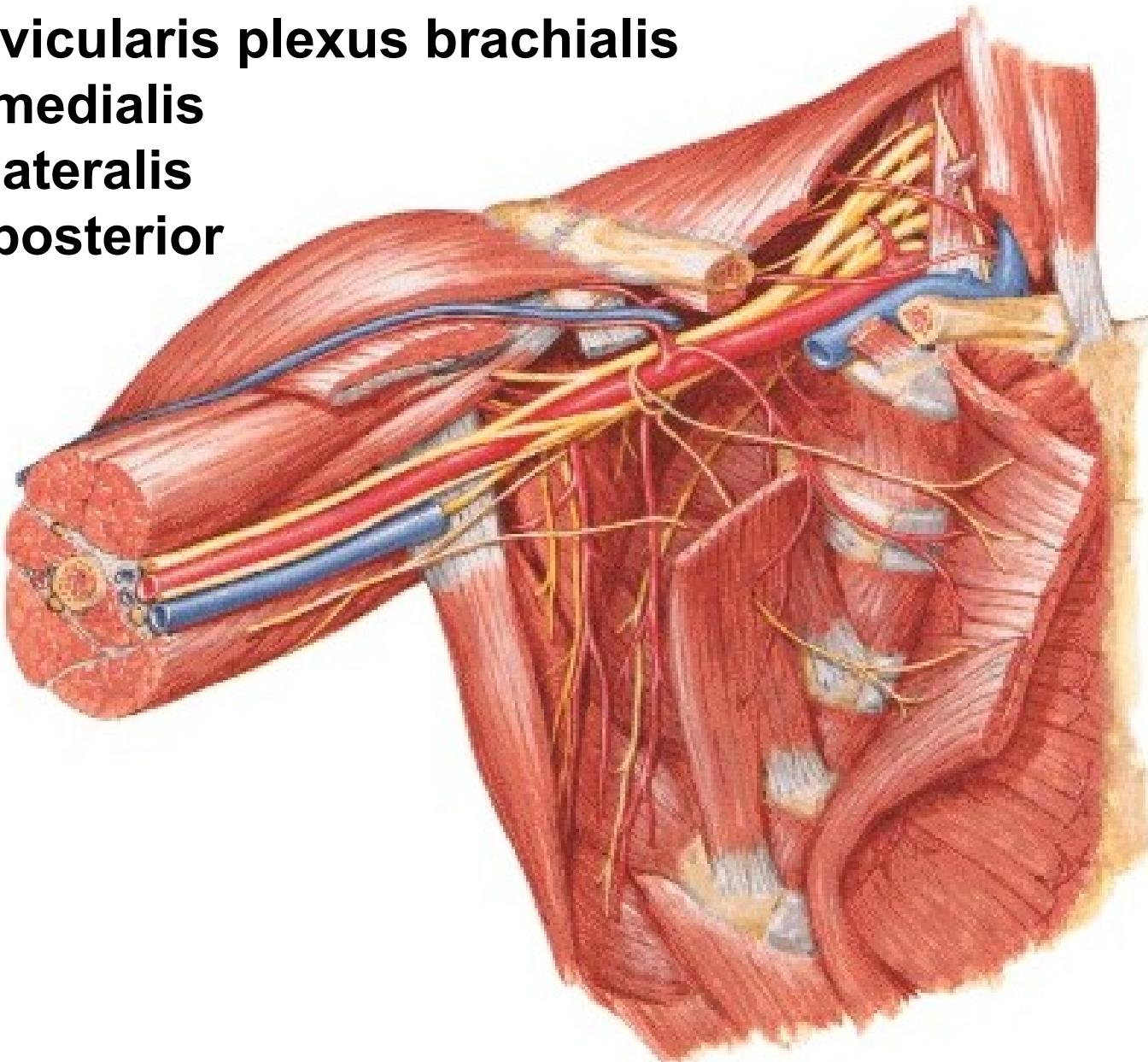
# A. axillaris

- rr. subscapulares
- a. thoracica suprema (superior)
- a. thoracoacromialis
  - r. deltoideus
  - r. acromialis
  - rr. pectorales
- a. thoracica lateralis
  - rr. mammarii lat.
- a. subscapularis
  - a. thoracodorsalis
  - a. circumflexa scapulae
- a. circumflexa humeri ant.
- a. circumflexa humeri post.



## **Pars infraclavicularis plexus brachialis**

- fasciculus medialis**
- fasciculus lateralis**
- fasciculus posterior**

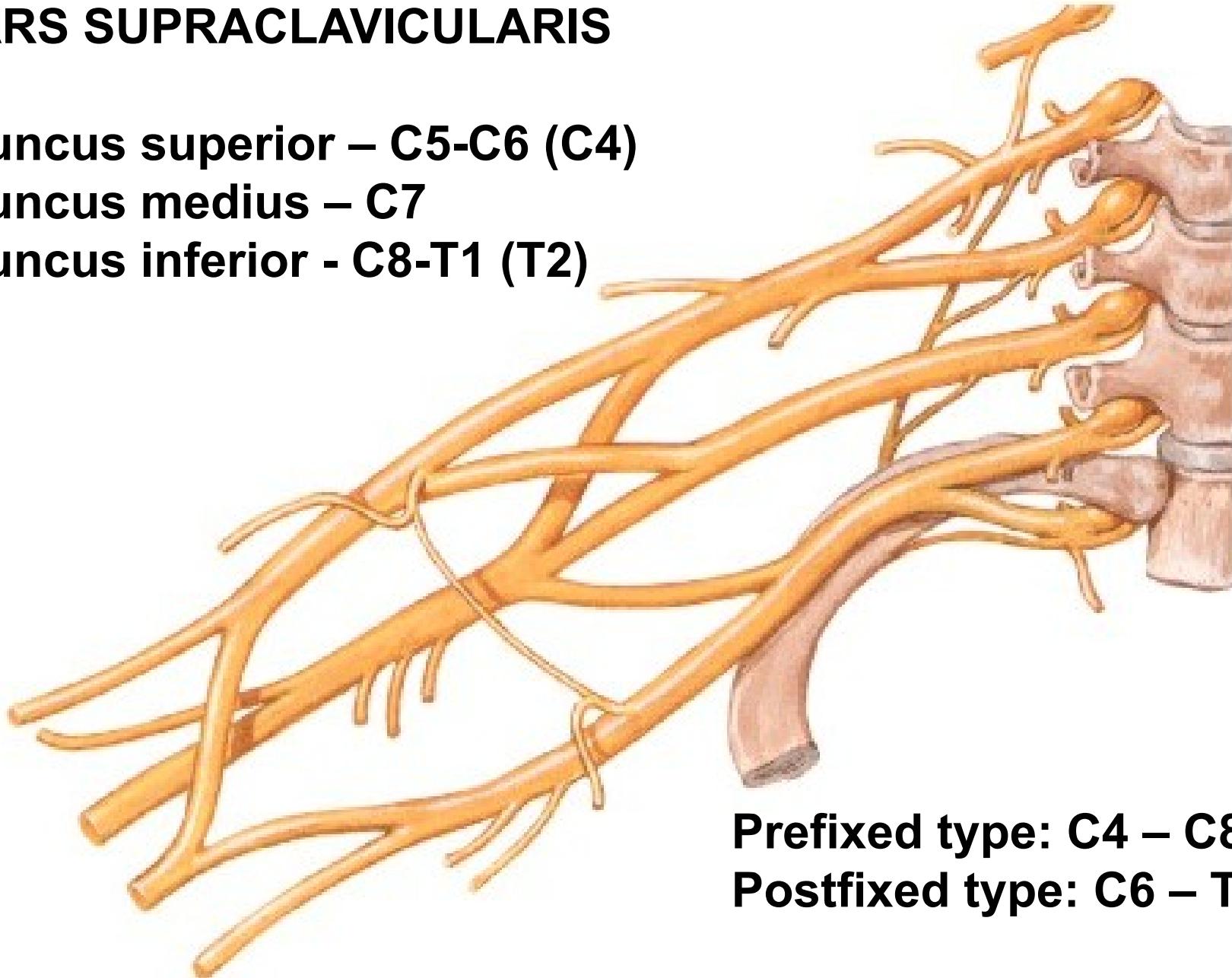


## PARS SUPRACLAVICULARIS

**Truncus superior – C5-C6 (C4)**

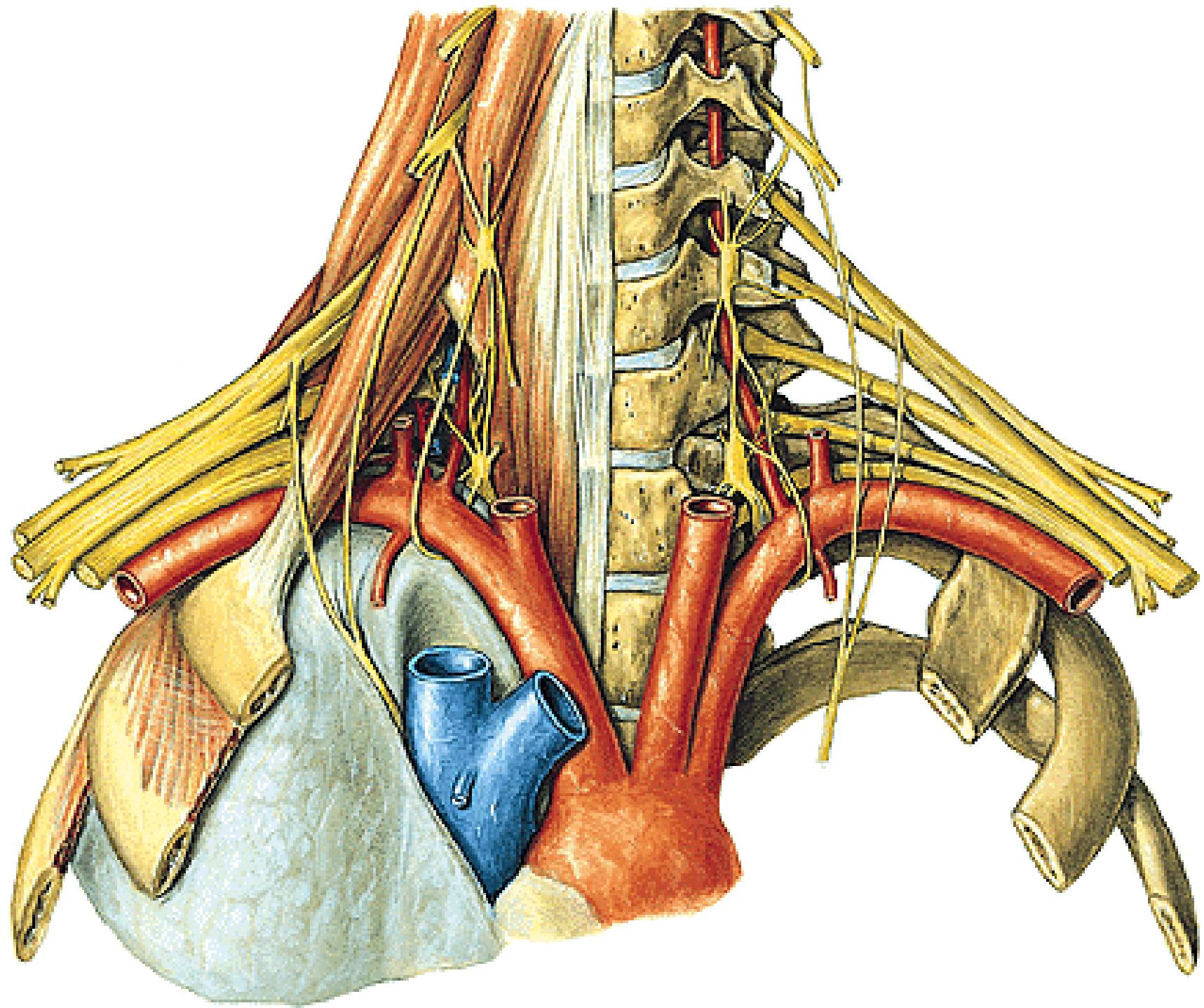
**Truncus medius – C7**

**Truncus inferior - C8-T1 (T2)**



**Prefixed type: C4 – C8**

**Postfixed type: C6 – T2**



# PARS SUPRACLAVICULARIS

**N. dorsalis scapulae (C4, C5)**

- mm. rhomboidei
- m. levator scapulae

**N. thoracicus longus (C5, C6, C7)**

- m. serratus ant.

