

REGIONAL ANATOMY OF THE UPPER LIMB



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

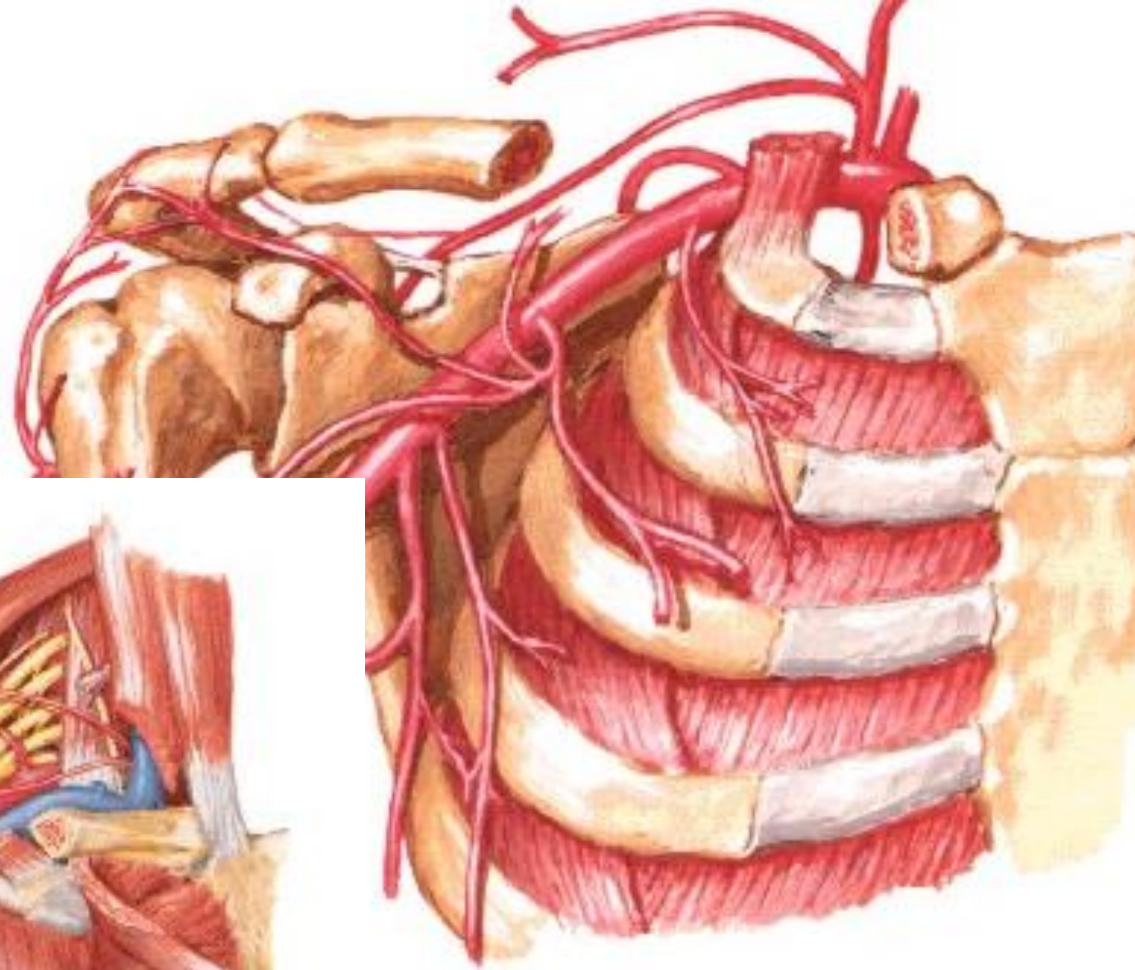
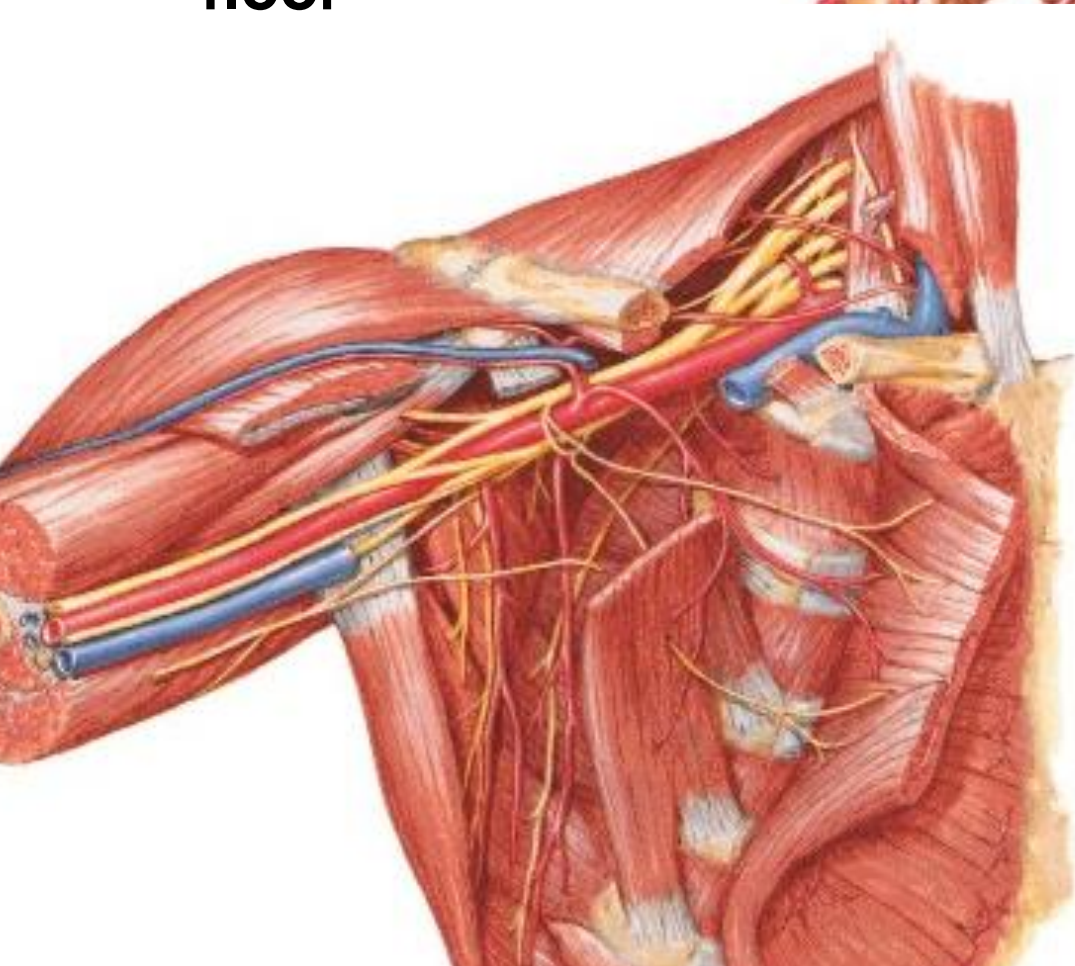


**Regio scapularis, reg. brachii post., reg. cubiti post.,
reg. antebrachii post., dorsum manus**

Regio axillaris

AXILLA

- inlet
- 4 sides
- floor

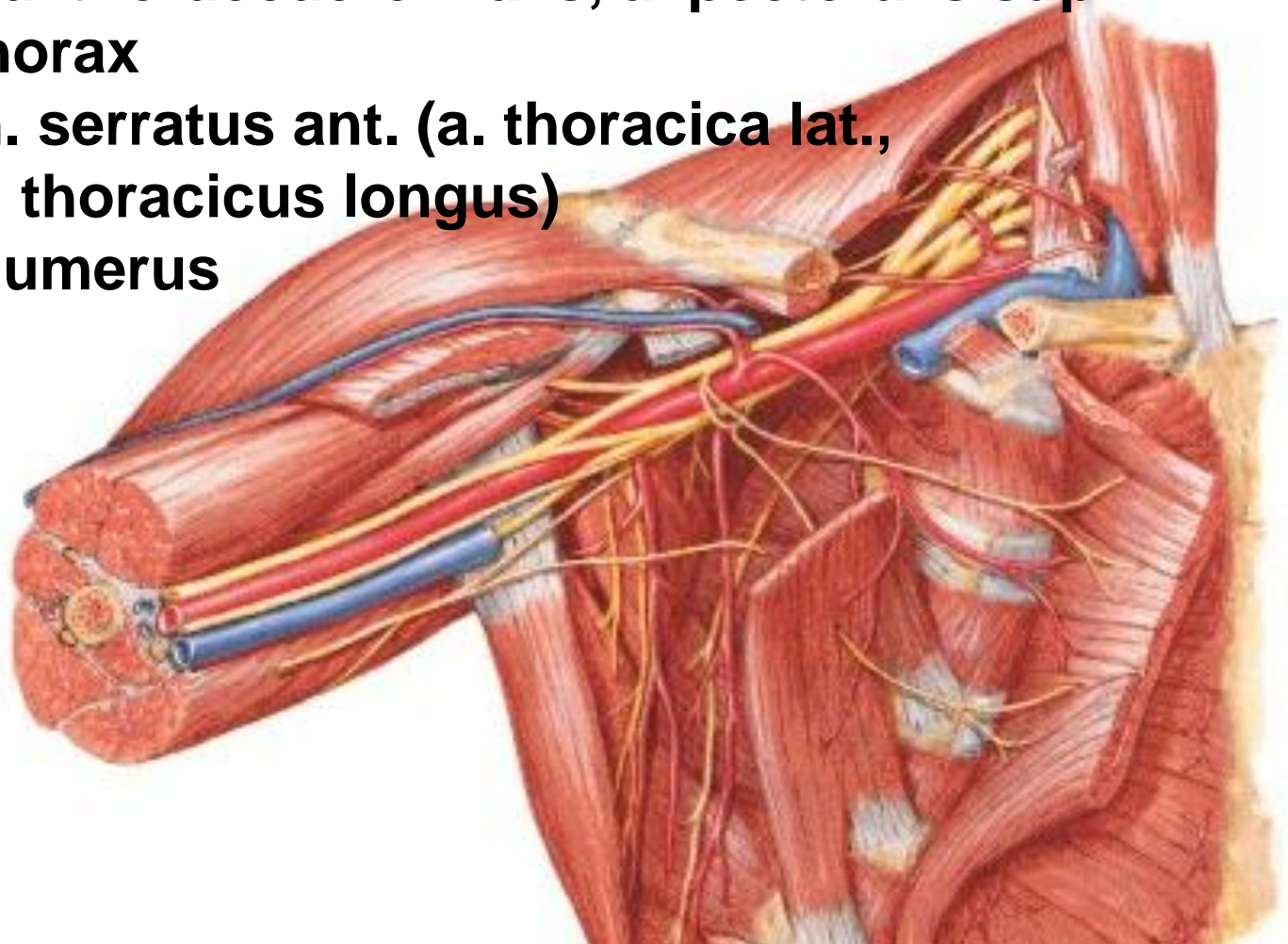


**Anterior wall: m. pectoralis major (n. pectoralis med. et lat.
m. pectoralis minor (n. pectoralis med.)
m. subclavius (n. subclavius)
fascia clavipectoralis
a. thoracoacromialis, a. pectoralis sup.**

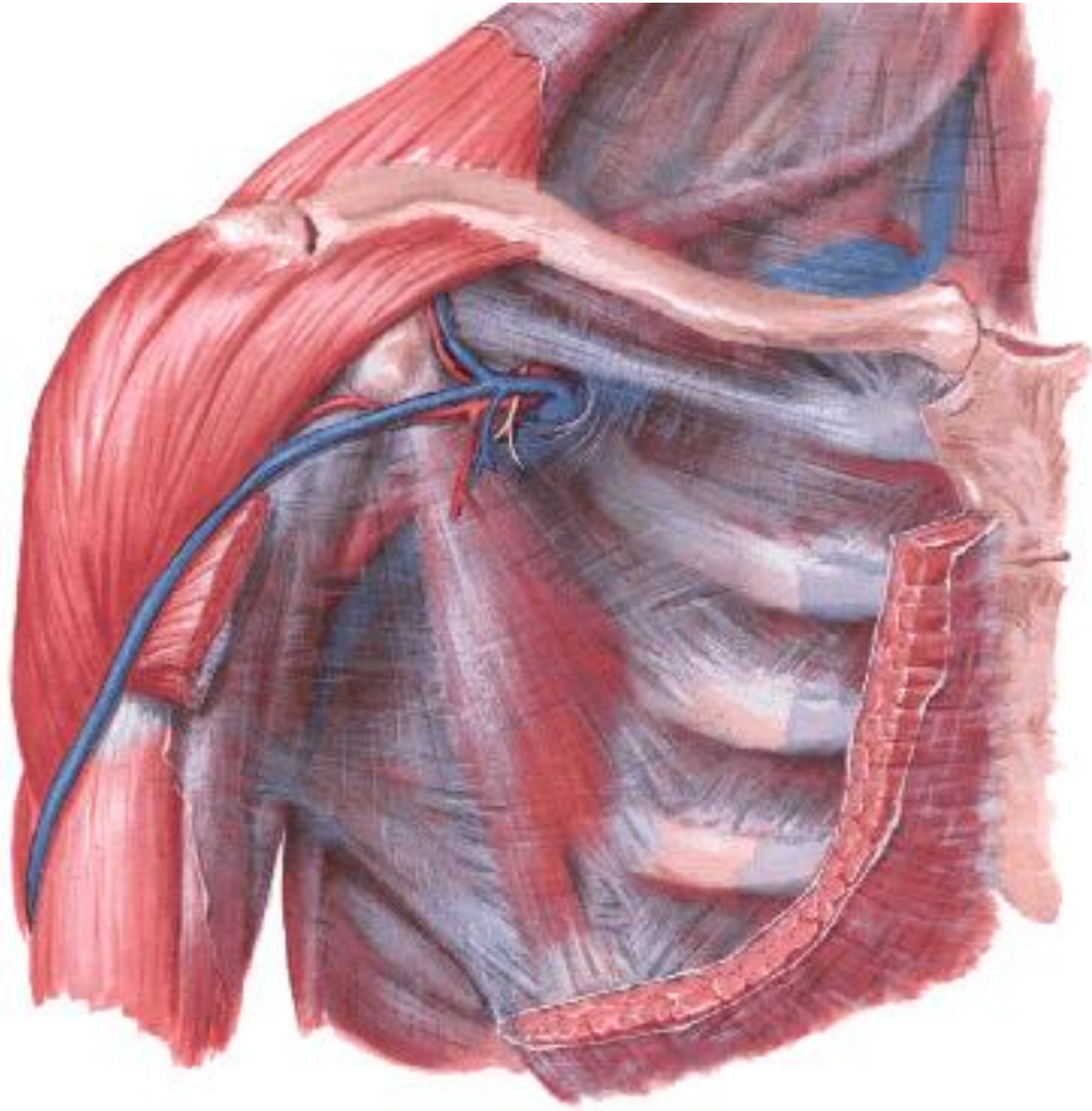
Medial wall: thorax

**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

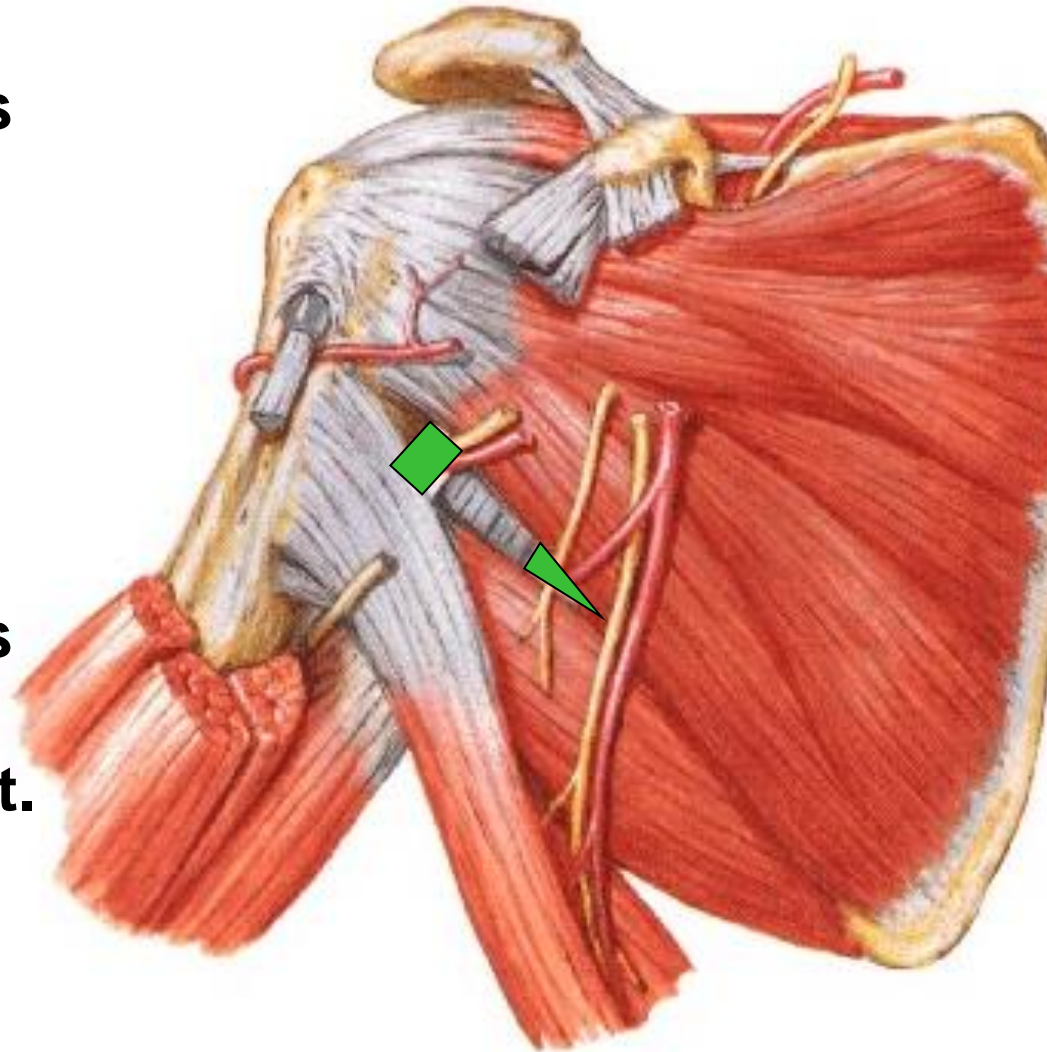
m. teres major

caput longum m. tricipitis

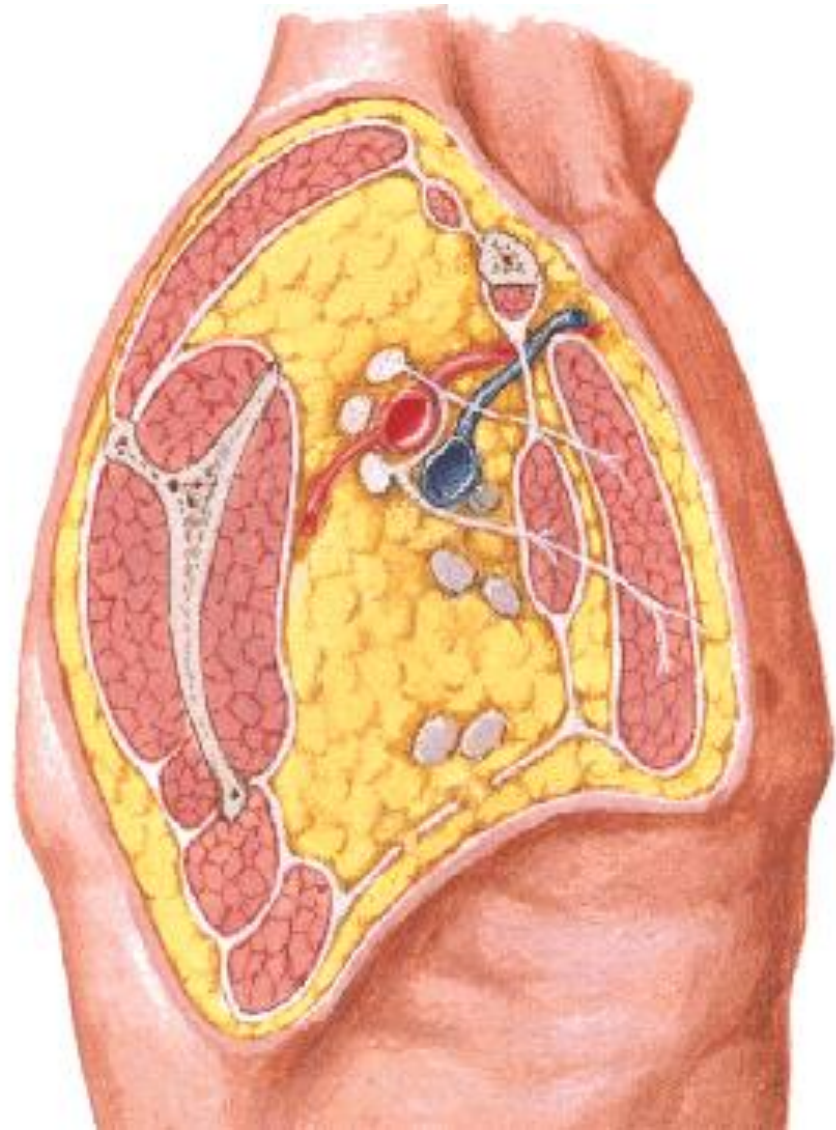
humerus

A. circumflexa humeri post.

N. axillaris



Floor: Fascia axillaris



Contents:

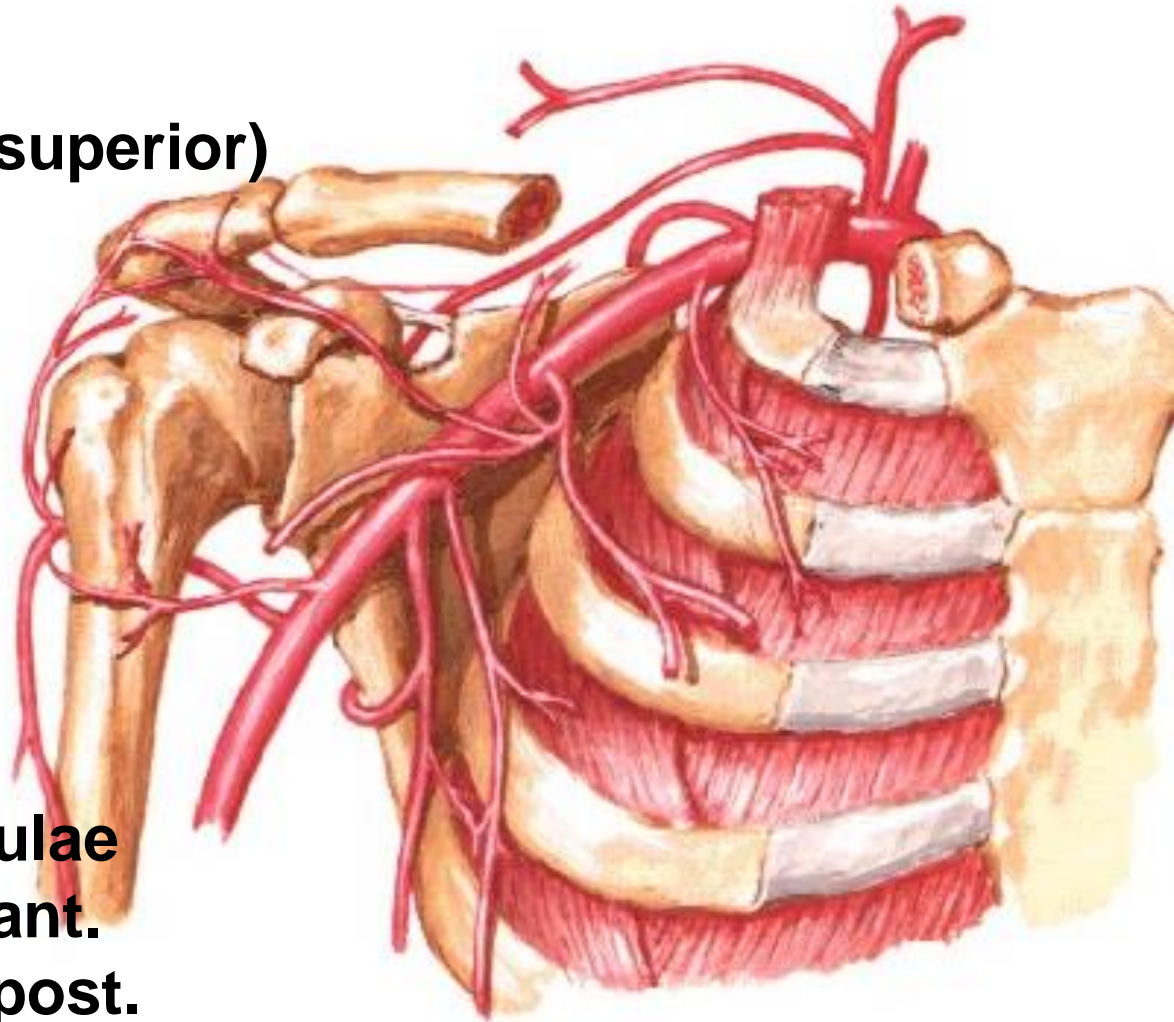
M. biceps brachii

M. coracobrachialis



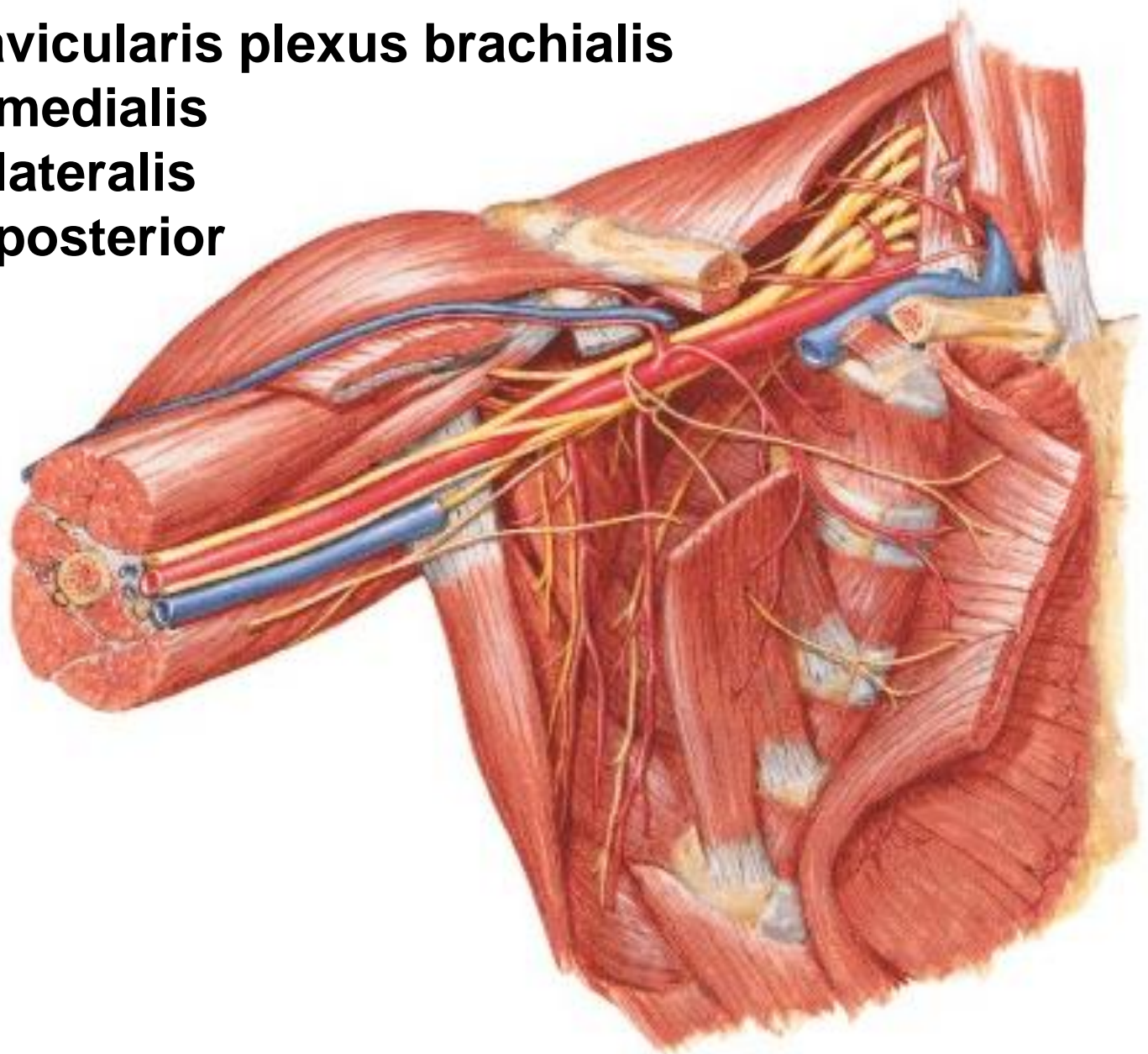
A. axillaris

- 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**

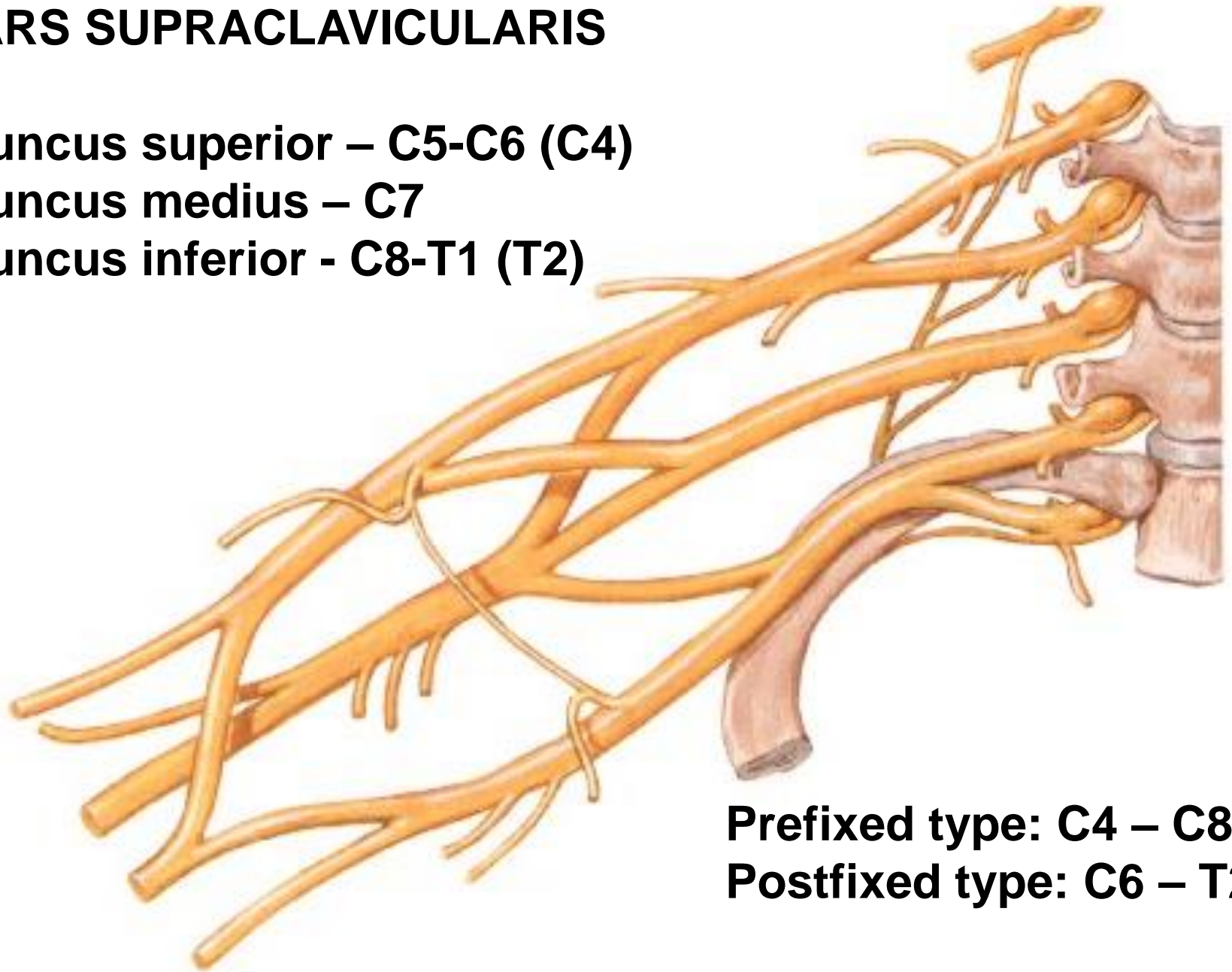


PARS SUPRACLAVICULARIS

Truncus superior – C5-C6 (C4)

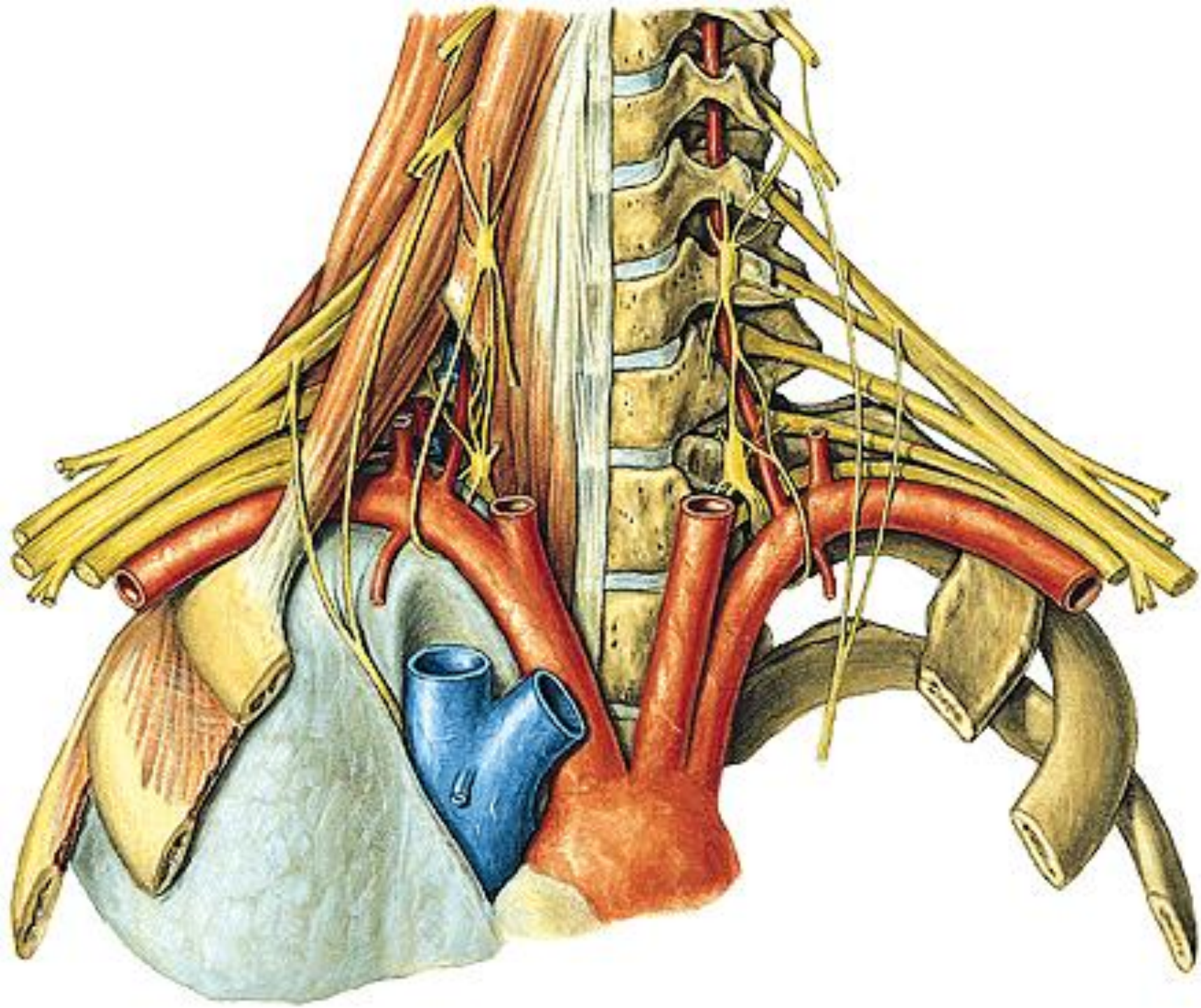
Truncus medius – C7

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.

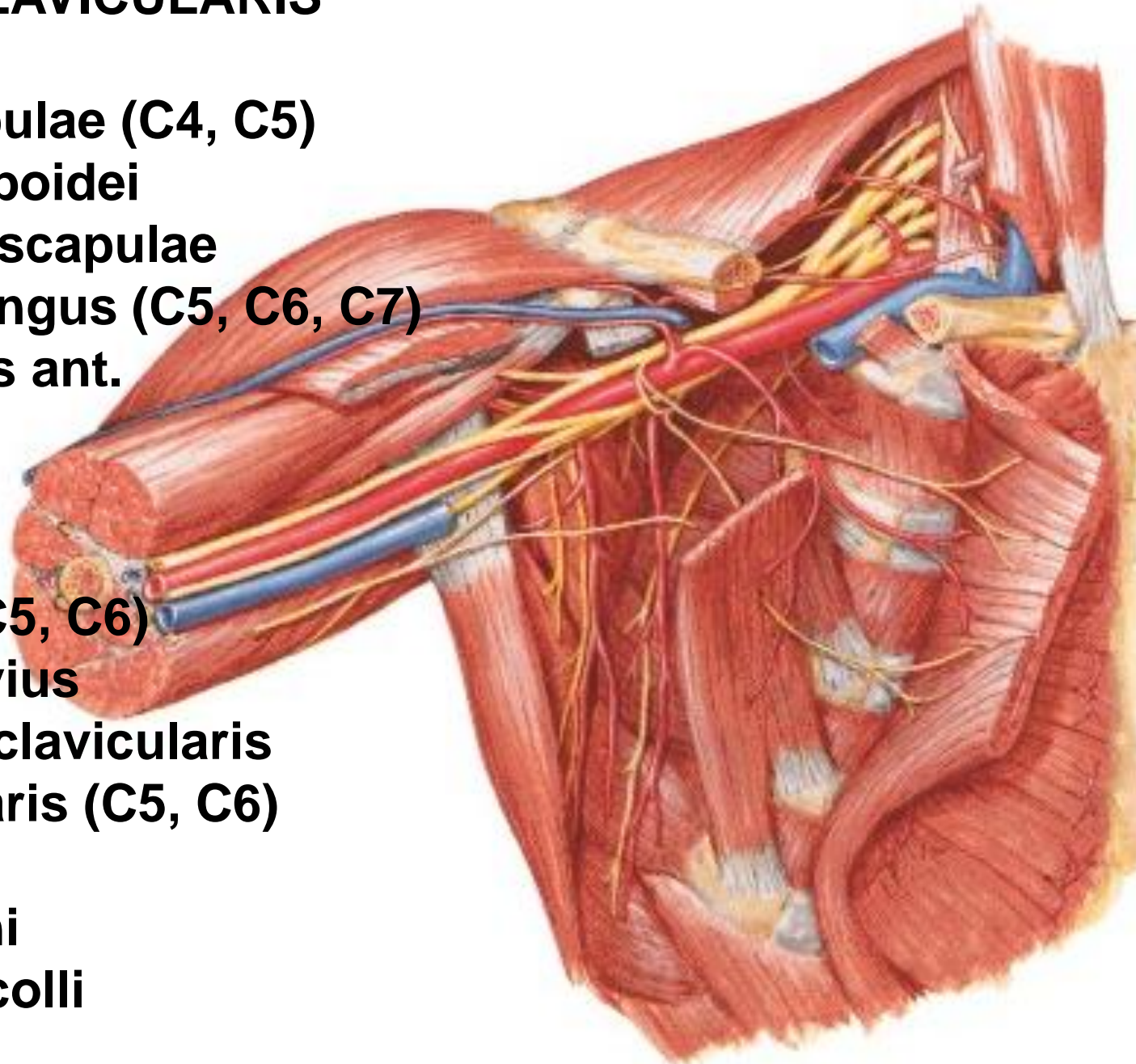
N. subclavius (C5, C6)

- m. subclavius
- art. sternoclavicularis

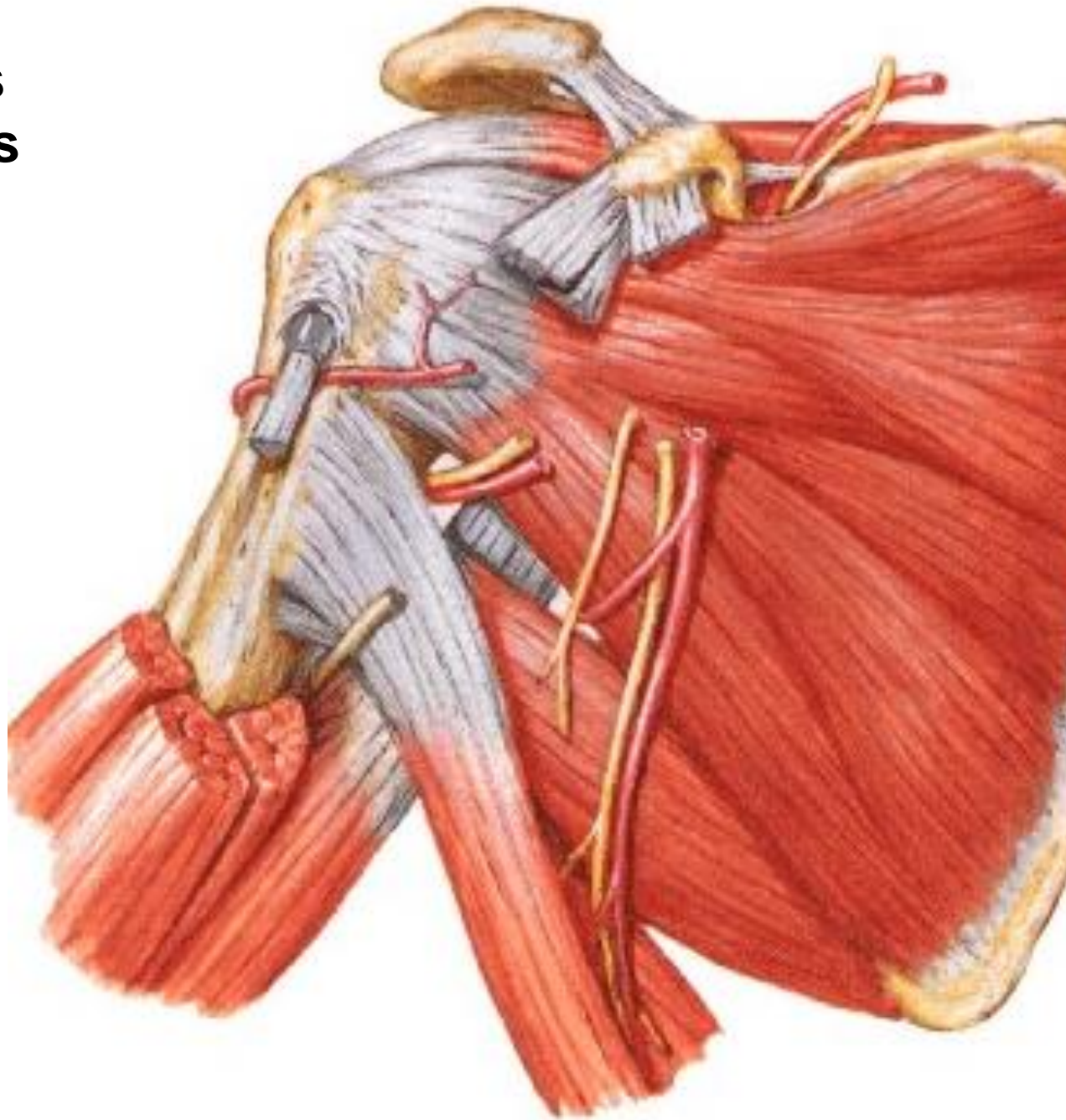
N. suprascapularis (C5, C6)

