

# Course of vessels and nerves in limbs



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# Arteries of upper limb

Heart

Arcus aortae

(Truncus brachiocephalicus)

Arteria subclavia

1. Arteria axillaris

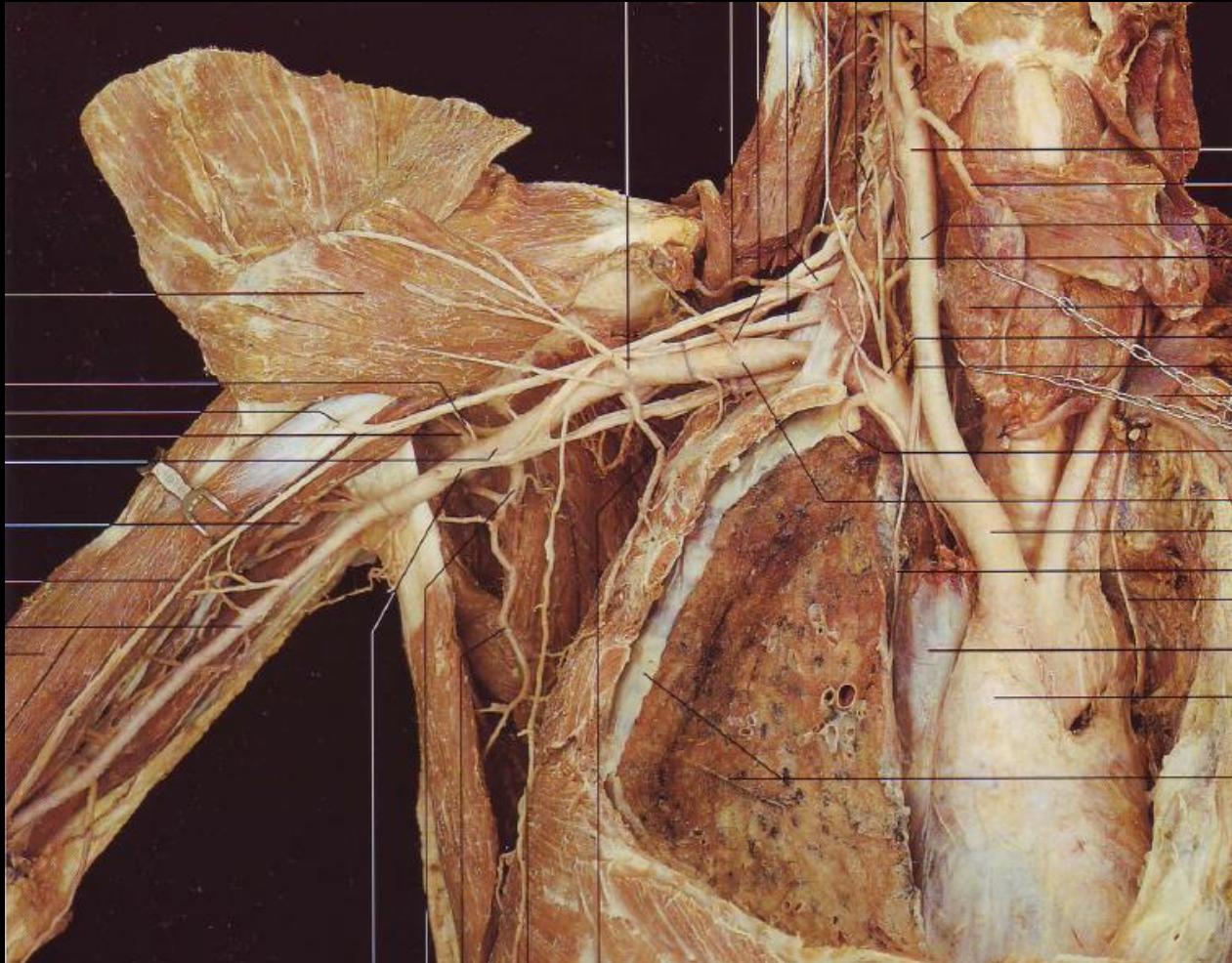
2. Arteria brachialis

3. Arteria radialis

4. Arteria ulnaris

- Arcus palmaris superficialis

- Arcus palmaris profundus



# Arteries of upper limb

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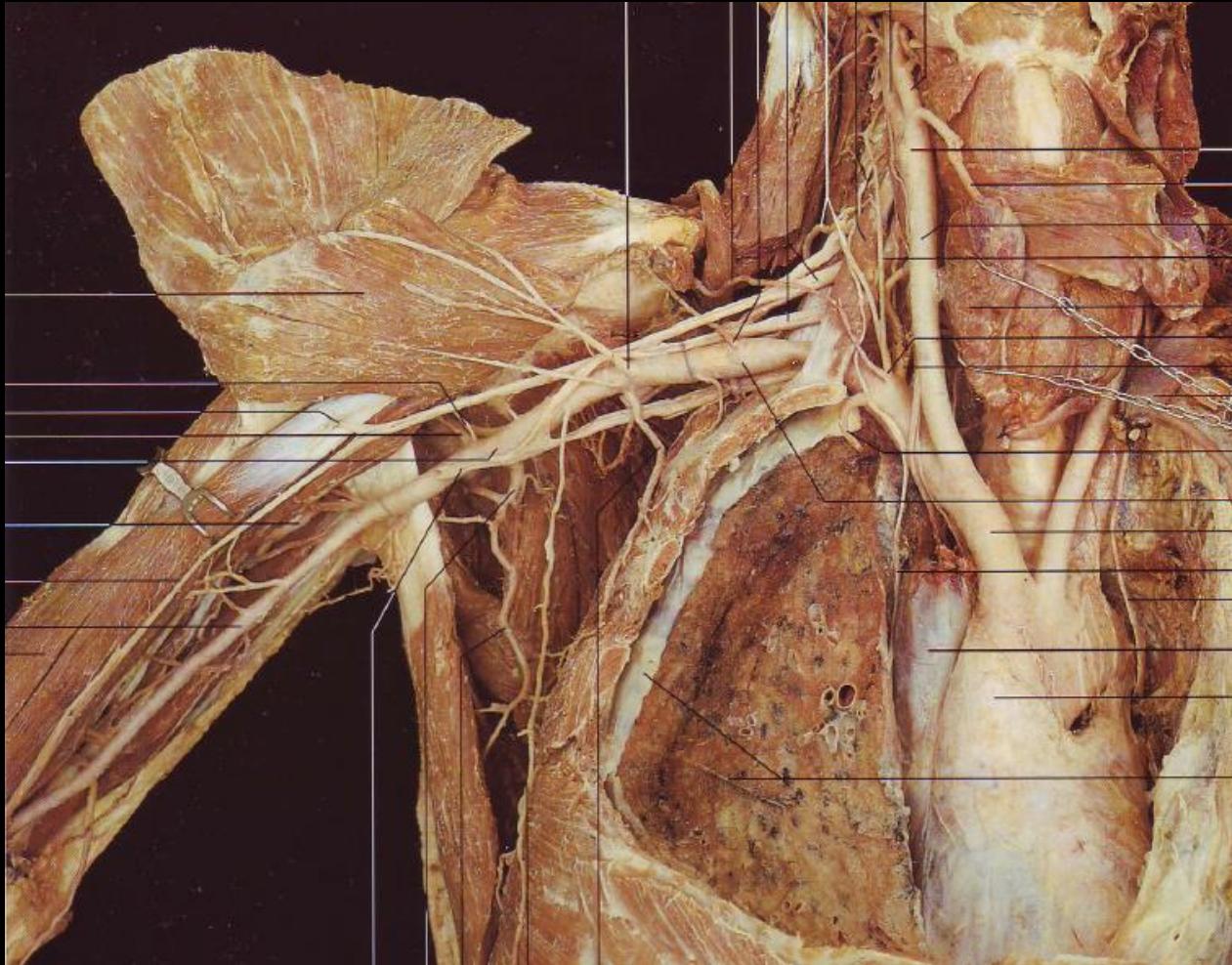
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# Arteria subclavia

Srdce  
Arcus aortae  
(Truncus  
brachiocephalicus)

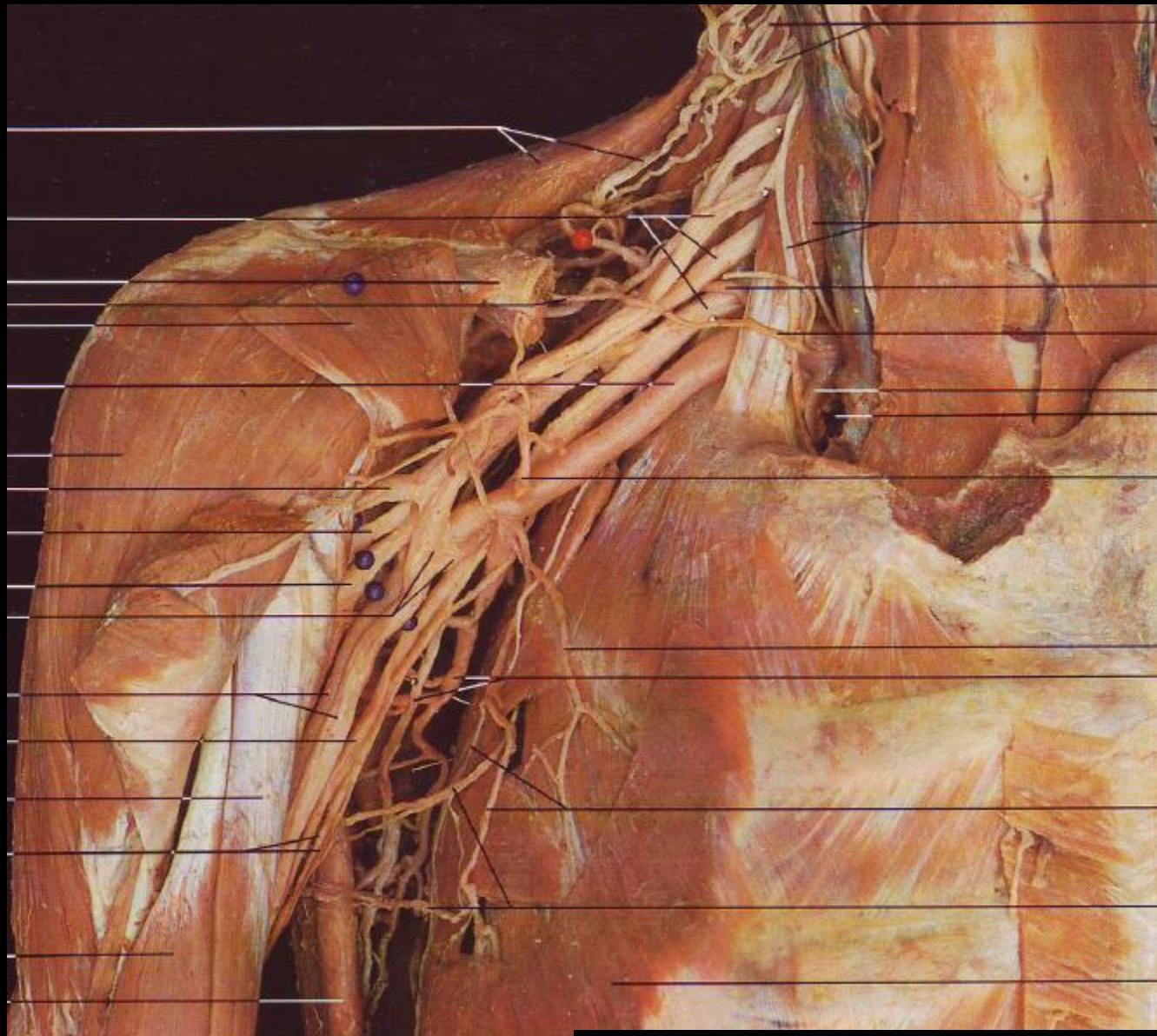
## Arteria subclavia

### Course:

1. across 1st rib
2. through  
**fissura scalenorum**
3. Across 1st rib changes  
name into a. axillaris