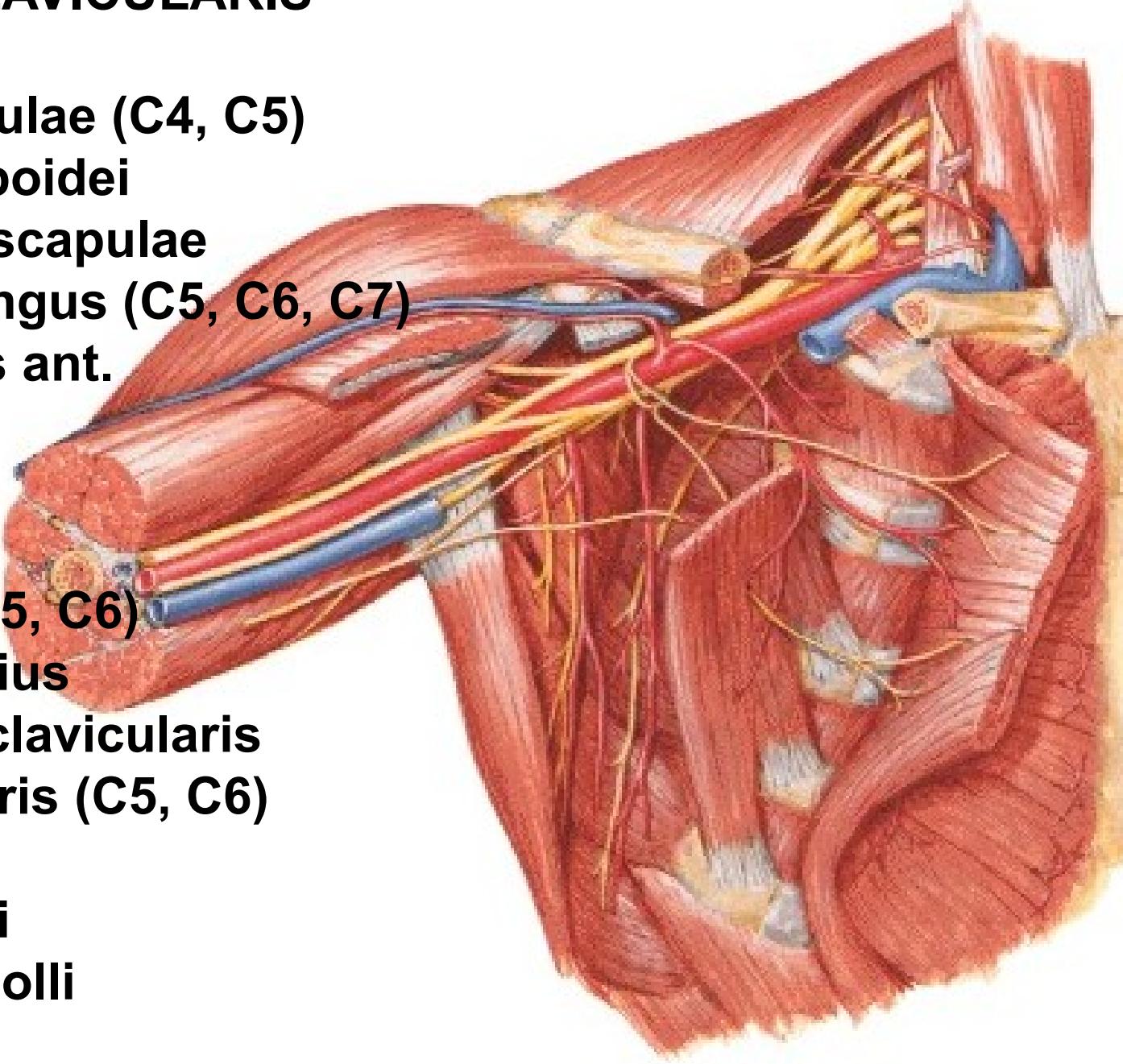
**N. subclavius (C5, C6)**

- m. subclavius
- art. sternoclavicularis

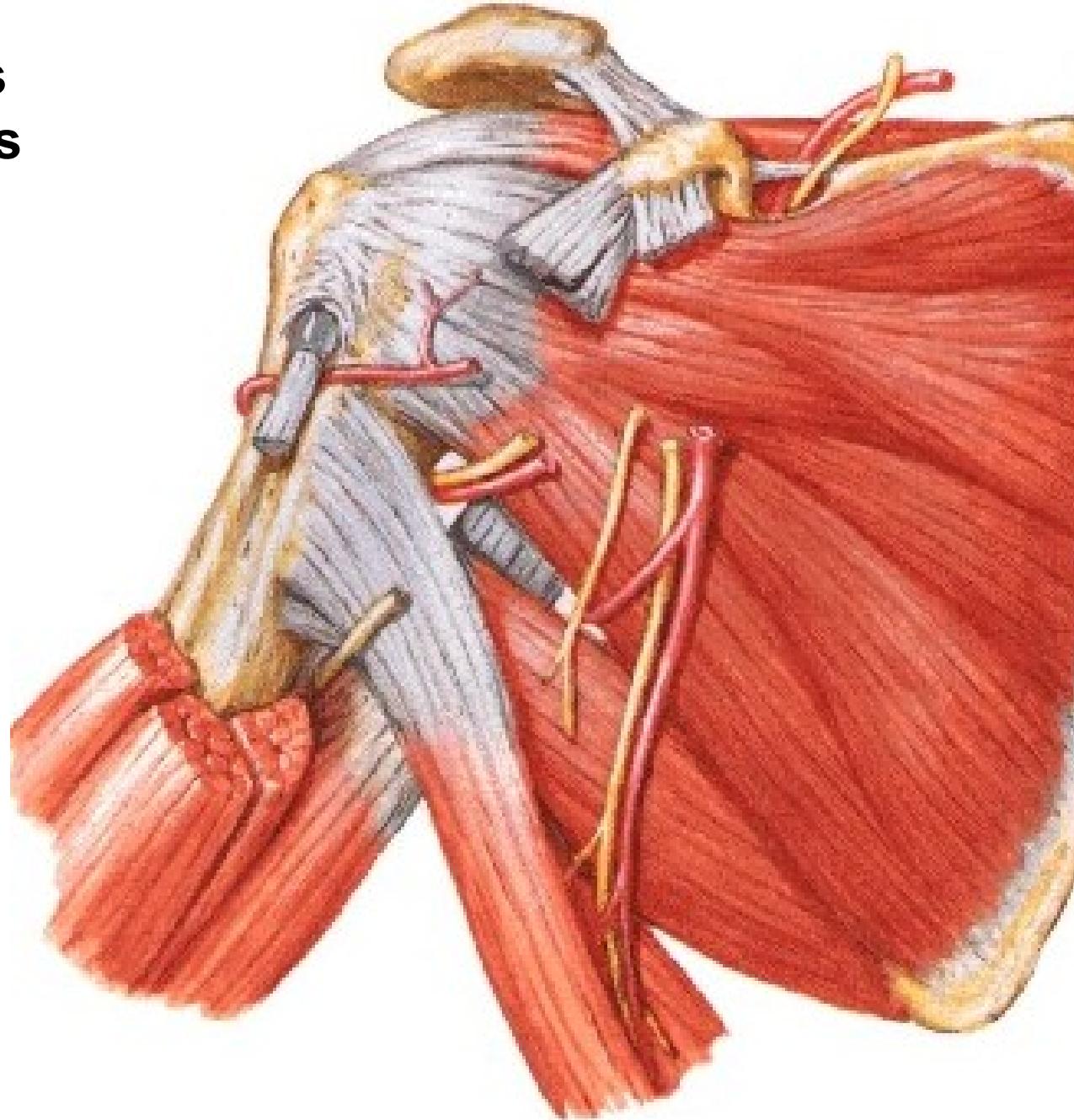
**N. suprascapularis (C5, C6)**

**Rr. musculares**

- mm. scaleni
- m. longus colli



**N suprascapularis**  
**A. suprascapularis**



**N. pectoralis lateralis (C5, C6, C7)**

- mm. pectorales

**N. pectoralis medialis (C8, T1)**

- mm. pectorales

**N. subscapularis sup. (C5)**

- m. subscapularis

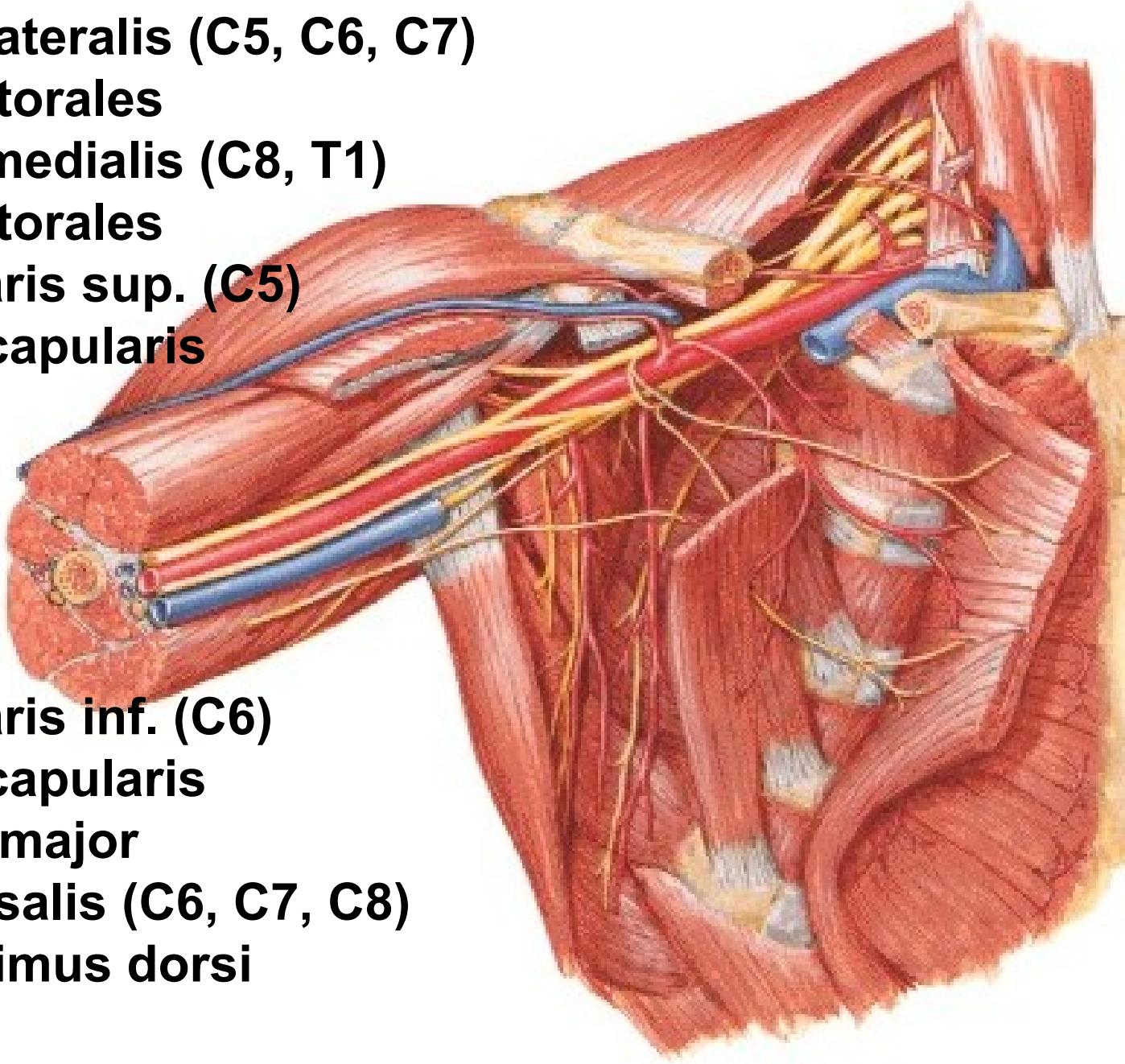
**N. subscapularis inf. (C6)**

- m. subscapularis

- m. teres major

**N. thoracodorsalis (C6, C7, C8)**

- m. latissimus dorsi



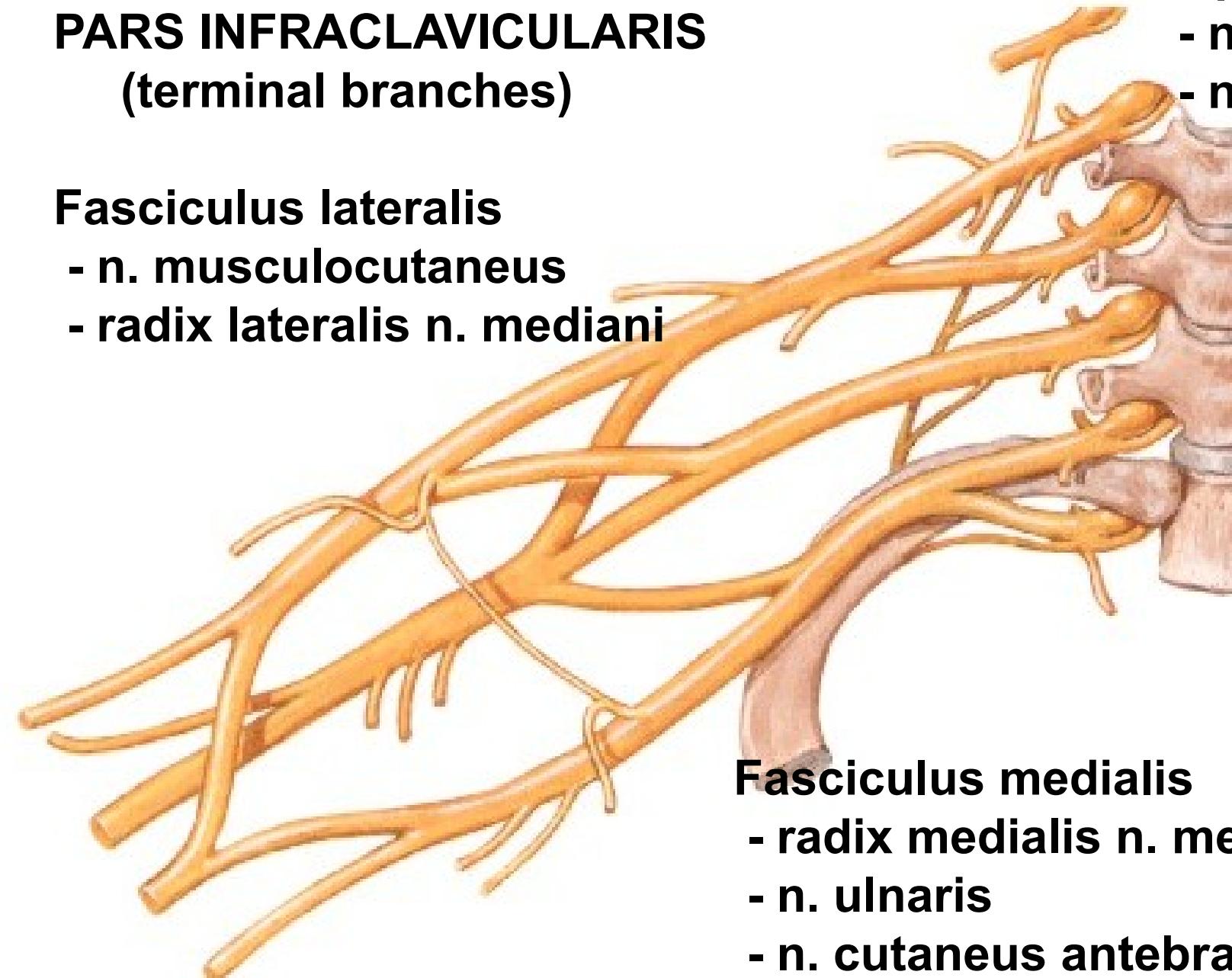
## PARS INFRACLAVICULARIS (terminal branches)

### Fasciculus lateralis

- n. musculocutaneus
- radix lateralis n. mediani

### Fasciculus posterior

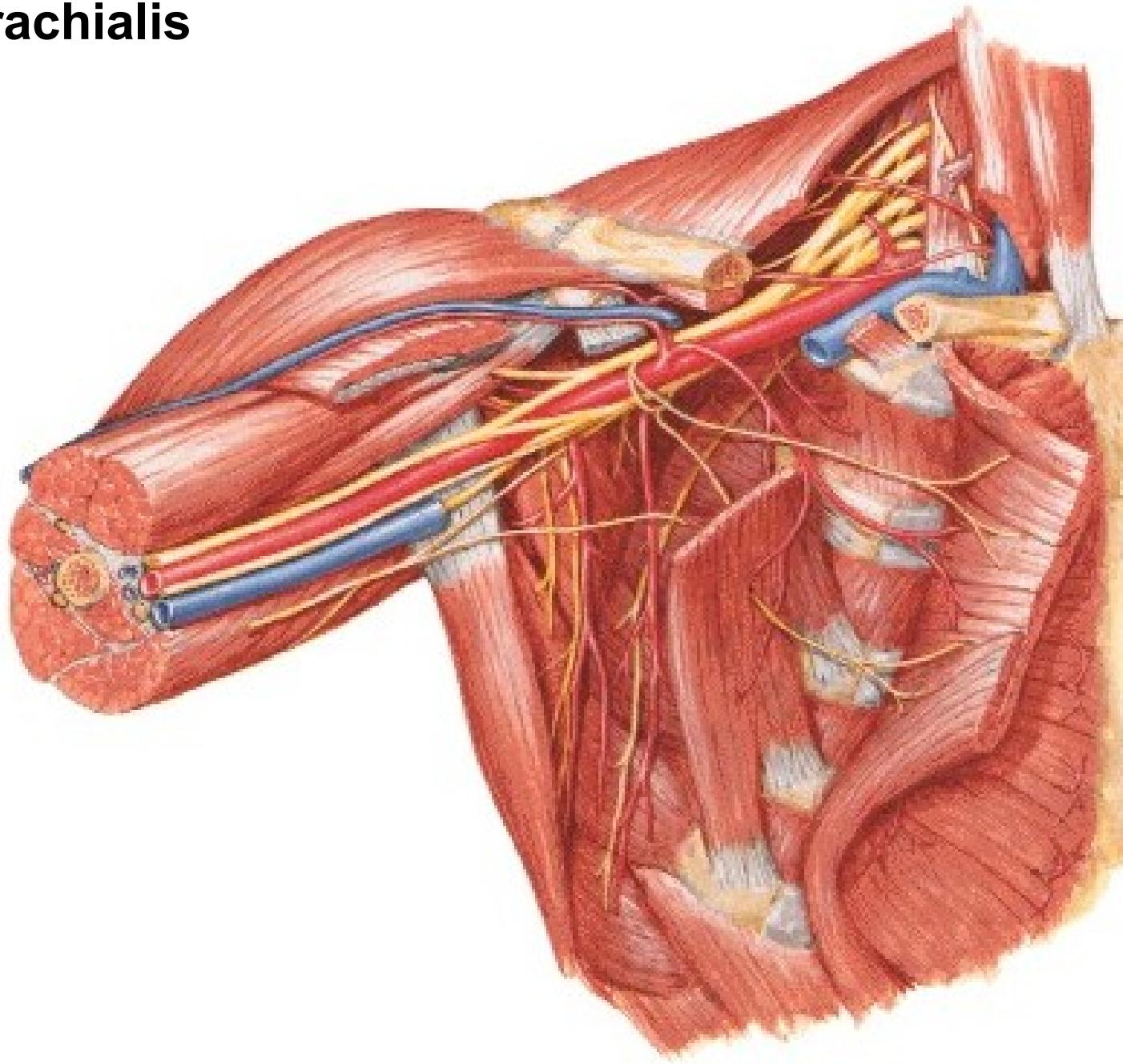
- n. axillaris
- n. radialis

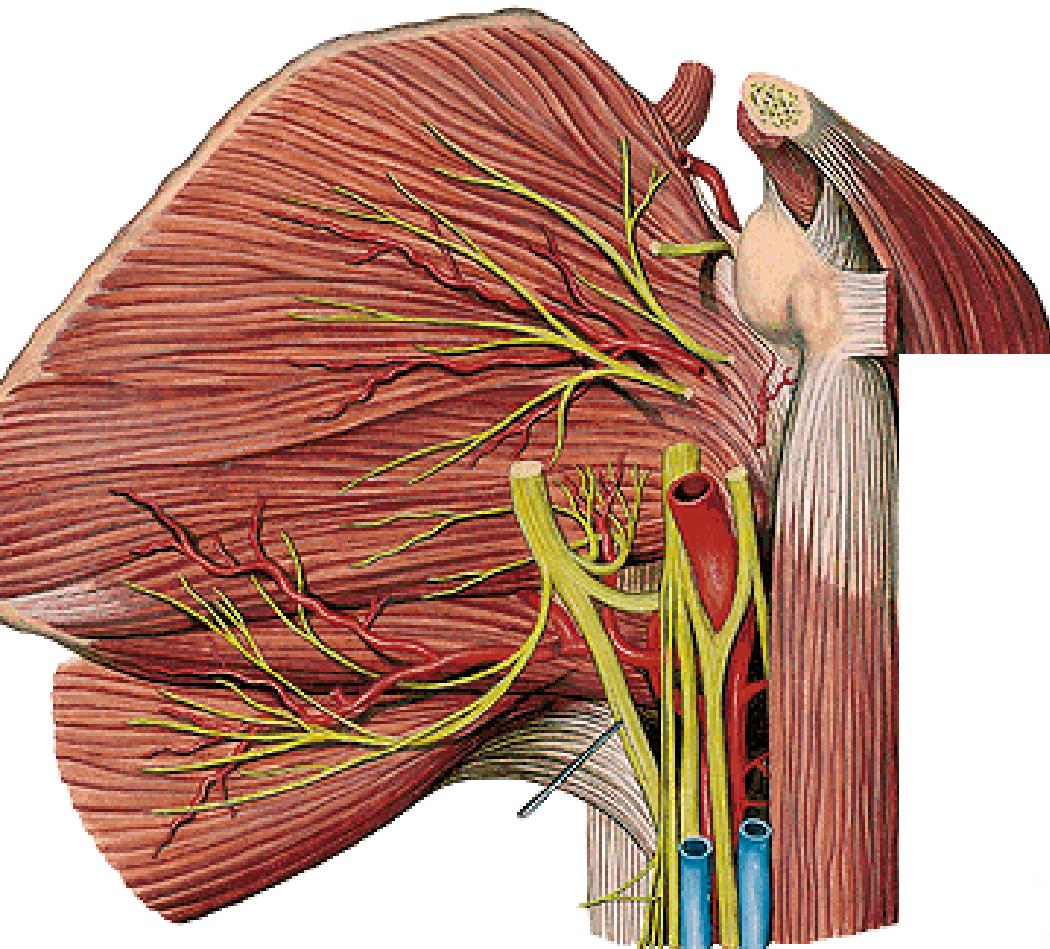


### Fasciculus medialis

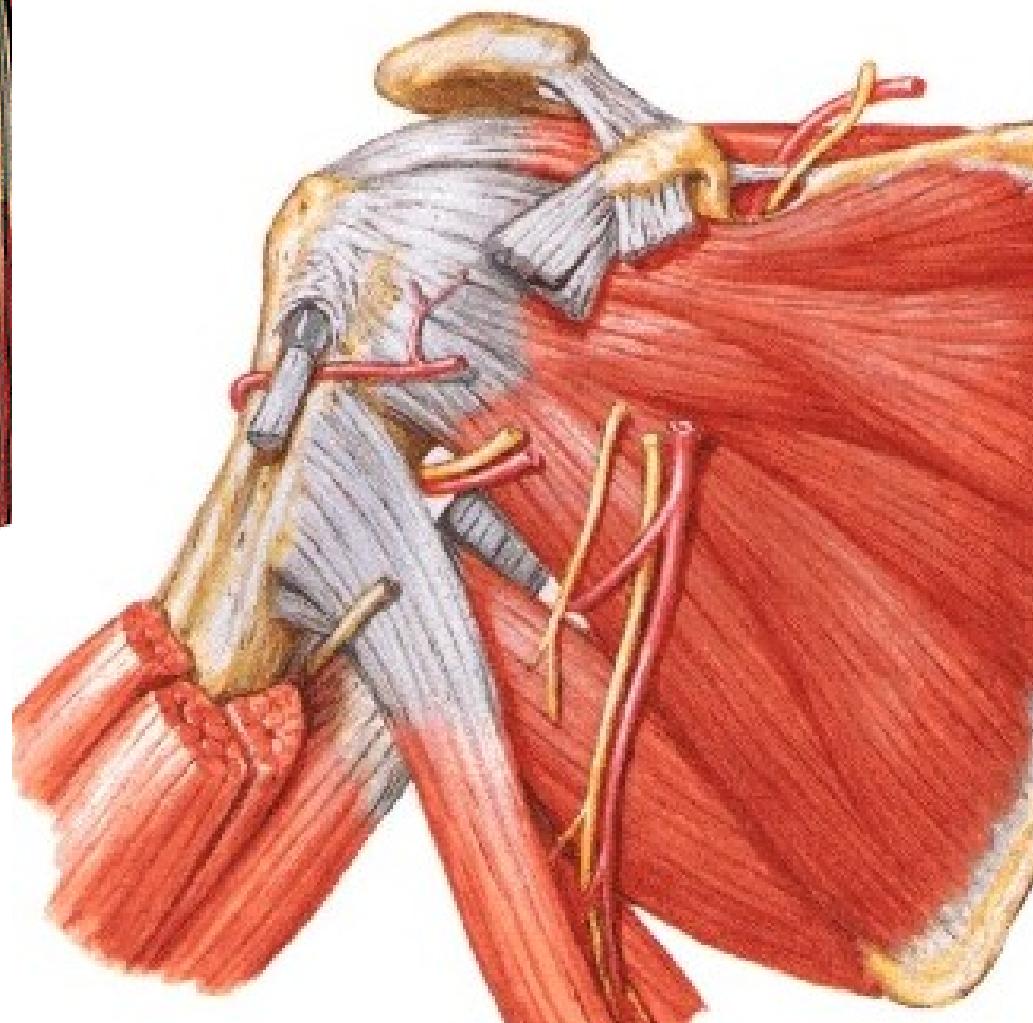
- radix medialis n. mediani
- n. ulnaris
- n. cutaneus antebrachii med.
- n. cutaneus brachii medialis