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

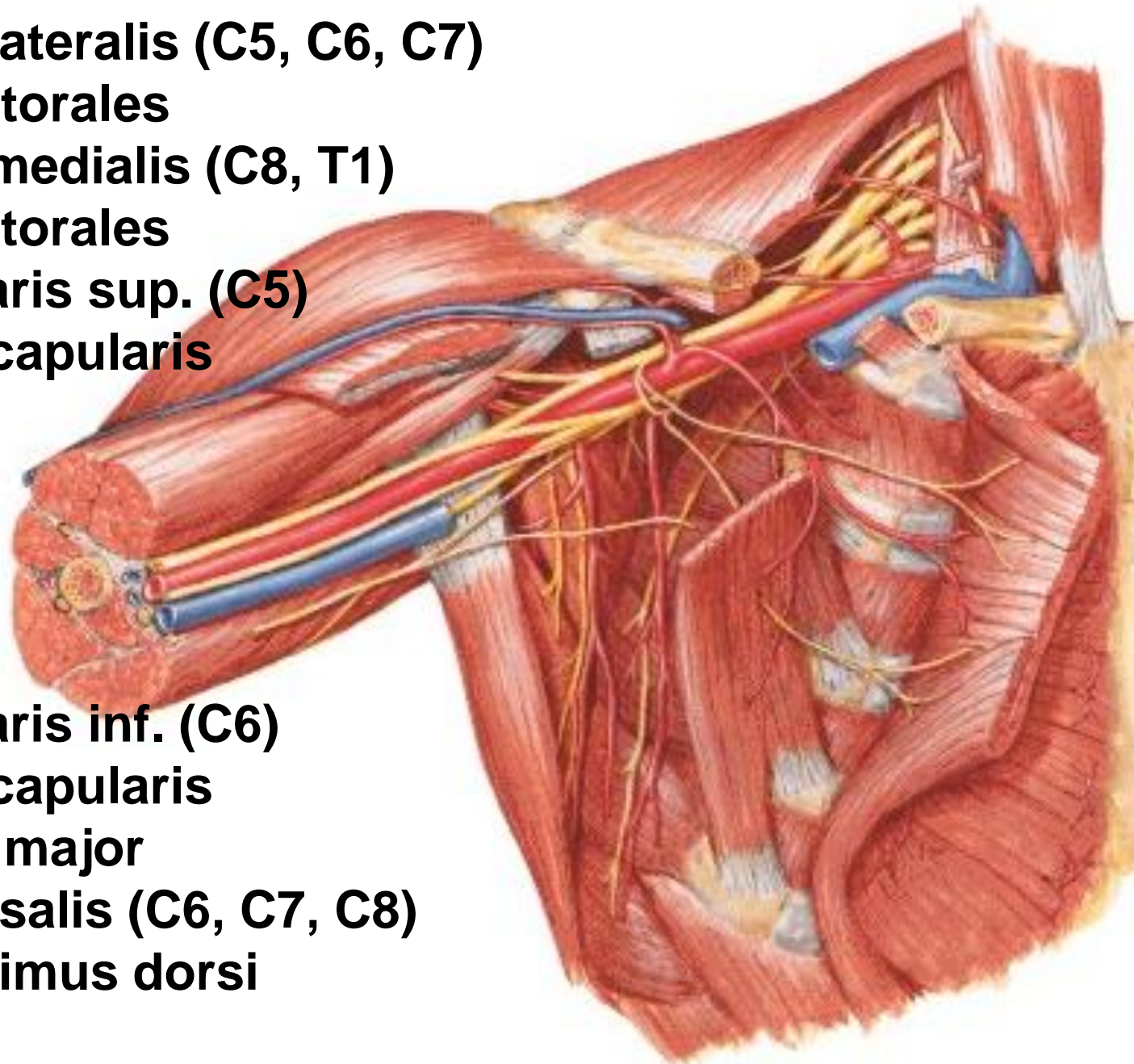
N. subscapularis inf. (C6)

- m. subscapularis

- m. teres major

N. thoracodorsalis (C6, C7, C8)

- m. latissimus dorsi



PARS INFRACLAVICULARIS
(terminal branches)

Fasciculus lateralis

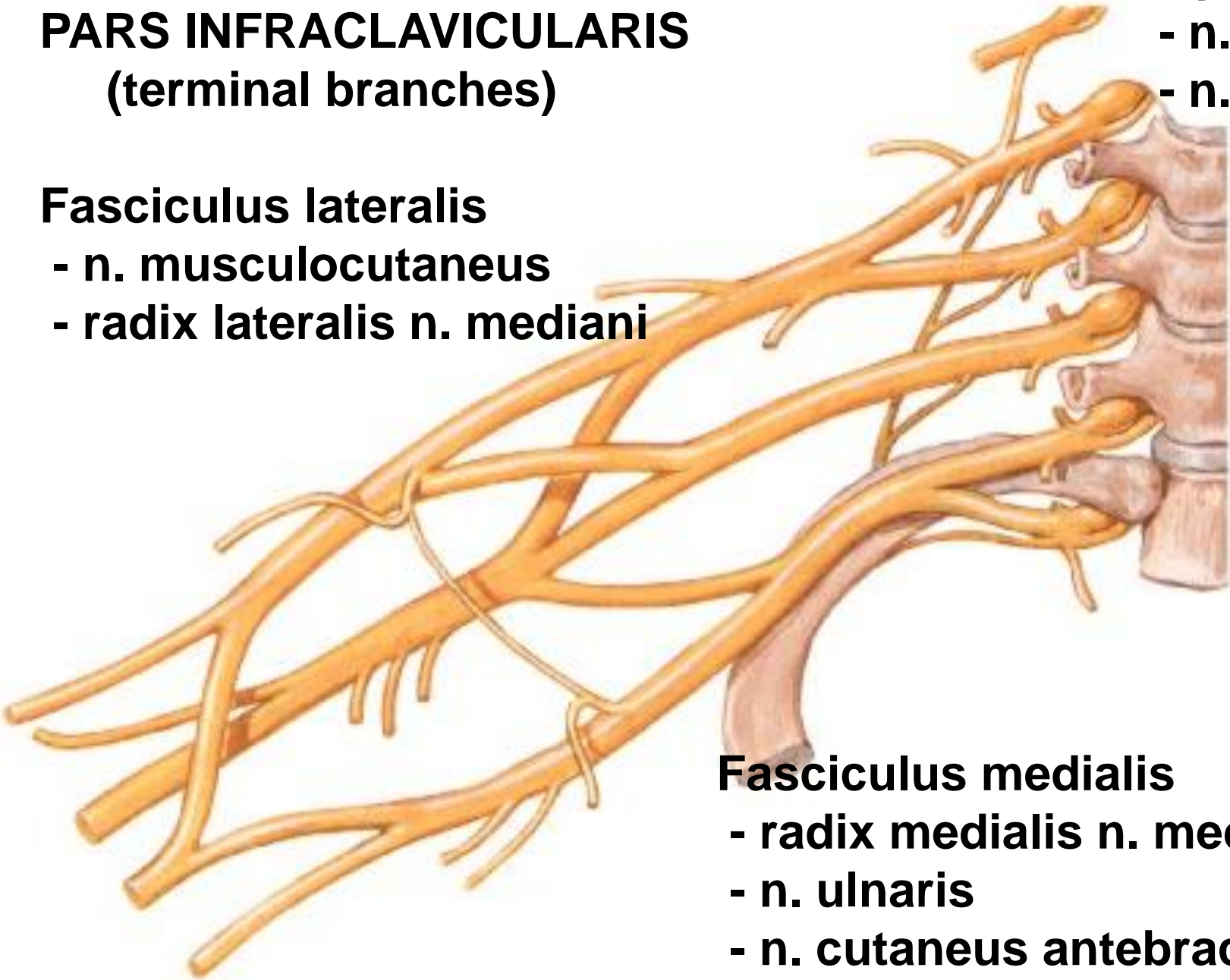
- n. musculocutaneus
- radix lateralis n. mediani

Fasciculus posterior

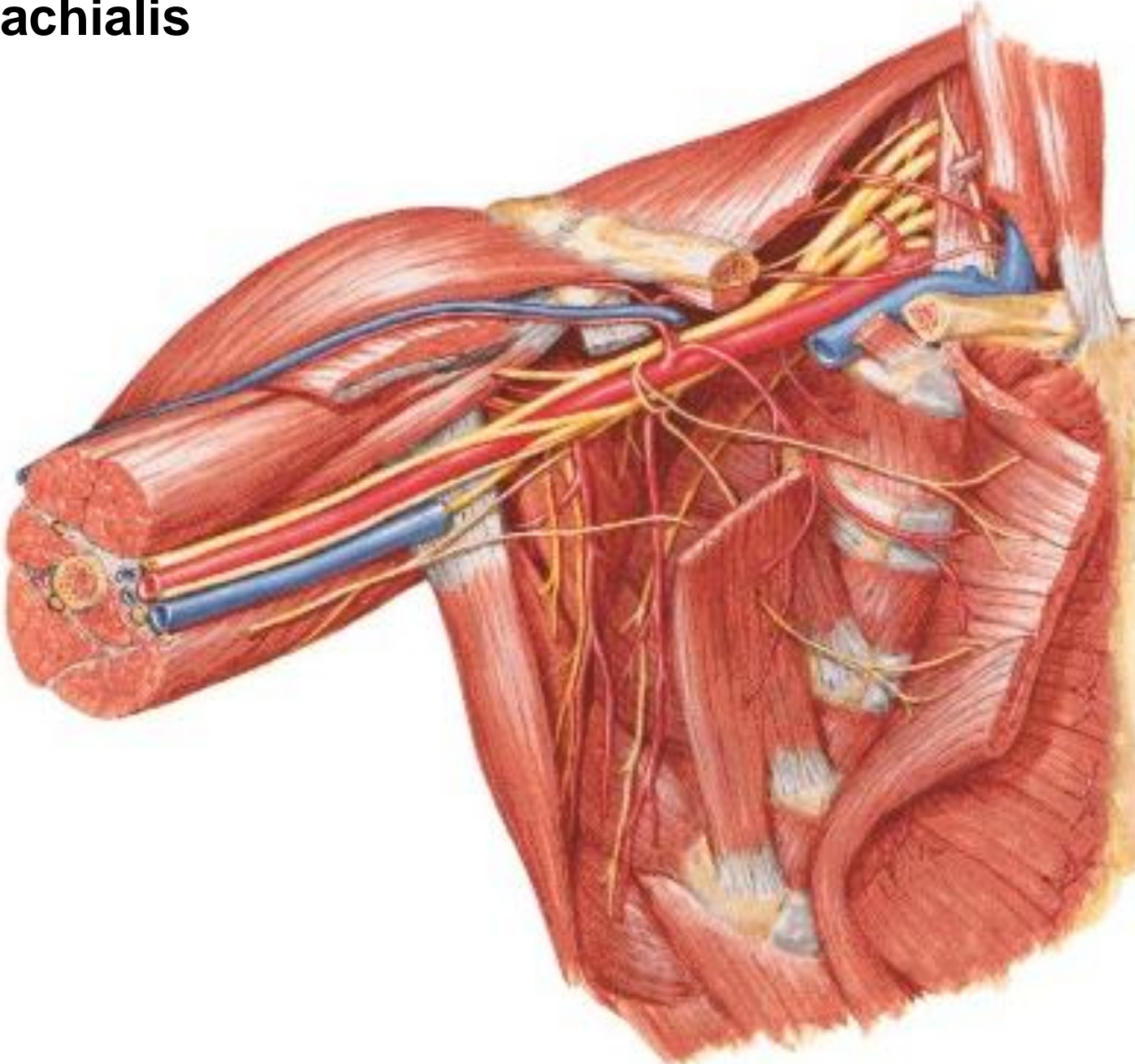
- n. axillaris
- n. radialis

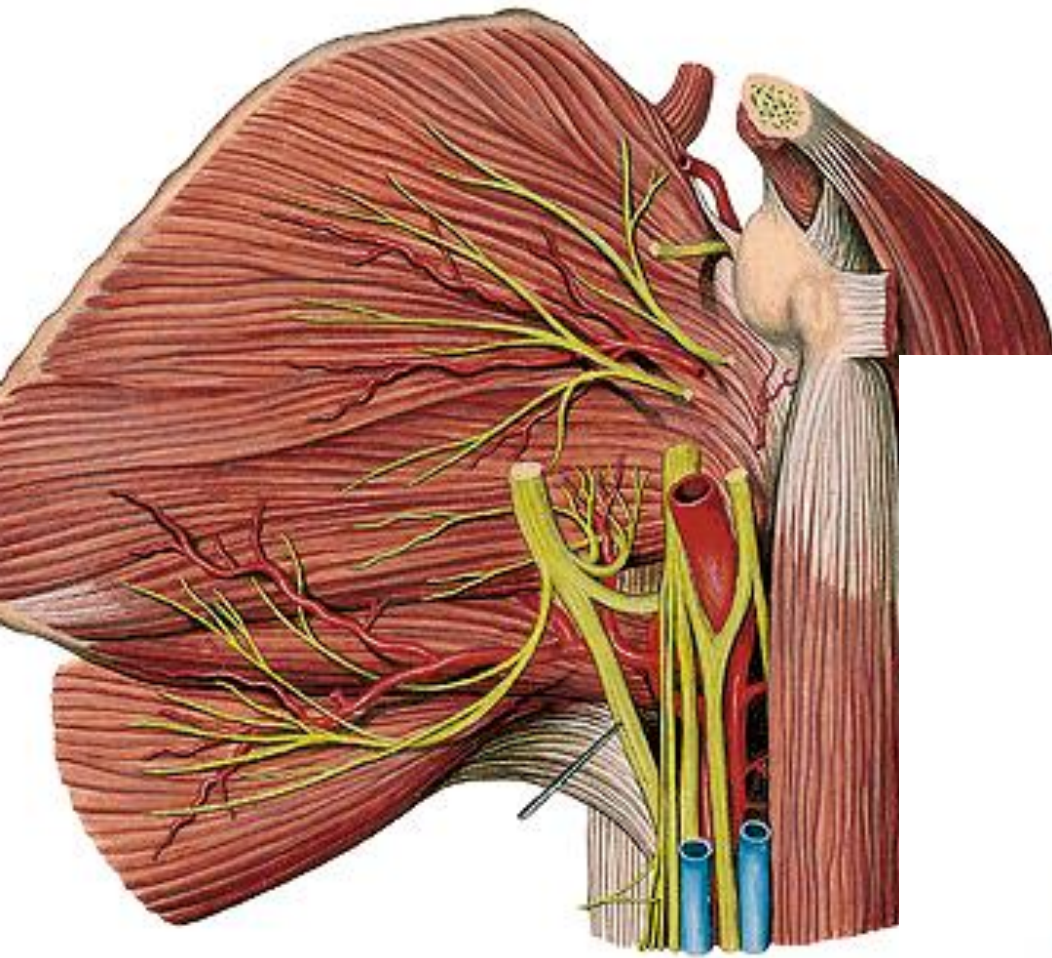
Fasciculus medialis

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

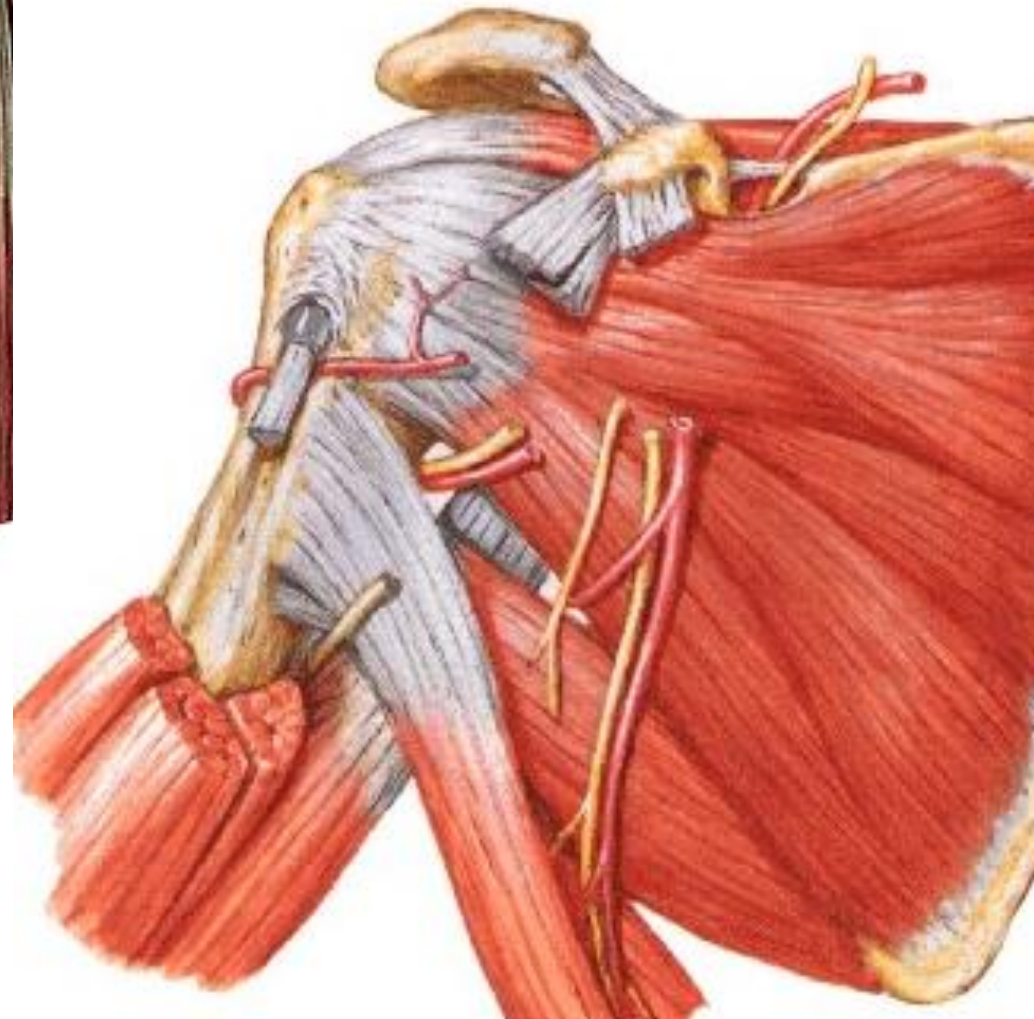


N. intercostobrachialis





N. axillaris

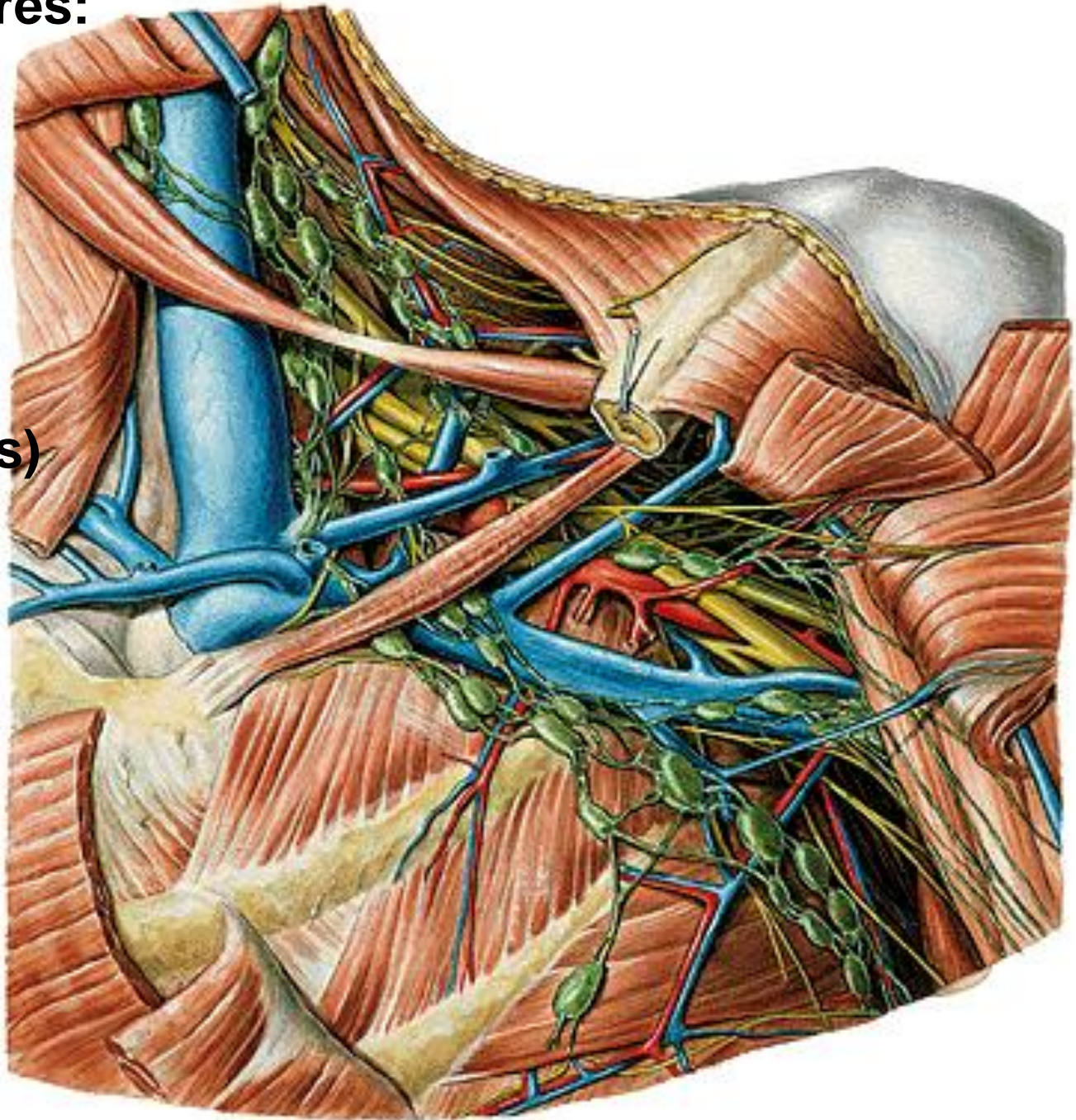


N. radialis

Nodi lymph. axillares:

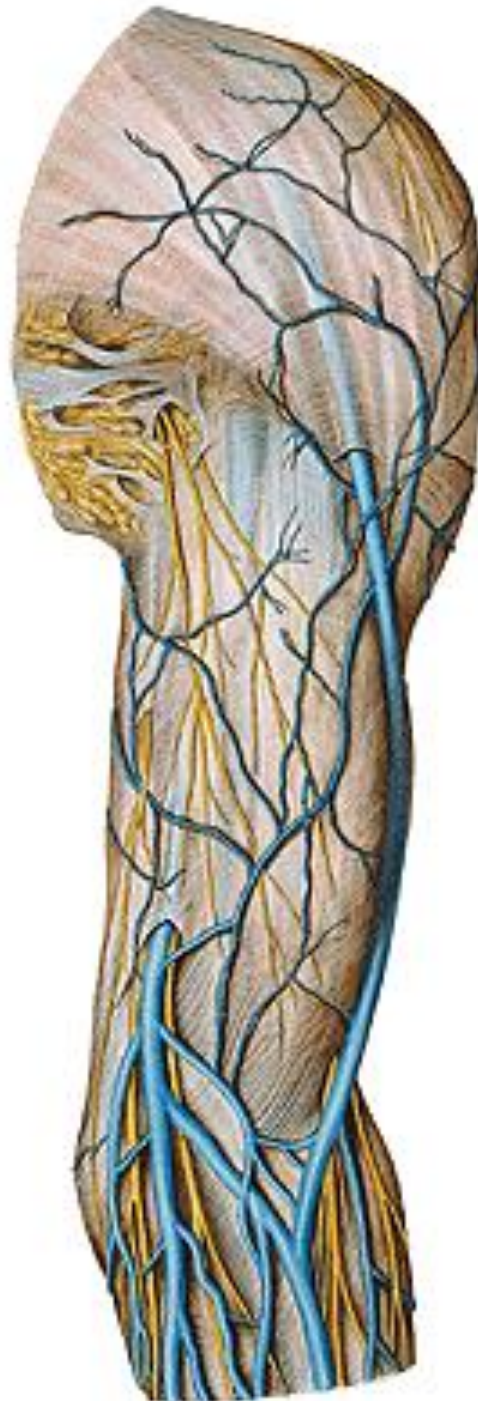
- laterales**
- pectorales (Sorgius)**
- subscapulares**
- centrales**
- apicales (infraclaviculares)**

→ tr. subclavius

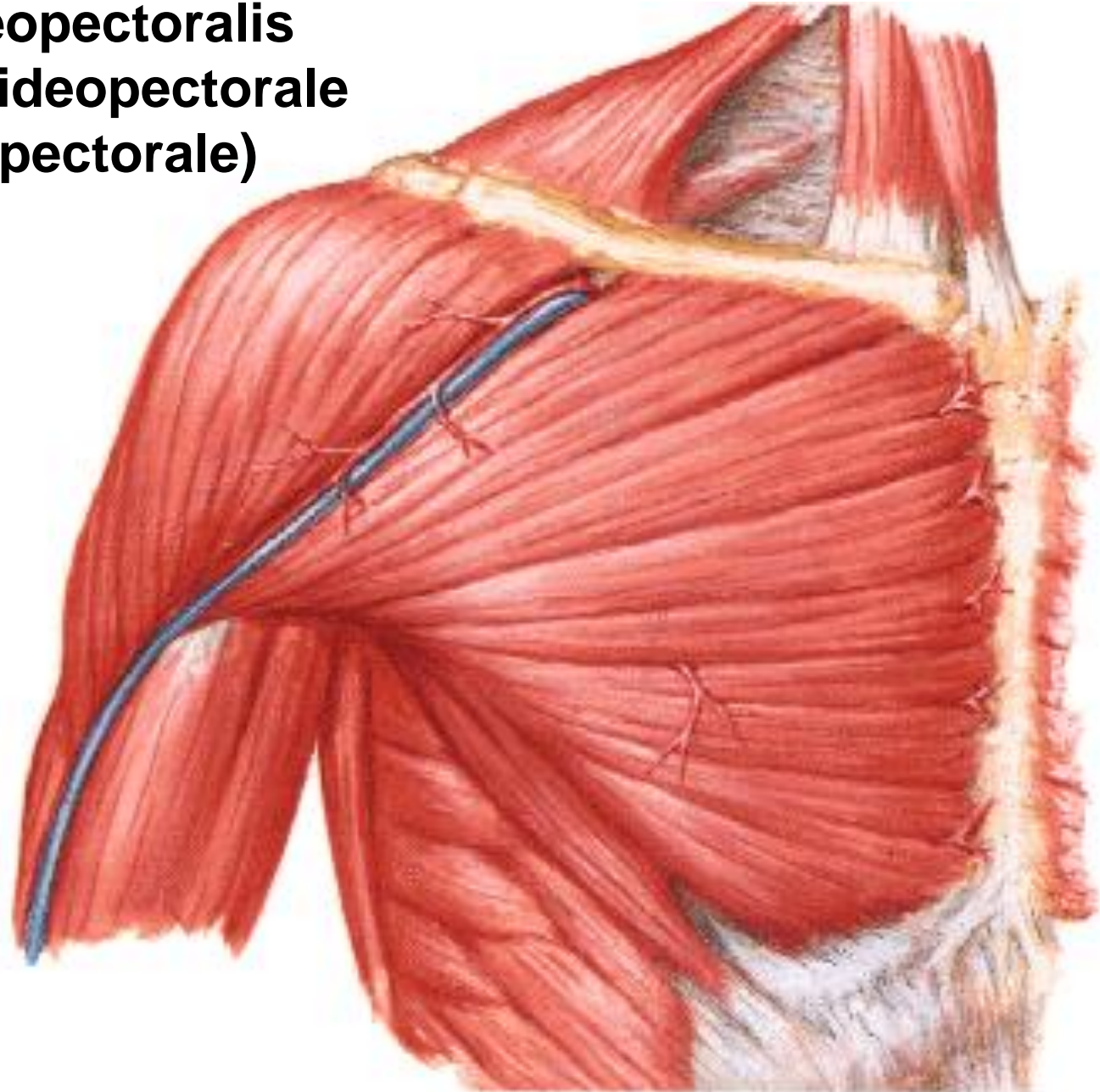


Regio deltoidea

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

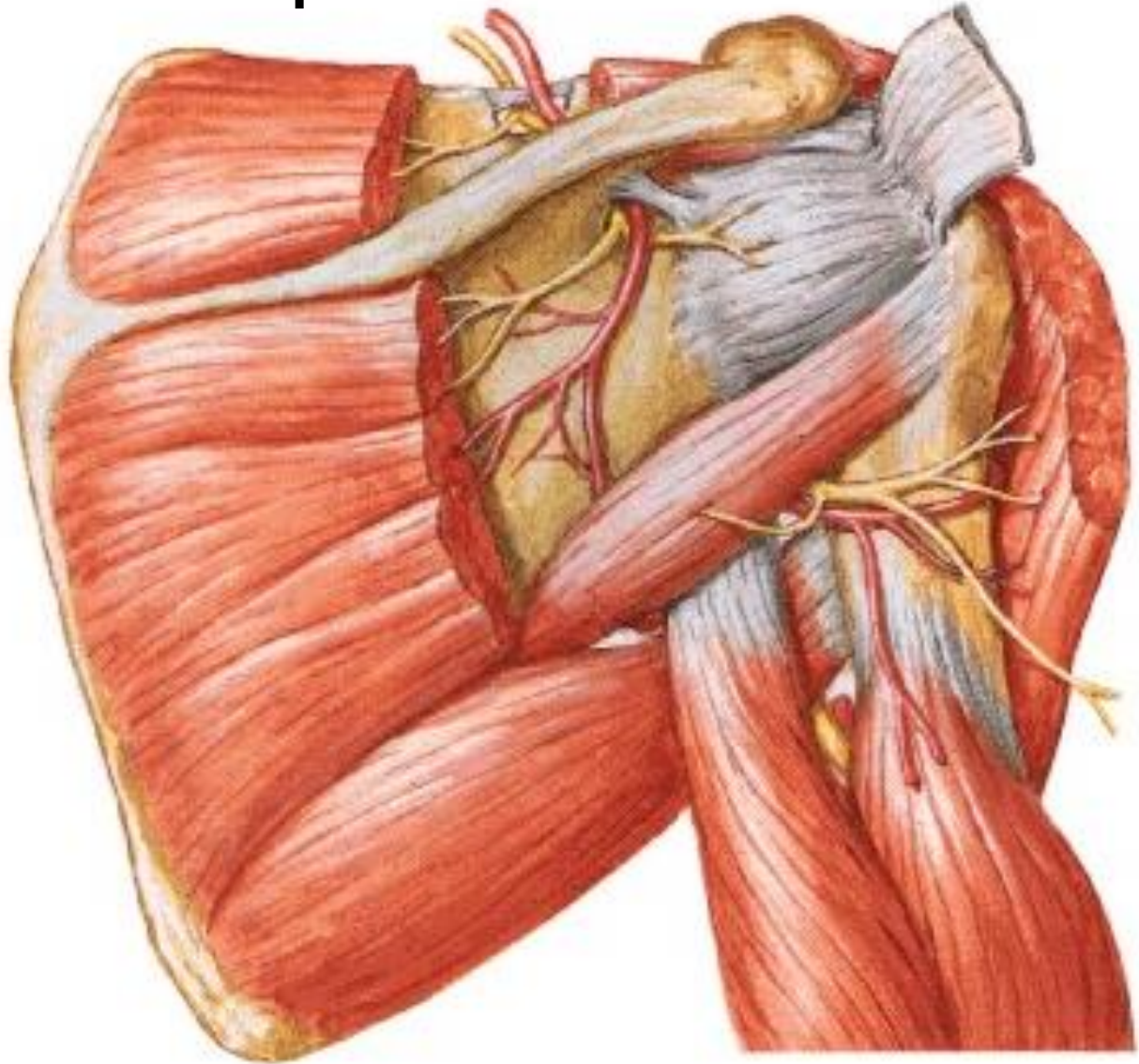


Sulcus deltoideopectoralis
Trigonum deltoideopectorale
(clavipectorale)



M. deltoideus (n. axillaris)

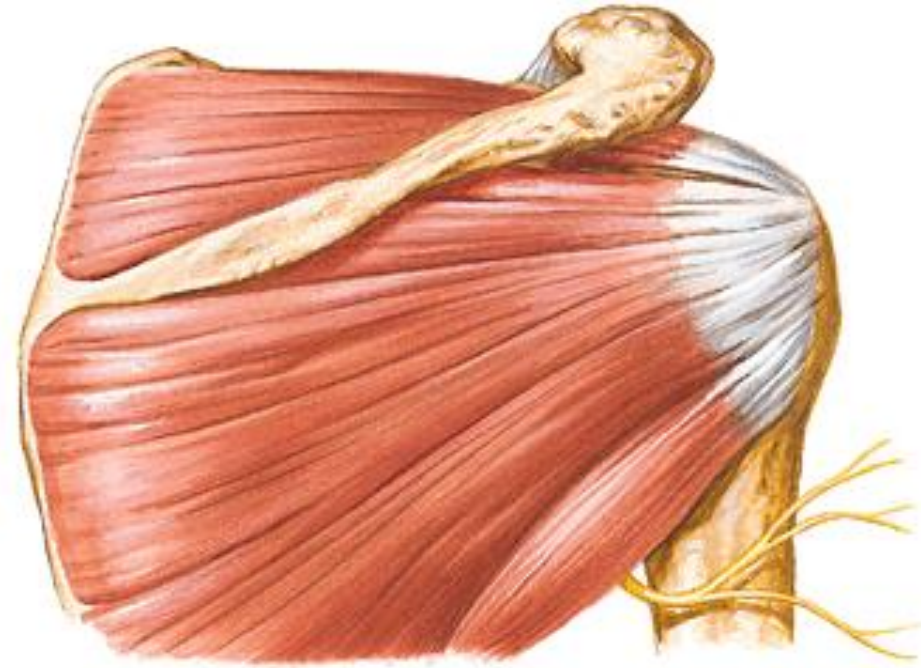
A. circumflexa humeri post. et ant.



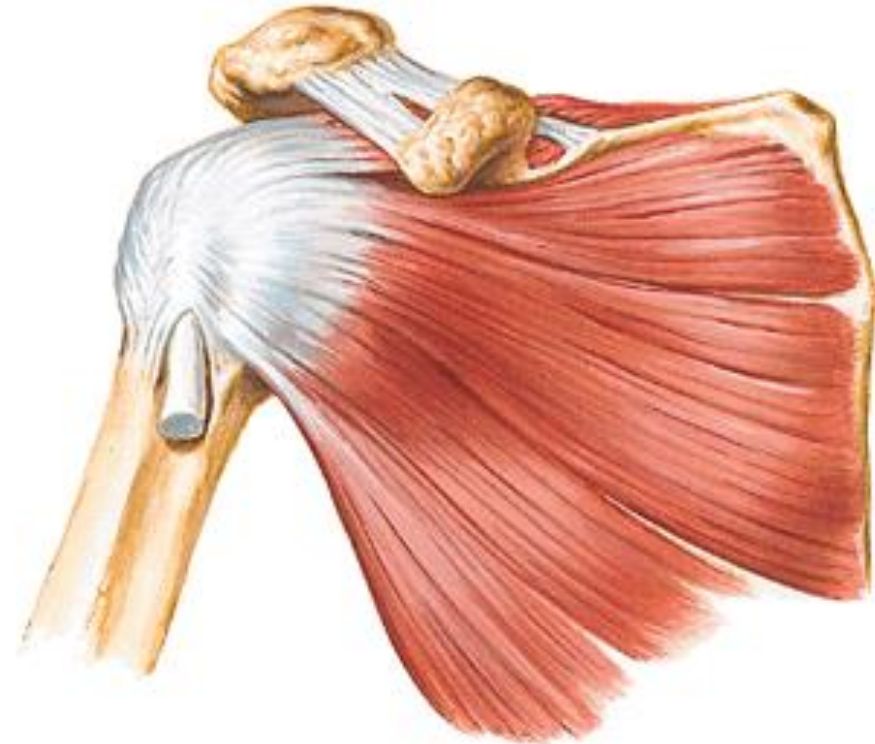
Regio scapularis



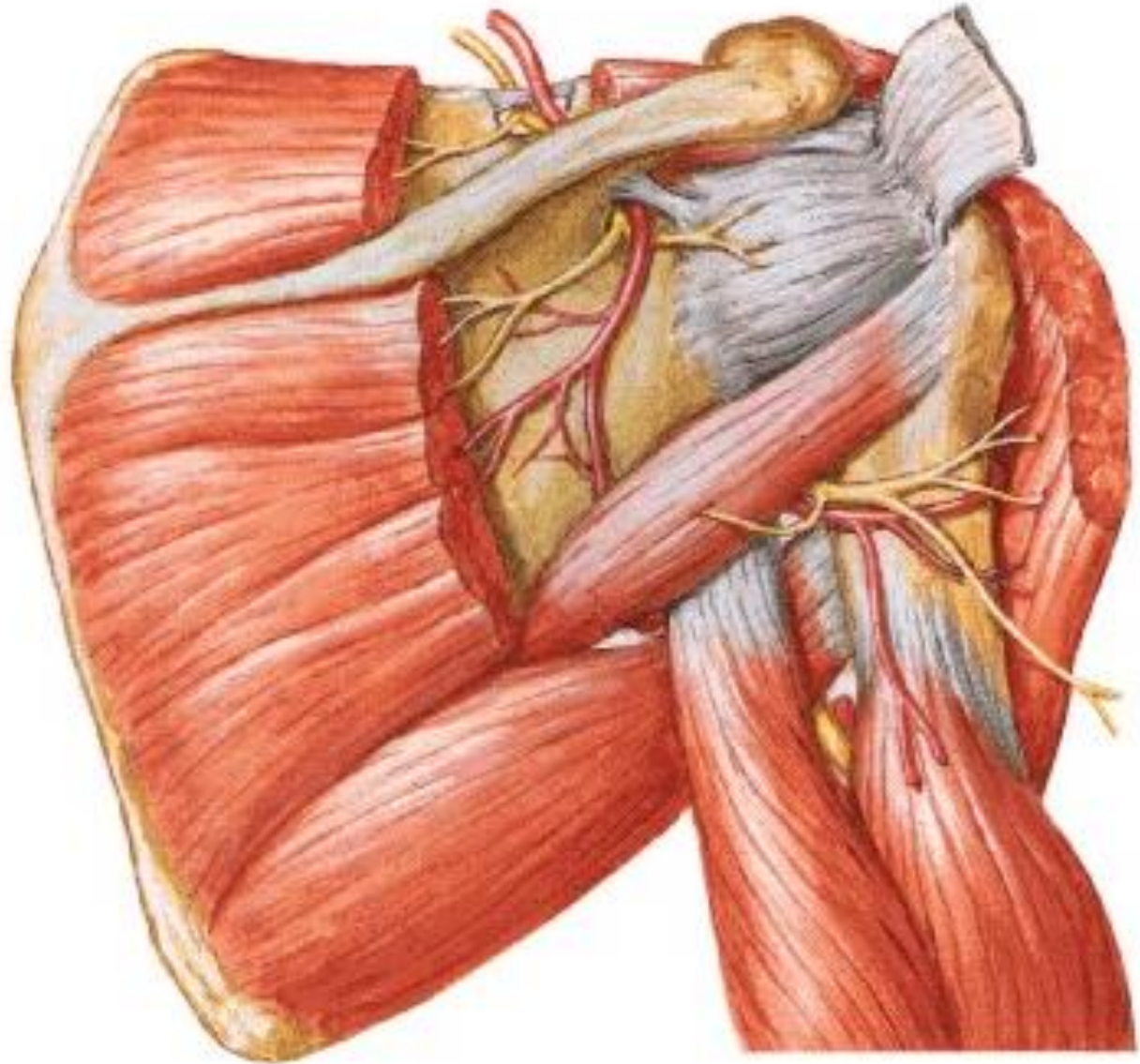
M. supraspinatus
M. infraspinatus
M. teres minor
M. teres major