### Important branch:

Arteria suprascapularis

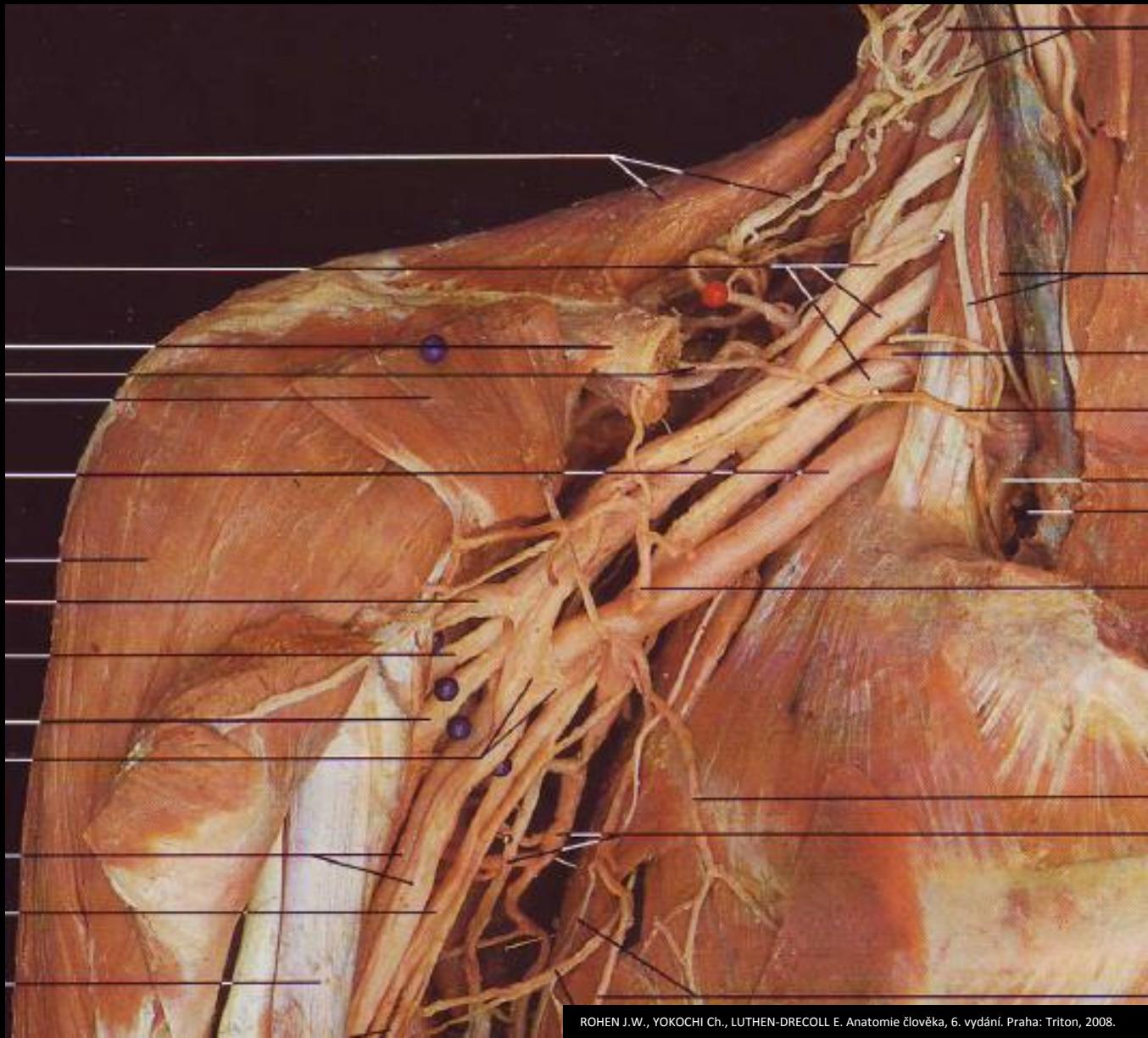


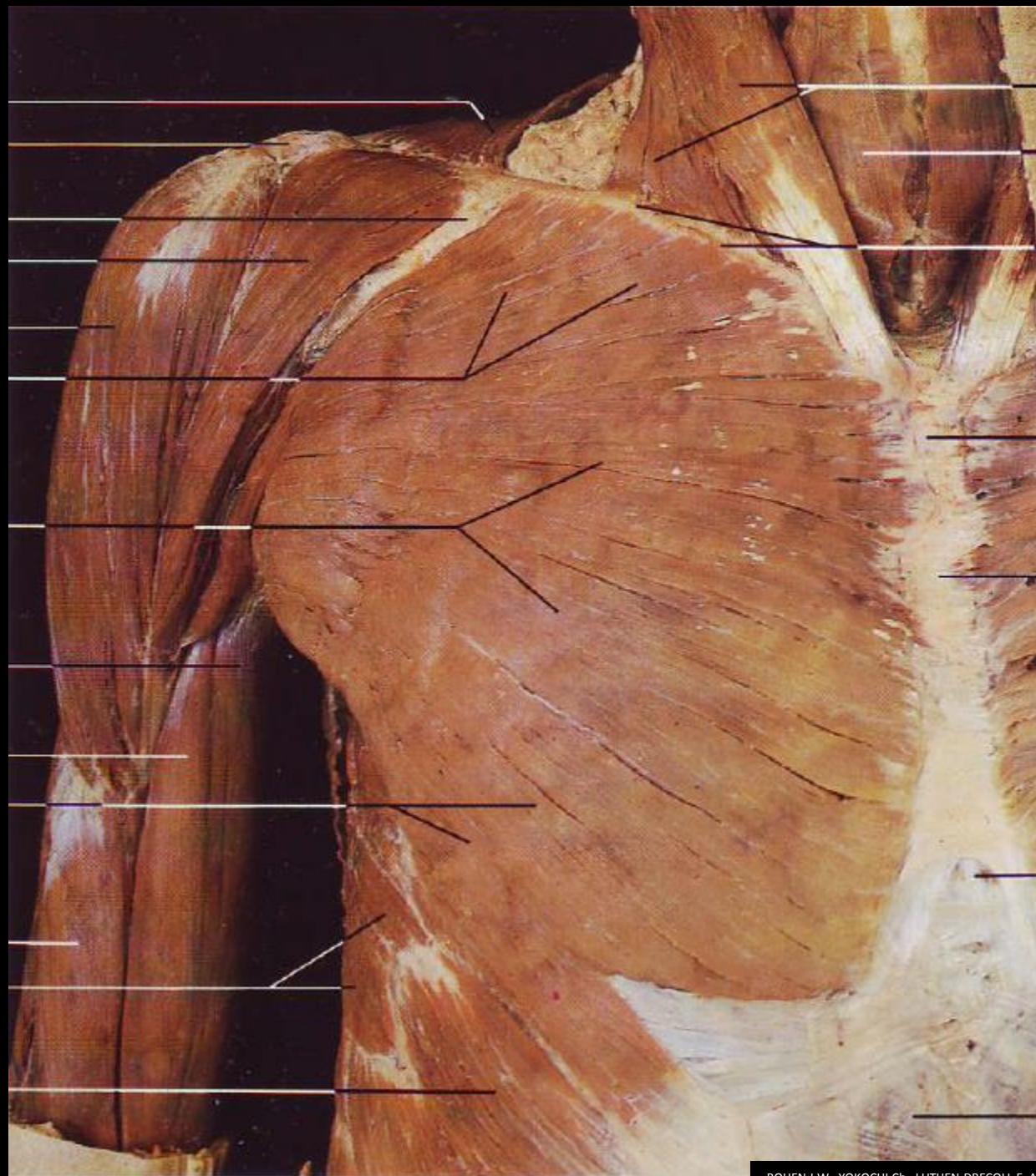
# Arteria subclavia

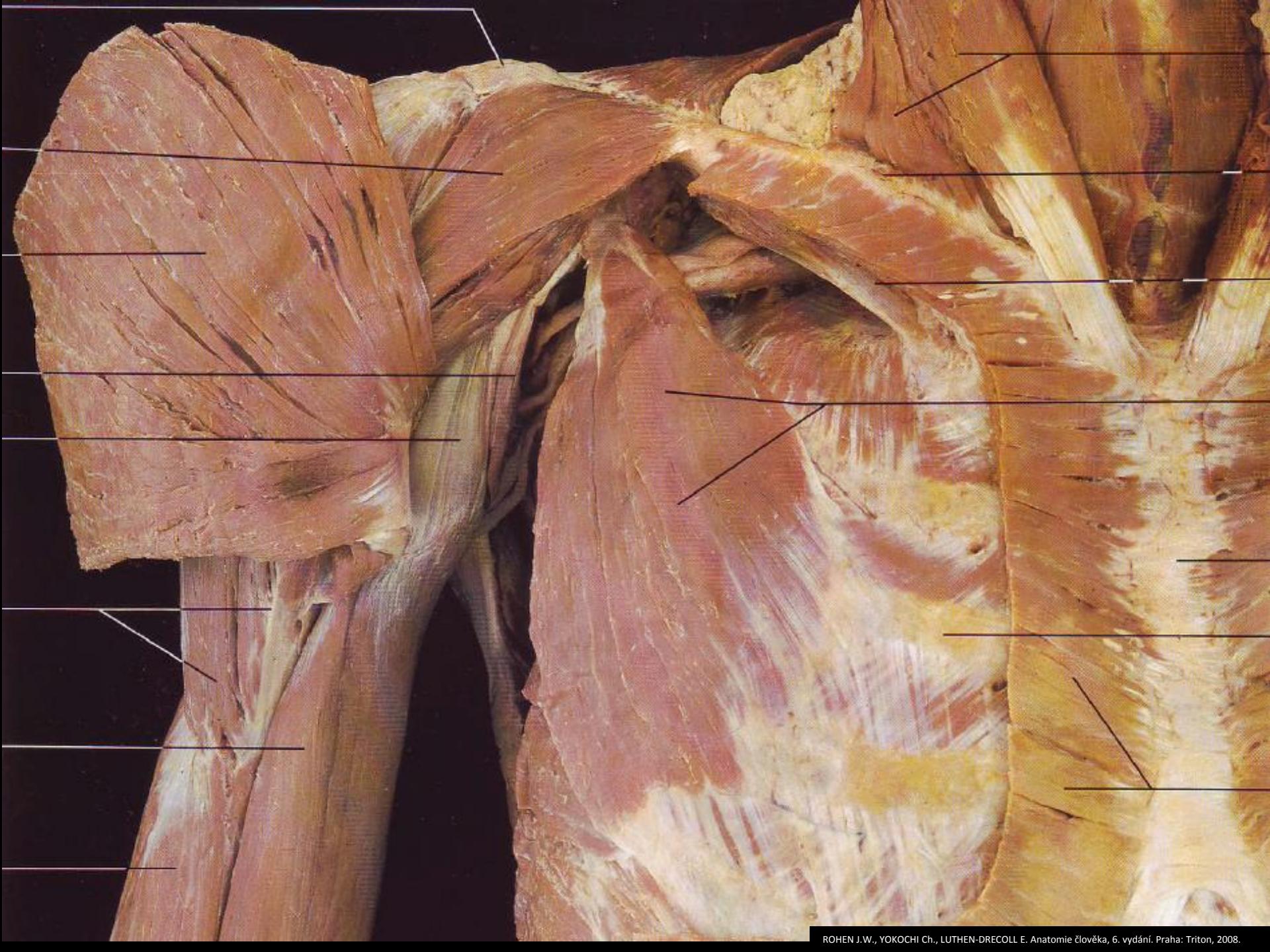
## Arteria suprascapularis

Course:

1. In front of m. scalenus anterior
2. across lig. transversum scapulae superius
3. into fossa supraspinata
4. through incisura spinoglenoidalis
5. into fossa infraspinata







# Arteria axillaris

- continuation of a. subclavia
- within fossa axillaris

Course:

1. across 1st rib
2. behind m. pectoralis minor
3. to inferior margin of m. latissimus dorsi

Important branches:

Arteria thoracoacromialis  
Arteria thoracica superior  
Arteria thoracica lateralis  
Arteria subscapularis  
Arteria circumflexa scapulae  
Arteria thoracodorsalis  
Arteria circumflexa humeri anterius + posterior



# Arteria axillaris

## Arteria thoracica lateralis

Course:

- descends on m. serratus anterior

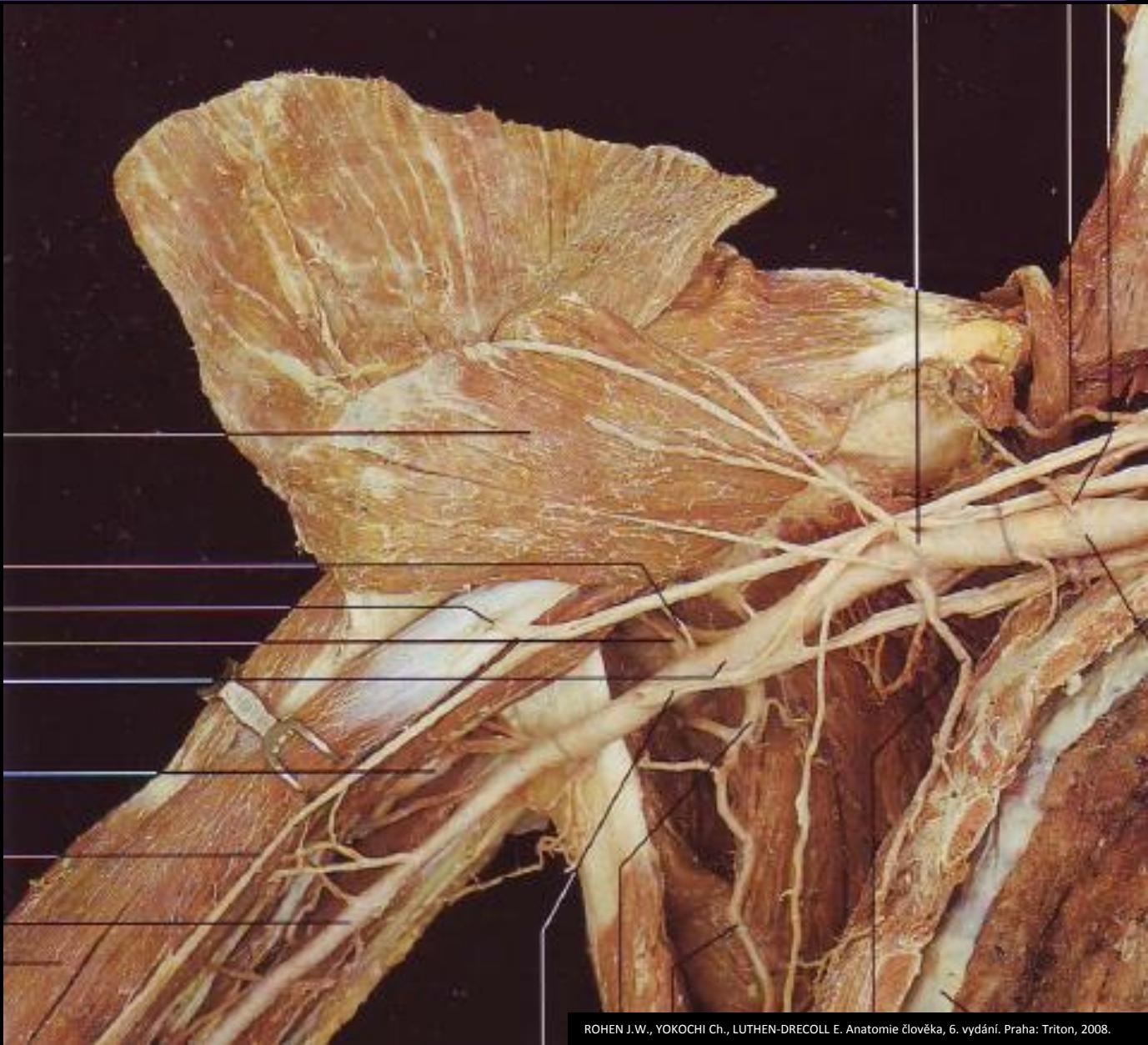


# Arteria axillaris

Arteria subscapularis

1 Arteria circumflexa  
scapulae  
- through  
foramen omotricipitale

2 Arteria thoracodorsalis  
- descends on  
m. latissimus dorsi

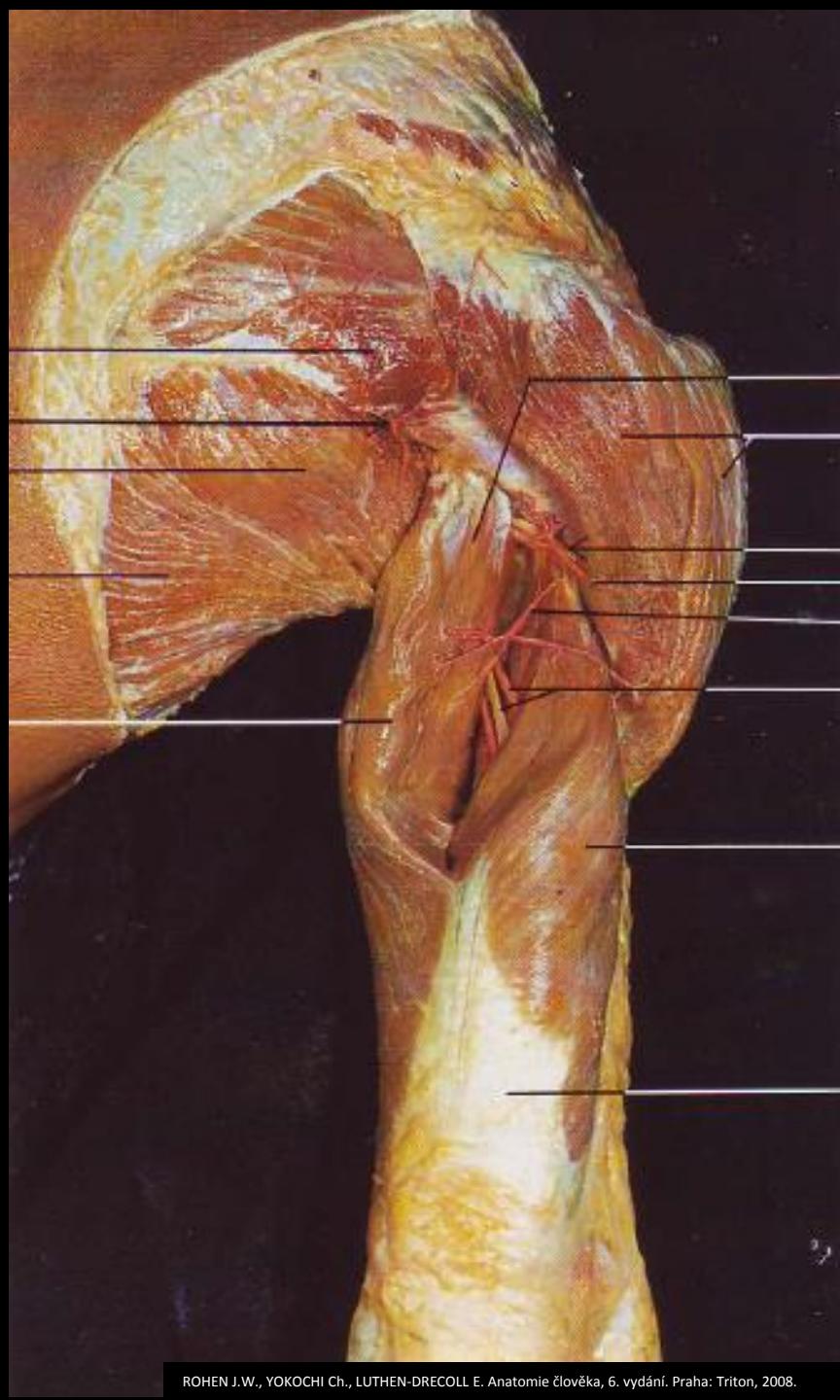


# Arteria axillaris

## Arteria circumflexa humeri posterior

Course:

- together with n. axillaris
- 1. through foramen humerotricipitale
- 2. into m. deltoideus