# **N. intercostobrachialis**





**N. axillaris**

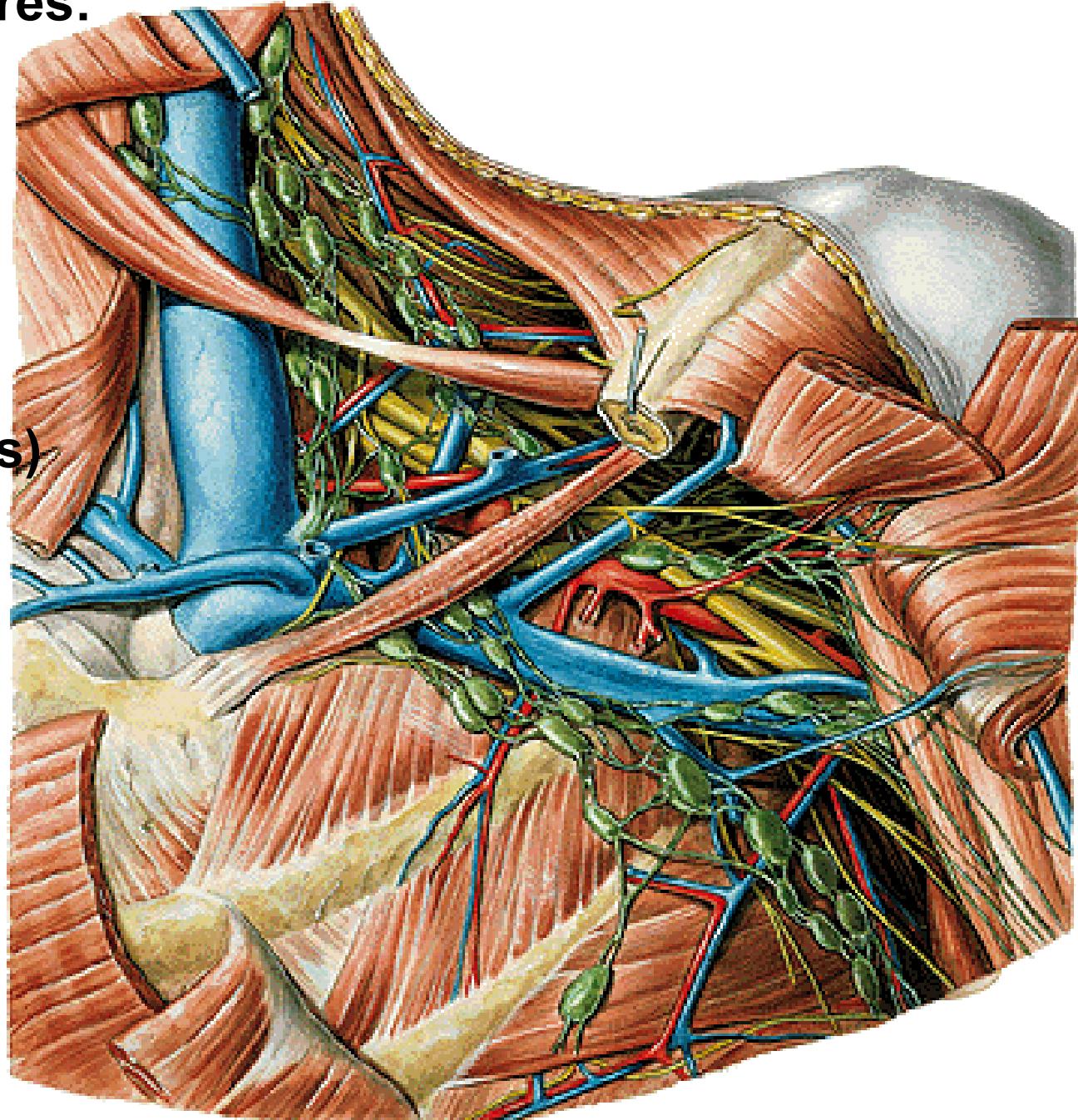


**N. radialis**

## Nodi lymph. axillares:

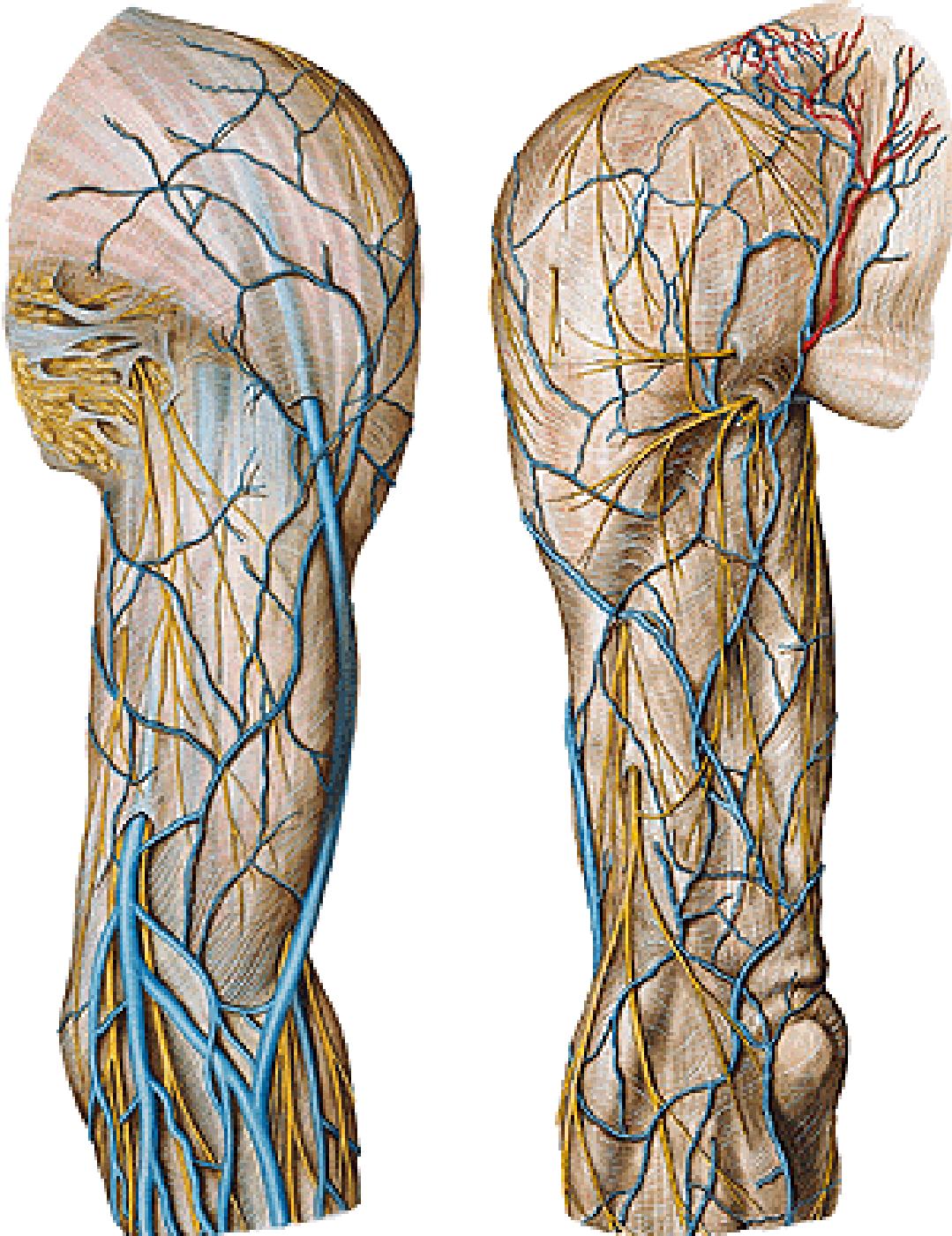
- laterales
- pectorales  
(Sorgius)
- subscapulares
- centrales
- apicales  
(infraclavulares)