M. subscapularis

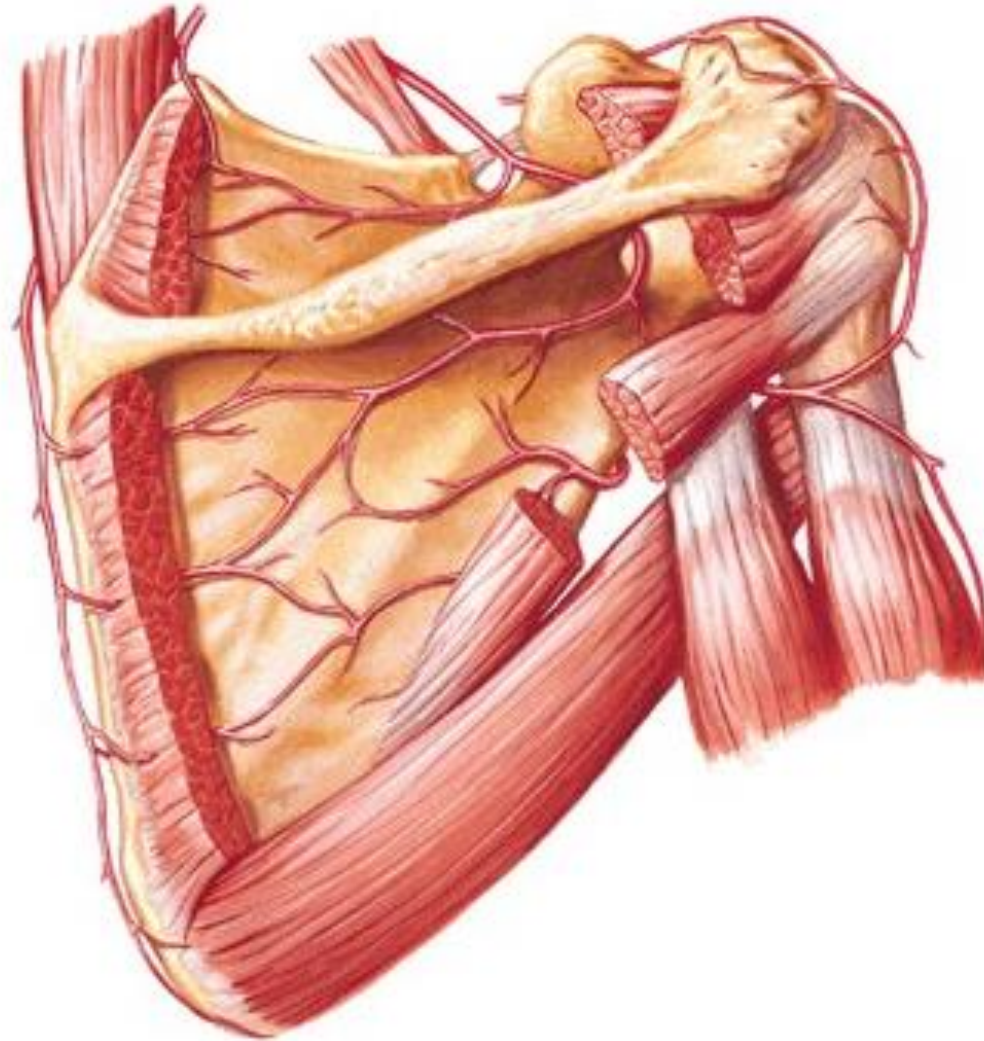


N. suprascapularis
N. axillaris

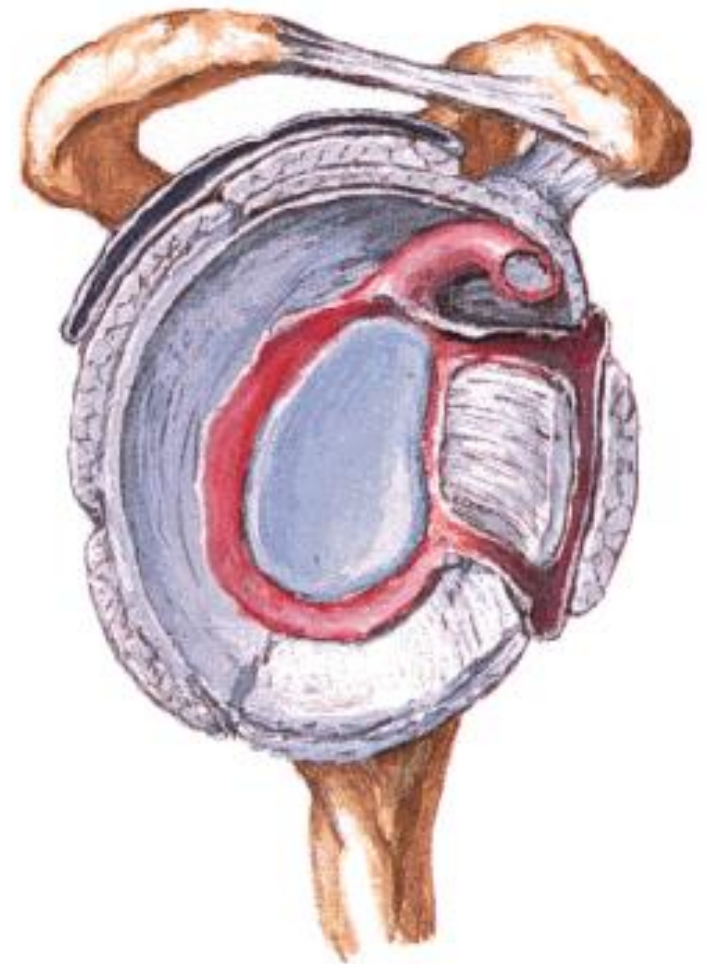
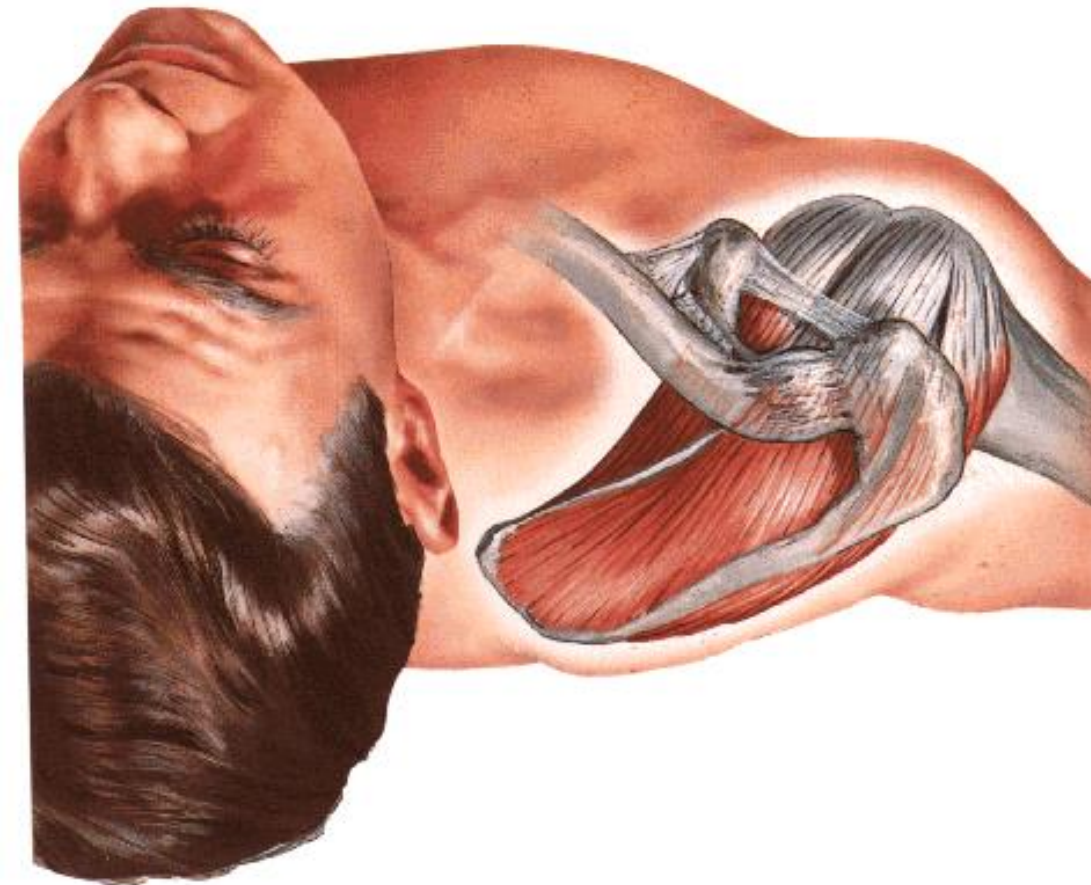


ARTERIAL ANASTOMOSES AROUND THE SCAPULA

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

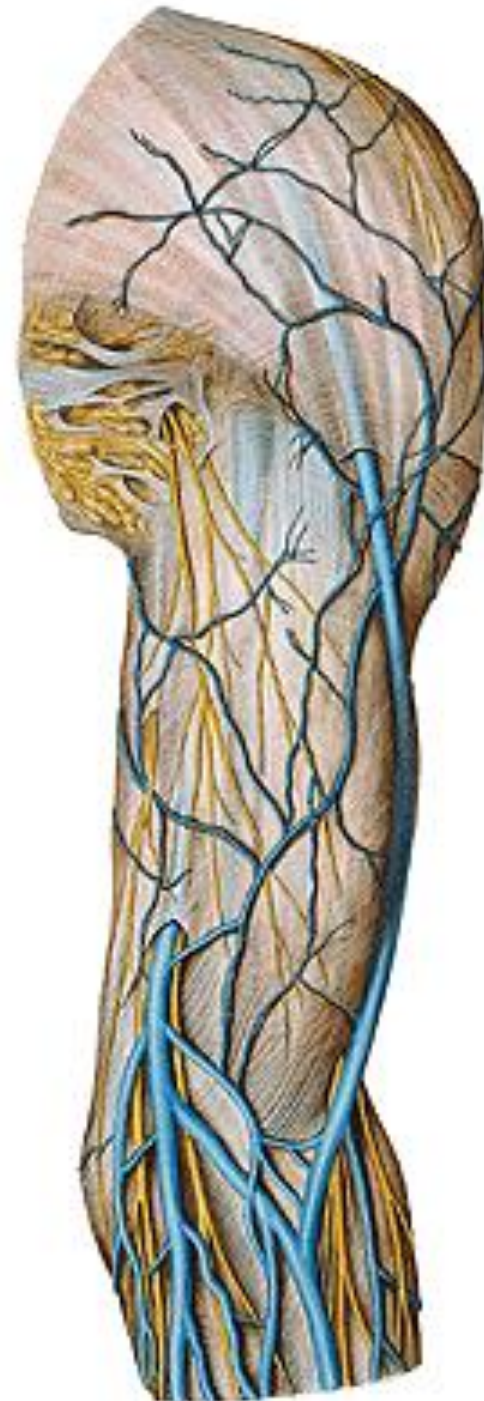


Rotator cuff

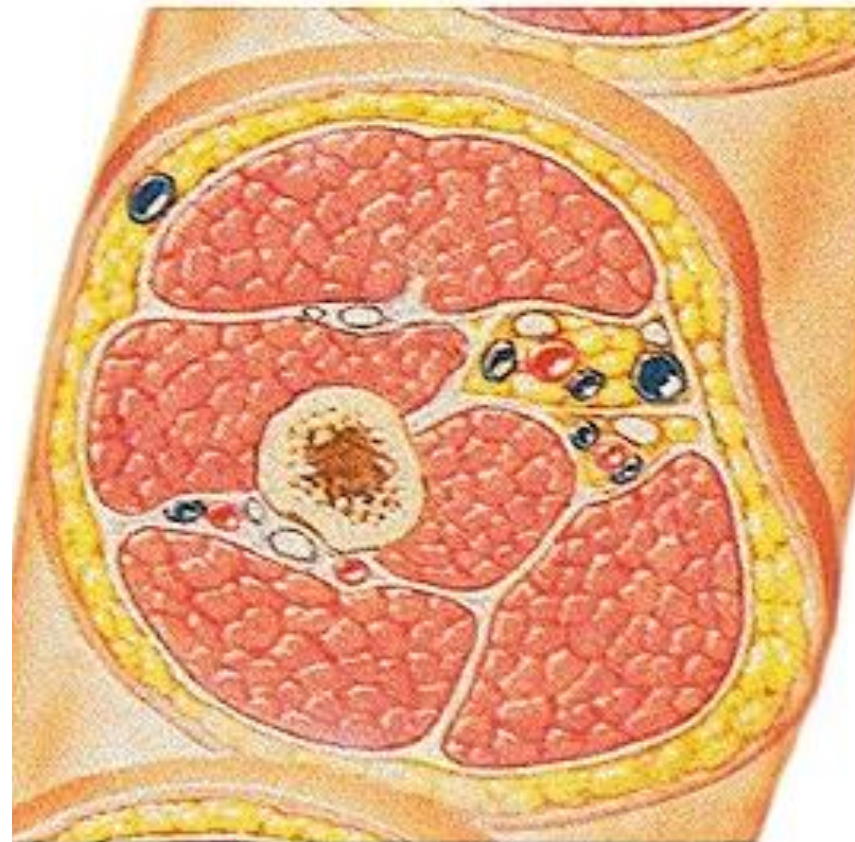
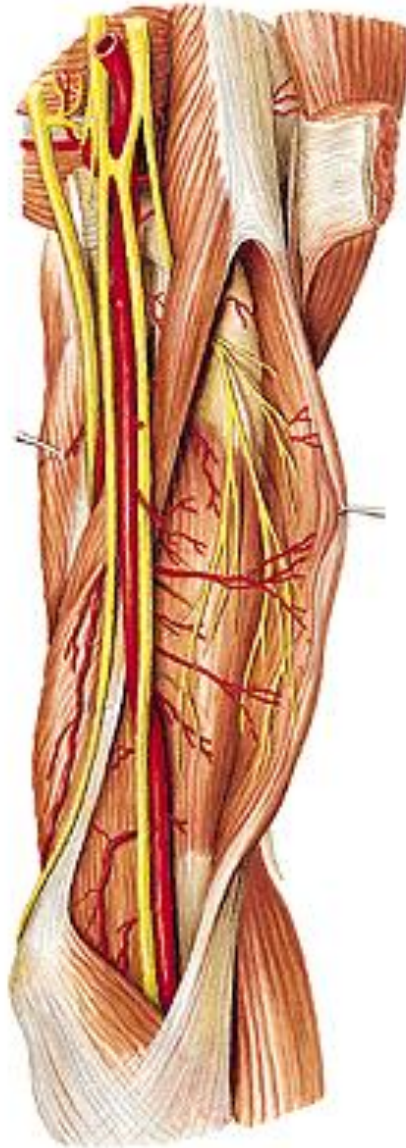
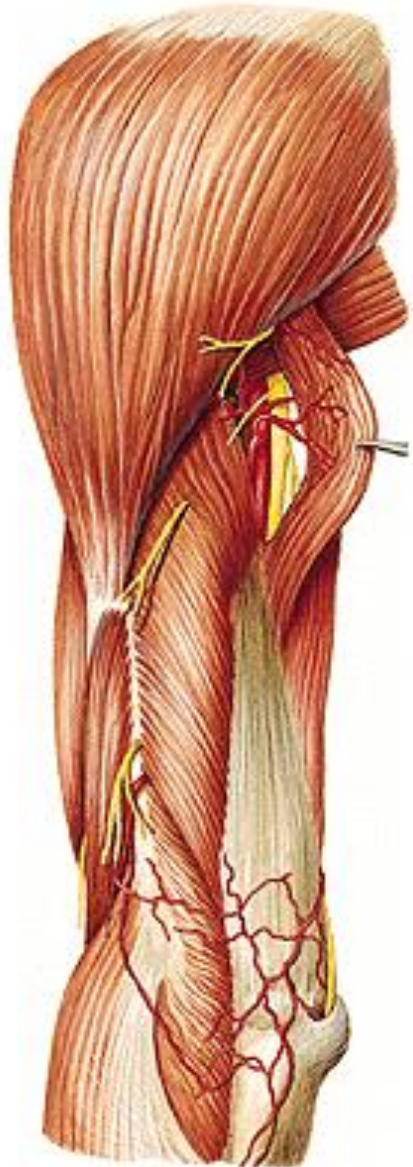