# Arteria brachialis

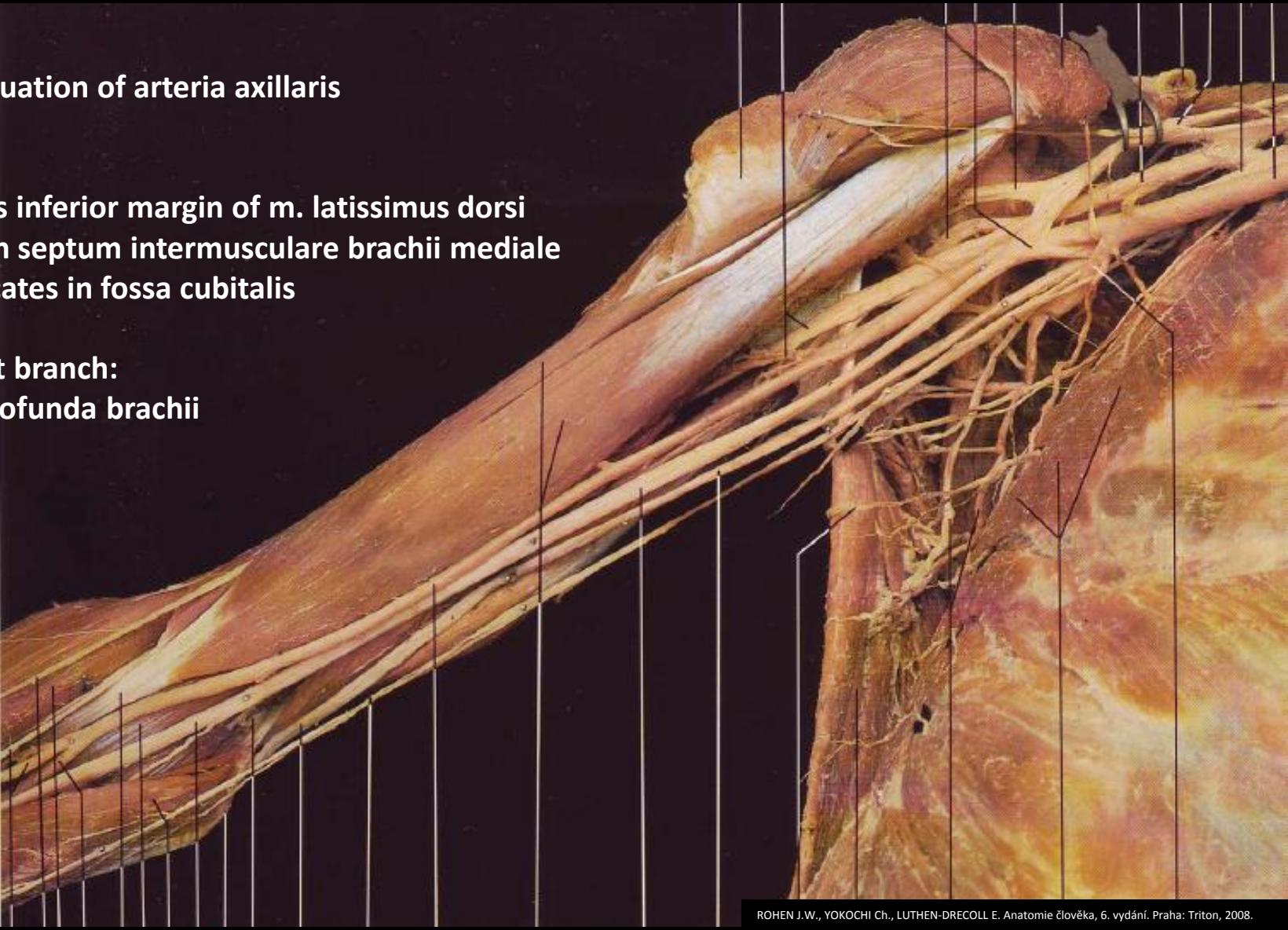
- continuation of arteria axillaris

**Course:**

1. across inferior margin of *m. latissimus dorsi*
2. within *septum intermusculare brachii mediale*
3. bifurcates in *fossa cubitalis*

**Important branch:**

*Arteria profunda brachii*

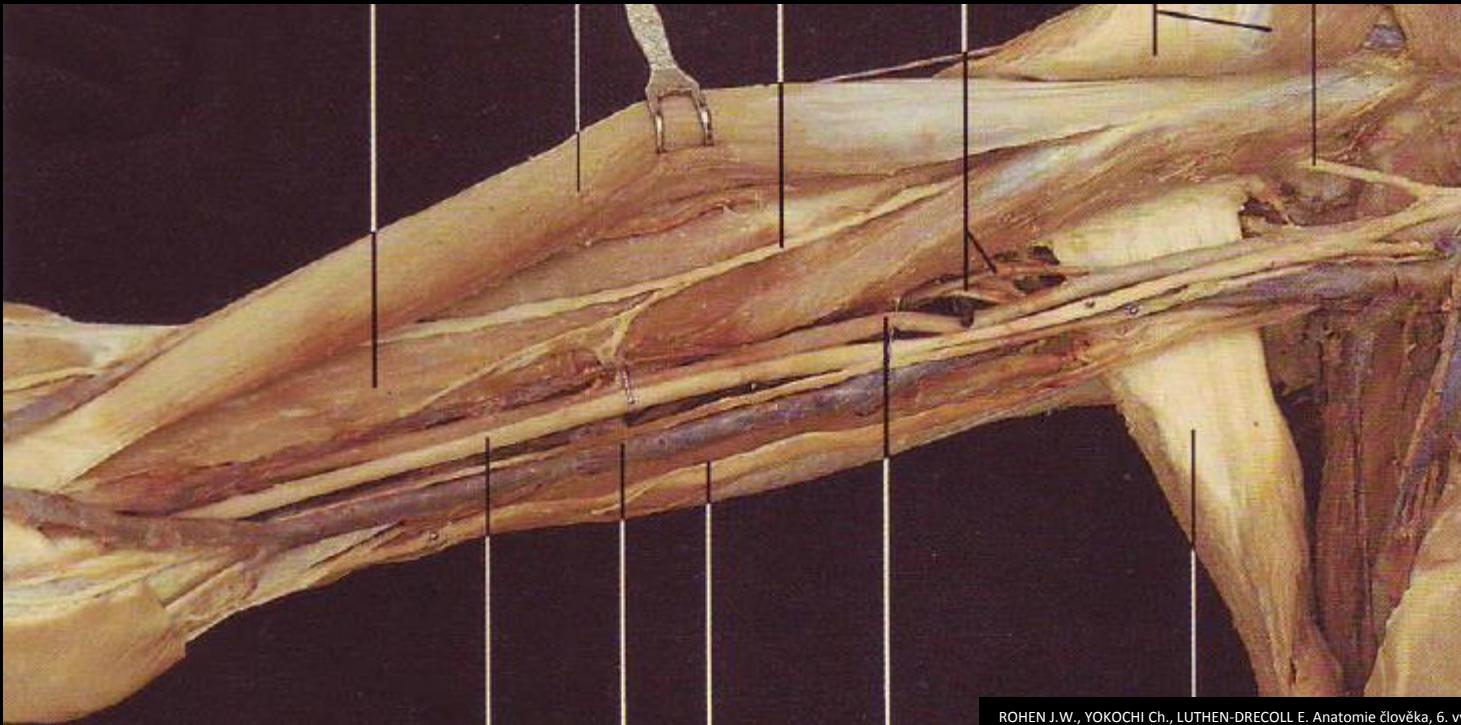


# Arteria brachialis

- continuation of arteria axillaris

**Course:**

1. across inferior margin of m. latissimus dorsi
2. within septum intermusculare brachii mediale
3. bifurcates in fossa cubitalis

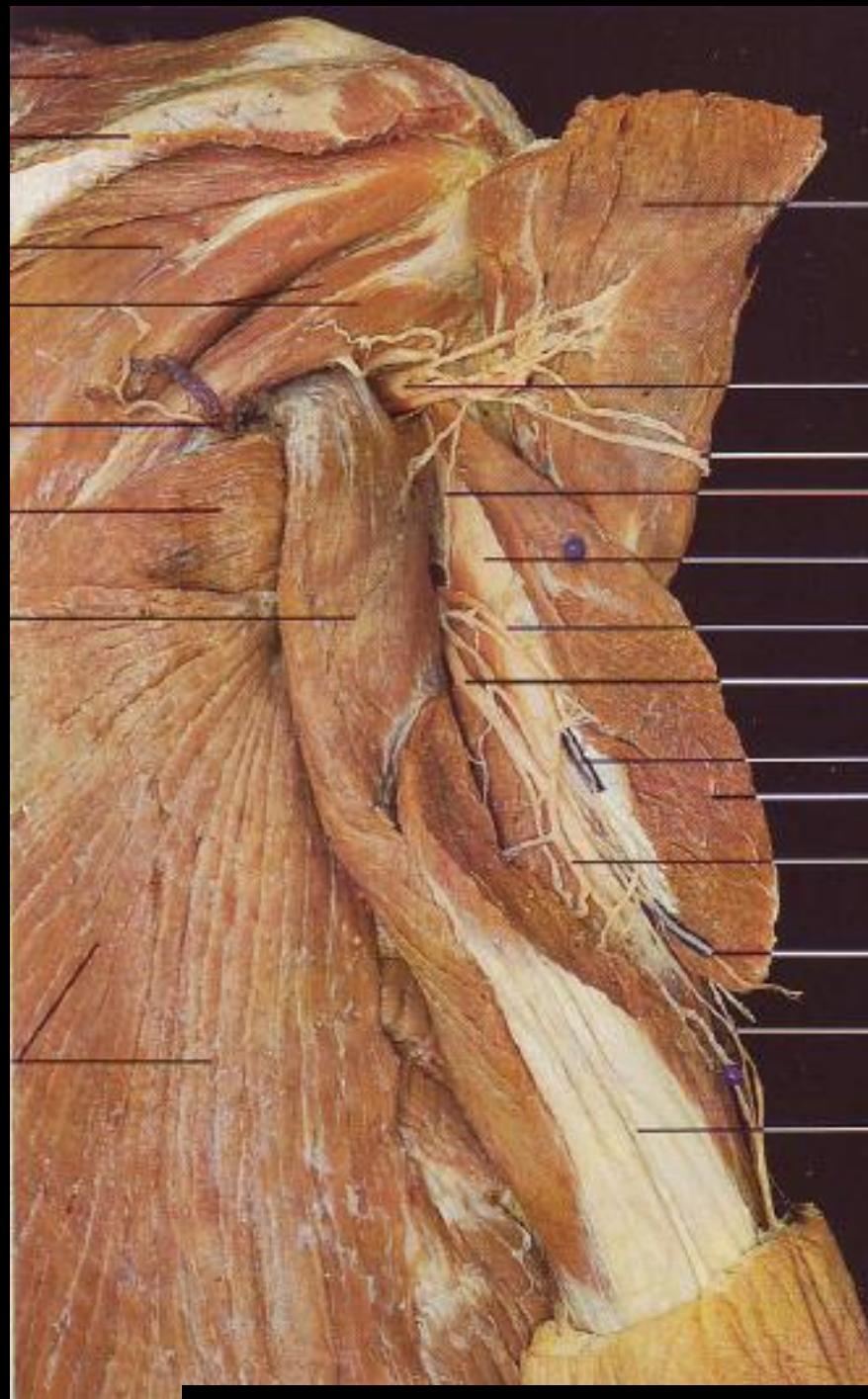


# Arteria brachialis

## Arteria profunda brachii

Course:

- together with n. radialis
- within canalis nervi radialis

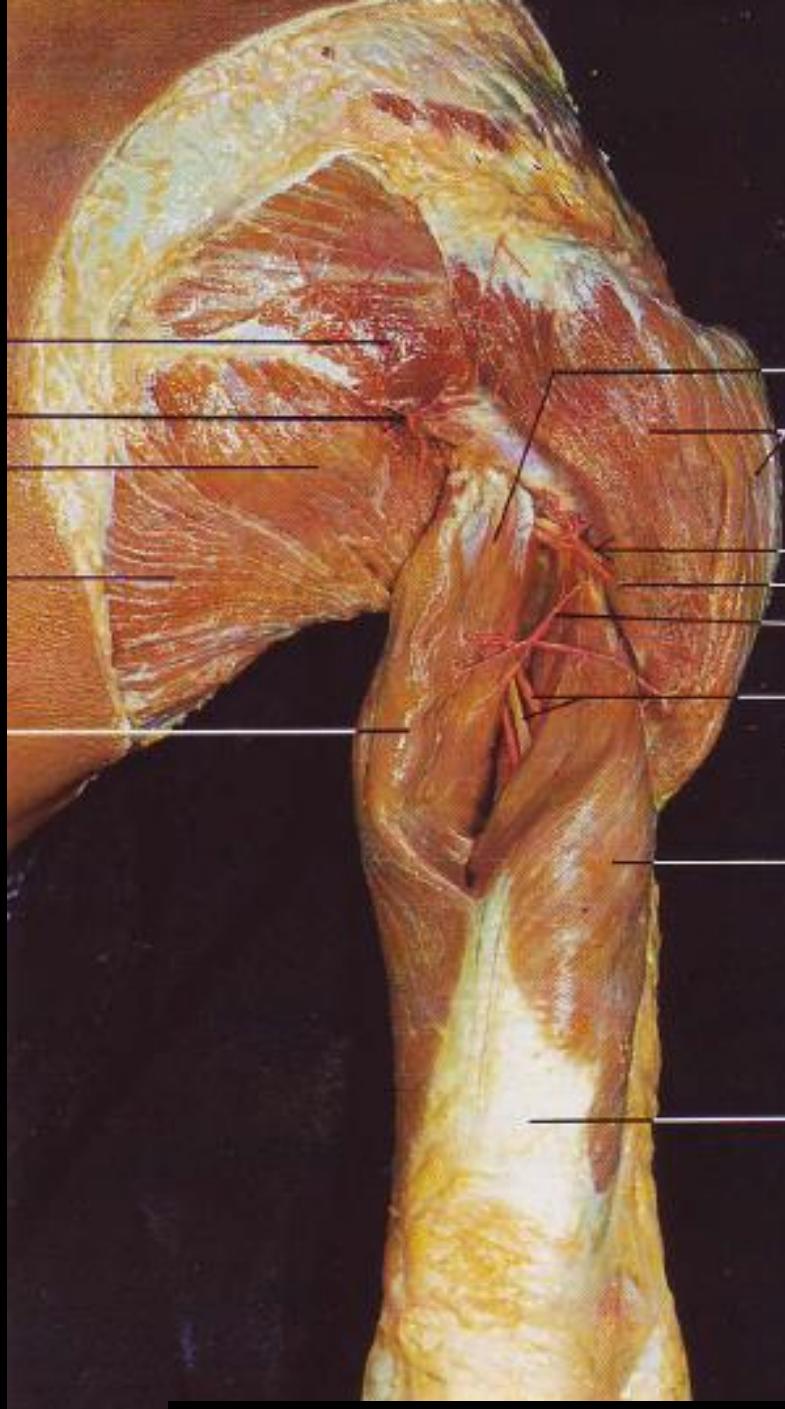


# Arteria brachialis

## Arteria profunda brachii

Course:

- together with n. radialis
- within canalis nervi radialis

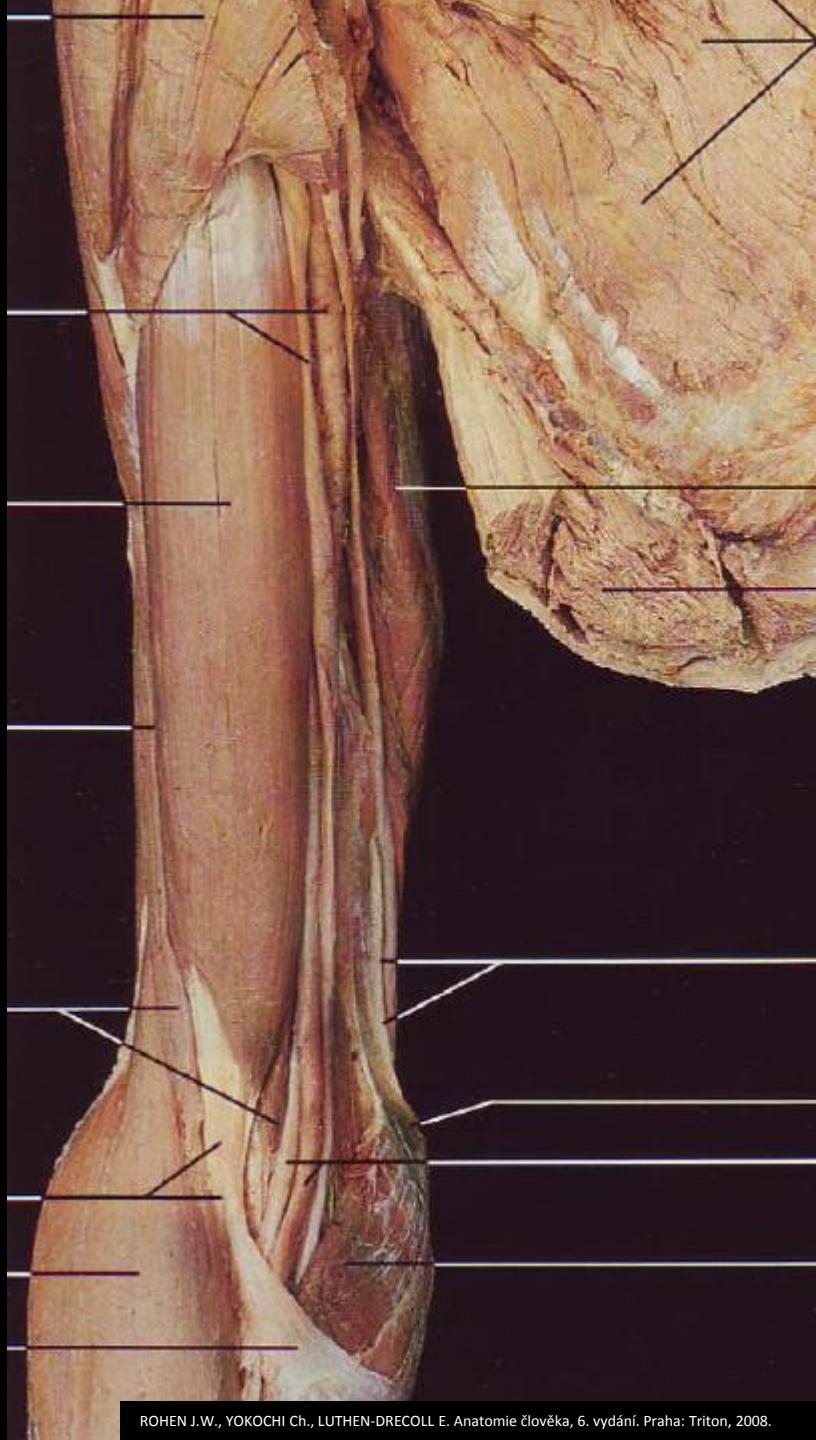


# Arteria brachialis

- continuation of arteria axillaris

## Course:

1. across inferior margin of m. latissimus dorsi
2. within septum intermusculare brachii mediale
3. bifurcates in fossa cubitalis