→ tr. subclavius

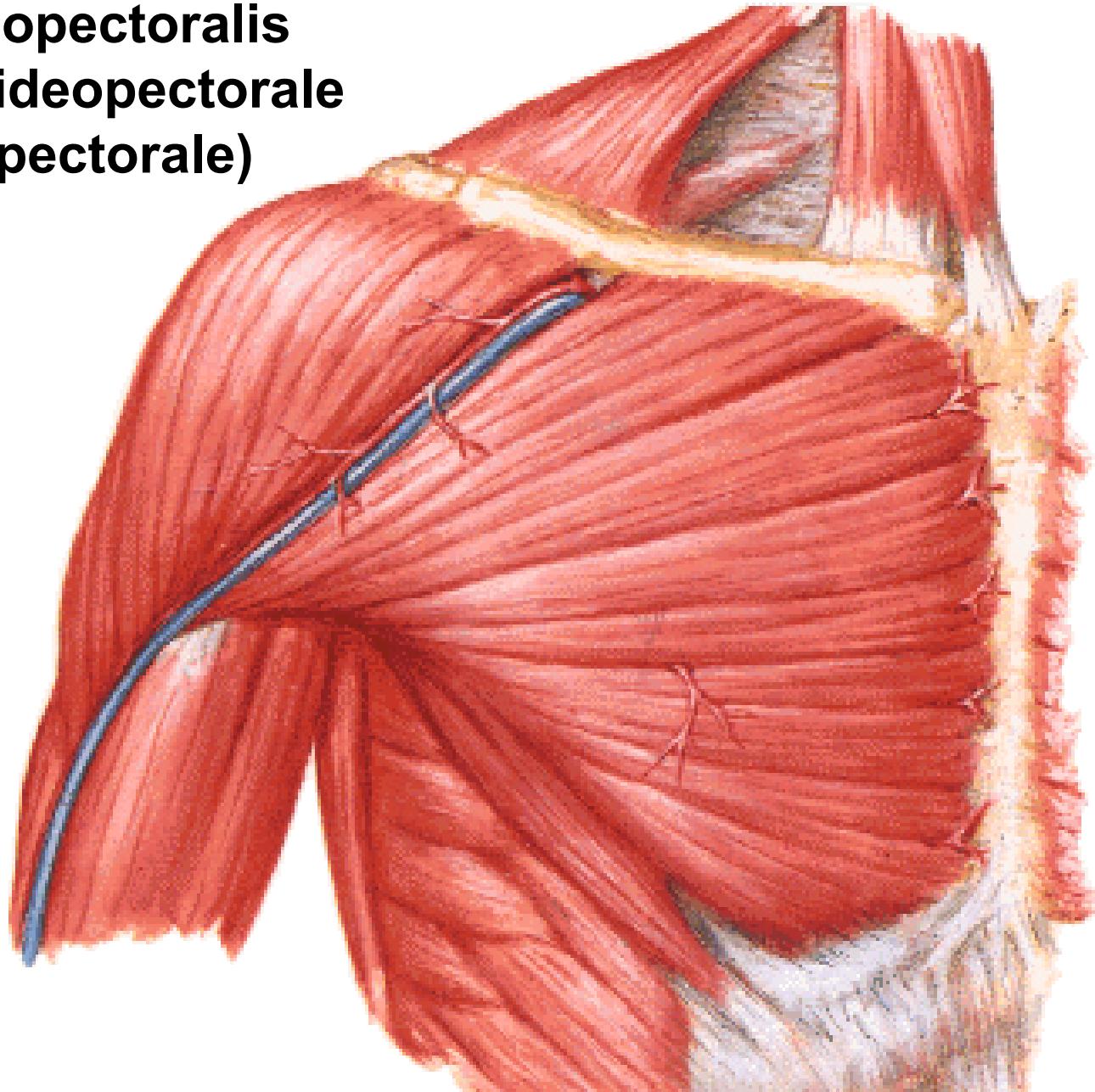


# **Regio deltoidea**

**N. cut. brachii lat. sup.**  
**Nn. supraclaviculares**  
**V. cephalica**

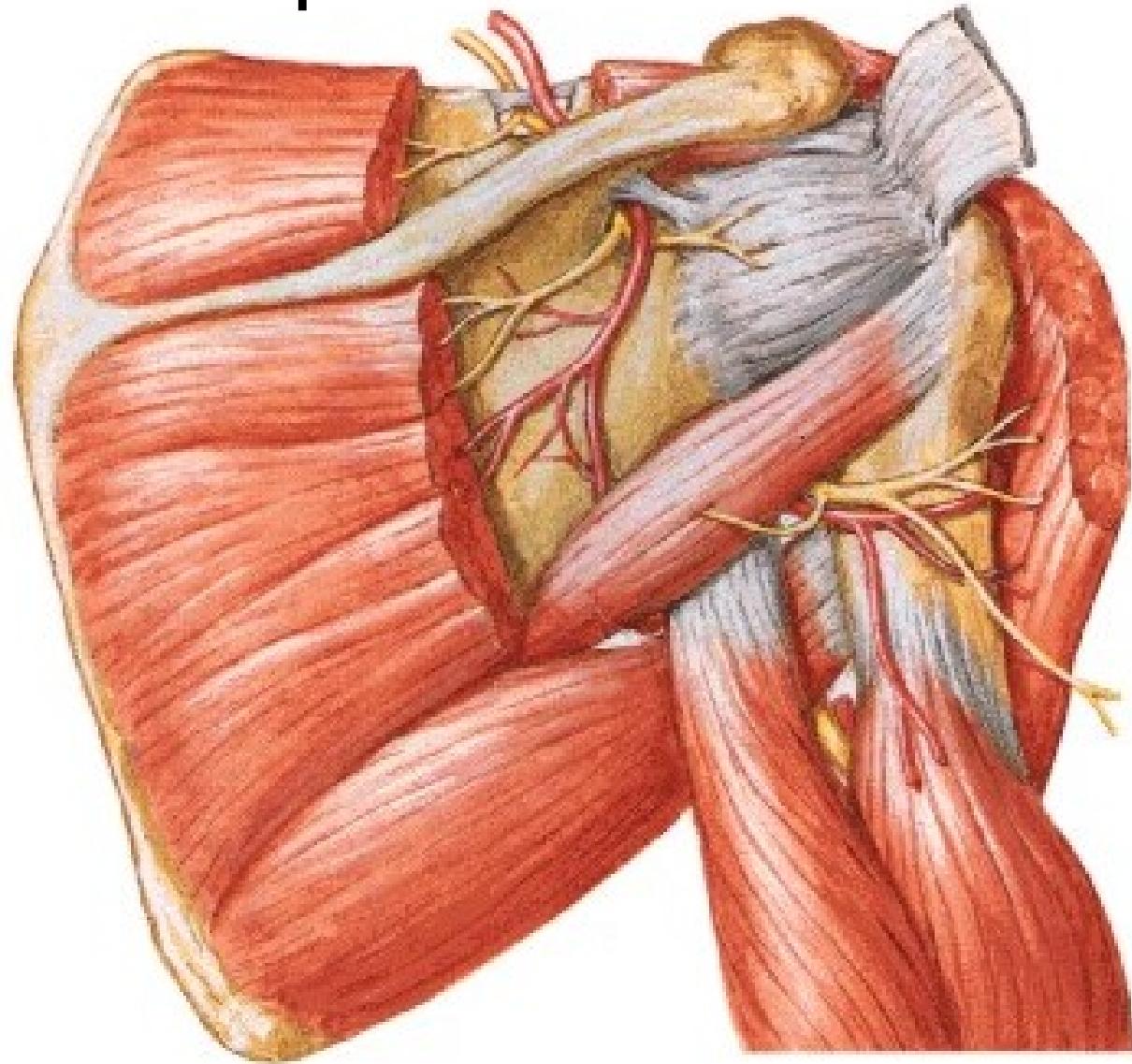


**Sulcus deltoideopectoralis**  
**Trigonum deltoideopectorale**  
**(clavipectorale)**

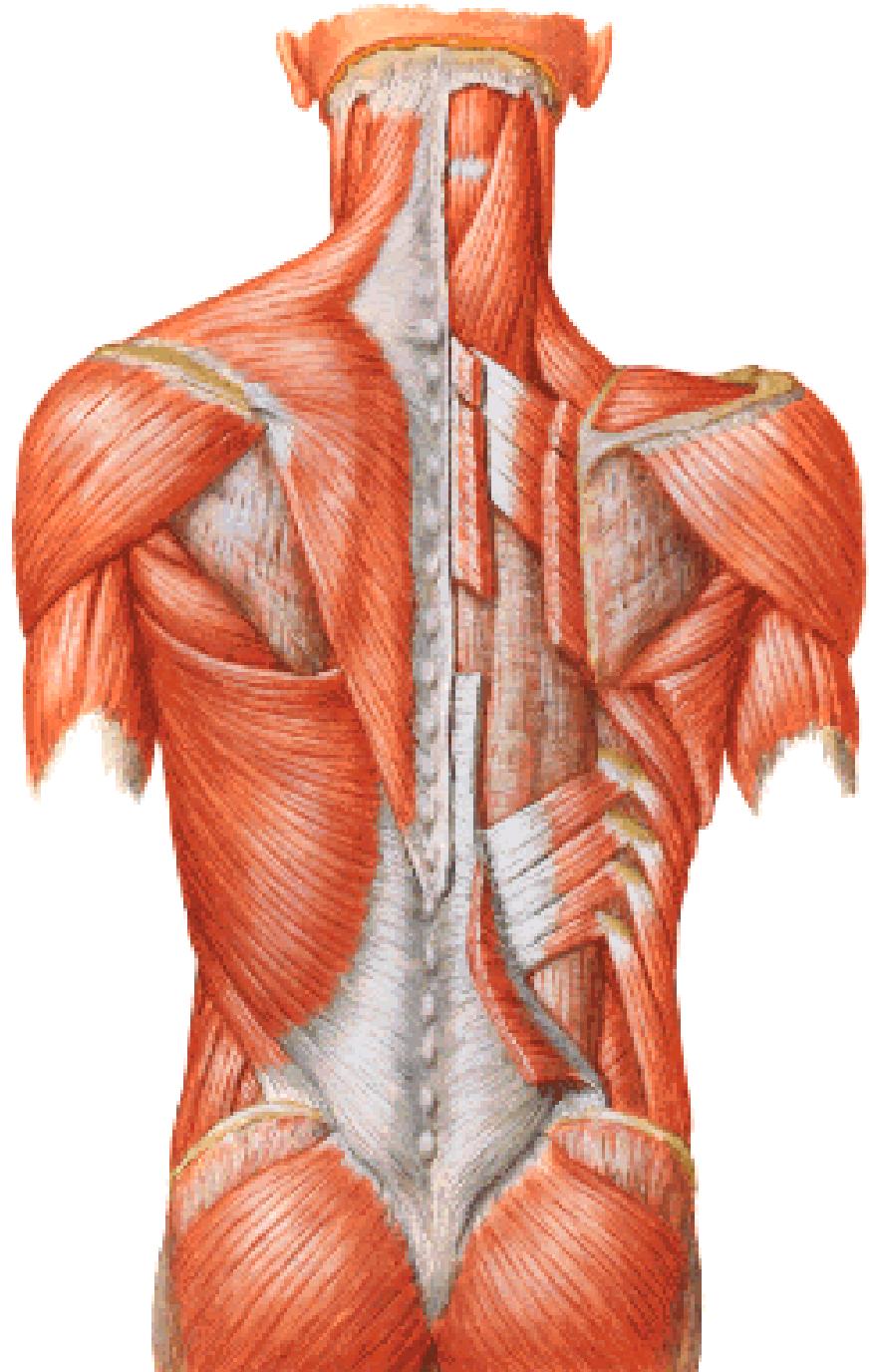


**M. deltoideus (n. axillaris)**

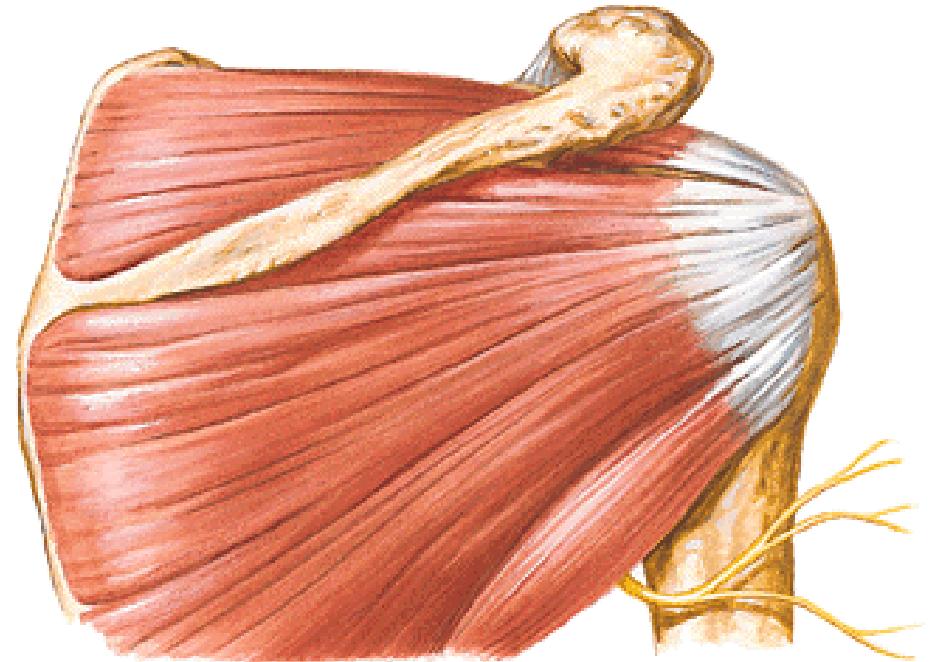
**A. circumflexa humeri post. et ant.**



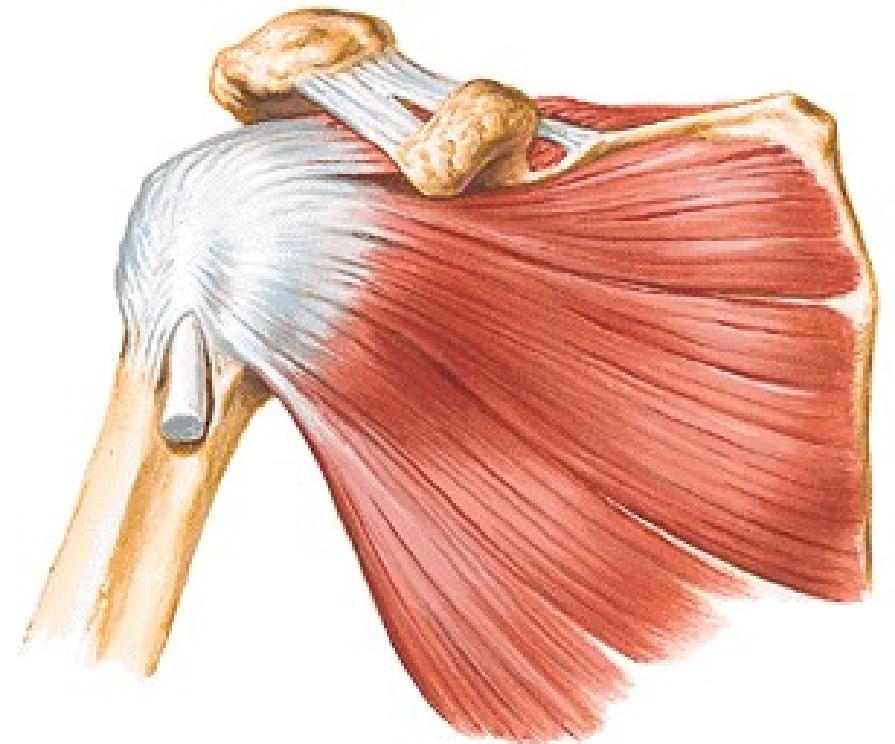
**Regio scapularis**



**M. supraspinatus**  
**M. infraspinatus**  
**M. teres minor**  
**M. teres major**

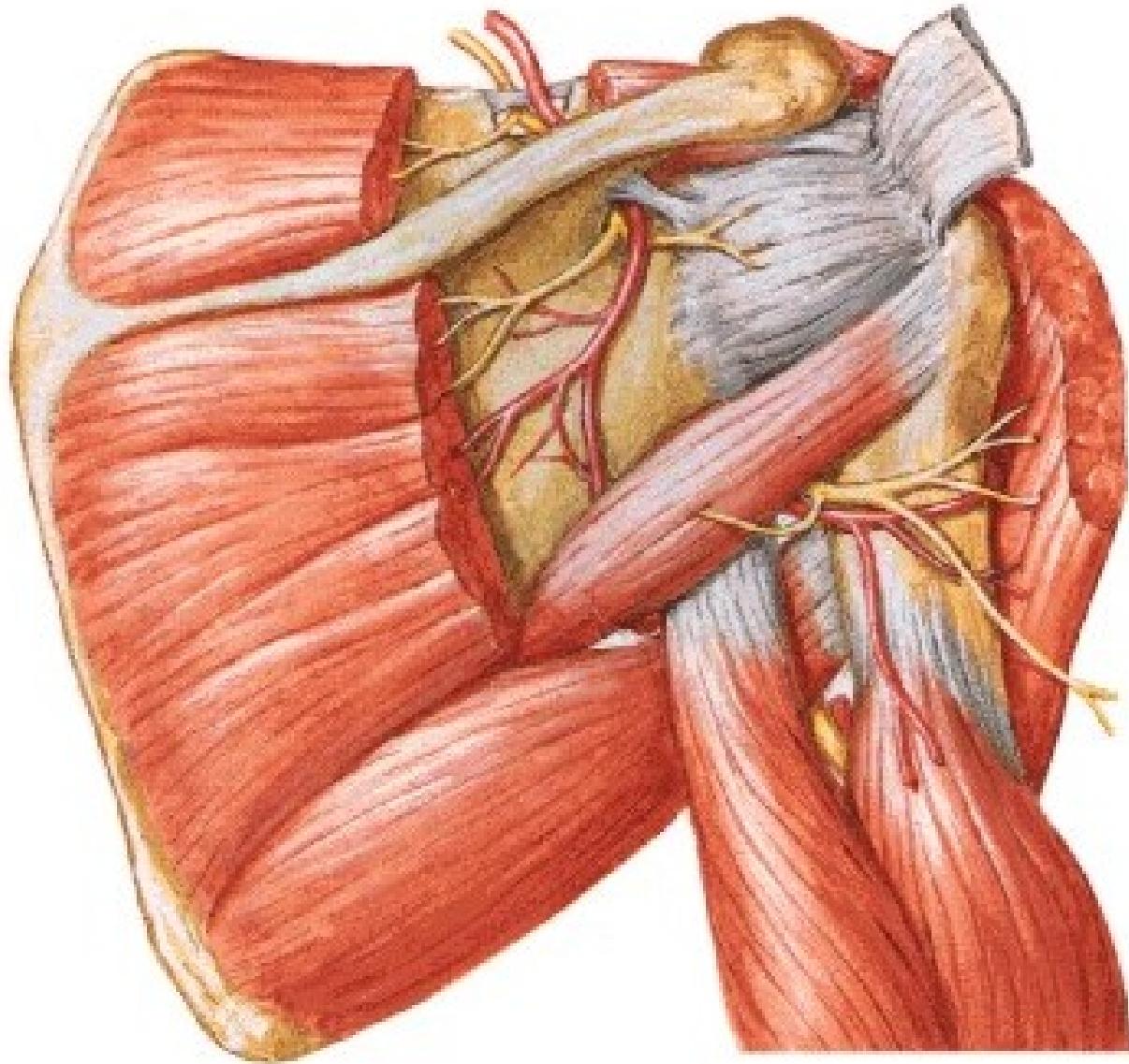


**M. subscapularis**



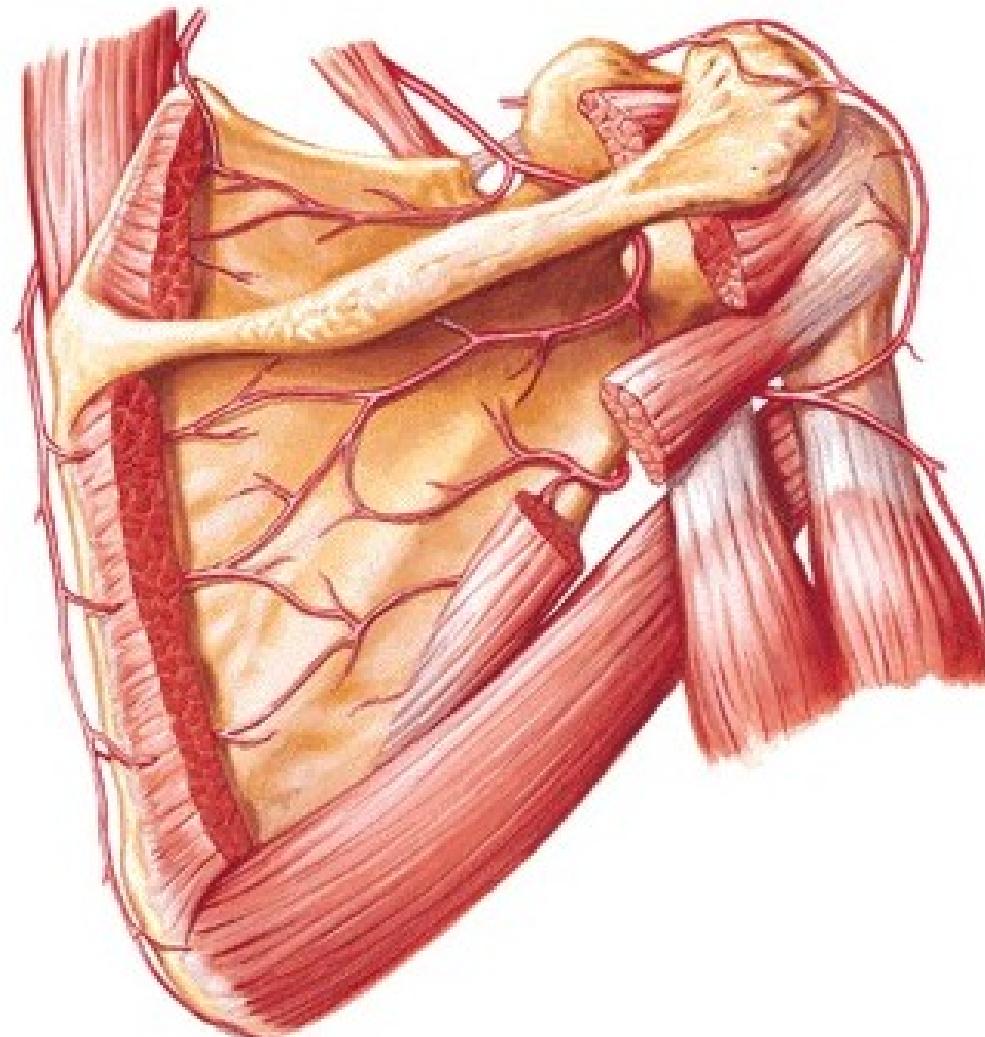
**N. suprascapularis**

**N. axillaris**

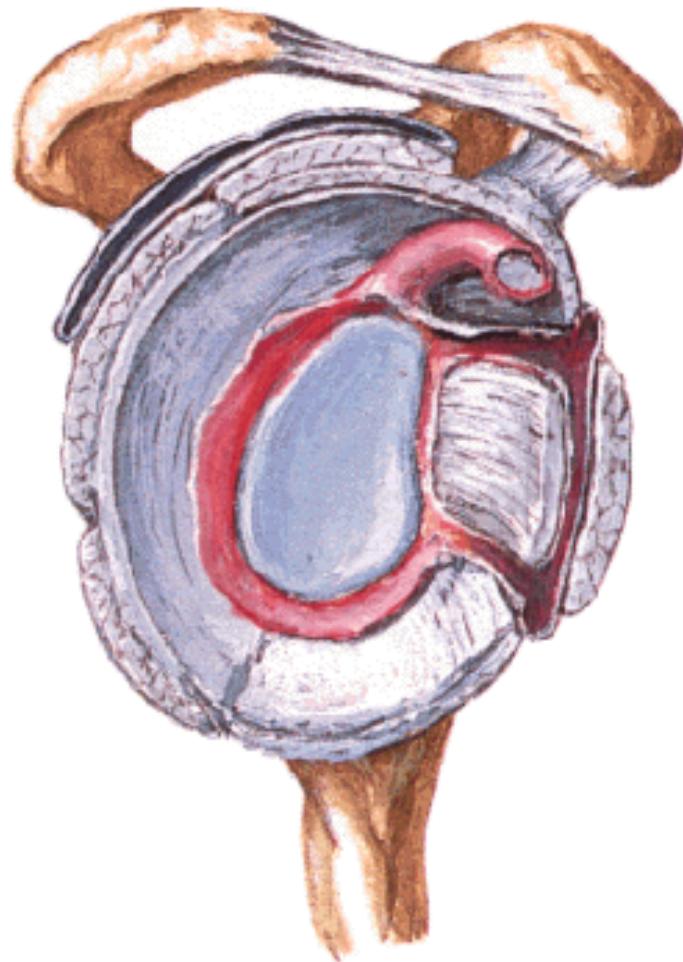
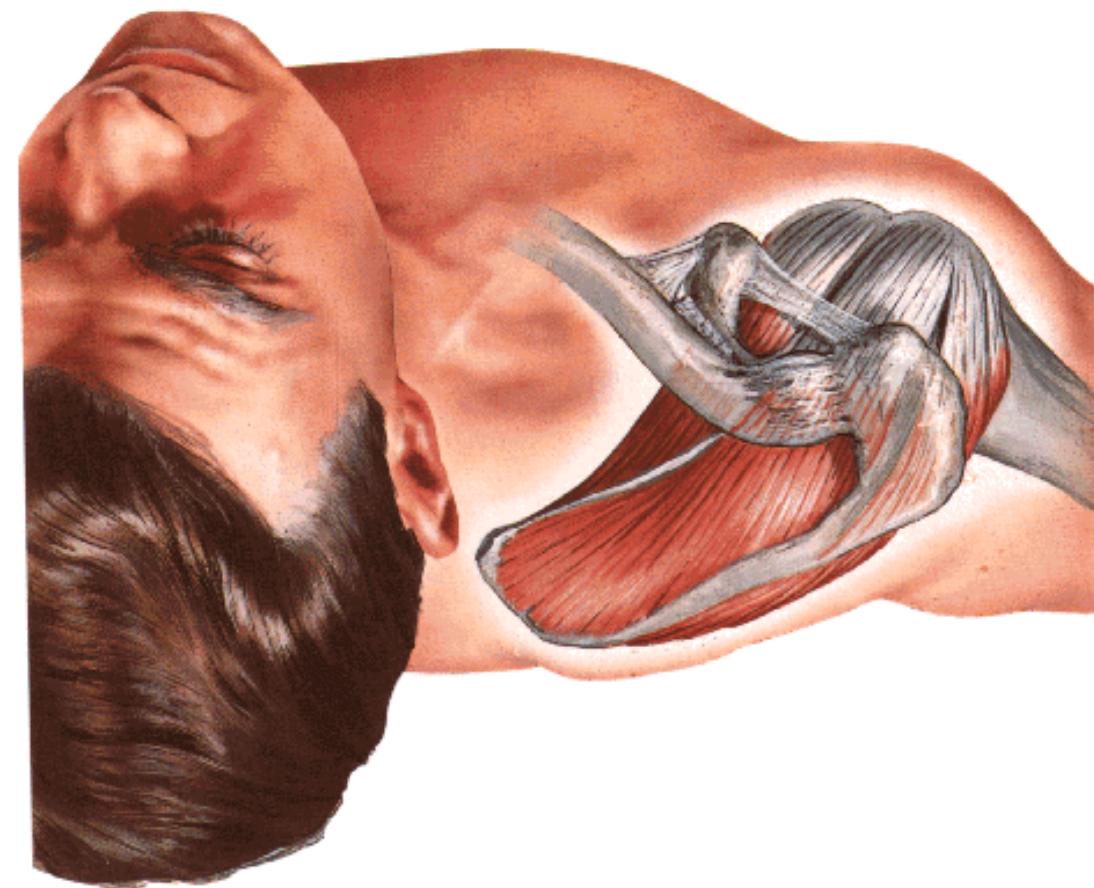


# ARTERIAL ANASTOMOSES AROUND THE SCAPULA

- A. transversa colli
- A. suprascapularis
- A. circumflexa scapulae
- A. circumflexa humeri post.



# Rotator cuff



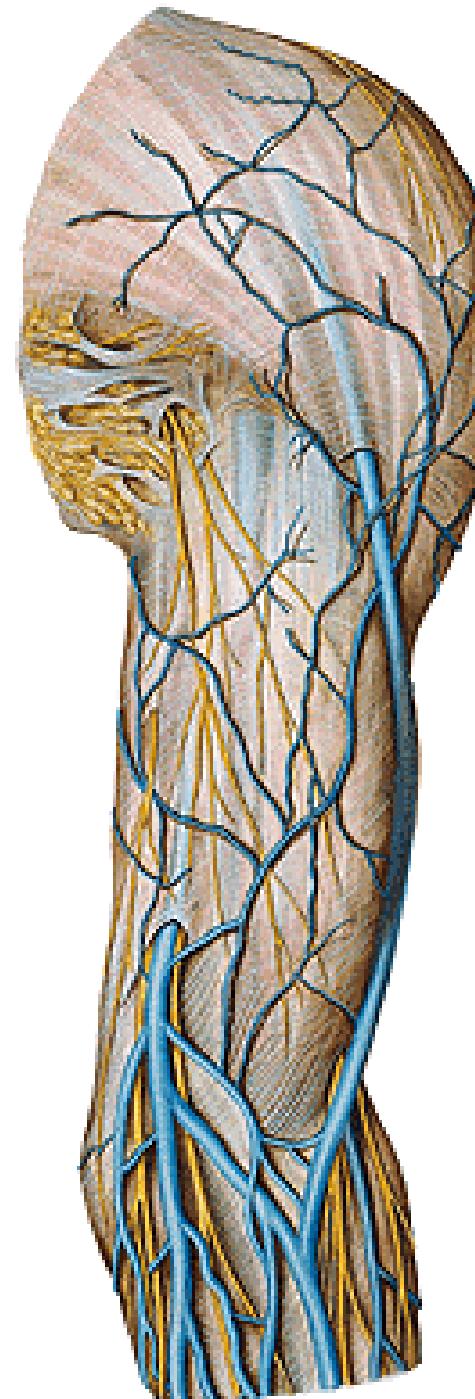
**Regio brachii anterior**

**N. cut. brachii lat. inf.**

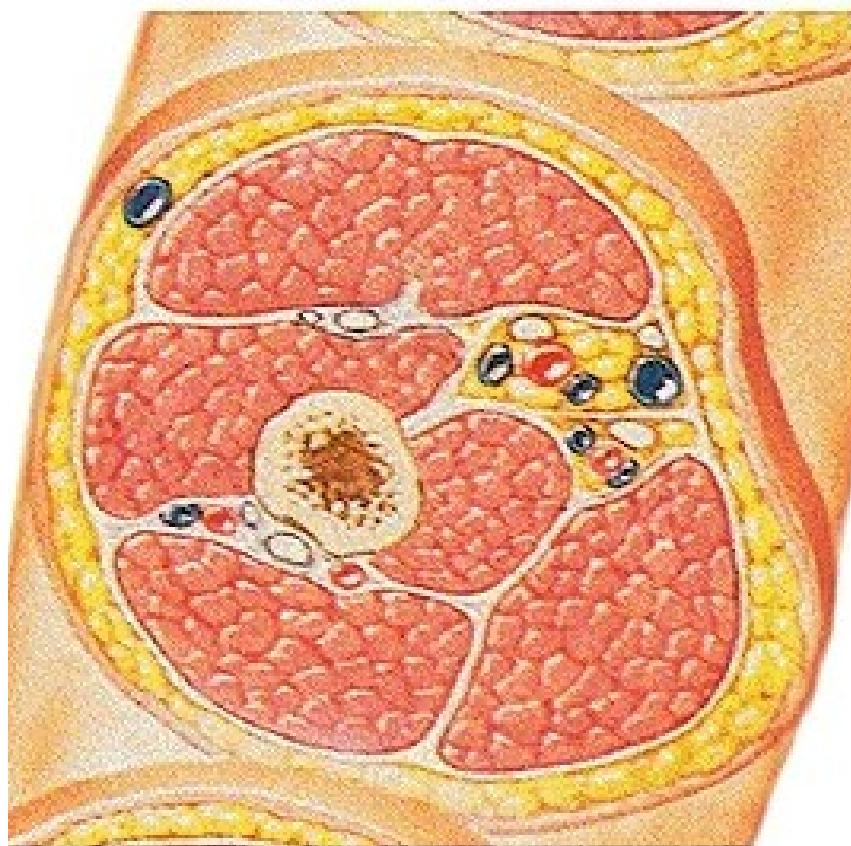
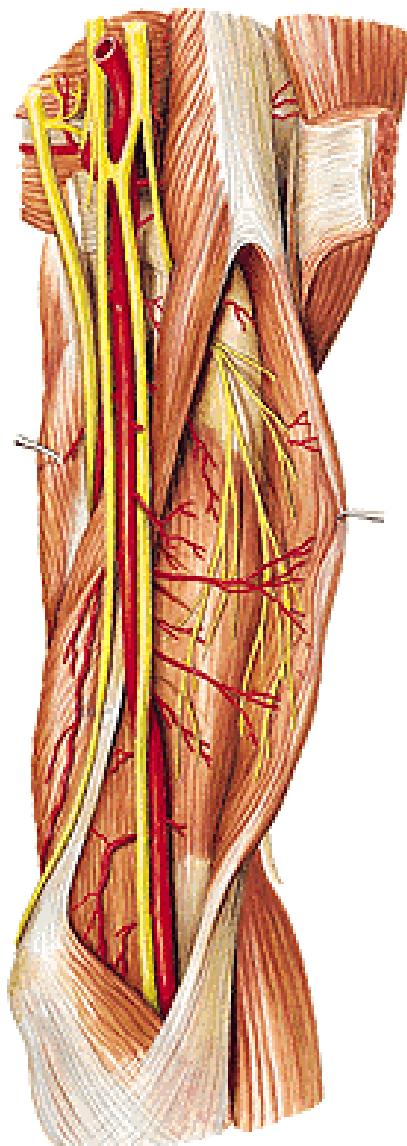
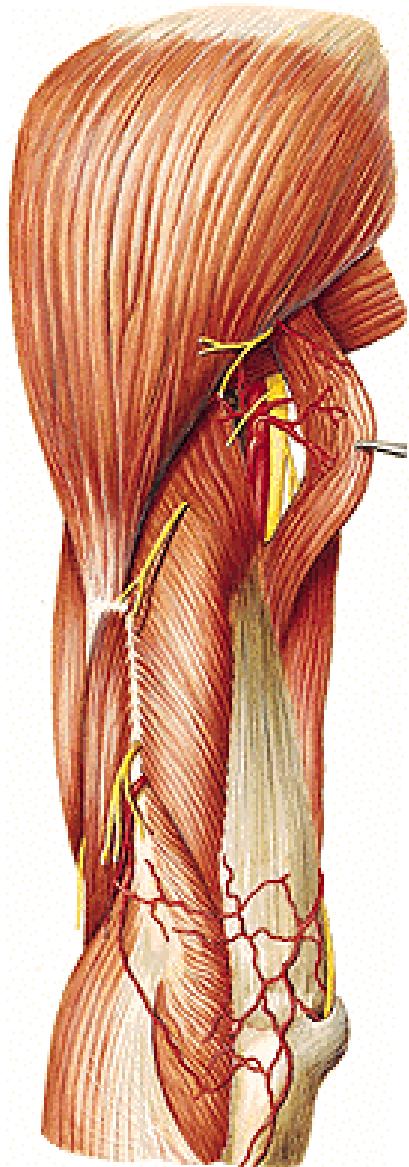
**N. cut. brachii med.**