Regio brachii anterior

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

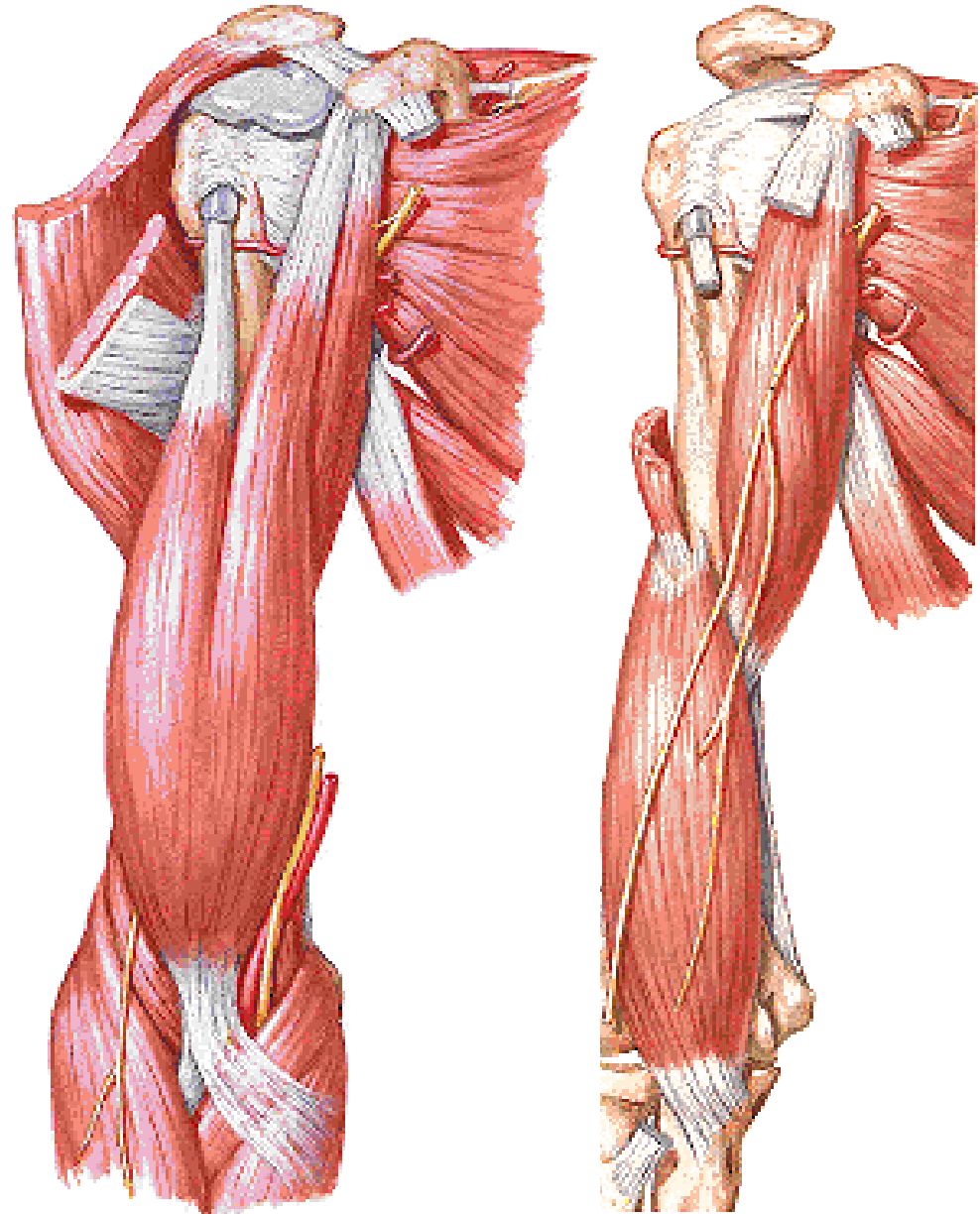
caput breve

aponeurosis m. bicipitis

M. coracobrachialis

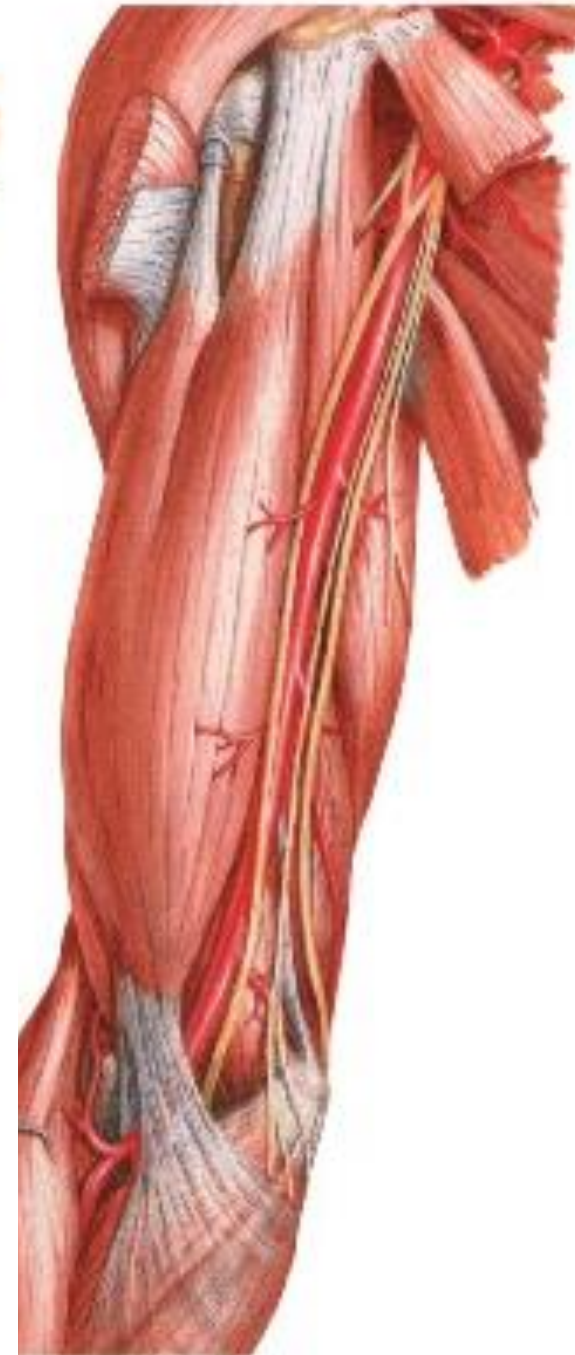
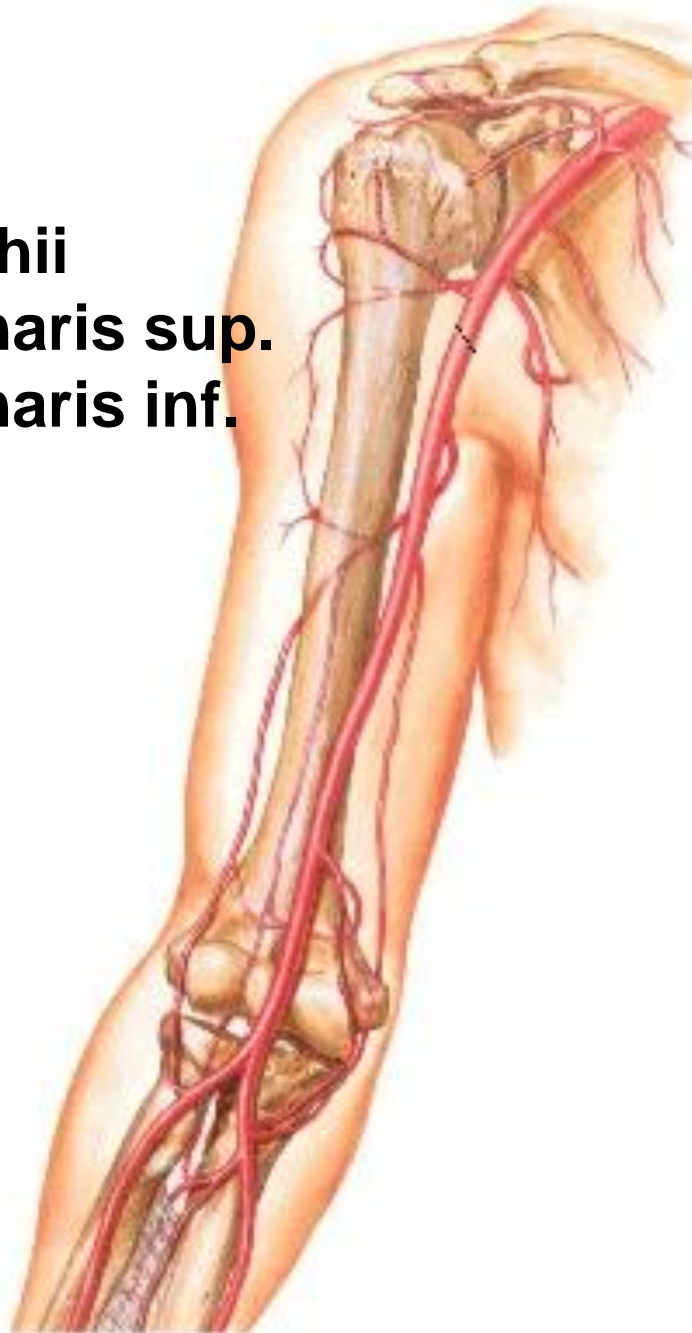
M. brachialis

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

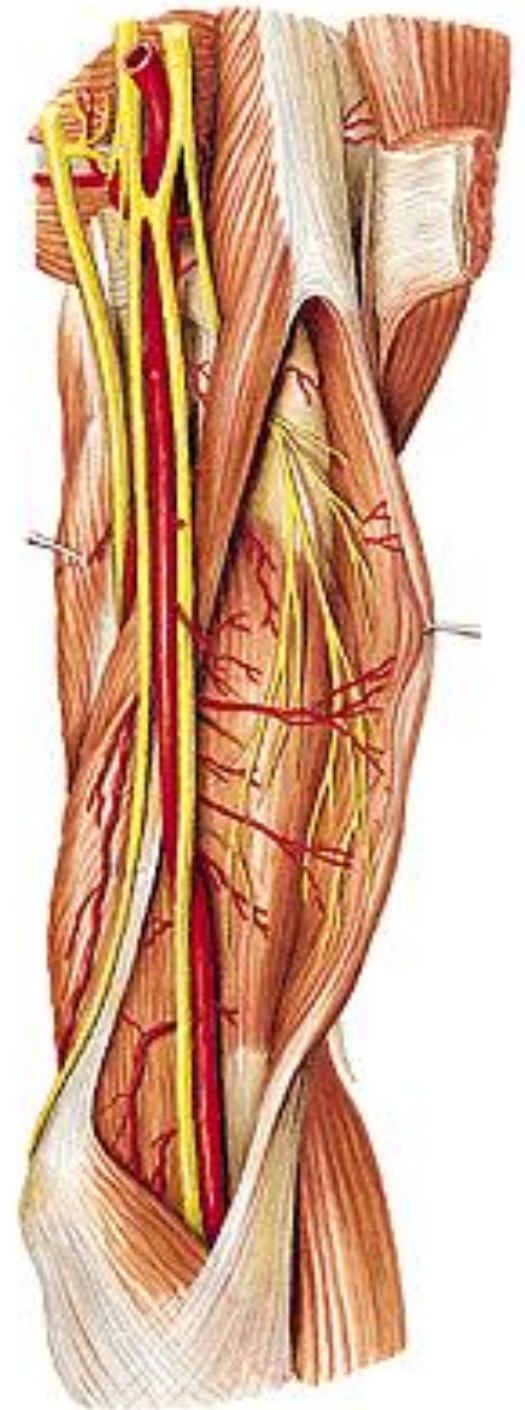


A. collateralis ulnaris sup.

A. collateralis ulnaris inf.

N. medianus

N. ulnaris



Regio brachii posterior

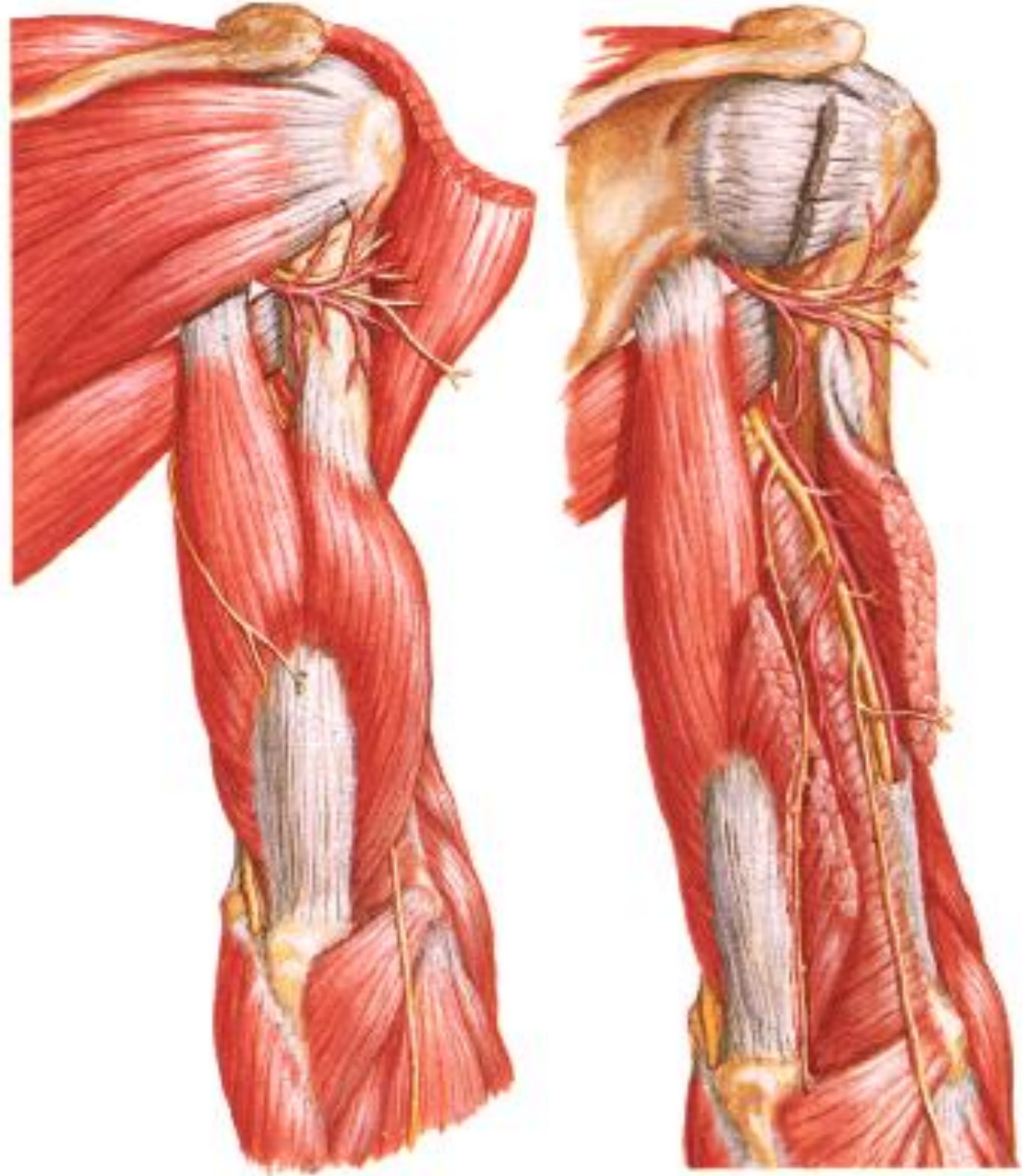
N. cutaneus brachii lateralis inferior
N. cutaneus brachii posterior
N. cutaneus antebrachii post.
(n. radialis)



Posterior group of muscles:

M. triceps brachii
caput longum
caput laterale
caput mediale

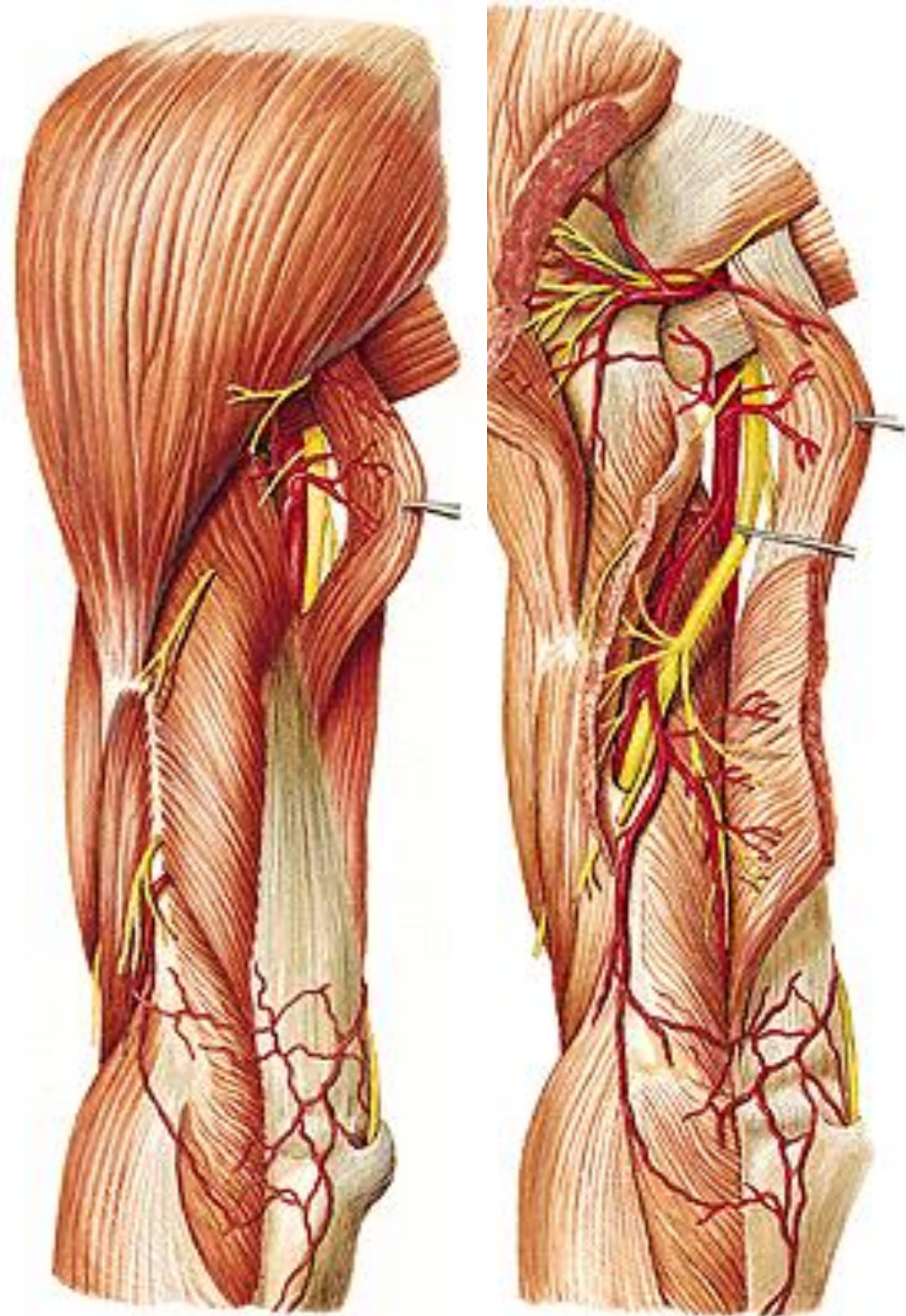
N. radialis



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

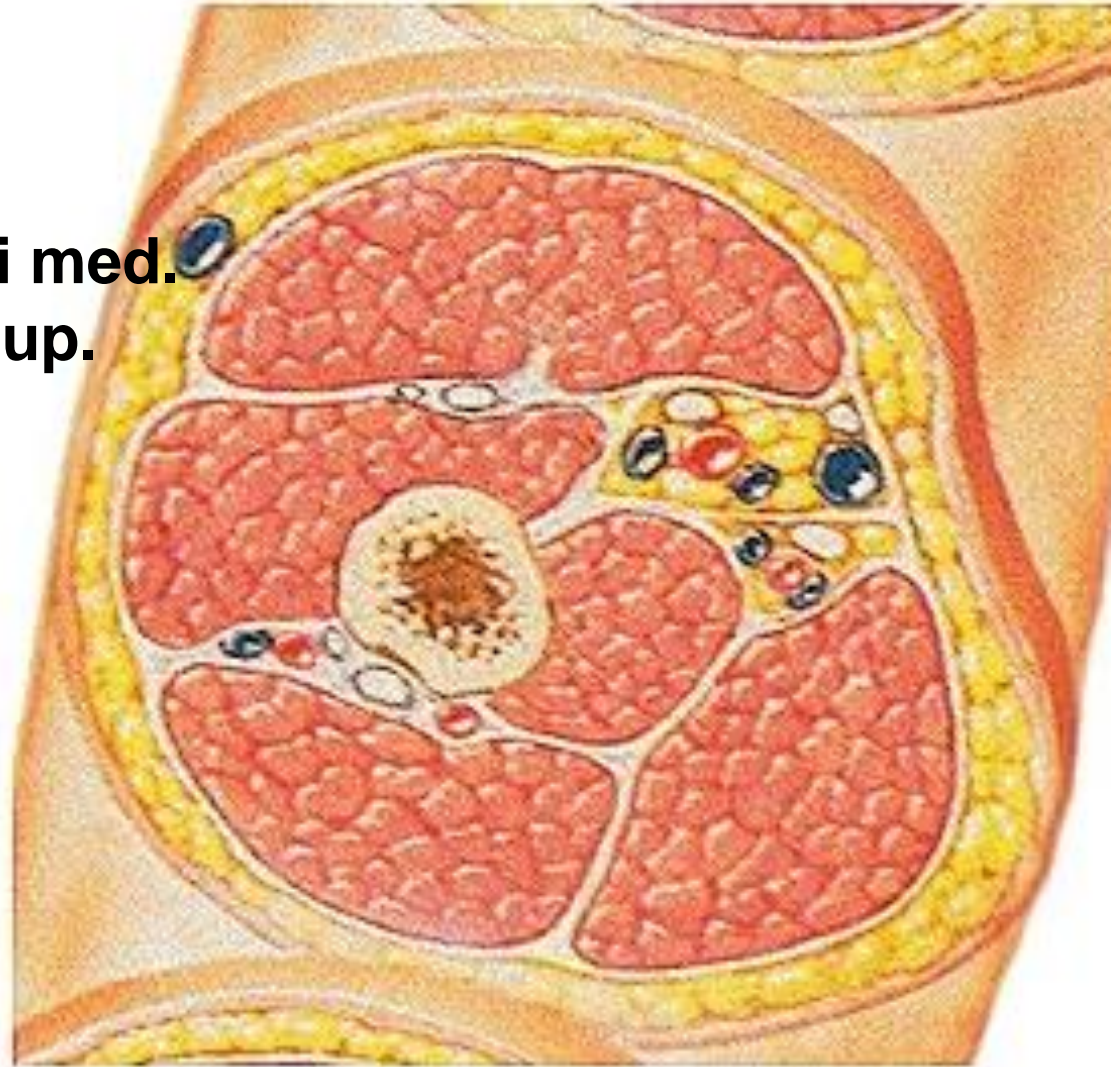
N. musculocutaneus

N. radialis

A. profunda brachii

V. profunda brachii

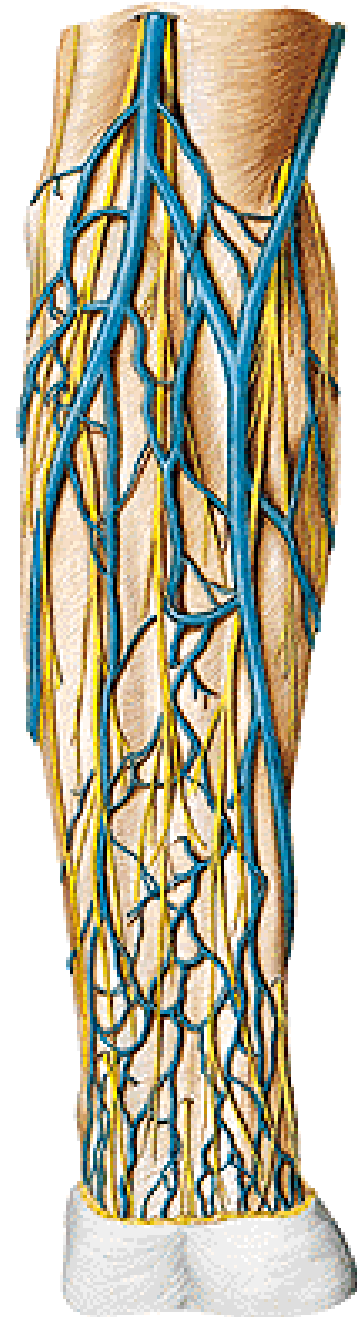
A. coll. media



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

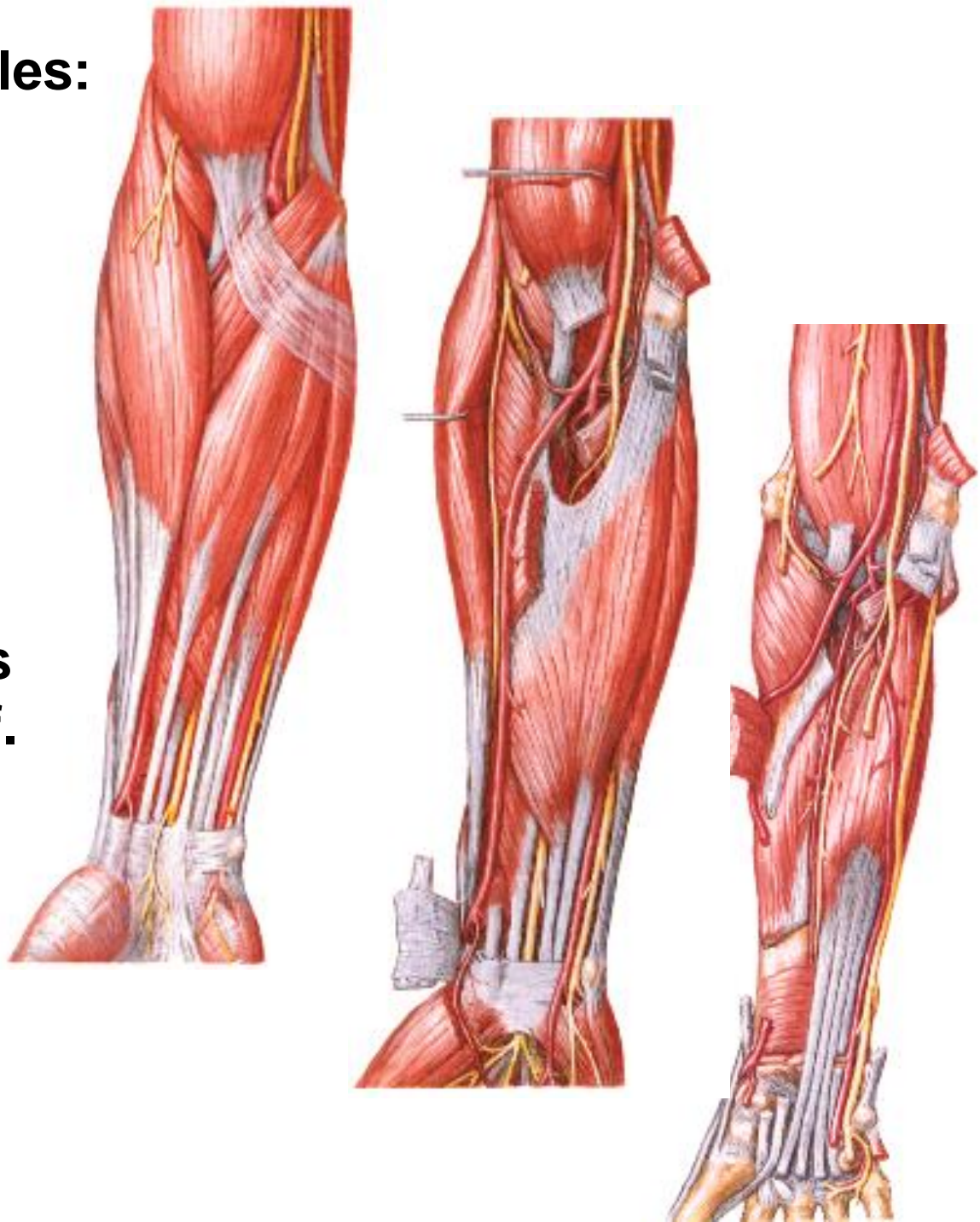
M. flexor carpi ulnaris

M. flexor digitorum spf.

M. flexor pollicis longus

M. flexor digitorum prof.

M. pronator quadratus



Lateral group of muscles:

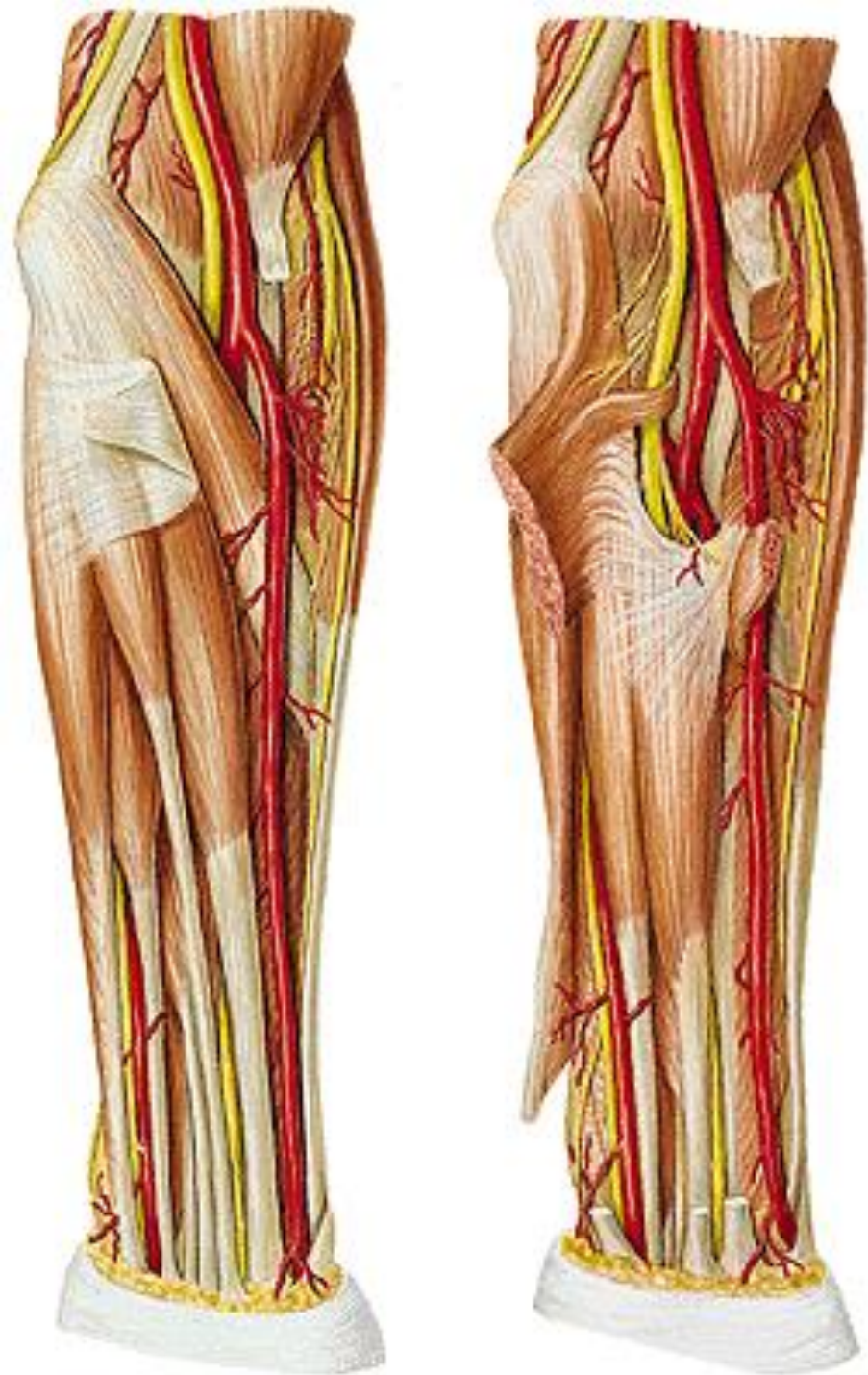
M. brachioradialis

M. extensor carpi radialis longus

M. extensor carpi radialis brevis

M. supinator





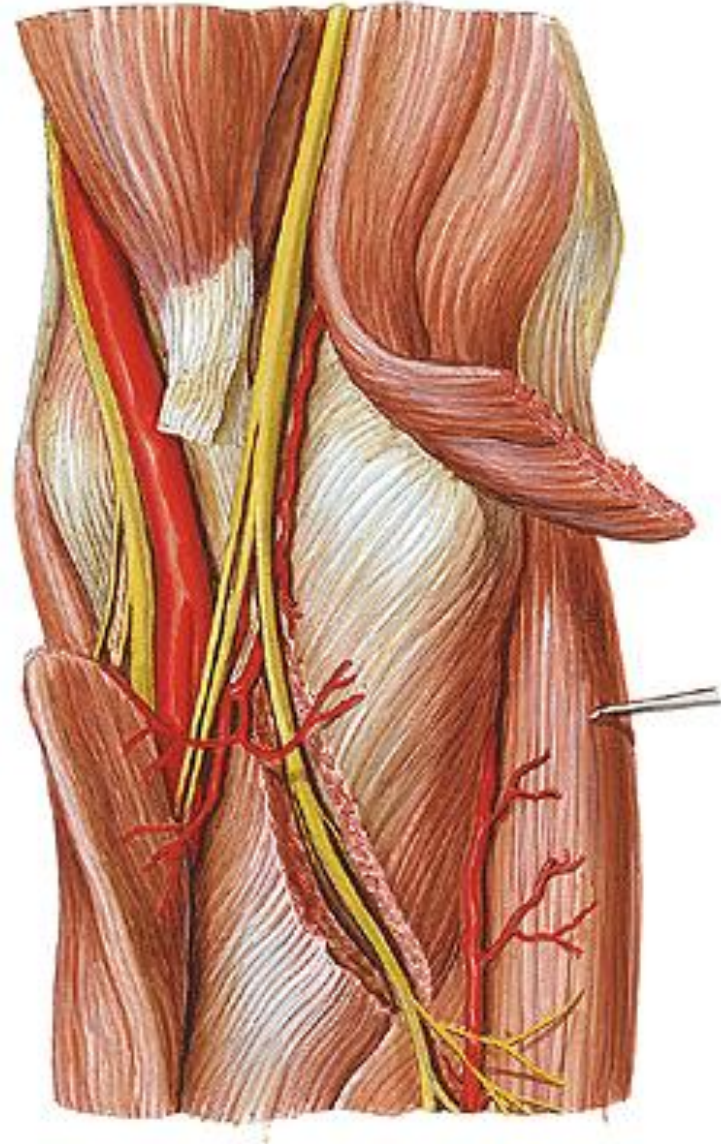
A. radialis
- a. recurrens radialis
- rr. musculares

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**

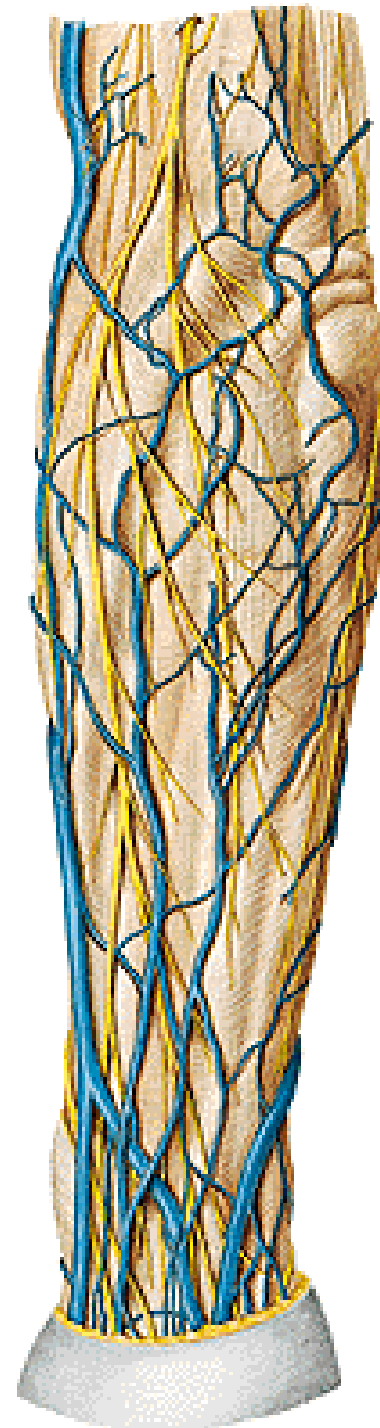
**N. cutaneus antebrachii post.
(n. radialis)**

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

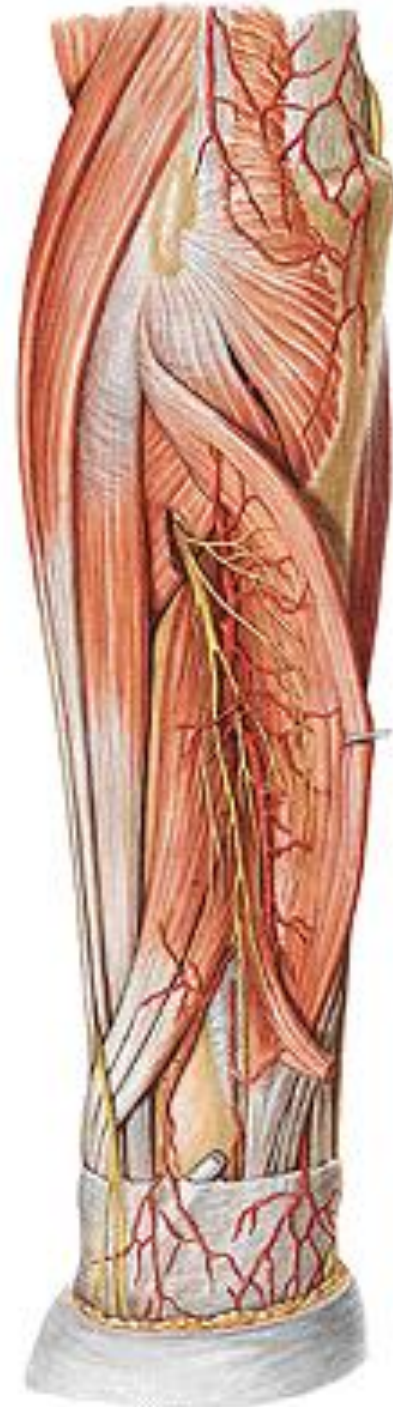
N. radialis

- n. interosseus post.
- rr. musculares

A. interossea post.

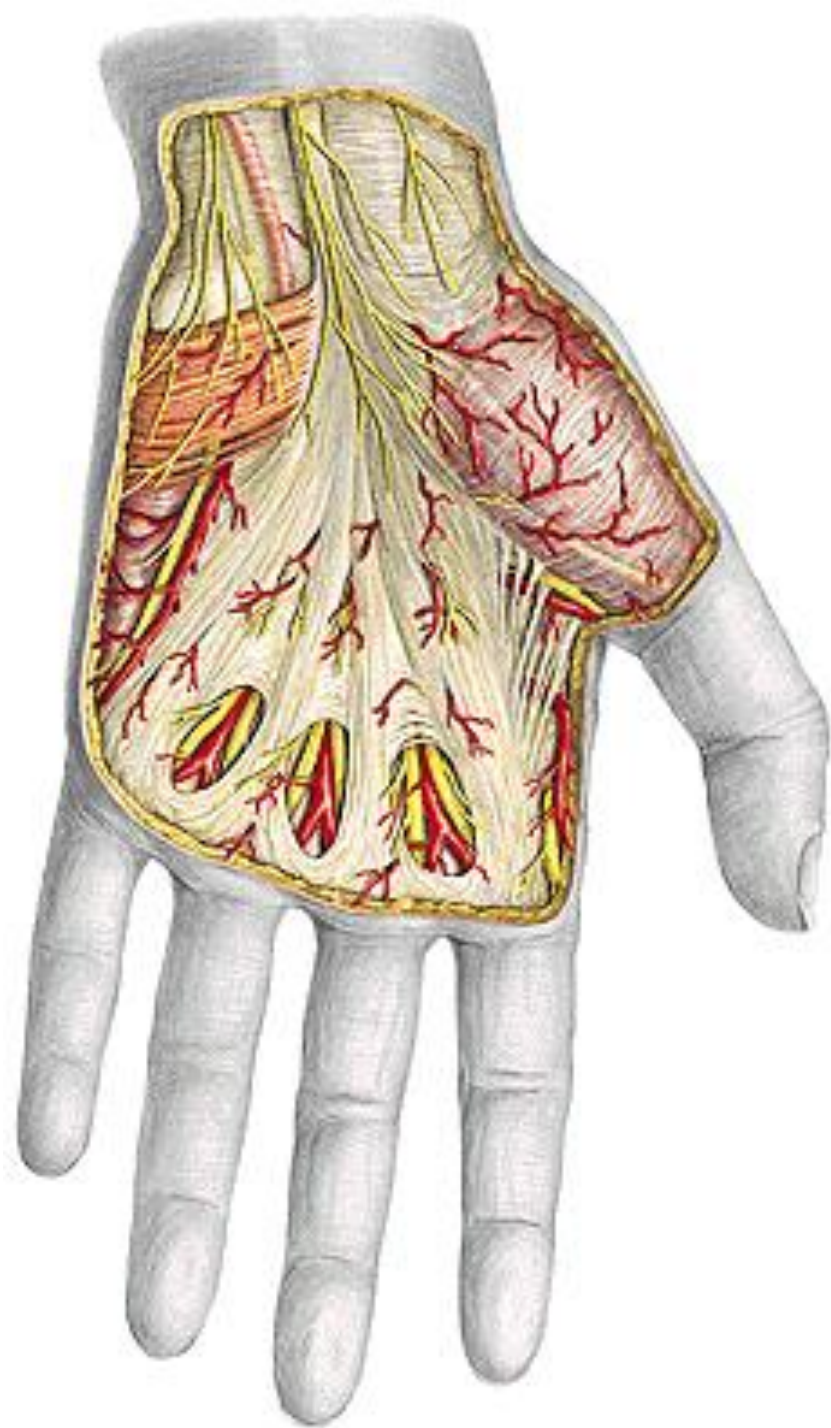
- a. recurrens interossea

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

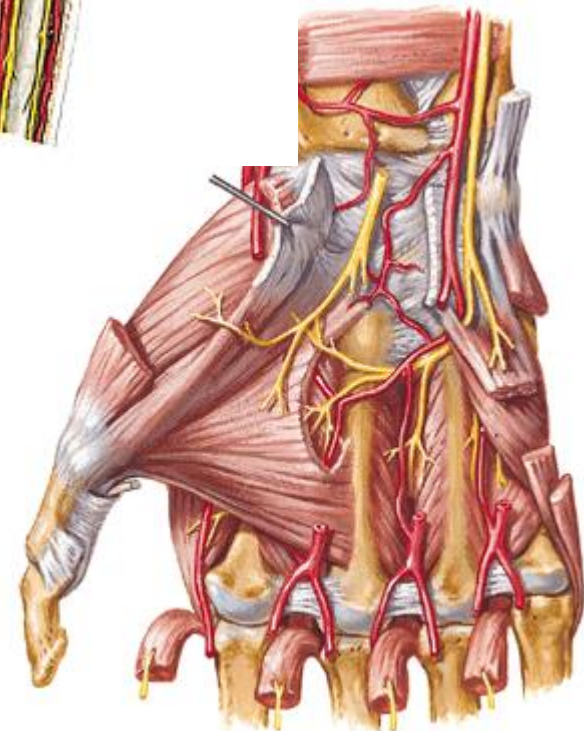
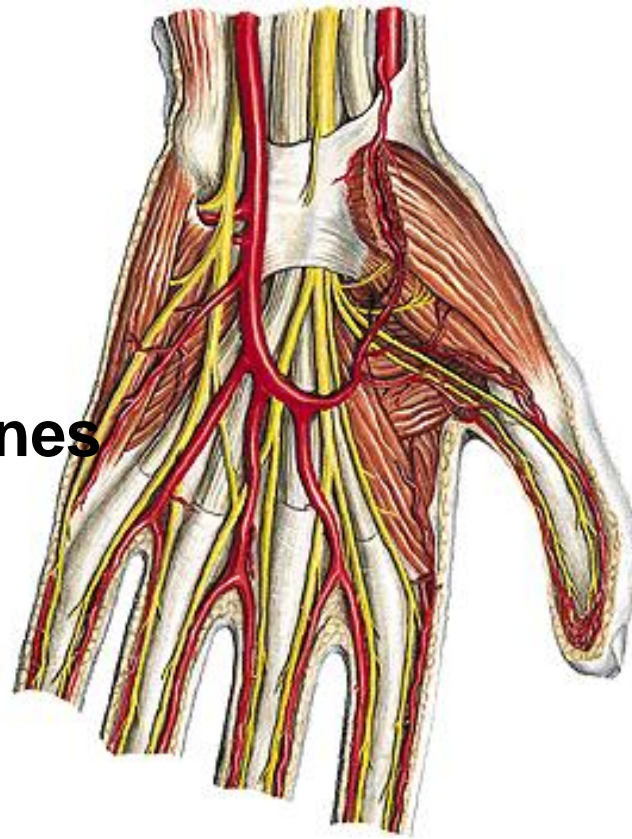
M. adductor pollicis