# Arteria brachialis

- continuation of arteria axillaris

## Course:

1. across inferior margin of m. latissimus dorsi
2. within septum intermusculare brachii mediale
3. together with n. medianus
4. passing under aponeurosis bicipitalis
5. bifurcates in fossa cubitalis into a. radialis and a. ulnaris



# Arteria brachialis

- continuation of arteria axillaris

## Course:

1. across inferior margin of m. latissimus dorsi
2. within septum intermusculare brachii mediale
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4. passing under aponeurosis bicipitalis
5. bifurcates in fossa cubitalis into a. radialis and a. ulnaris



# Arteria radialis et ulnaris

## Arteria radialis

- lateral continuation of arteria brachialis
- together with r. superficialis n. radialis

## Arteria ulnaris

- medial continuation of arteria brachialis
- together with n. ulnaris



# Arteria radialis

- lateral continuation of arteria brachialis
- together with r. superficialis n. radialis

## Course

1. from fossa cubitalis
2. between m. brachioradialis and m. pronator teres
3. between m. brachioradialis and m. flexor carpi radialis
4. between processus styloideus radii and os scaphoideum
5. through foveola radialis
6. first intermetacarpal space (of Guiot)
7. spatium palmarum medium

In the palm it anastomoses with a. ulnaris

- continues as arcus palmaris profundus



# Arteria radialis

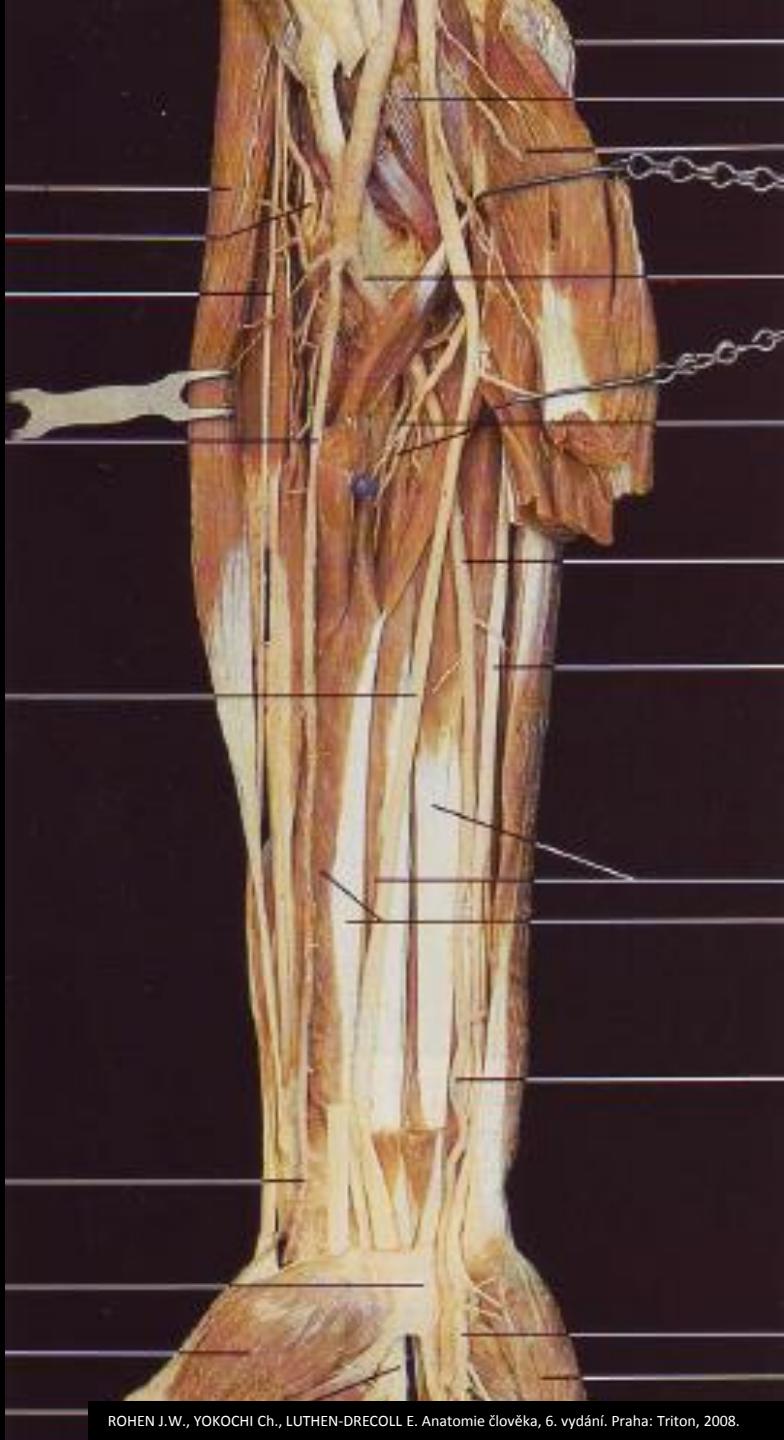
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- together with r. superficialis n. radialis

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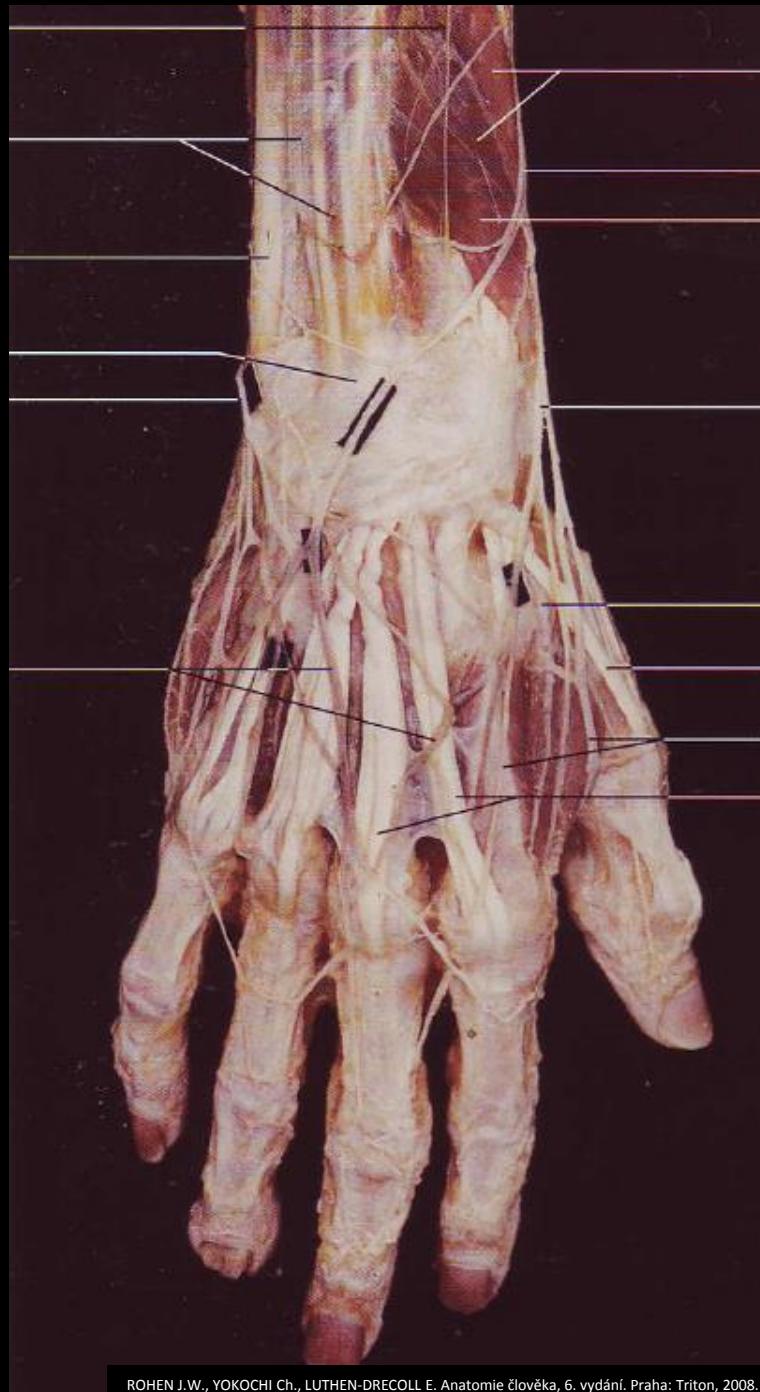
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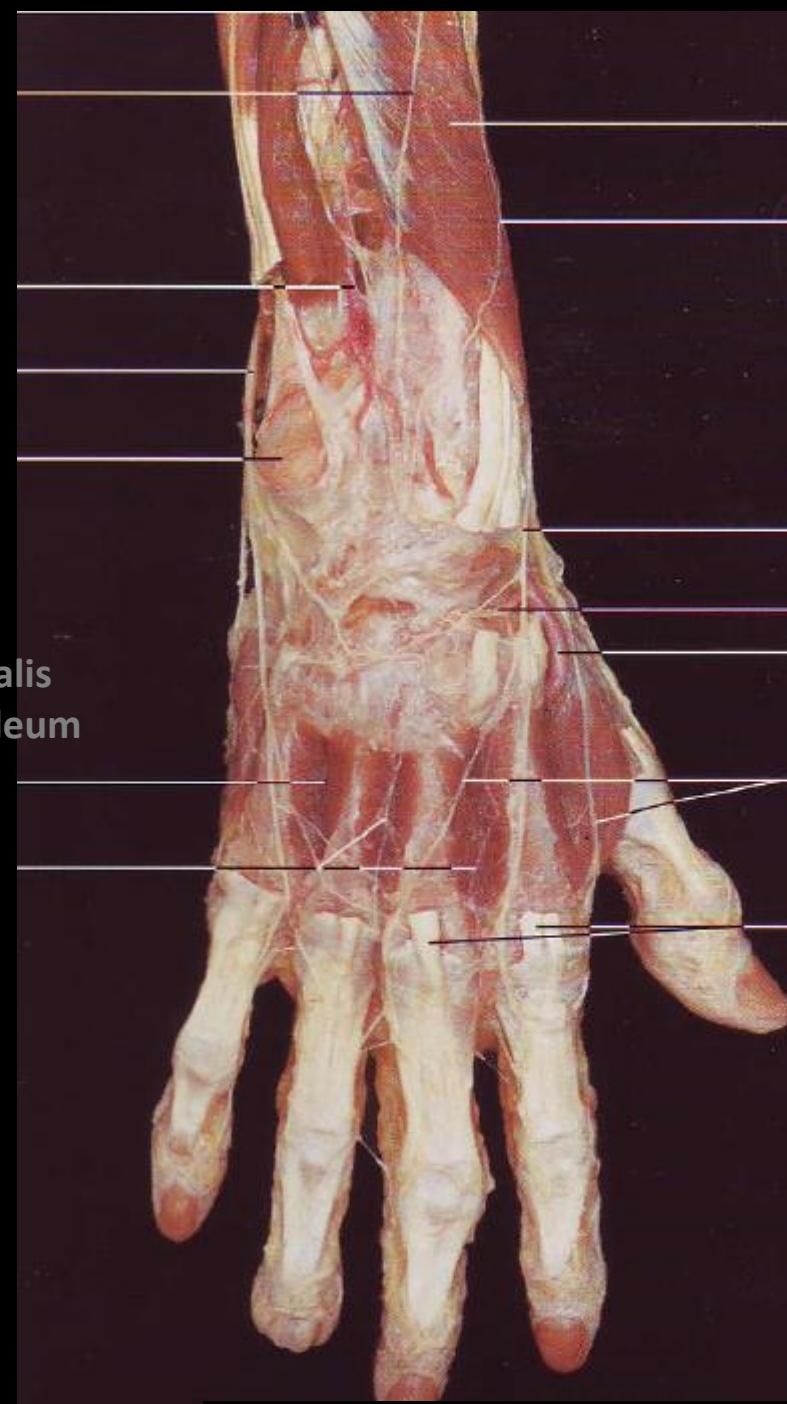
- lateral continuation of arteria brachialis
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# Arteria radialis

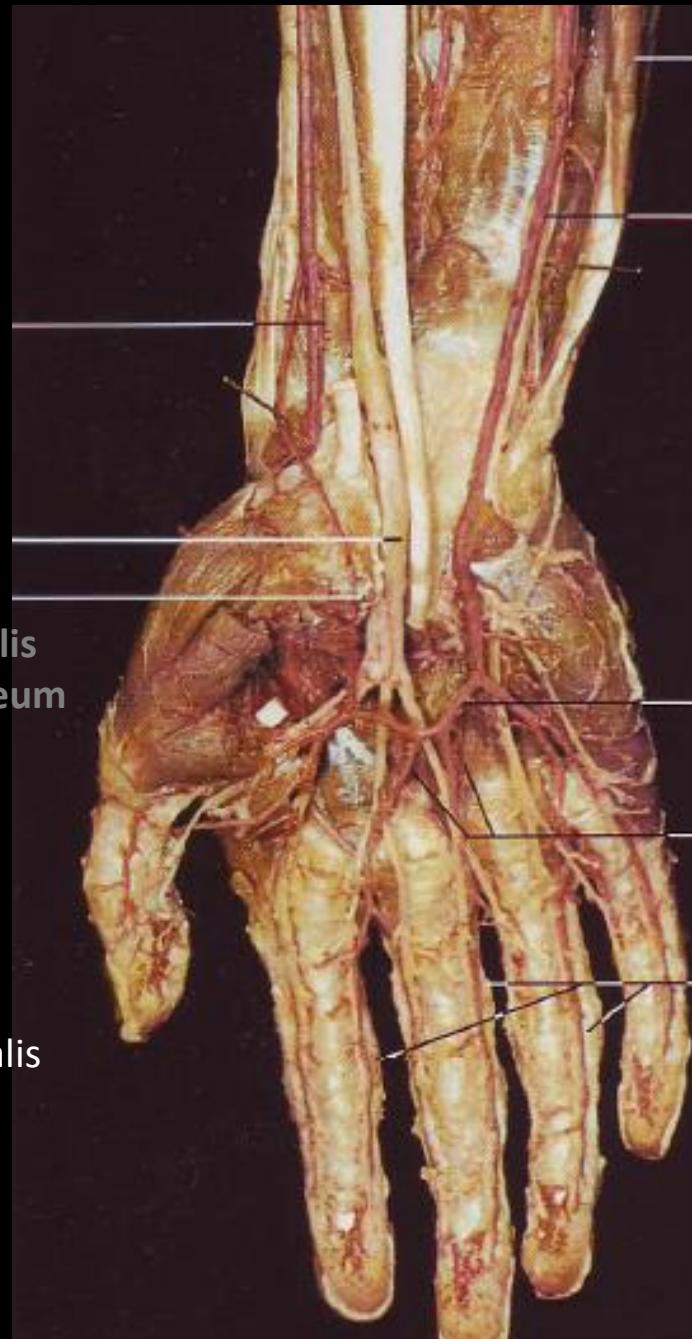
- lateral continuation of arteria brachialis
- together with r. superficialis n. radialis