**V. cephalica**

**V basilica – hiatus  
basilicus**



# Septum intermusculare mediale et laterale



# **Anterior group of muscles:**

**M. biceps brachii**

**caput longum**

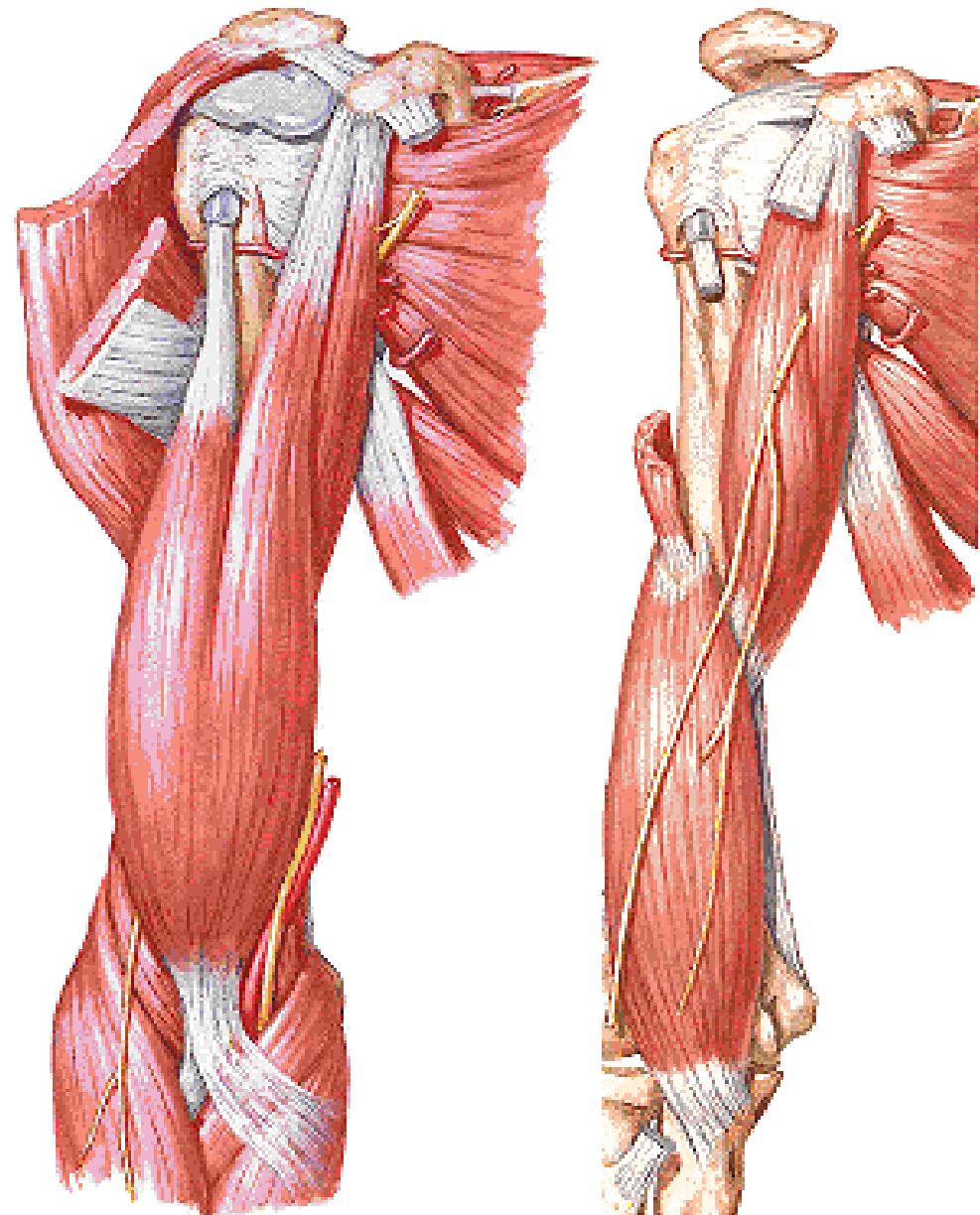
**caput breve**

**aponeurosis m. bicipitis**

**M. coracobrachialis**

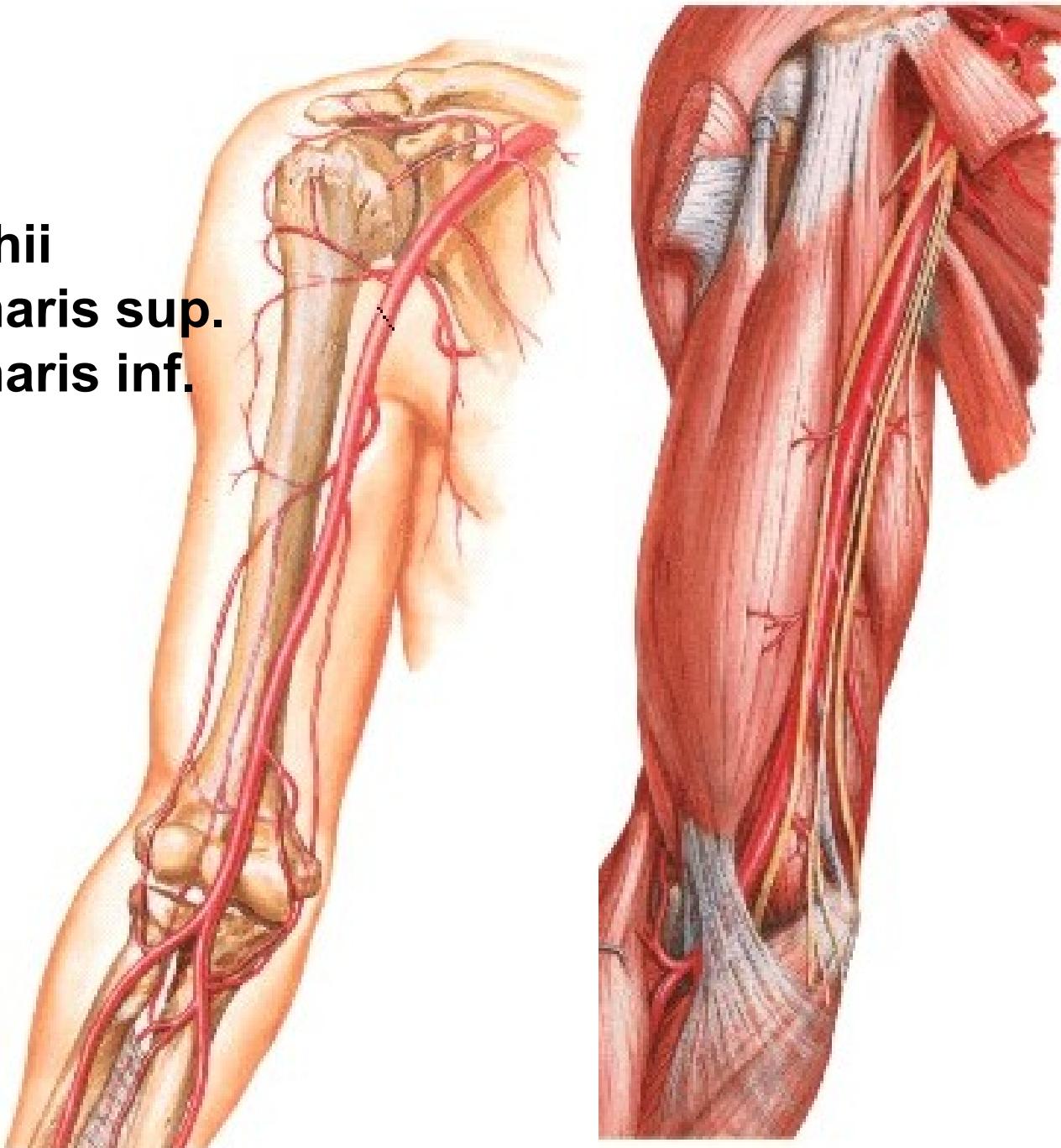
**M. brachialis**

**N. musculocutaneus**



## A. BRACHIALIS

- a. profunda brachii
- a. collateralis ulnaris sup.
- a. collateralis ulnaris inf.
- a. radialis
- a. ulnaris



# Sphygmomanometer

Every health care visit should include a blood pressure reading

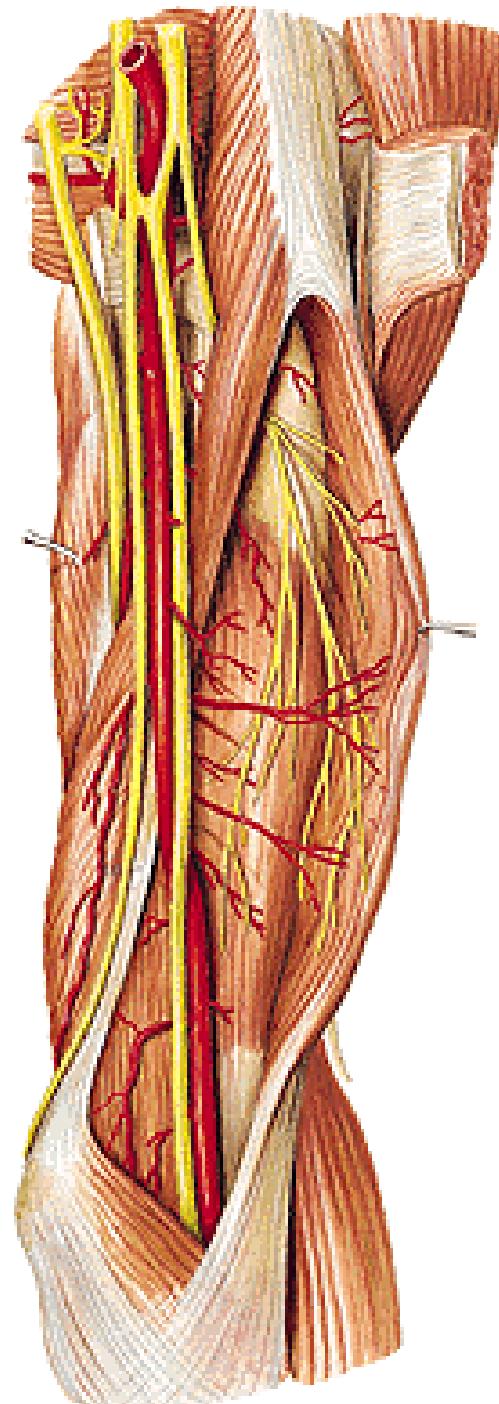


**A. collateralis ulnaris sup.**

**A. collateralis ulnaris inf.**

**N. medianus**

**N. ulnaris**



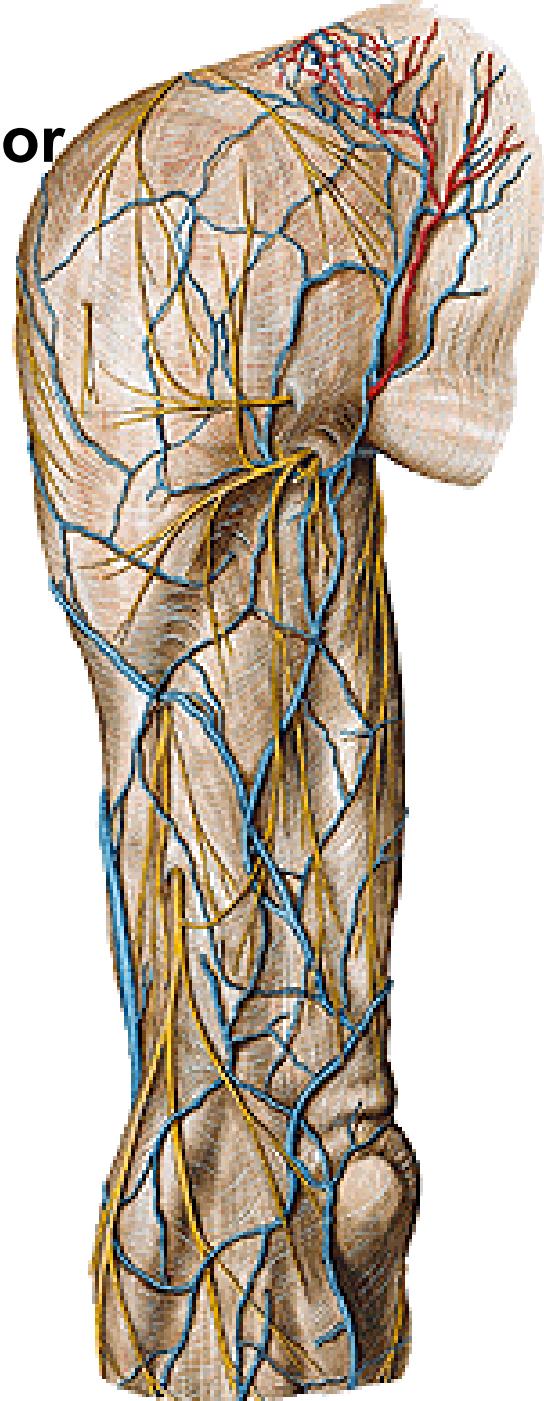
**Regio brachii posterior**

**N. cutaneus brachii lateralis inferior**

**N. cutaneus brachii posterior**

**N. cutaneus antebrachii post.**

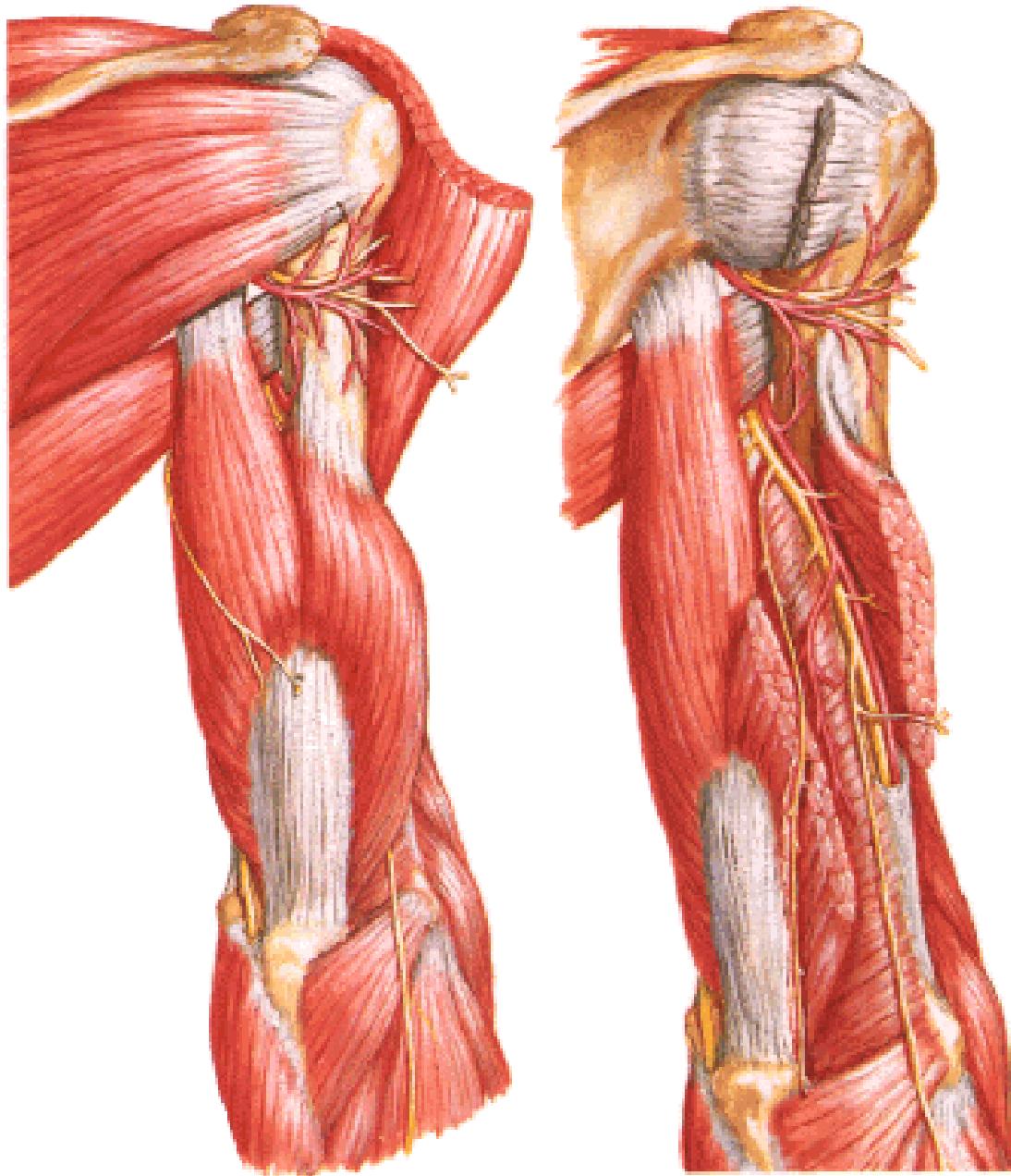
**(n. radialis)**



## **Posterior group of muscles:**

**M. triceps brachii**  
**caput longum**  
**caput laterale**  
**caput mediale**

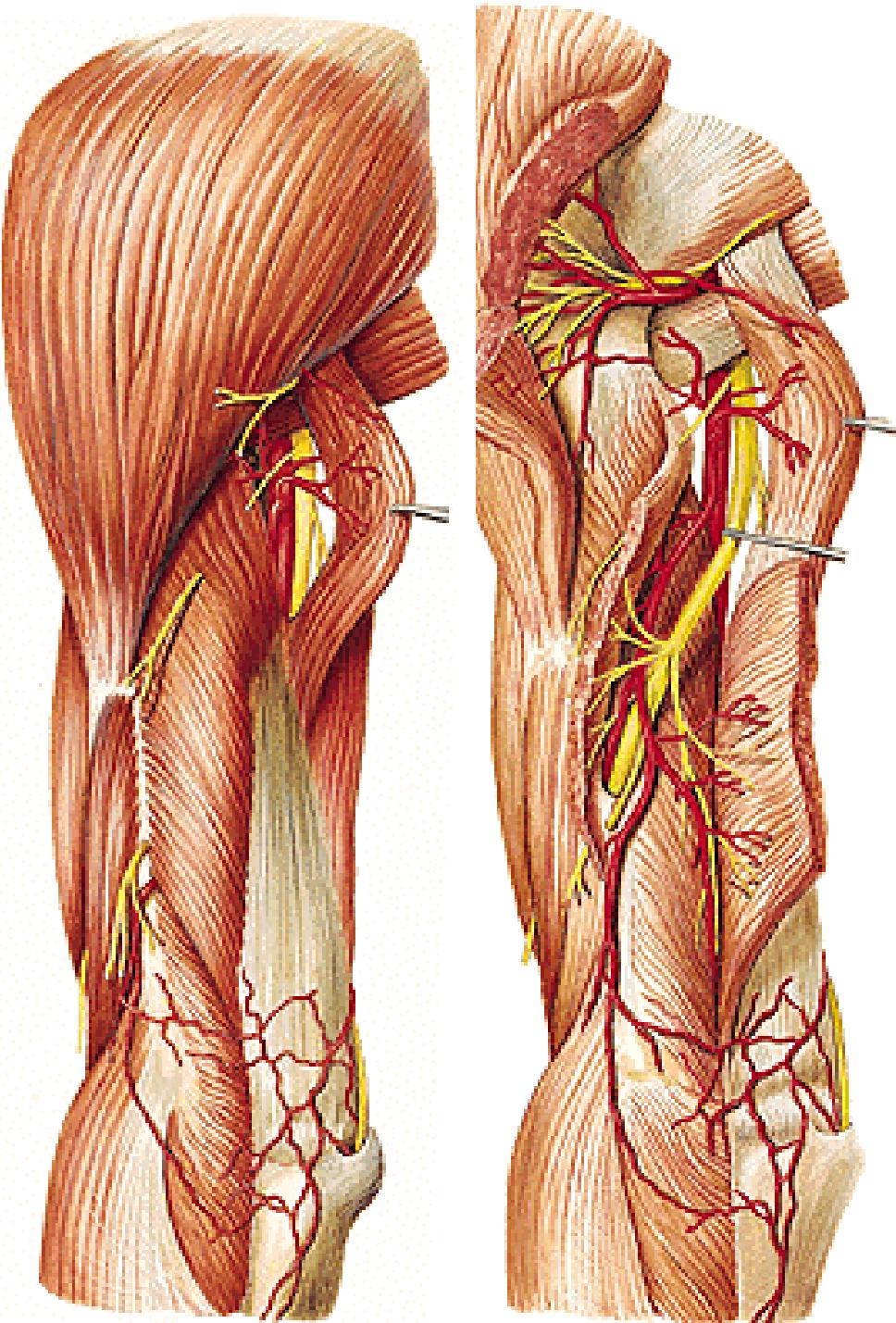
**N. radialis**



## A. PROFUNDA BRACHII

- r. deltoideus
- a. nutricia humeri
- a. collateralis media
- a. collateralis radialis