Mm. lumbricales

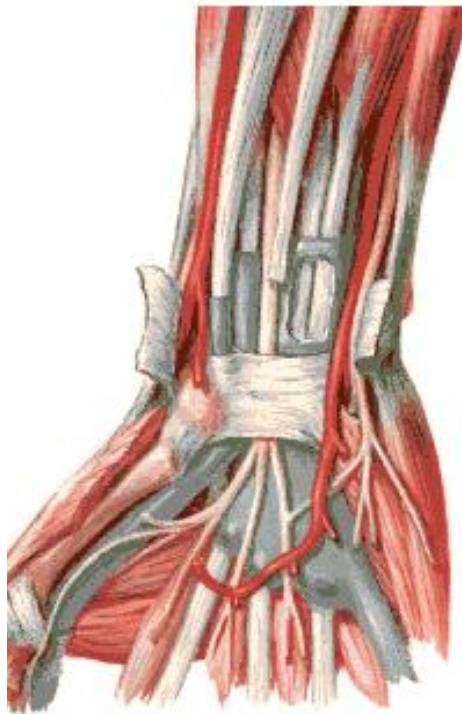
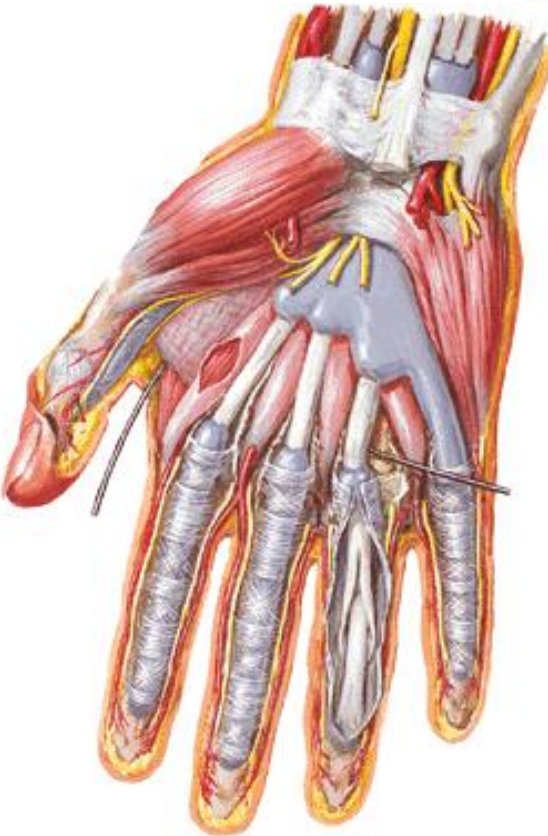
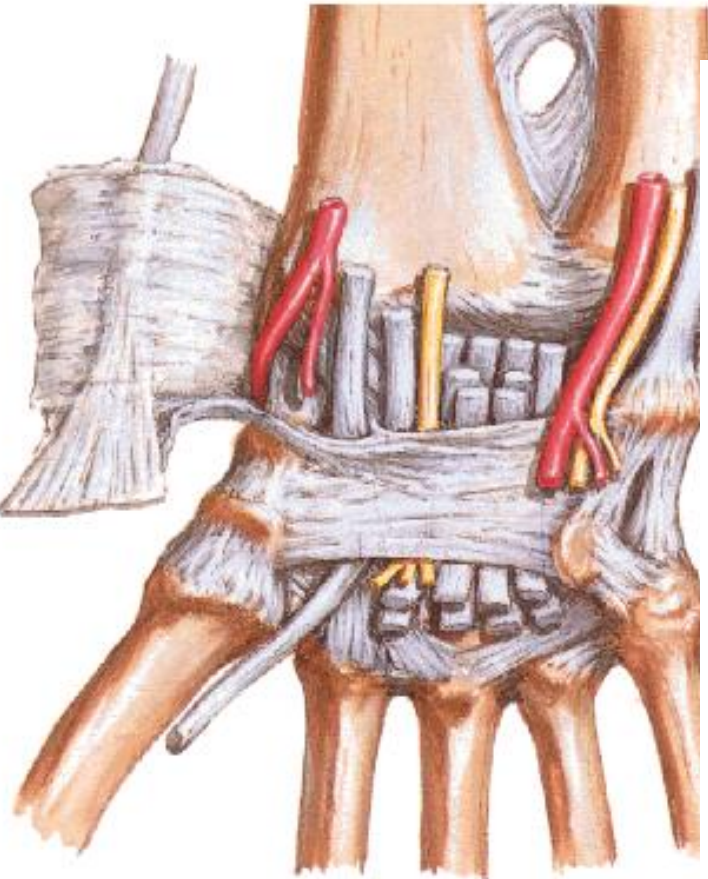
M. abductor digiti minimi

M. flexor digiti minimi brevis

M. opponens digiti minimi



Canalis carpi



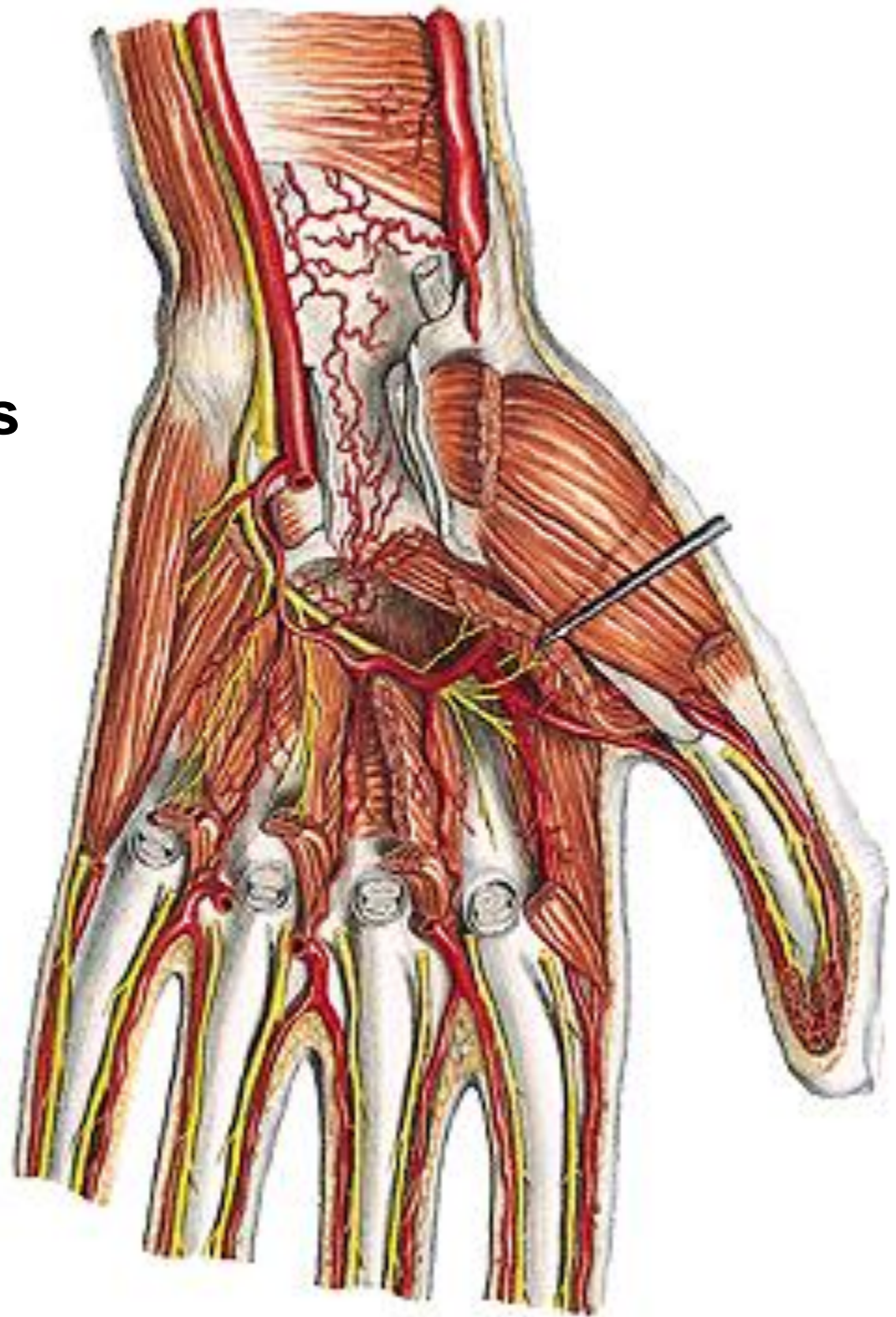
Rete carpi palmare

Arcus palmaris prof.

- aa. metacarpeae palmares

R. prof. n. ulnaris

Mm. interossei palmares



Regio carpi dorsalis et dorsum manus

Rete venosum dorsale manus

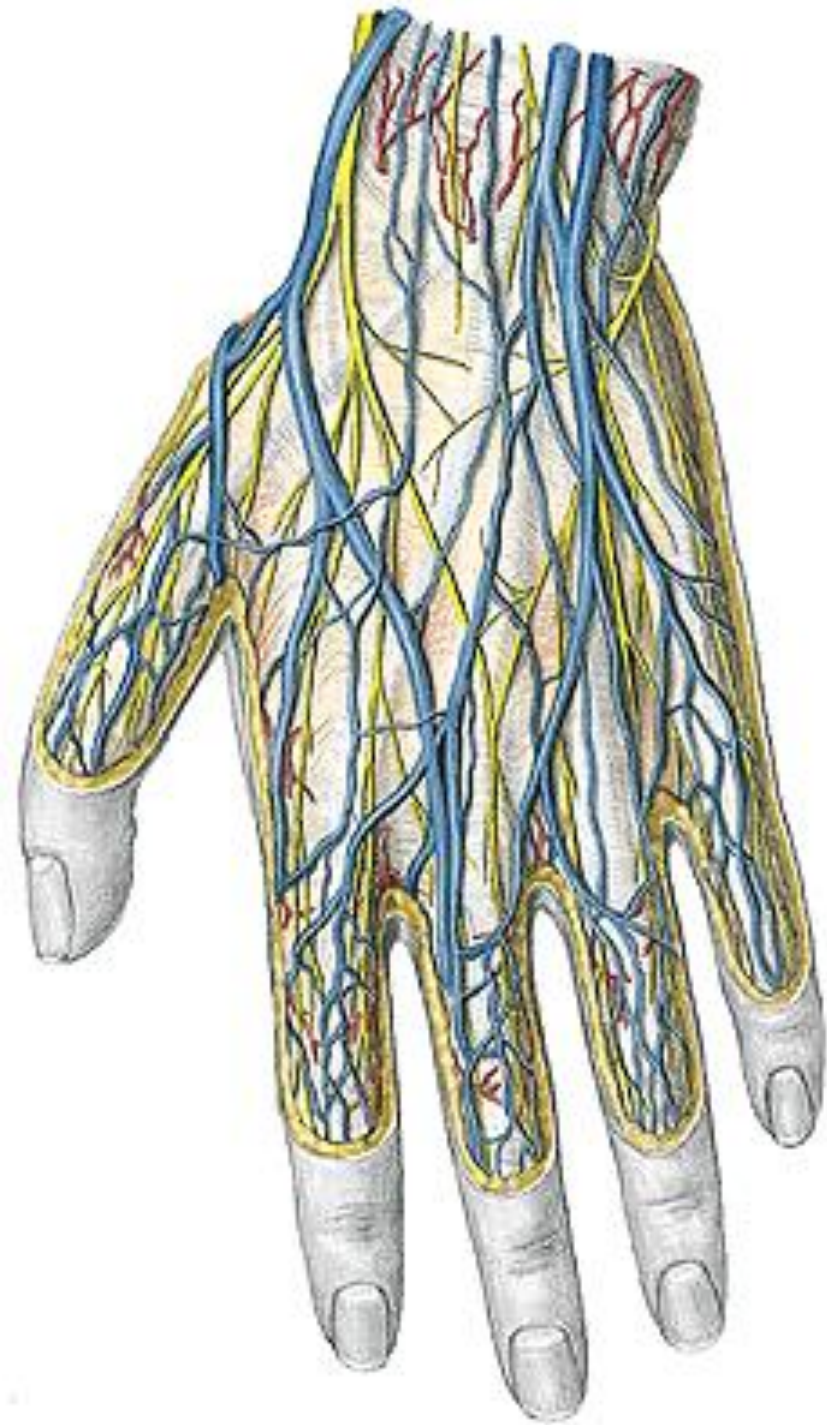
R. spf. n. radialis

- nn. digitales dorsales

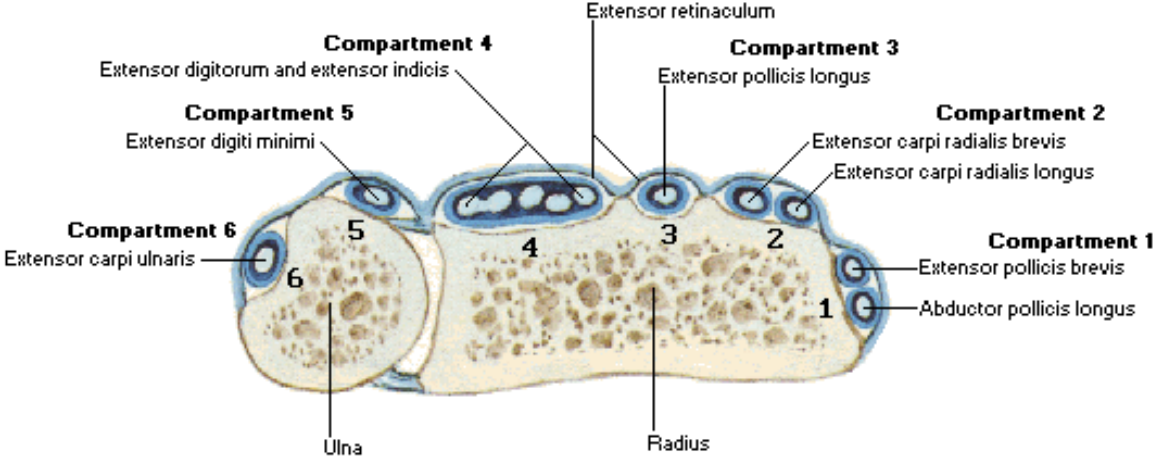
R. dorsalis n. ulnaris

- nn. digitales dorsales

Retinaculum extensorum



Extensor compartments



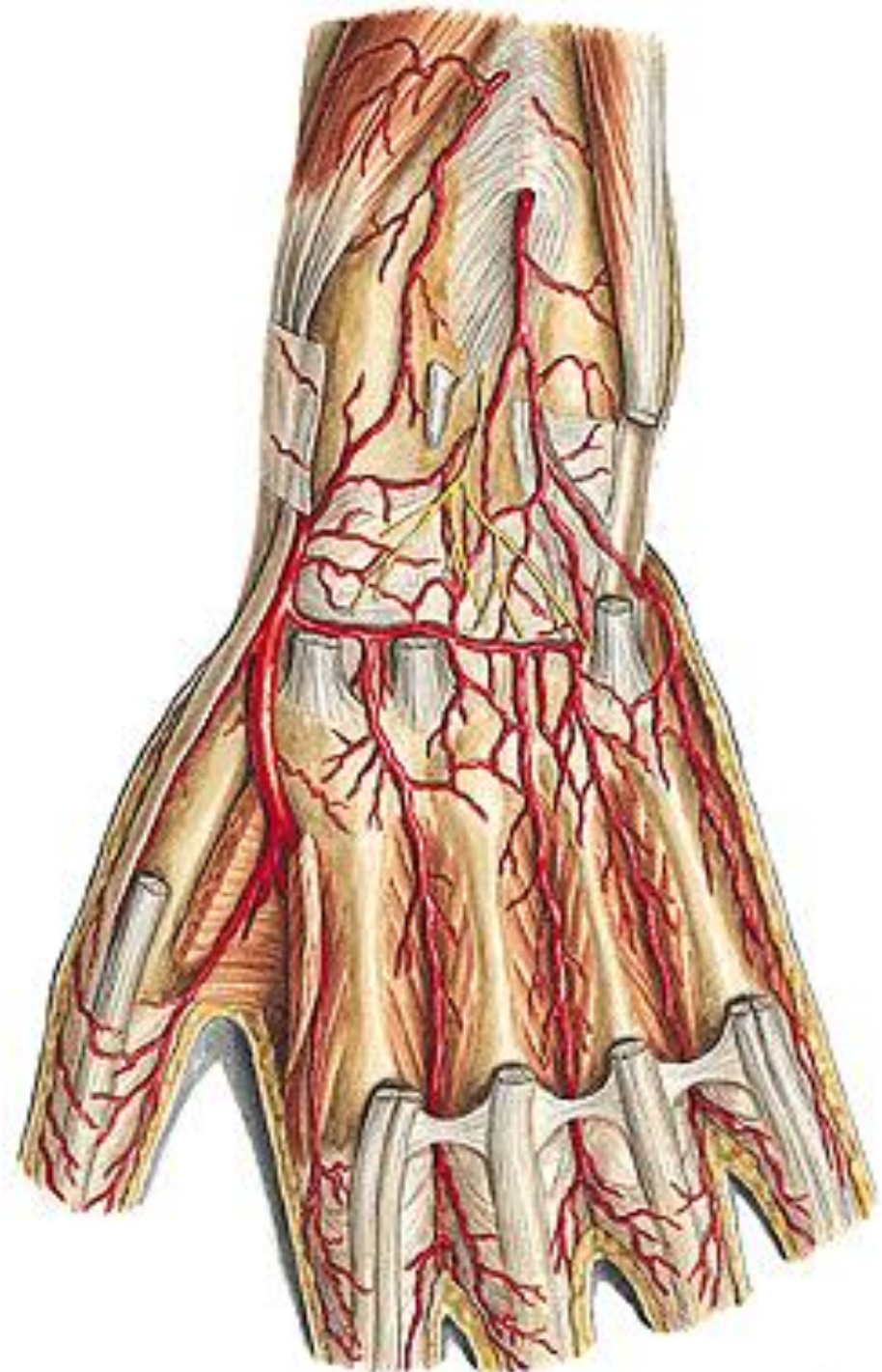
Rete carpi dorsale

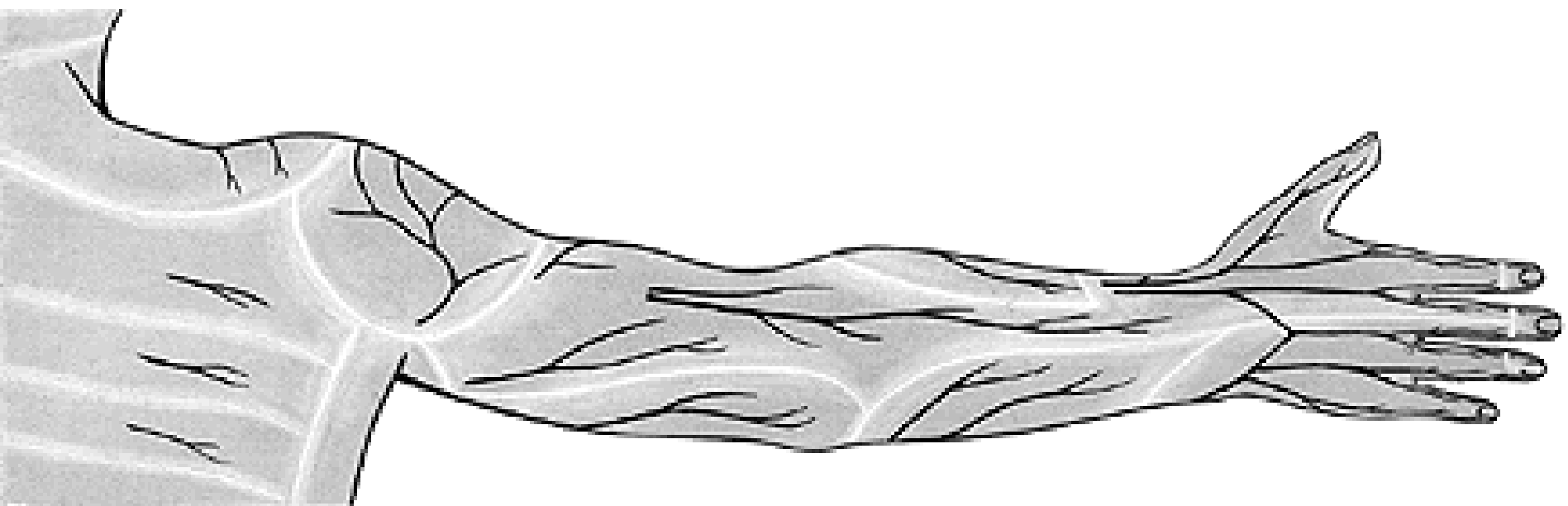
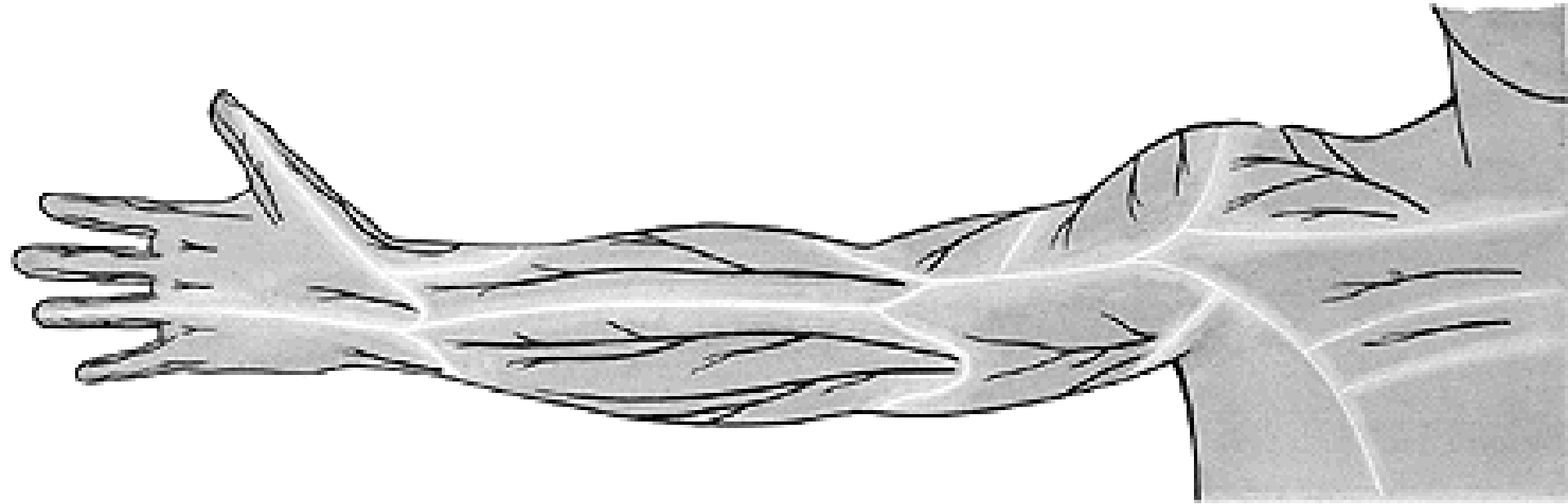
Aa. metacarpeae dorsales

- 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

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Putz,R., und Pabst,R. 20. Auflage. München:
Urban & Schwarzenberg, 1993
Netter: Interactive Atlas of Human Anatomy.
Windows Version 2.0