## Course

1. from fossa cubitalis
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4. between processus styloideus radii and os scaphoideum
5. through foveola radialis
6. first intermetacarpal space (of Guiot)
7. spatium palmarum medium

In the palm it anastomoses with a. ulnaris

- continues as arcus palmaris profundus
- its r. superficialis contributes to arcus palmaris superficialis



# Arteria ulnaris

- medial continuation of arteria brachialis
- together with n. ulnaris

## Course:

1. from fossa cubitalis
2. between m. flexor digitorum superficialis et profundus
3. between m. flexor digitorum superficialis and m. flexor carpi ulnaris
4. through canalis ulnaris (of Guyon)
5. spatium palmarum medium

In the palm it anastomoses with a. radialis

- continues as arcus palmaris superficialis
- its r. profundus contributes to arcus palmaris profundus



# Arteria ulnaris

- medial continuation of arteria brachialis
- together with n. ulnaris

## Course:

1. from fossa cubitalis
2. between m. flexor digitorum superficialis et profundus
3. between m. flexor digitorum superficialis and m. flexor carpi ulnaris
4. through canalis ulnaris (of Guyon)
5. spatium palmare medium

In the palm it anastomoses with a. radialis

- continues as arcus palmaris superficialis
- its r. profundus contributes to arcus palmaris profundus



# Arteria ulnaris

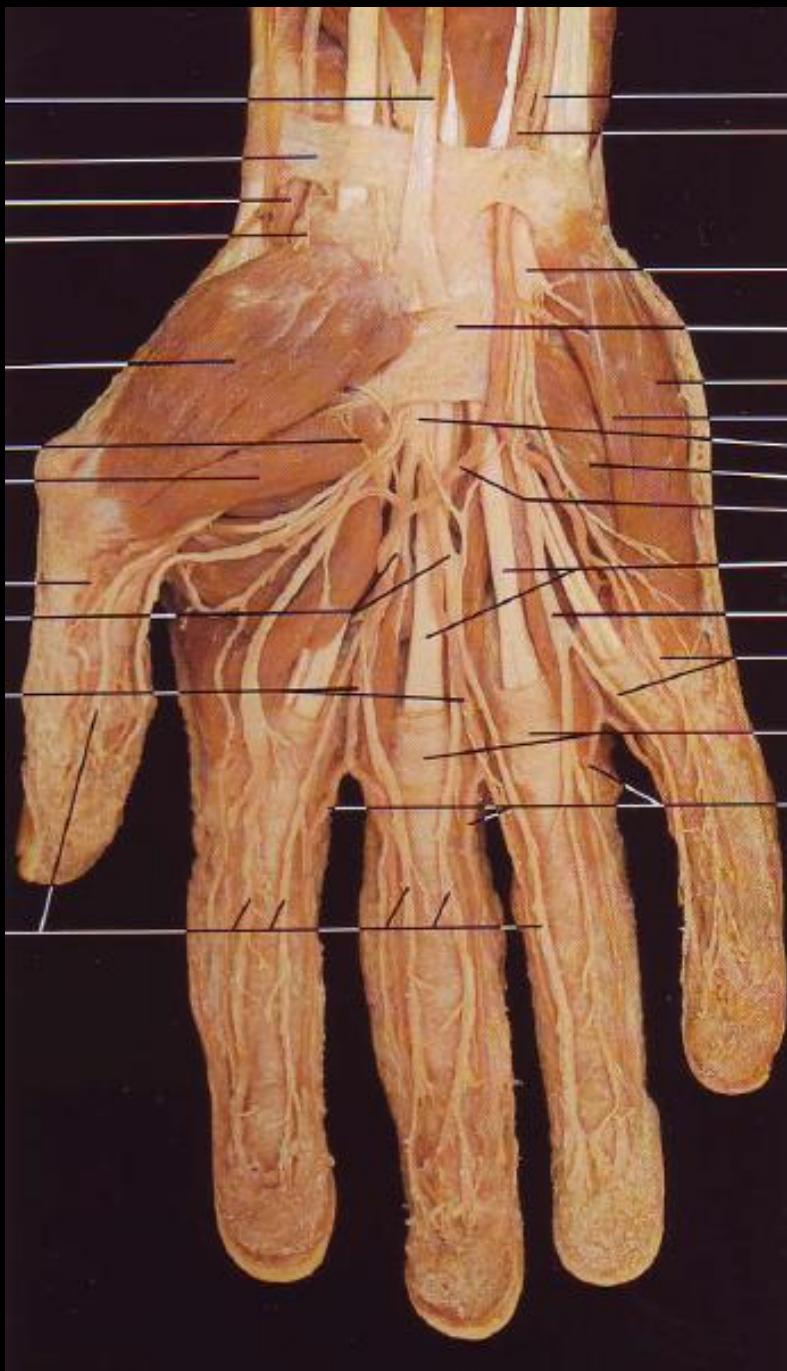
- medial continuation of arteria brachialis
- together with n. ulnaris

## Course:

1. from fossa cubitalis
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3. between m. flexor digitorum superficialis and m. flexor carpi ulnaris
4. through canalis ulnaris (of Guyon)
5. spatium palmarum medium

## In the palm it anastomoses with a. radialis

- continues as arcus palmaris superficialis
- its r. profundus contributes to arcus palmaris profundus



# Veins of upper limb

## Deep veins:

- follow arteries and are doubled as high as fossa axillaris

**Venae radiales**

**Venae ulnares**

**Venae brachiales**

**Vena axillaris**

**Vena subclavia**

## Superficialis veins:

**Vena basilica**

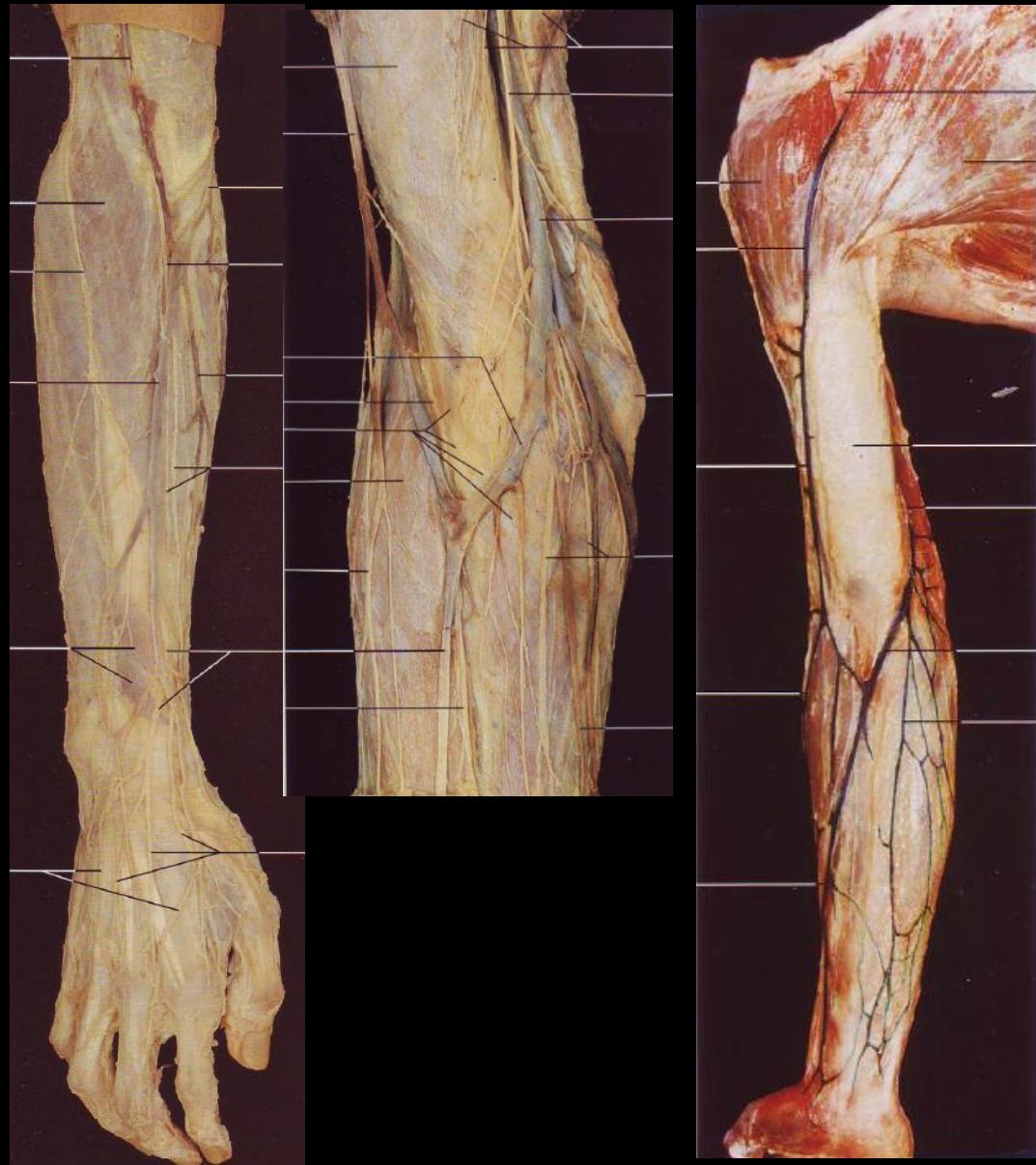
- along medial side into v. brachialis
- with n. cutaneus antebrachii medialis

**Vena cephalica**

- along lateral side do v. axillaris
- with s n. cutaneus antebrachii lateralis

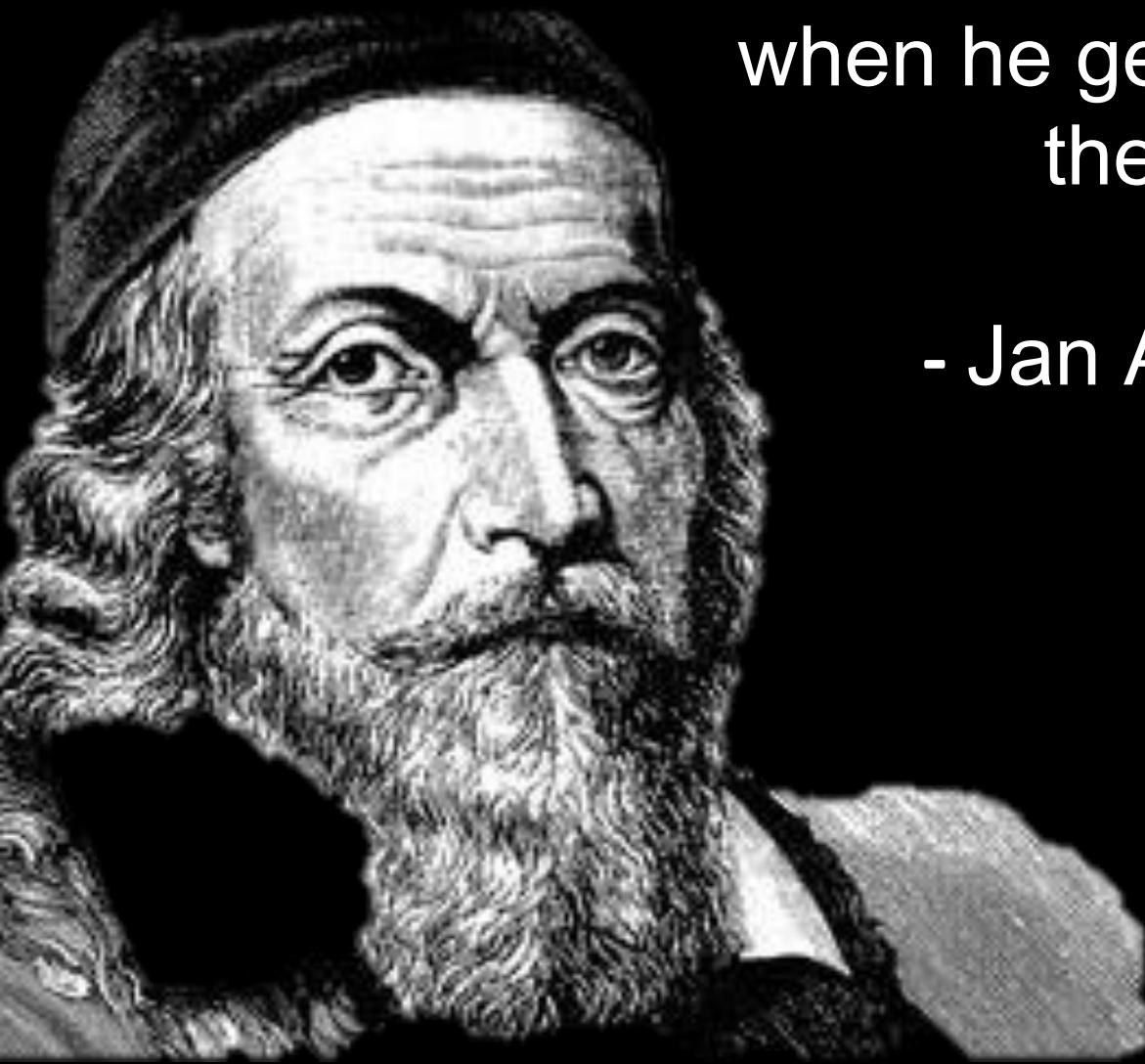
**Vena mediana cubiti**

**Vena mediana antebrachii**



„When the teacher tells the pupils something,  
they will forget. When he shows them, they  
will rather remember. But only  
when he gets them involved,  
they will understand“

- Jan Amos Komenský -



# Nerves of upper limb

## Plexus brachialis

1. Truncus superior
2. Truncus medius
3. Truncus inferior

## Course:

through fissura scalenorum

## Plexus brachialis

1. Fasciculus medialis
2. Fasciculus lateralis
3. Fasciculus posterior

## Course:

within fossa axillaris around  
a. axillaris



# Nerves of upper limb

## Plexus brachialis

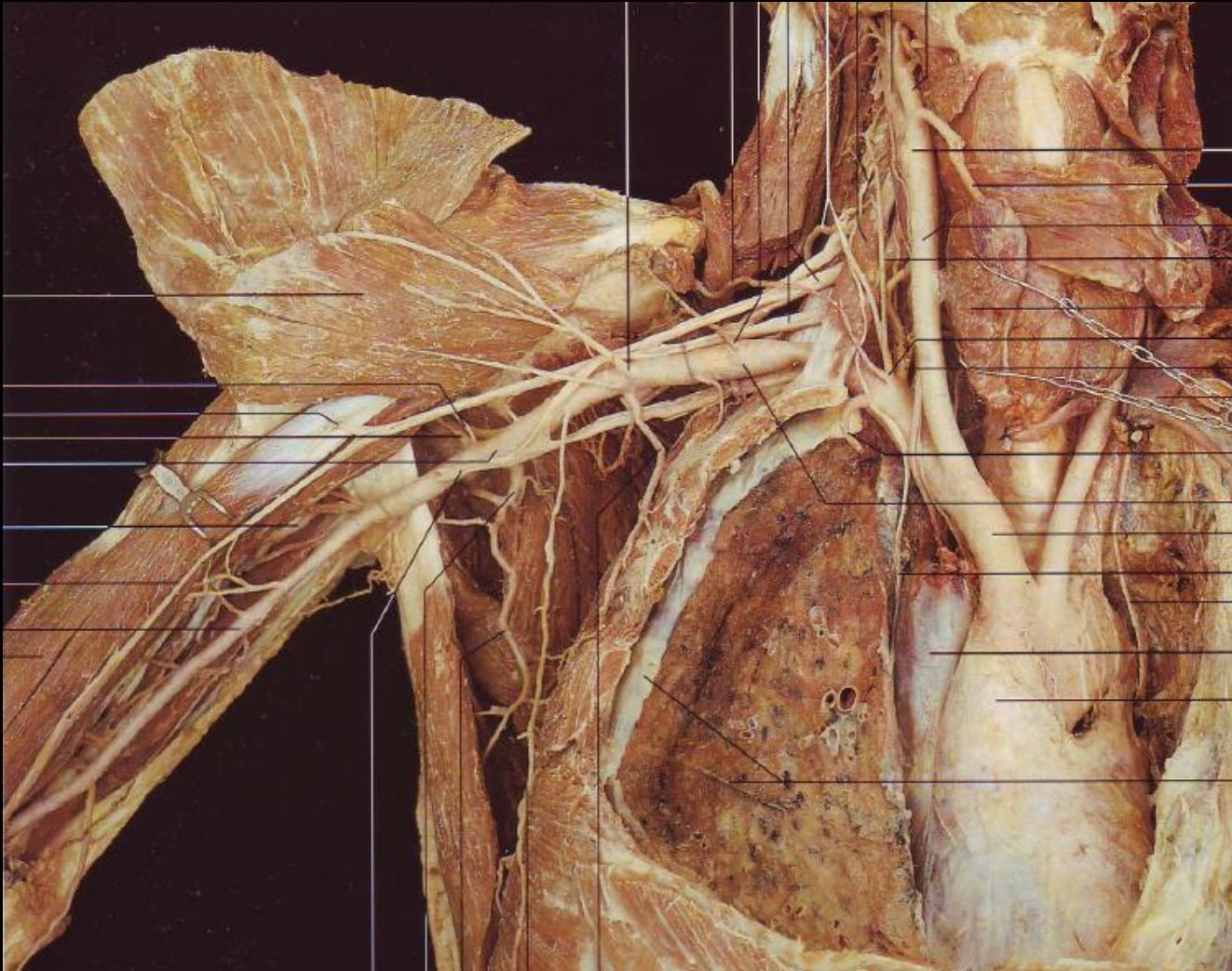
### – pars supraclavicularis:

Nervus thoracicus longus  
Nervus suprascapularis  
Nervi pectorales  
Nervus thoracodorsalis  
Nervus dorsalis scapulae  
Nervus subclavius

## Plexus brachialis

### – pars infraclavicularis:

Nervus musculocutaneus  
Nervus medianus  
Nervus ulnaris  
Nervus radialis  
Nervus axillaris



# Plexus brachialis – pars supraclavicularis

## 1. Nervus thoracicus longus

- descends on m. serratus anterior with vasa thoracica lateralia

## 2. Nervus suprascapularis

- with s vasa suprascapularia
- through incisura scapulae under lig. transversum scapulae superius
- through incisura spinoglenoidalis under lig. transversum scapulae inferius

## 3. Nervus pectoralis medialis et lateralis

- deep in trigonum clavipectorale
- with rr. pectorales from a. thoracoacromialis

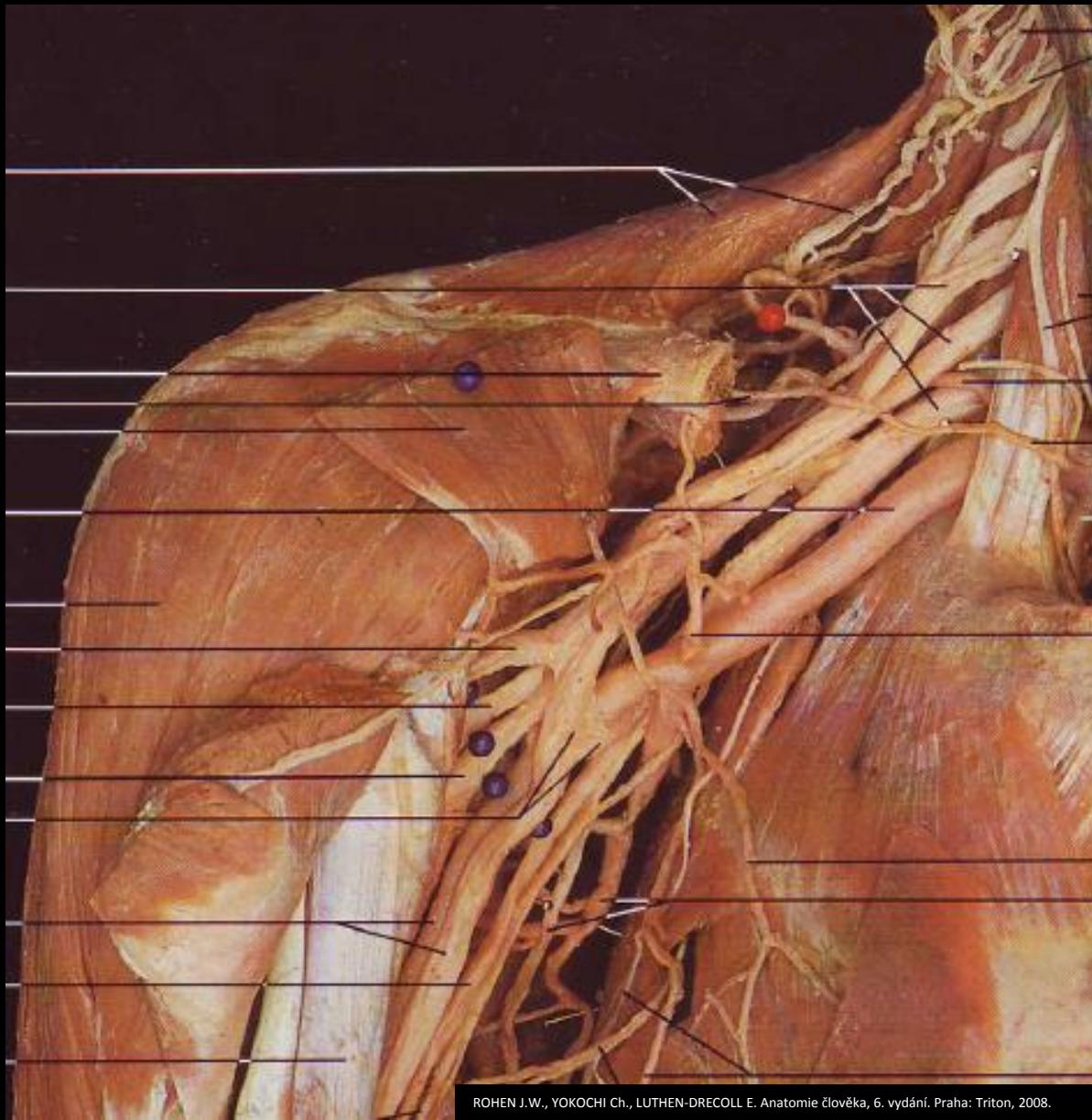
## 4. Nervus thoracodorsalis

- with vasa thoracodorsalia

## 5. Nervus dorsalis scapulae

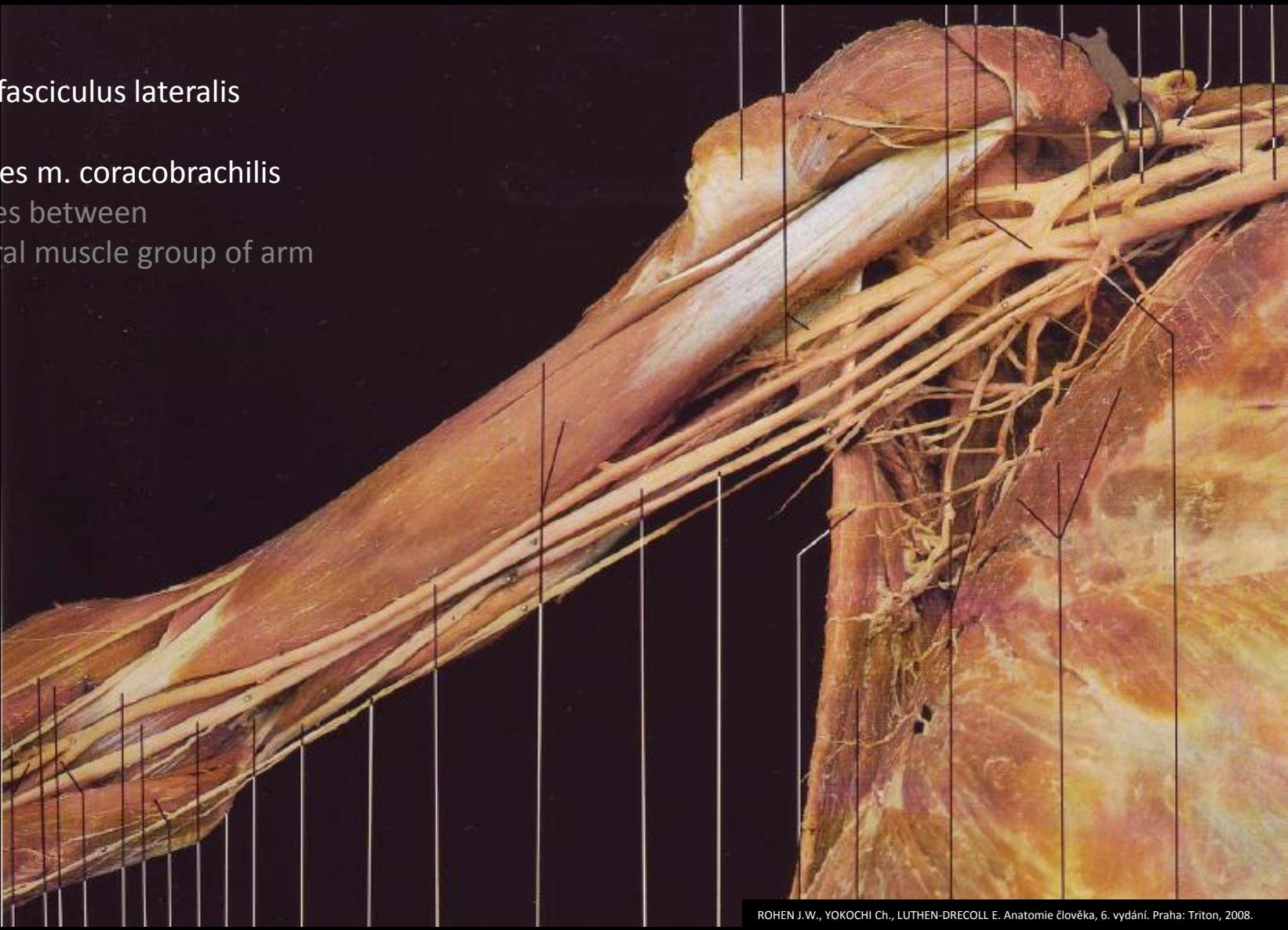
- with vasa dorsalia scapulae

## 6. Nervus subclavius



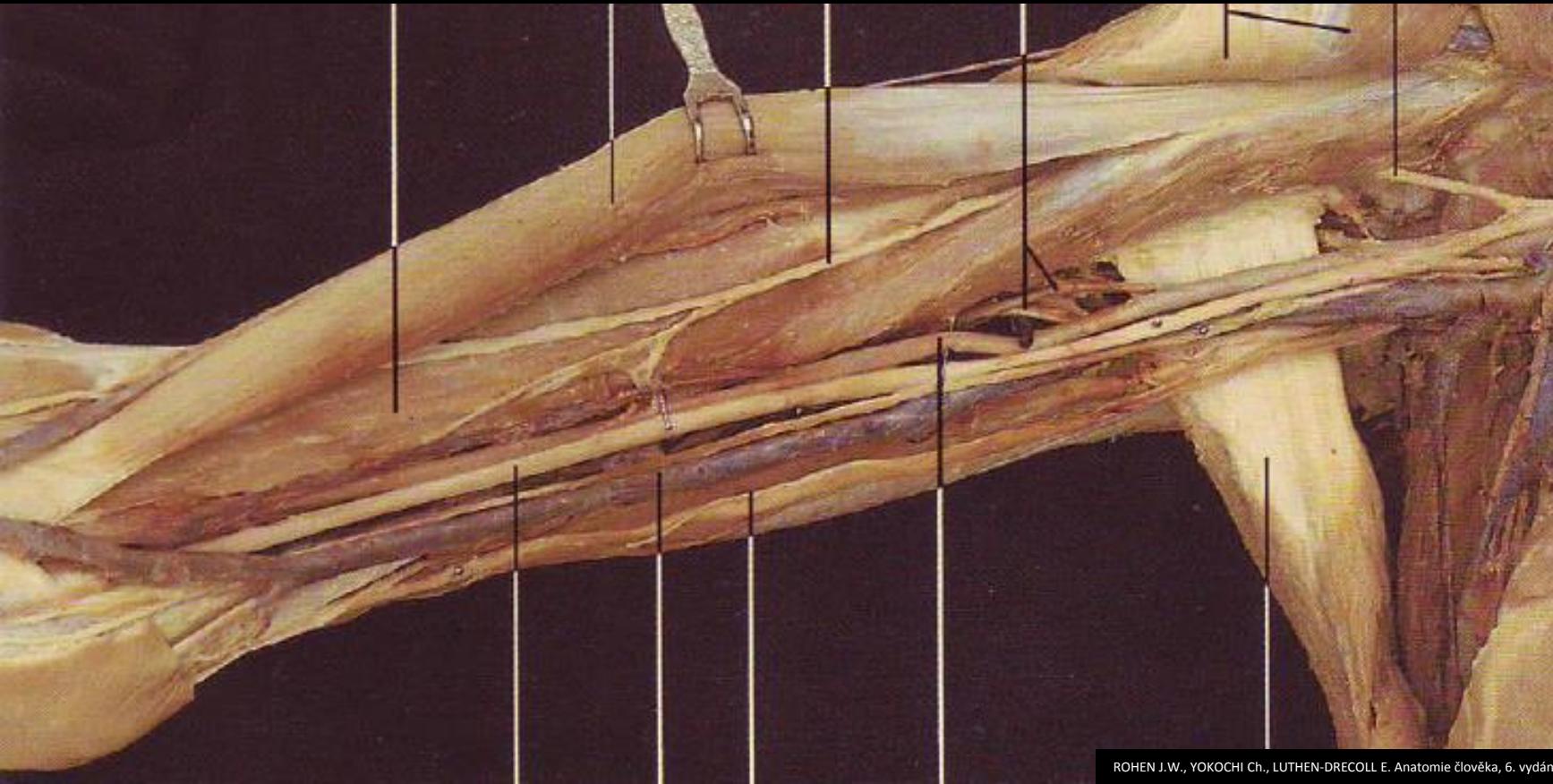
# Nervus musculocutaneus

- from fasciculus lateralis
- 1. pierces m. coracobrachialis
- 2. passes between  
ventral muscle group of arm



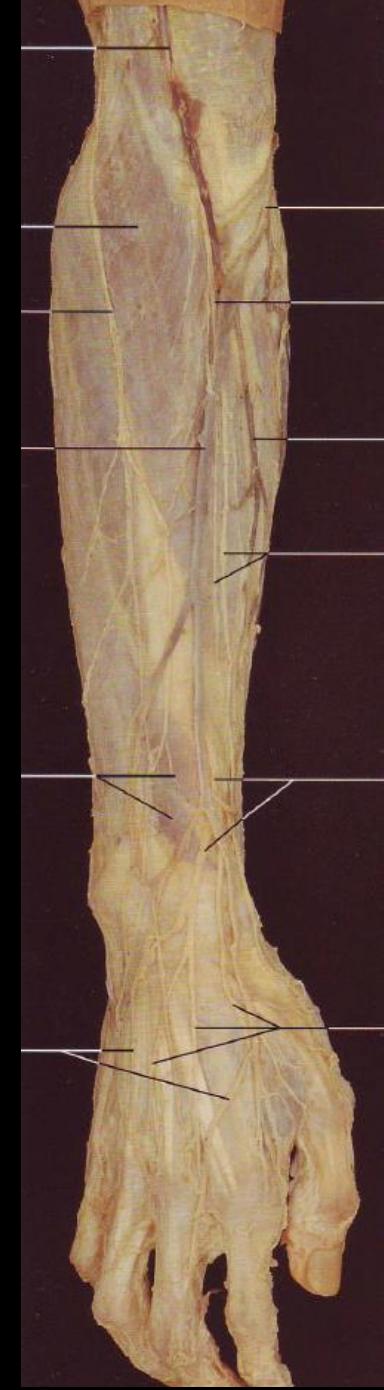
# Nervus musculocutaneus

- from fasciculus lateralis
- 1. pierces m. coracobrachialis
- 2. passes between ventral muscle group of arm
- 3. continues into fossa cubitalis
- 4. along lateral side of forearm