Rete articulare cubiti



## **Sulcus bicipitalis medialis**

- a. brachialis
- vv. brachiales
- n. medianus
- v. basilica
- n. cutaneus antebrachii med.
- a. collateralis ulnaris sup.
- vv. coll. ulnares sup.
- n. ulnaris

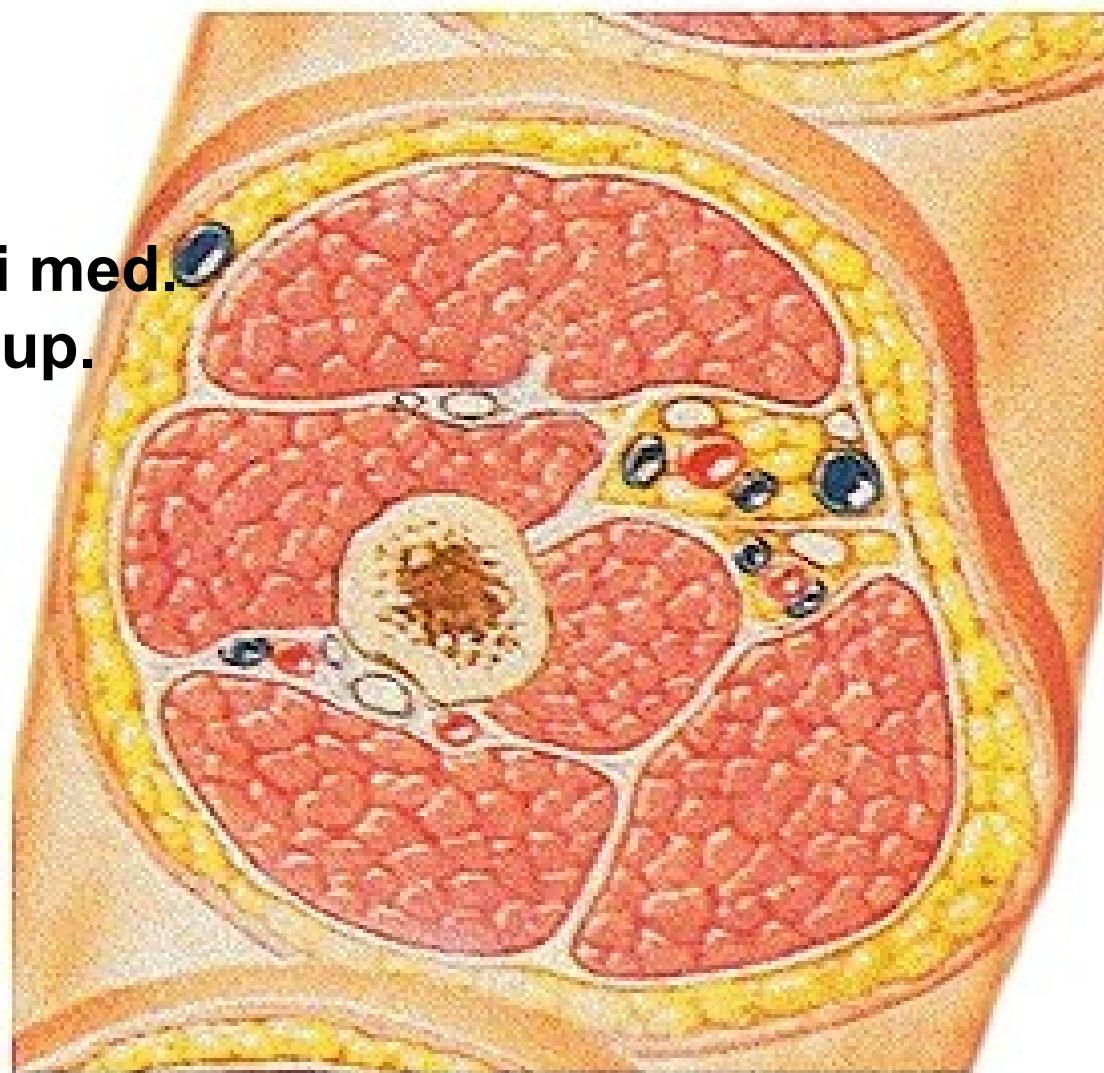
## **N. musculocutaneus**

### **N. radialis**

**A. profunda brachii**

**V. profunda brachii**

**A. coll. media**



# **Regio cubiti et antebrachii anterior**

**N. cutaneus brachii med.**

**N. cutaneus antebrachii med.**

- r. anterior

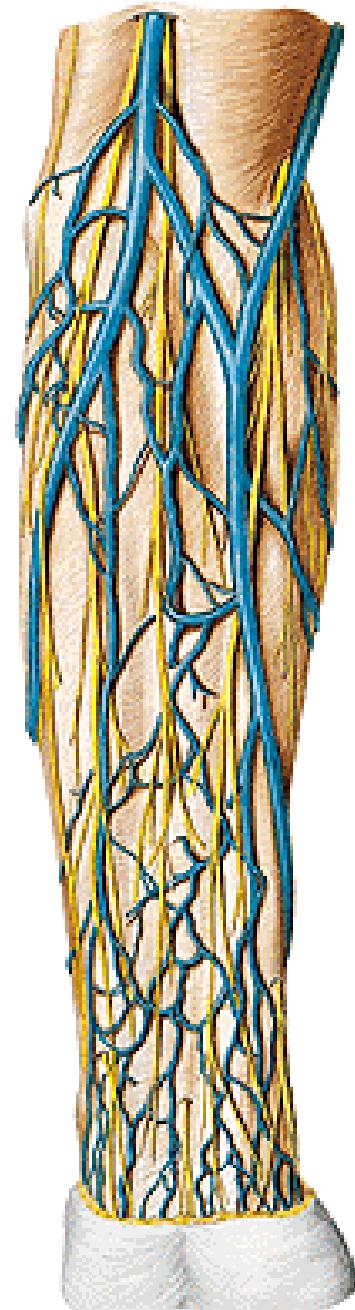
- r. posterior

**N. cutaneus antebrachii lat.**

(n. musculocutaneus)

**V. cephalica**

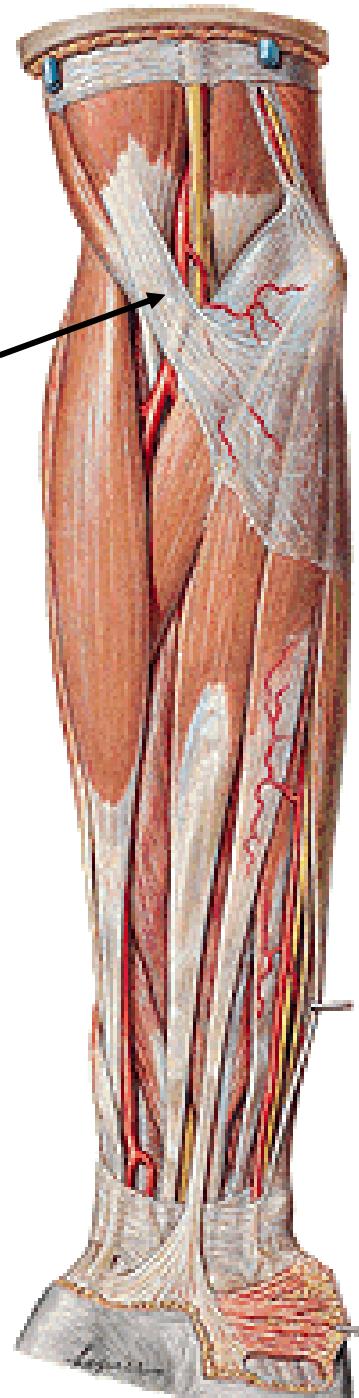
**V. basilica**



## **A. brachialis**

- a. **radialis**
- a. **ulnaris**

**aponeurosis m. bicipitis  
brachii**



## **Anterior group of muscles:**

**M. pronator teres**

**M. flexor carpi radialis**

**M. palmaris longus**

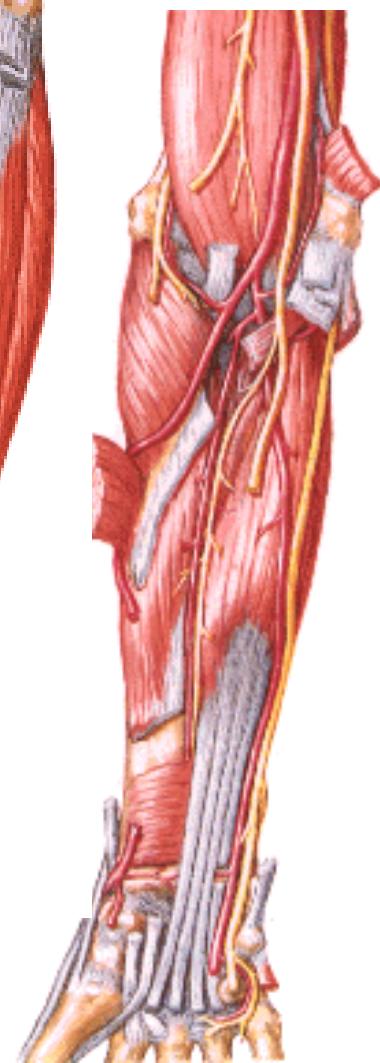
**M. flexor carpi ulnaris**

**M. flexor digitorum spf.**

**M. flexor pollicis longus**

**M. flexor digitorum prof.**

**M. pronator quadratus**



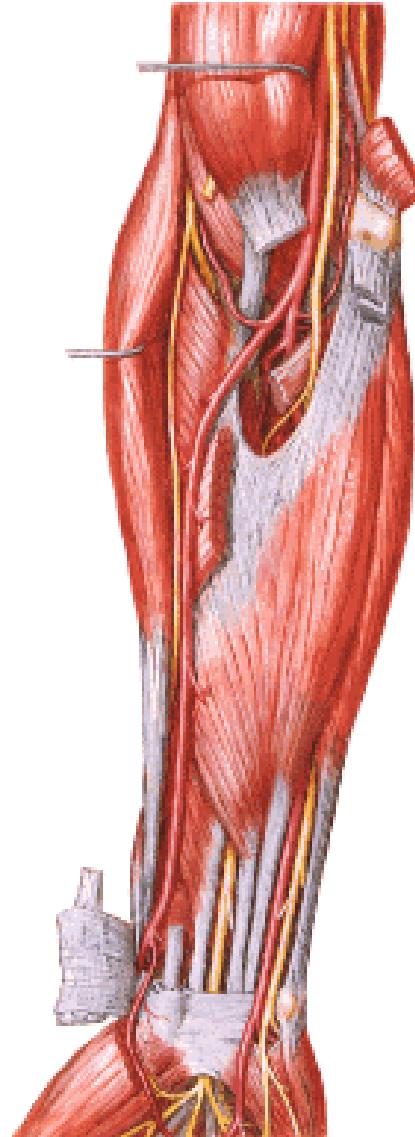
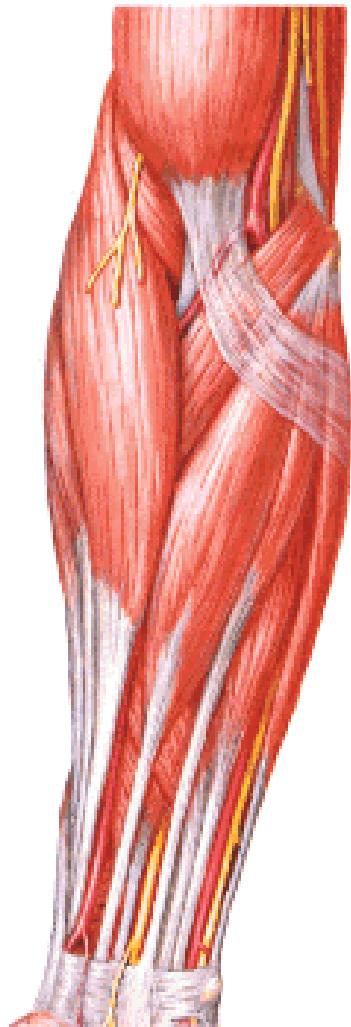
# Lateral group of muscles:

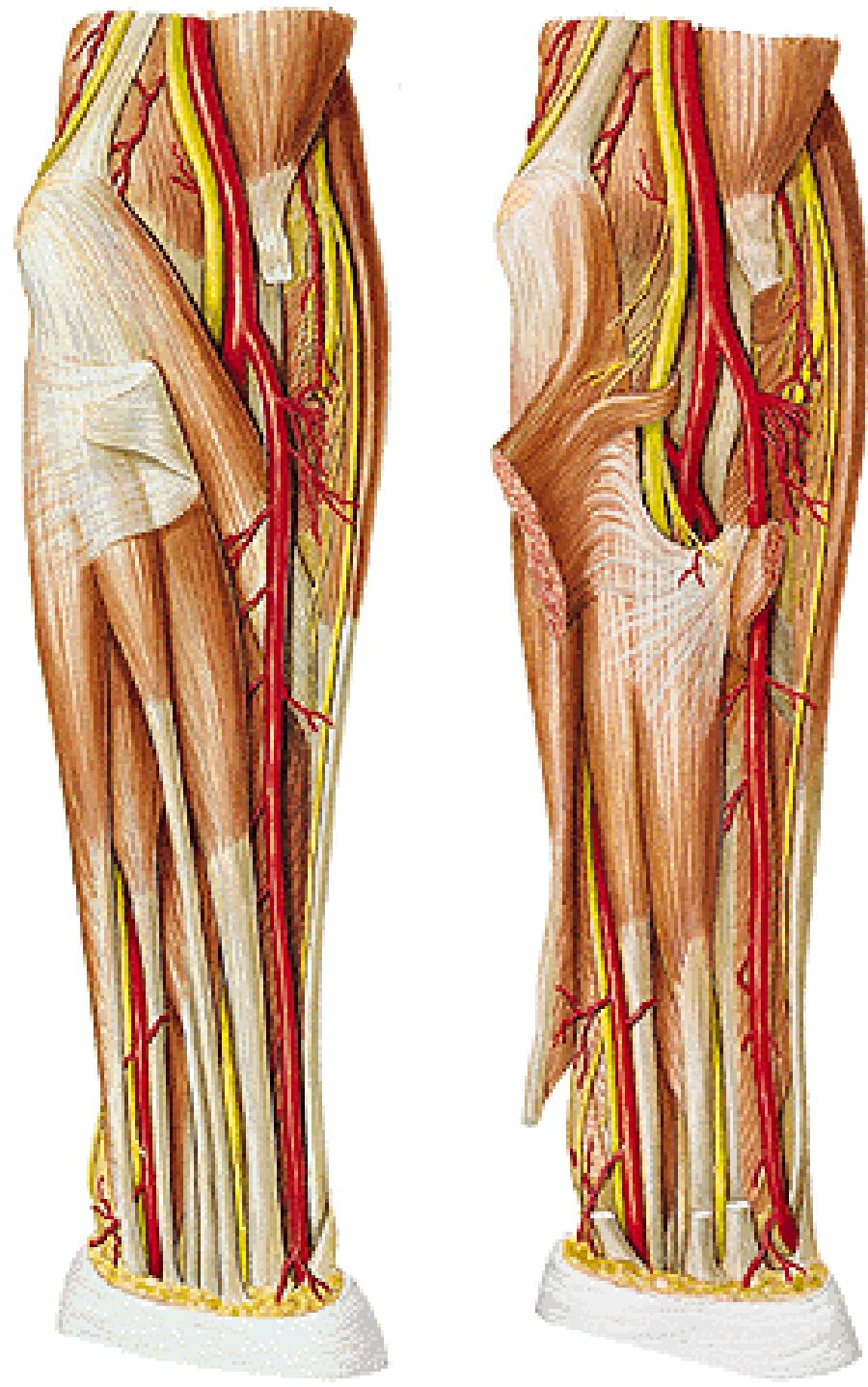
**M. brachioradialis**

**M. extensor carpi radialis longus**

**M. extensor carpi radialis brevis**

**M. supinator**





**A. radialis**

- **a. recurrens radialis**
- **rr. musculares**

**R. spf. n. radialis**

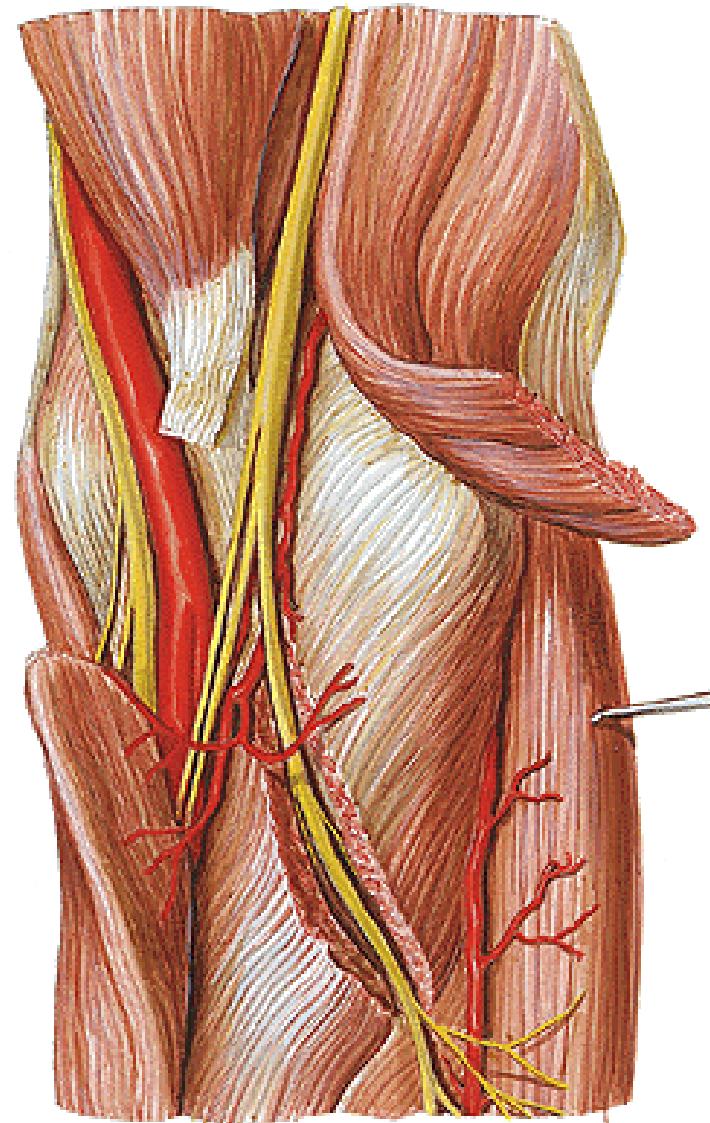
**N. medianus**

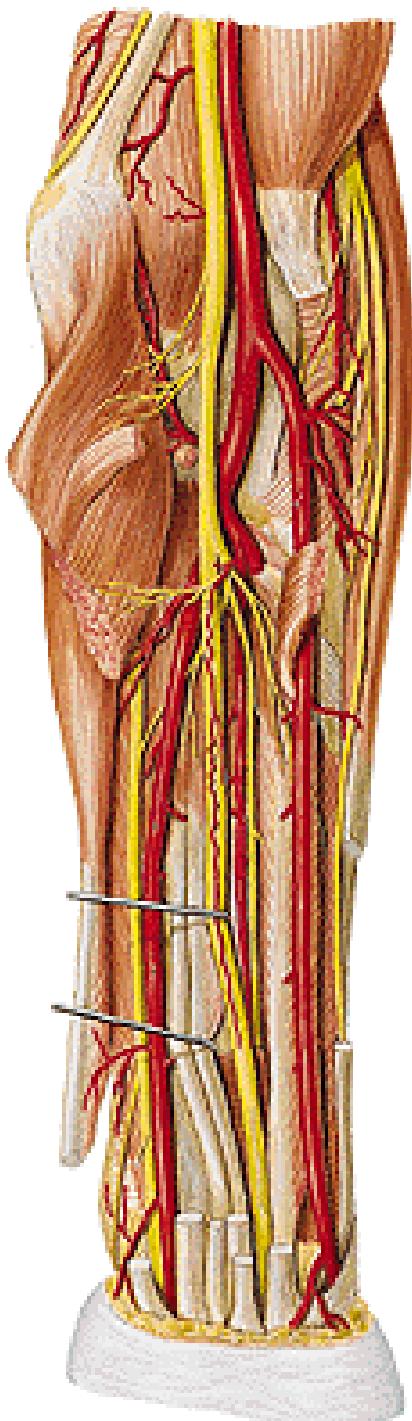
**A. ulnaris**

**N. ulnaris**

**N. radialis - r. spf.  
- r. prof.**

**M. supinator**





### **N. medianus**

- rr. musculares
- n. interosseus ant.

### **A. ulnaris**

- a. recurrens ulnaris
- rr. musculares
- a. interossea communis
  - a. interossea ant.
  - a. interossea post.

# **Regio cubiti et antebrachii posterior**

**N. cutaneus antebrachii med.**

- r. posterior

**N. cutaneus antebrachii post.**

(n. radialis)

**R. superficialis n. radialis**

**R. dorsalis n. ulnaris**

**V. cephalica**

**V. basilica**



## **Posterior group of muscles:**

**M. anconeus**

**M. extensor digitorum**

**M. extensor digiti minimi**

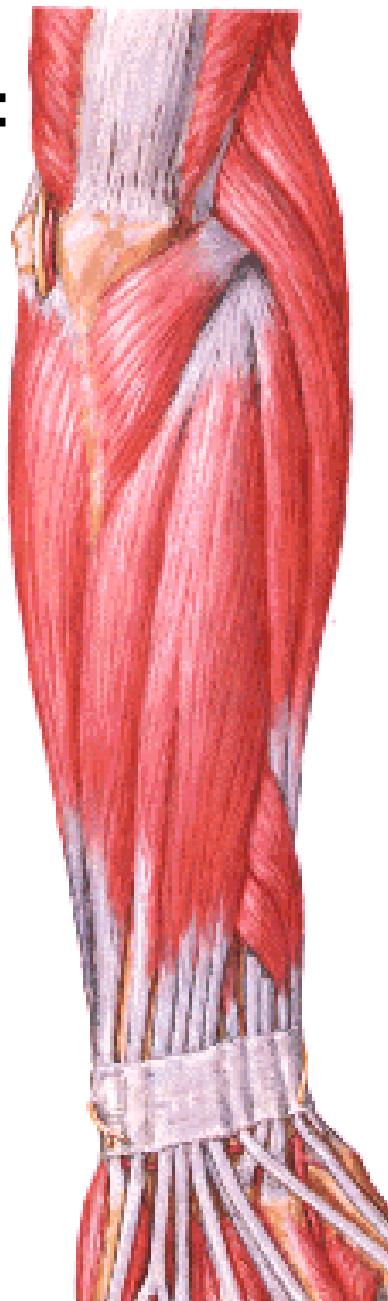
**M. extensor carpi ulnaris**

**M. abductor pollicis longus**

**M. extensor pollicis brevis**

**M. extensor pollicis longus**

**M. extensor indicis**



# Rete articulare cubiti

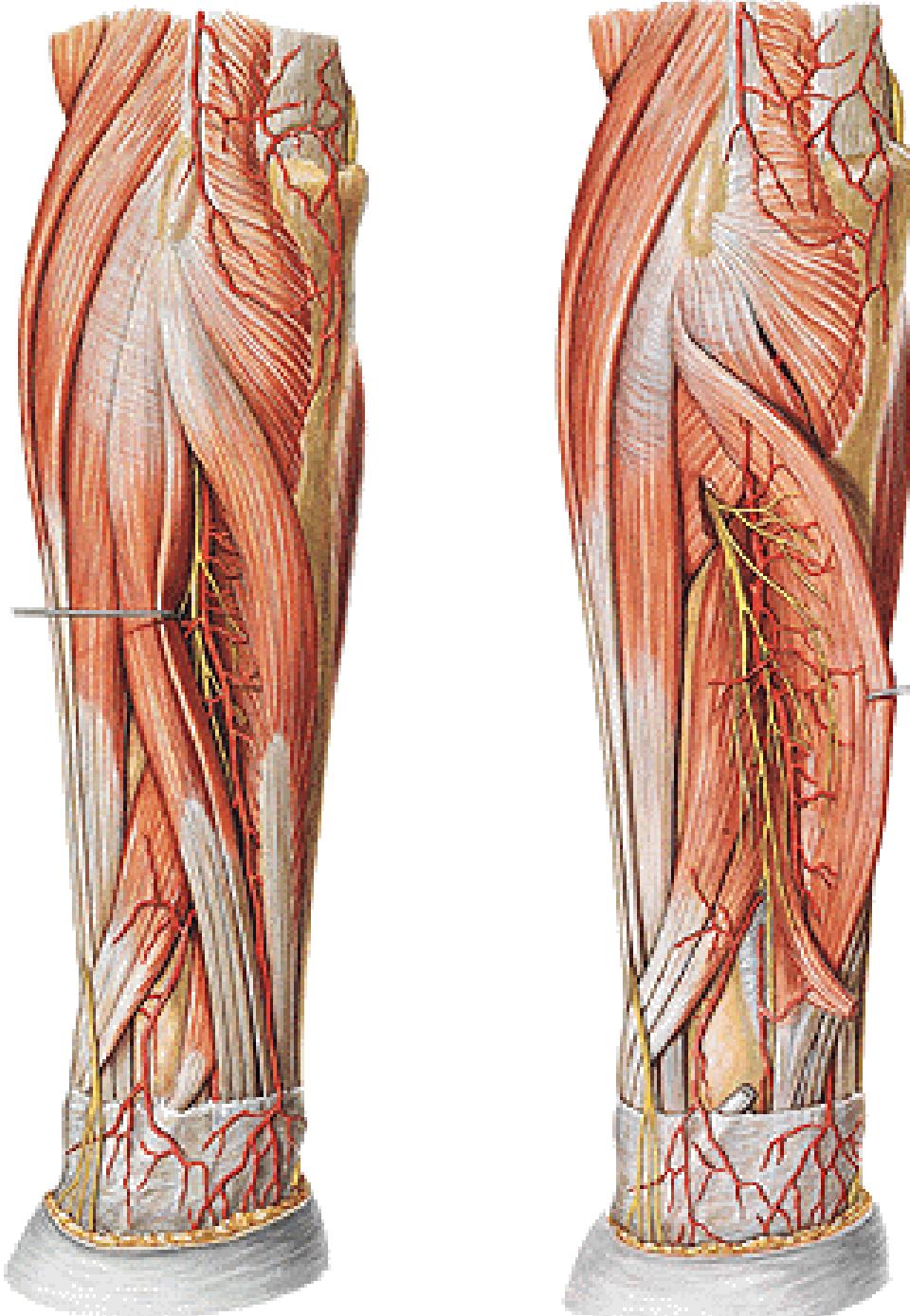
## N. radialis

- n. interosseus post.
- rr. musculares

## A. interossea post.

- a. recurrens interossea

## A. interossea ant.



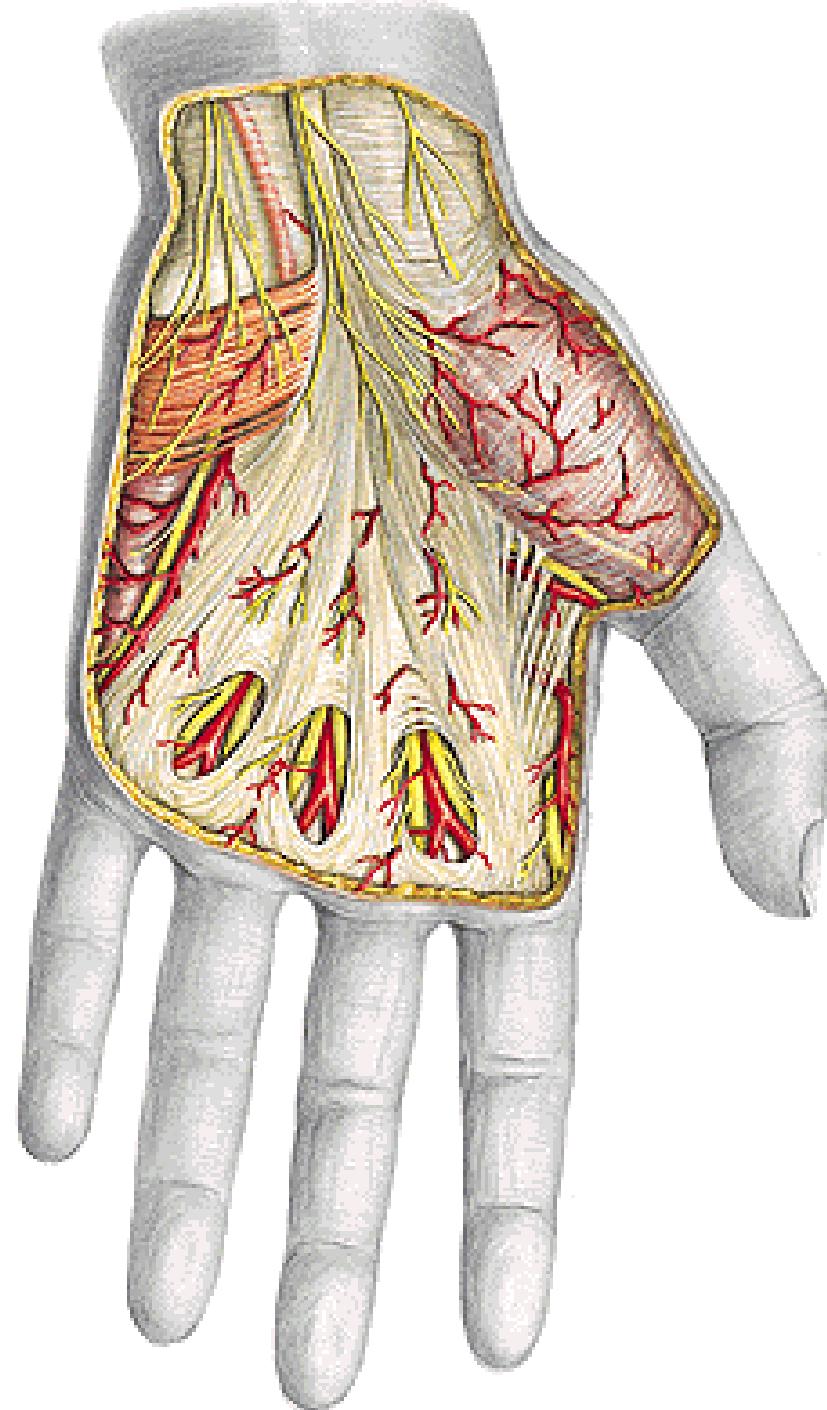
**Regio carpi palmaris et palma  
manus**

**N. ulnaris – r. palmaris**

**N. medianus – rr. palmares**

**M. palmaris brevis**

**Aponeurosis palmaris**



**Retinaculum flexorum**

**Arcus palmaris spf.**

- aa. digitales palmares  
communes et propriae

**A. princeps pollicis**

**Nn. digitales palmares communes**

**Nn. digitales palmares proprii**

**M. abductor pollicis brevis**

**M. flexor pollicis brevis**

**M. opponens pollicis**

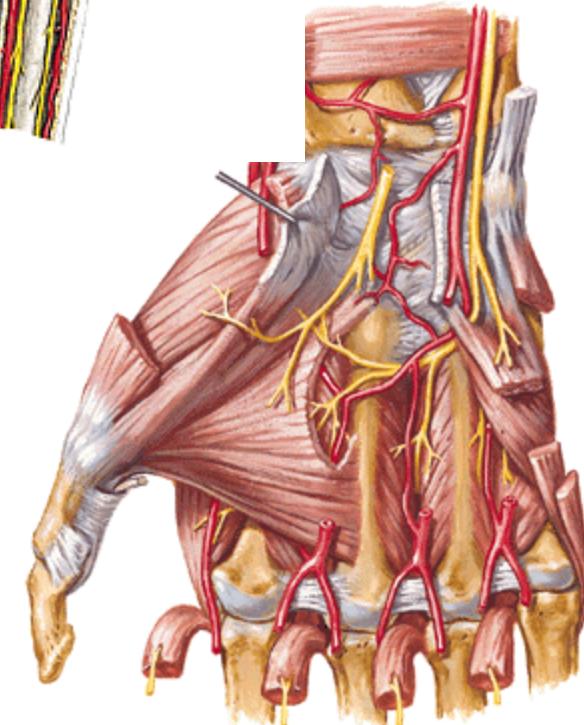
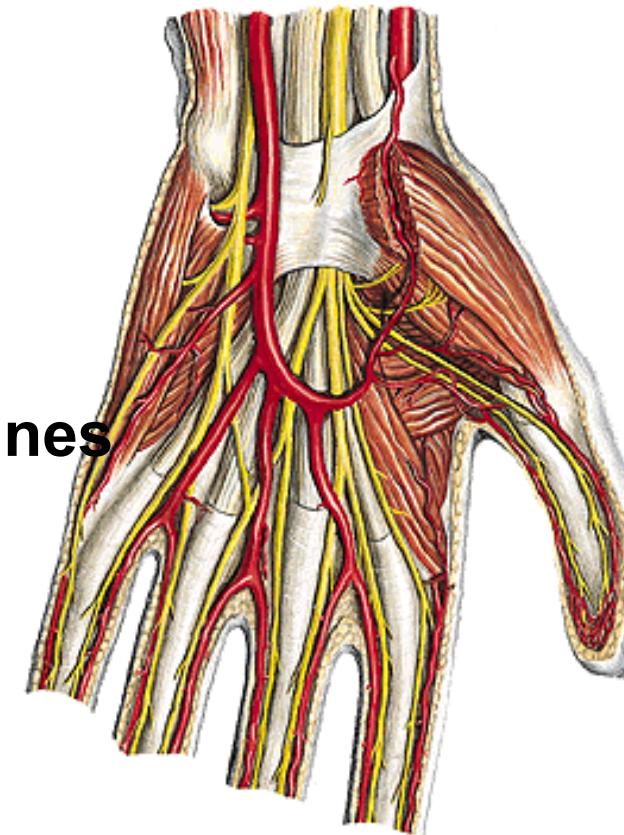
**M. adductor pollicis**

**Mm. lumbricales**

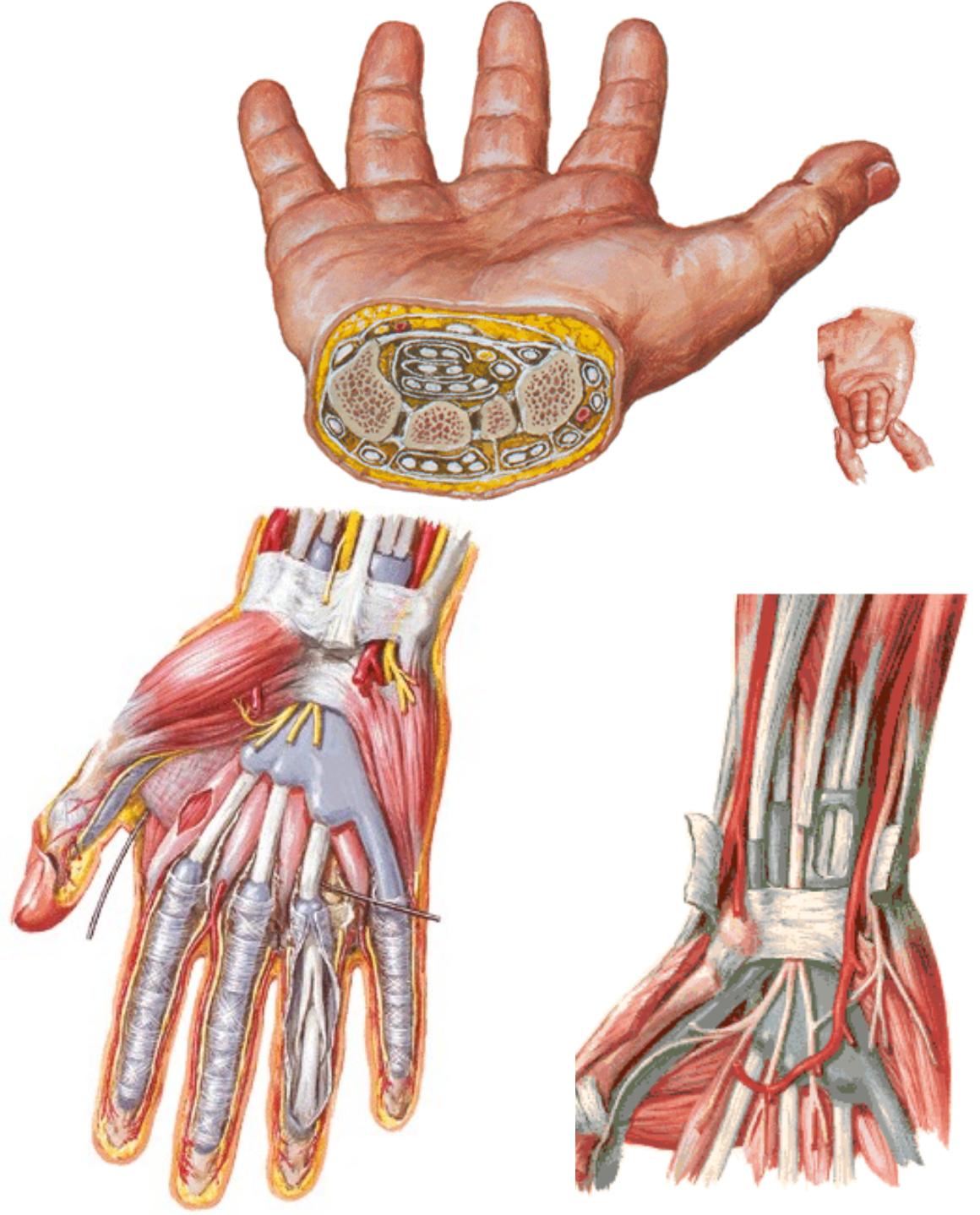
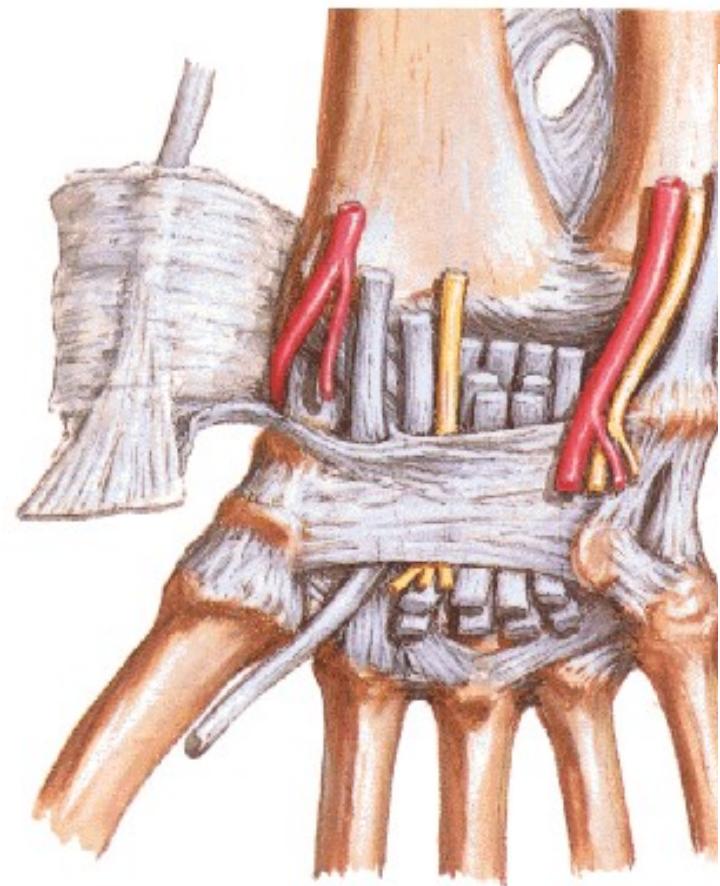
**M. abductor digiti minimi**