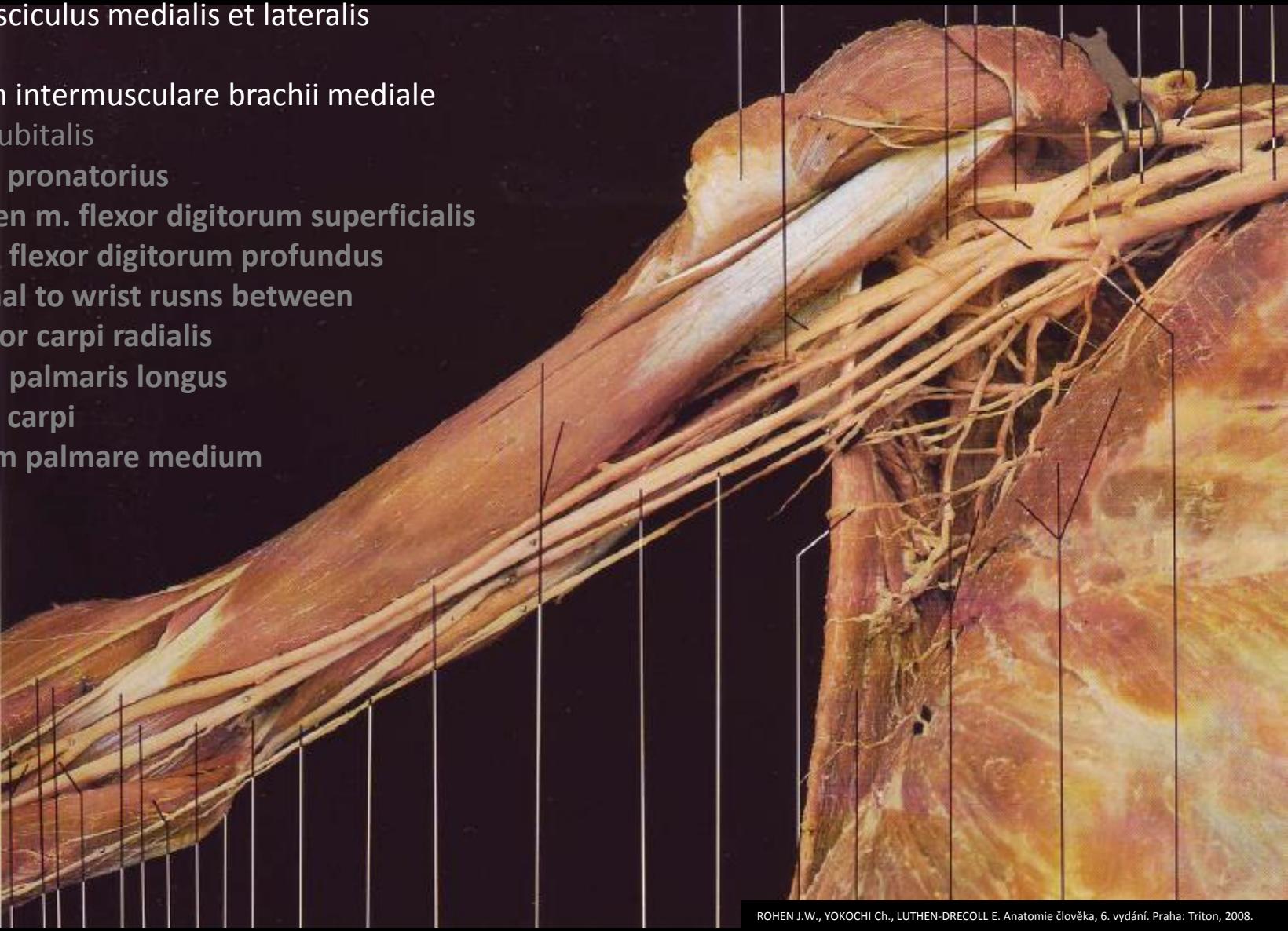
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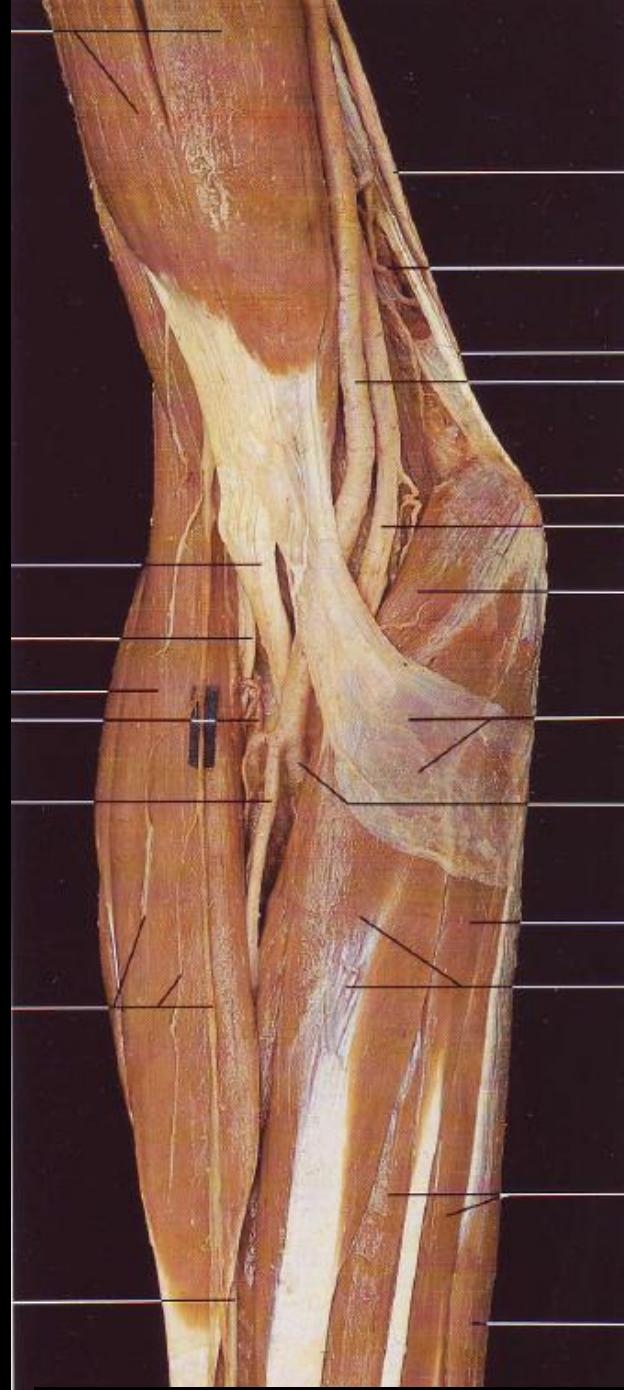
# Nervus medianus

- from fasciculus medialis et lateralis
- 1. septum intermusculare brachii mediale
- 2. fossa cubitalis
- 3. canalis pronatorius
- 4. between m. flexor digitorum superficialis  
and m. flexor digitorum profundus
- 5. proximal to wrist rusns between  
m. flexor carpi radialis  
and m. palmaris longus
- 6. canalis carpi
- 7. spatium palmare medium



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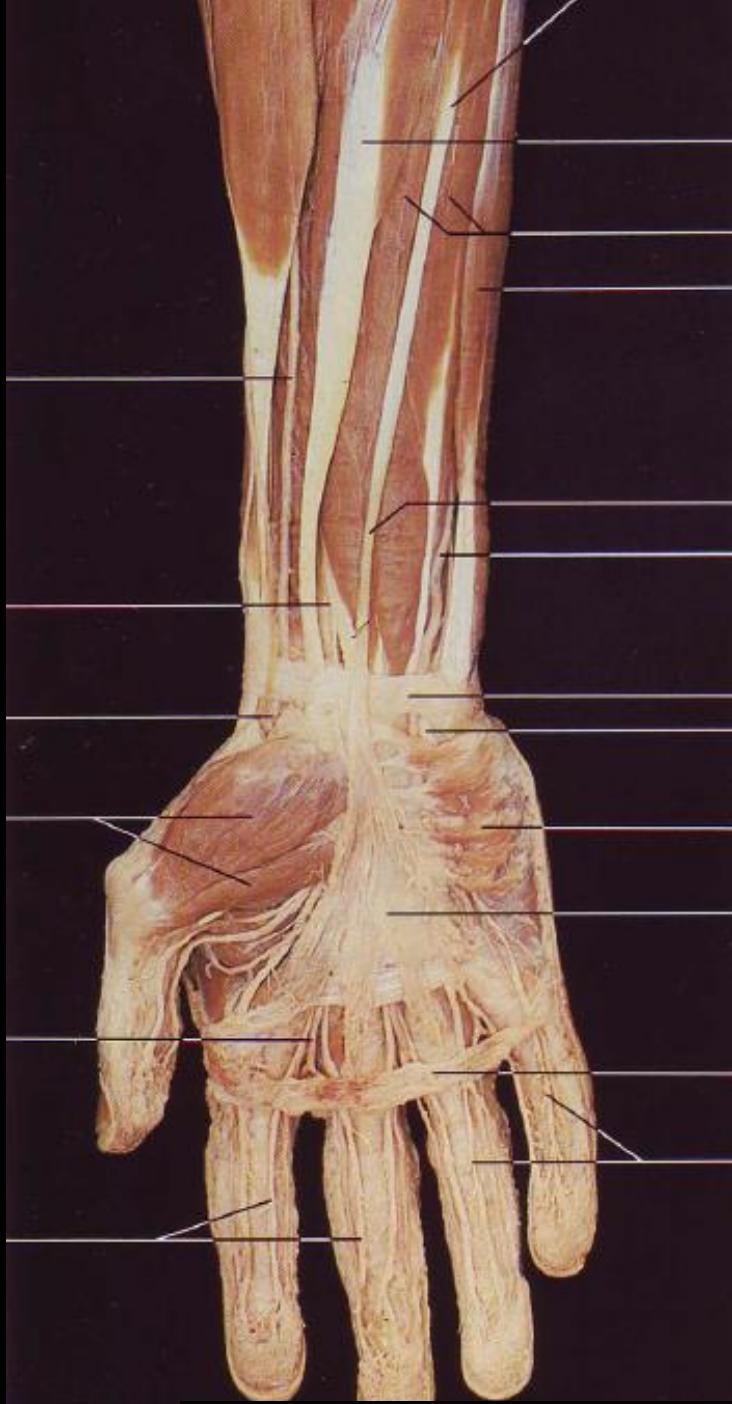
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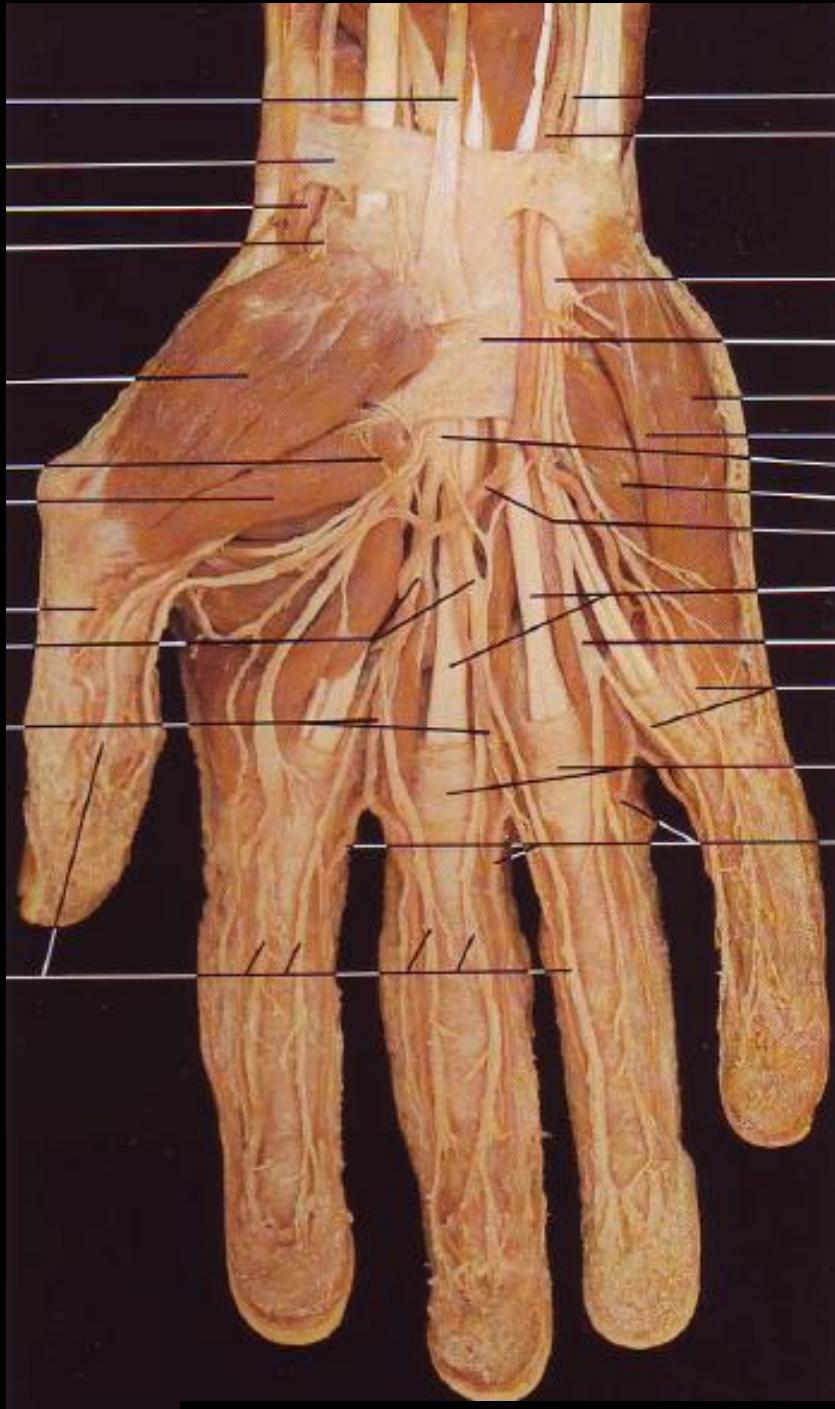
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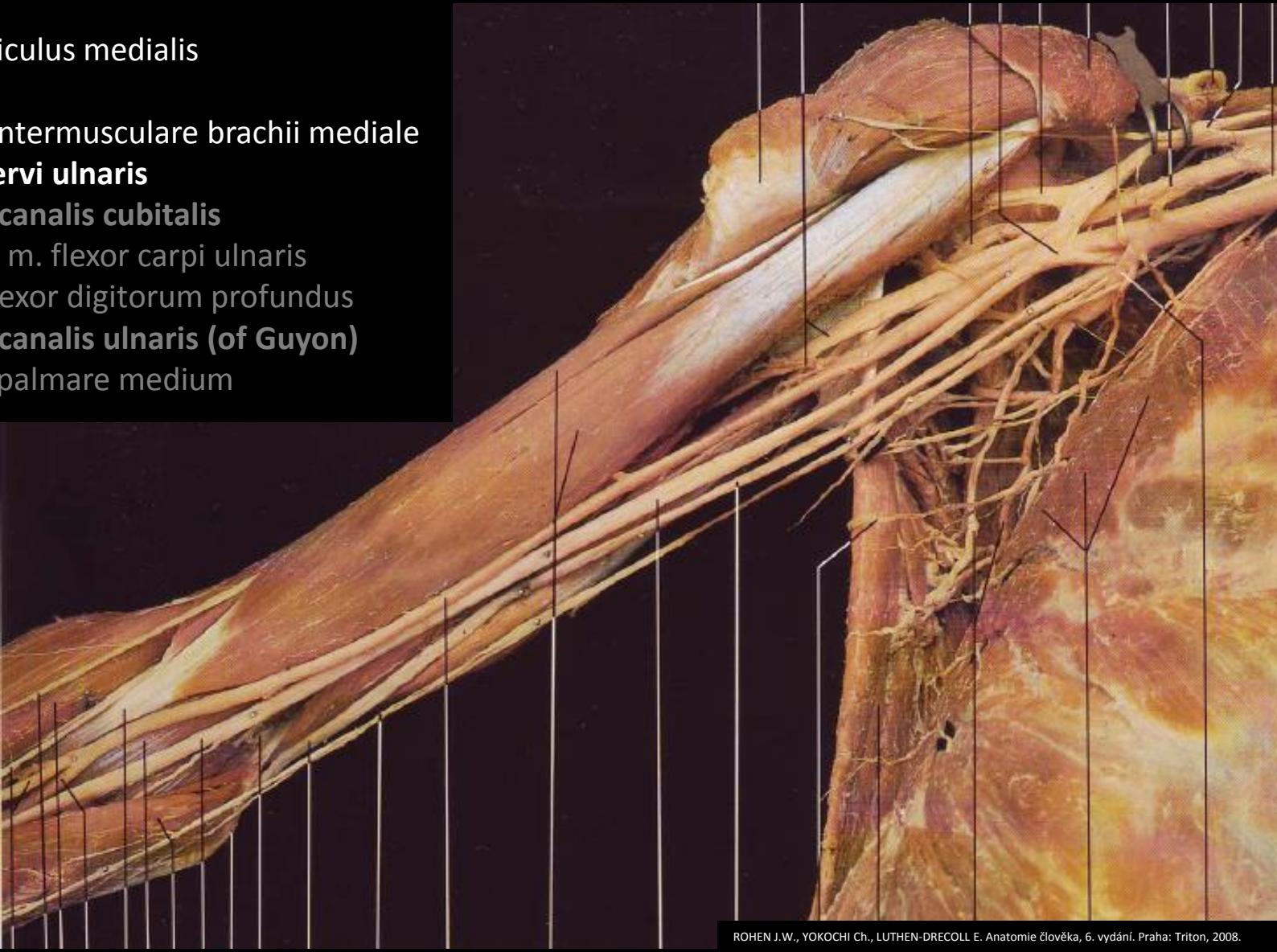
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- 6. canalis carpi
- 7. spatium palmare medium