**M. flexor digiti minimi brevis**

**M. opponens digiti minimi**



# Canalis carpi



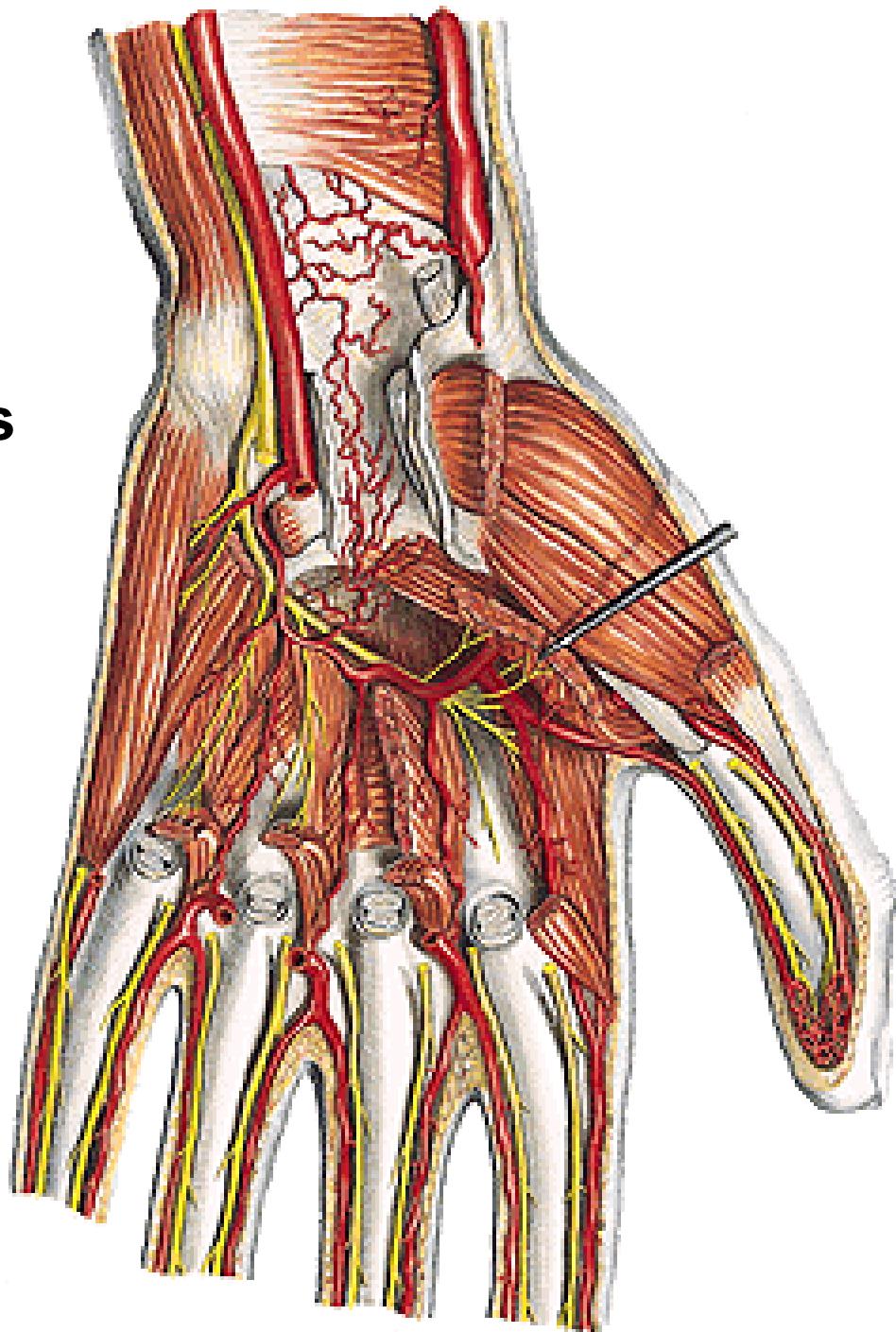
**Rete carpi palmare**

**Arcus palmaris prof.**

- aa. metacarpeae palmares

**R. prof. n. ulnaris**

**Mm. interossei palmares**



# **Regio carpi dorsalis et dorsum manus**

## **Rete venosum dorsale manus**

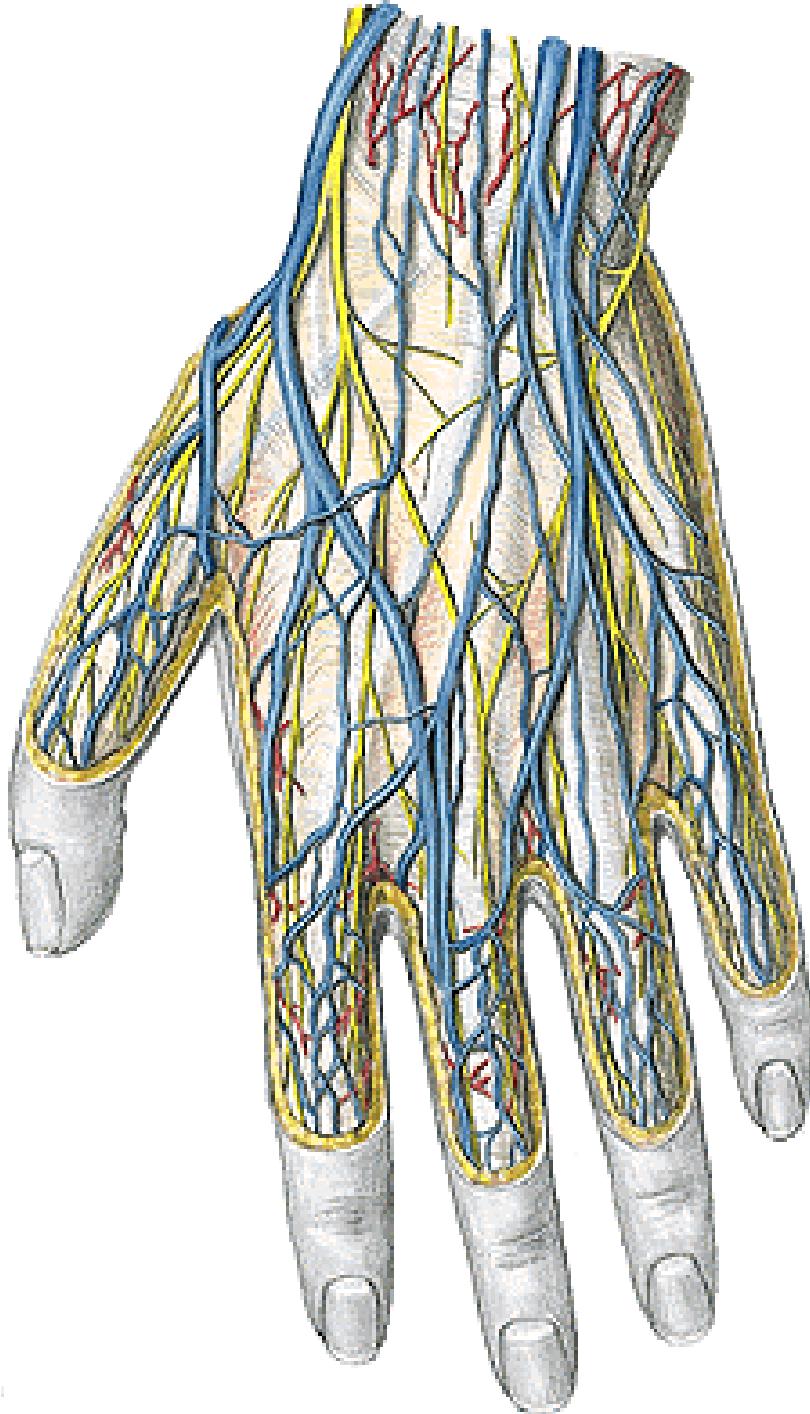
**R. spf. n. radialis**

- nn. digitales dorsales

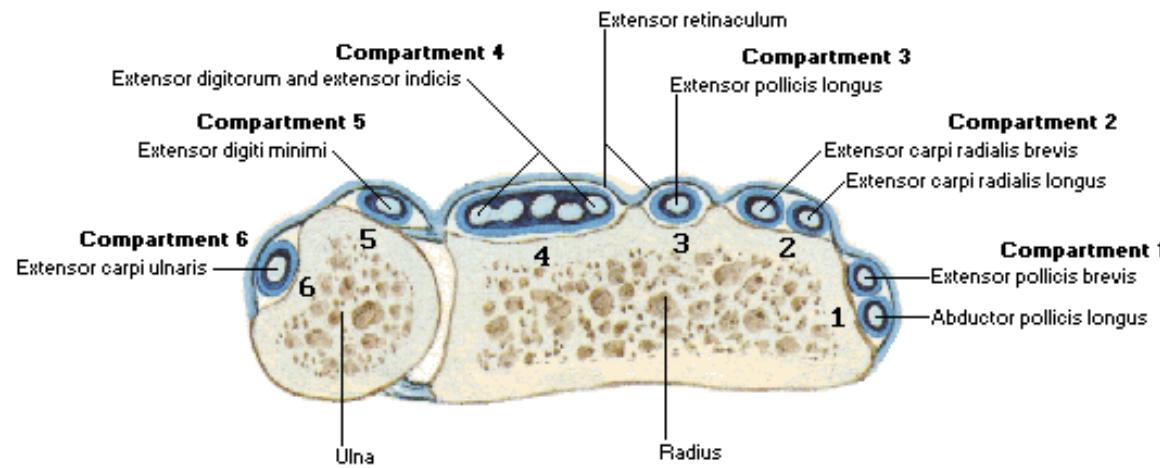
**R. dorsalis n. ulnaris**

- nn. digitales dorsales

## **Retinaculum extensorum**



# Extensor compartments



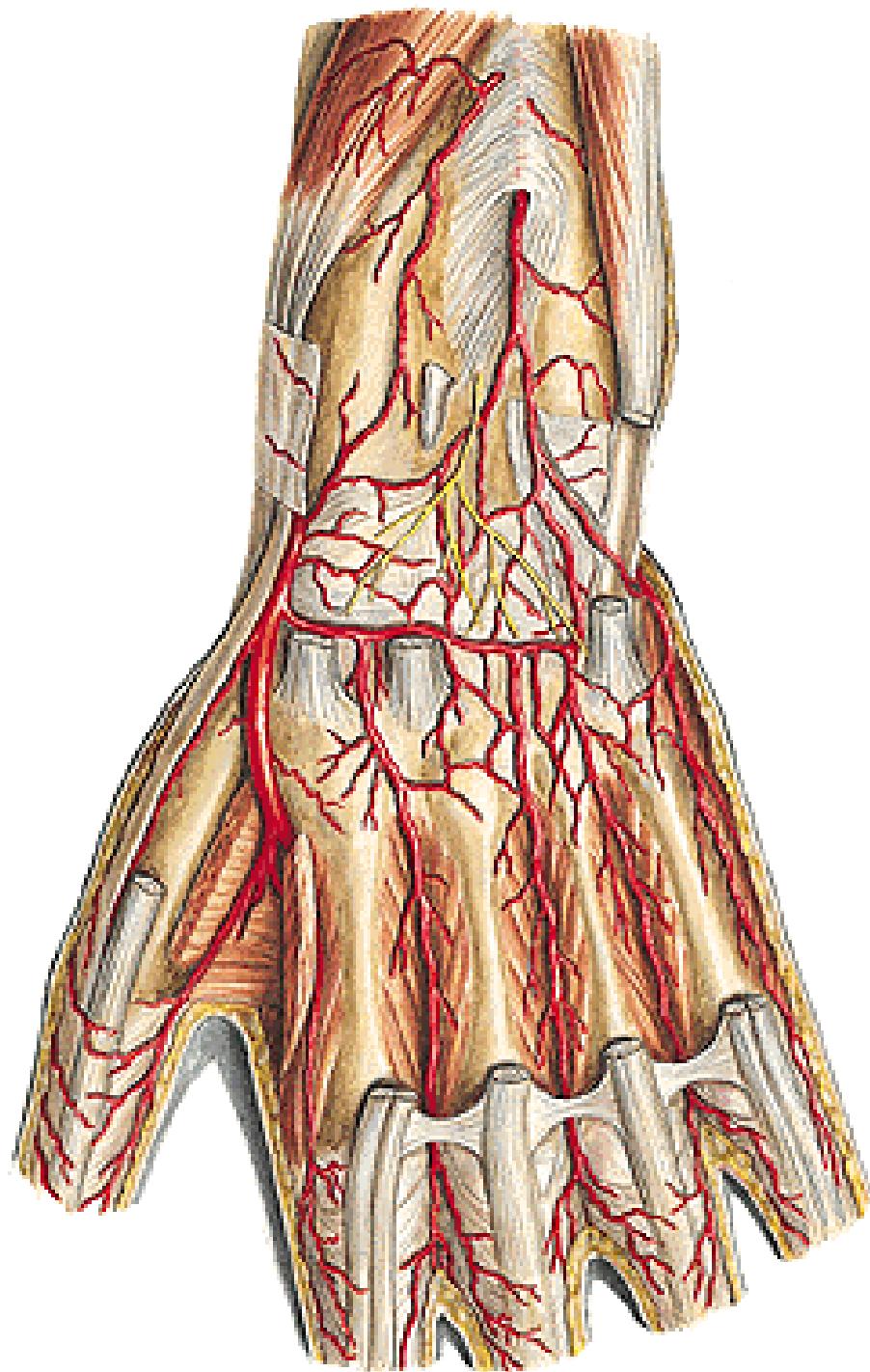
**Rete carpi dorsale**

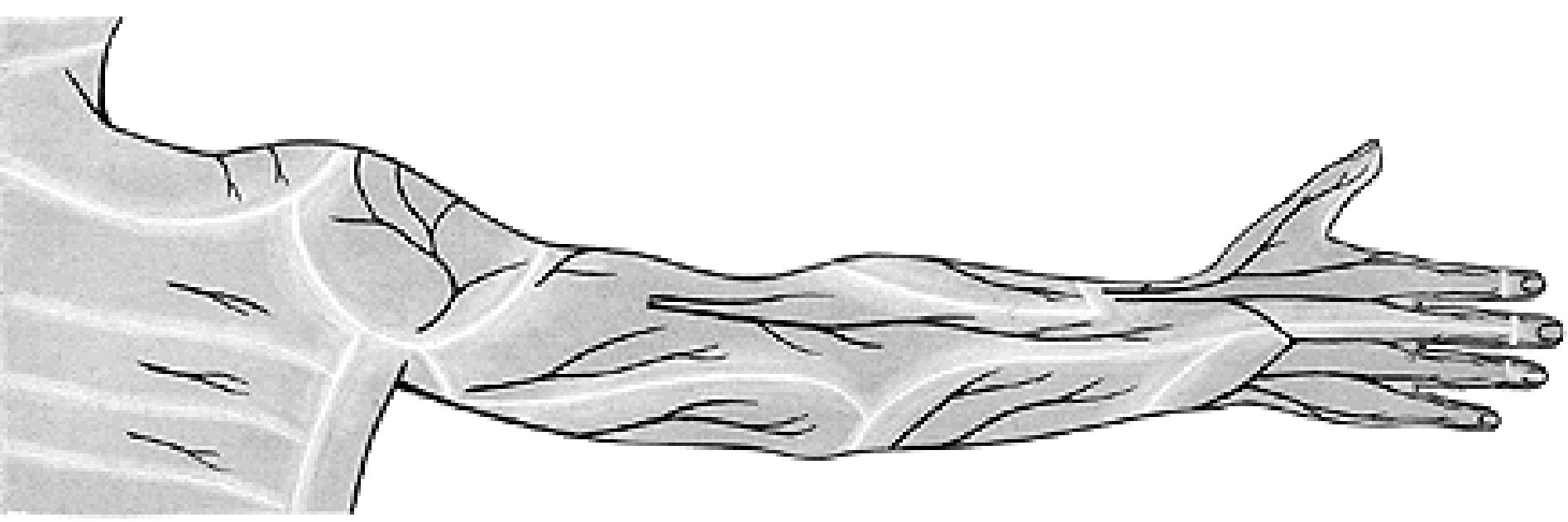
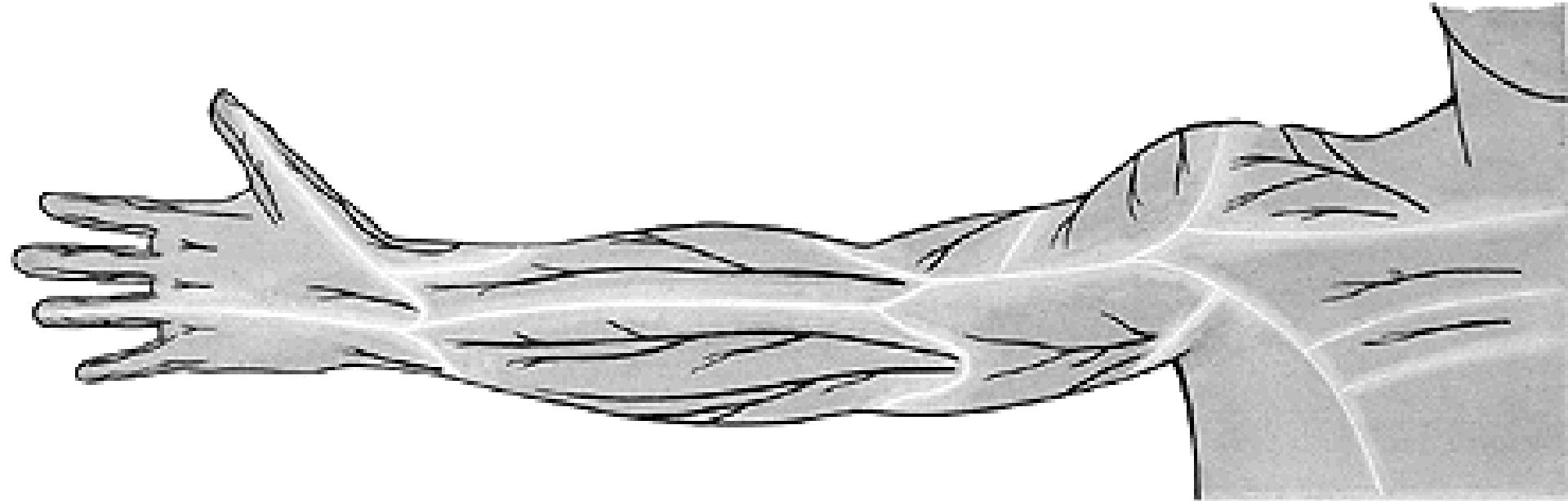
**Aa. metacarpeae dorsales**

- aa. digitales dorsales

**A. metacarpea dorsalis prima**

**Mm. interossei dorsales**





## Innervation of upper limb muscles:

**N. subscapulares – subscapularis, teres major**

**N. axillaris – deltoideus, teres minor**

**N. suprascapularis – supraspinatus et infraspinatus**

**N. musculocutaneus – anterior brachial group**

**N. radialis – posterior brachial group, posterior antebrachial group, lateral antebrachial group**

**N. ulnaris – flexor carpi ulnaris, medial half of flexor dig. prof., most of muscles of the hand**

**N. medianus – anterior antebrachial group (except 2 muscles innervated by ulnar nerve), abductor pollicis brevis, flexor pollicis brevis (superficial head), opponens pollicis, 2 medial lumbricals**

Illustrations and photographs were copied from:  
**Atlas der Anatomie des Menschen/Sobotta.**  
**Putz,R., und Pabst,R. 20. Auflage. München:**  
**Urban & Schwarzenberg, 1993**  
**Netter: Interactive Atlas of Human Anatomy.**  
**Windows Version 2.0**