# Nervus ulnaris

- from fasciculus medialis
- 1. septum intermusculare brachii mediale
- 2. **sulcus nervi ulnaris**
- 3. through canalis cubitalis
- 4. between m. flexor carpi ulnaris  
and m. flexor digitorum profundus
- 5. **through canalis ulnaris (of Guyon)**
- 6. spatum palmarum medium



# Nervus ulnaris

- from fasciculus medialis
- 1. septum intermusculare brachii mediale
- 2. **sulcus nervi ulnaris**
- 3. **through canalis cubitalis**
- 4. between m. flexor carpi ulnaris  
and m. flexor digitorum profundus
- 5. **through canalis ulnaris (of Guyon)**
- 6. spatium palmarum medium



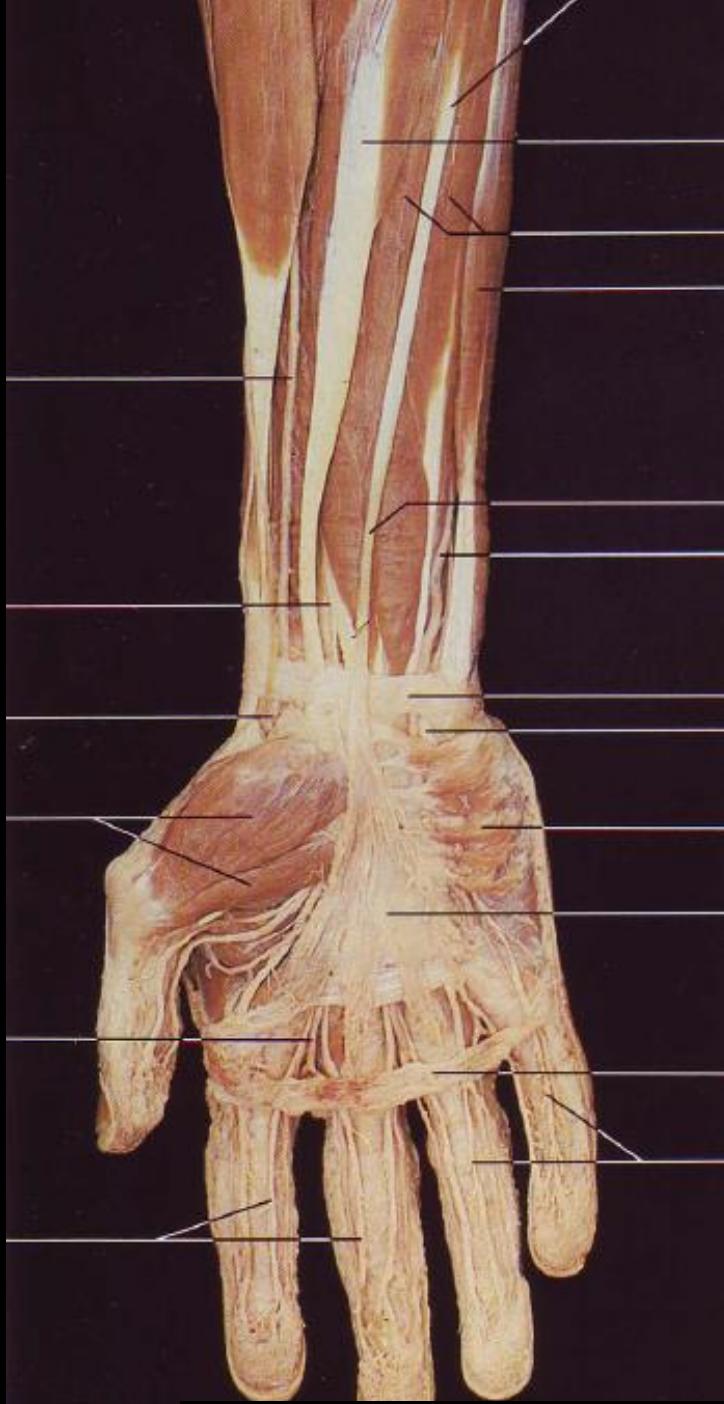
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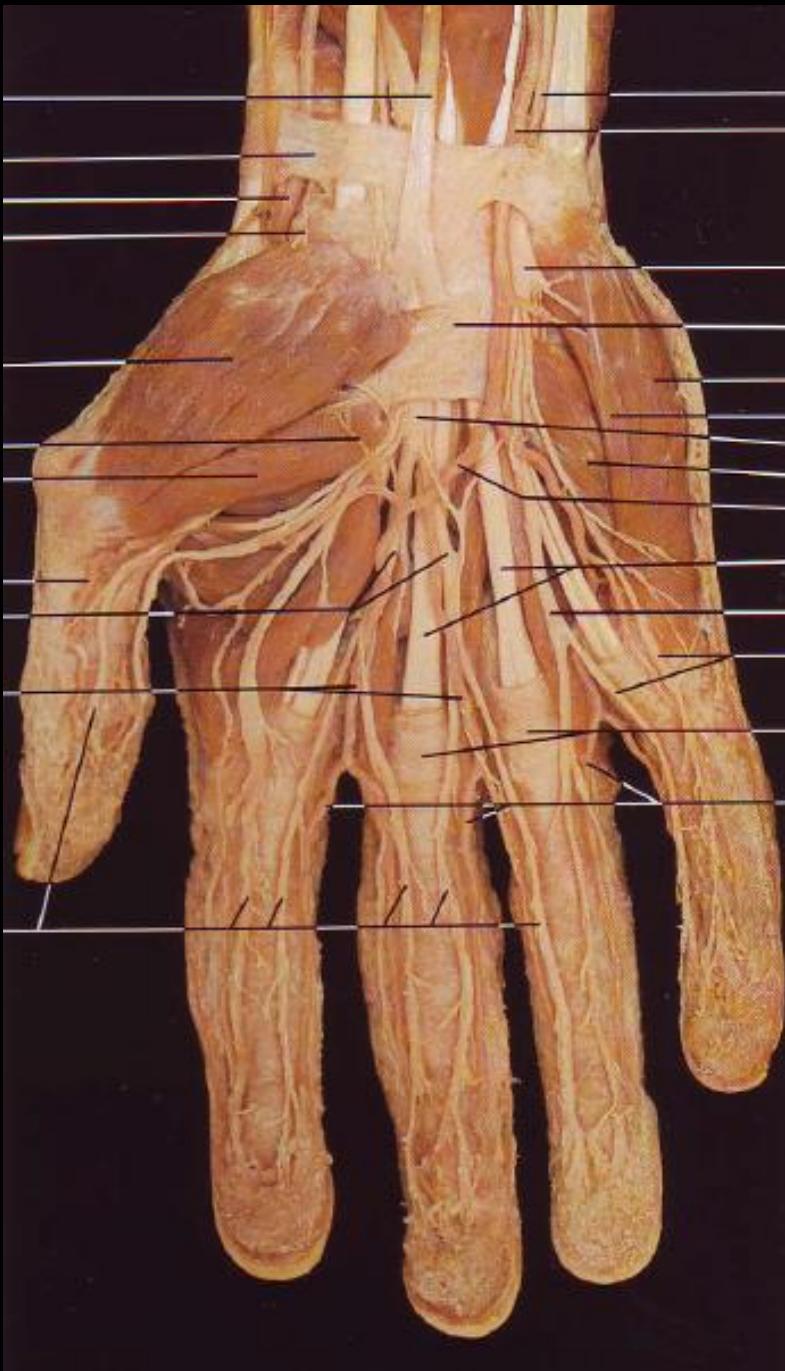
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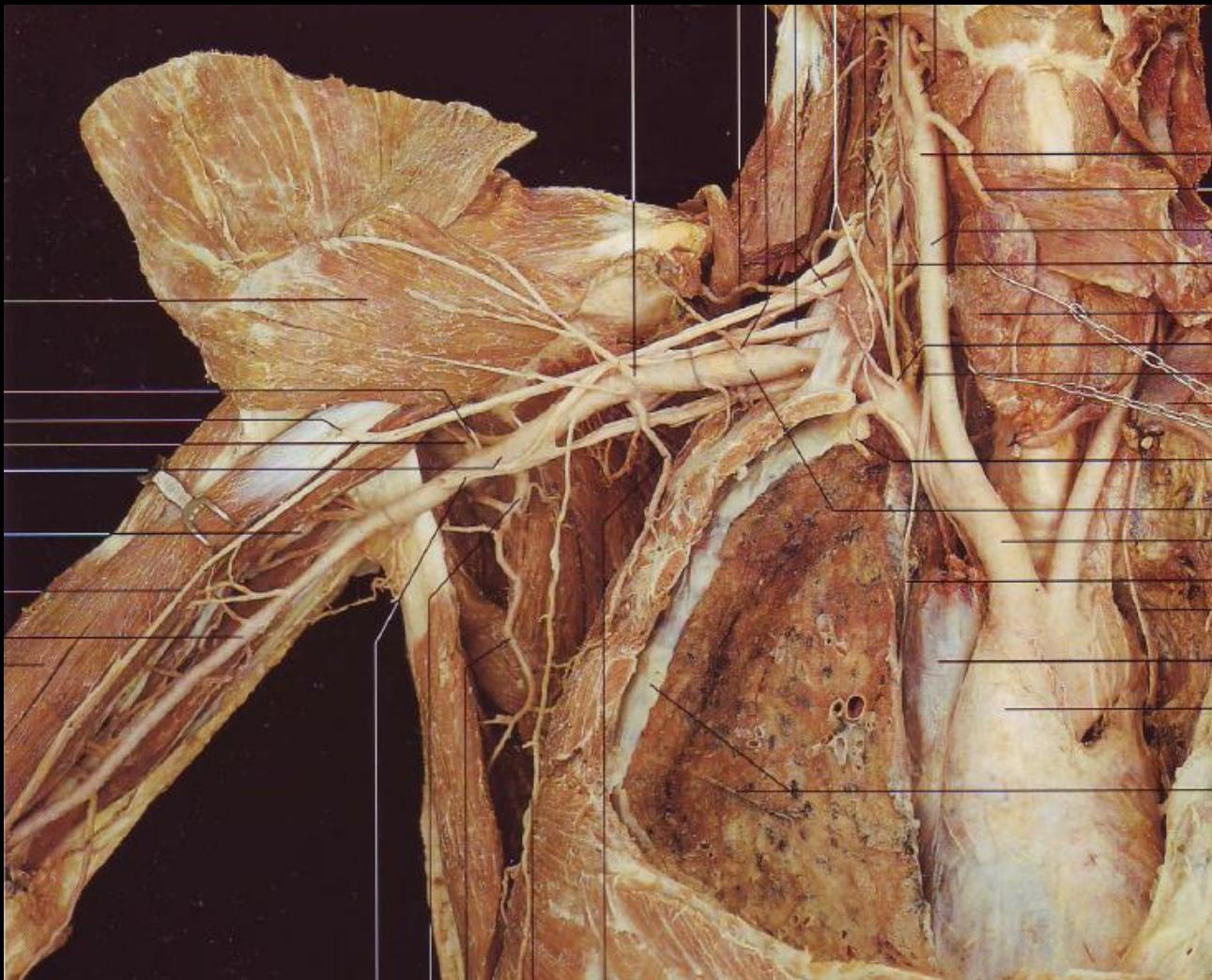


# Nervus axillaris

- from fasciculus posterior

## **foramen humerotricipitale**

- with vasa circumflexa  
humeri posteriora

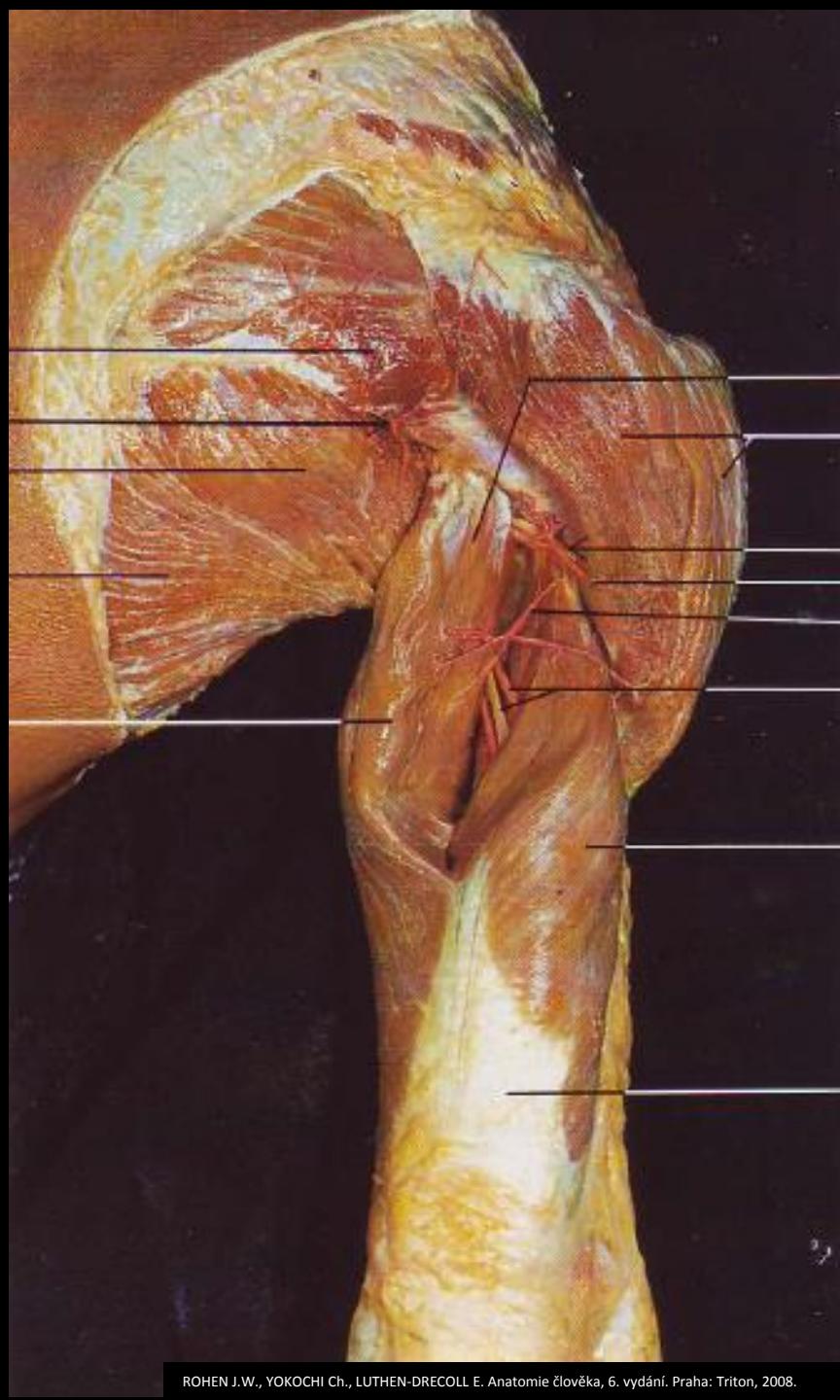


# Nervus axillaris

- from fasciculus posterior

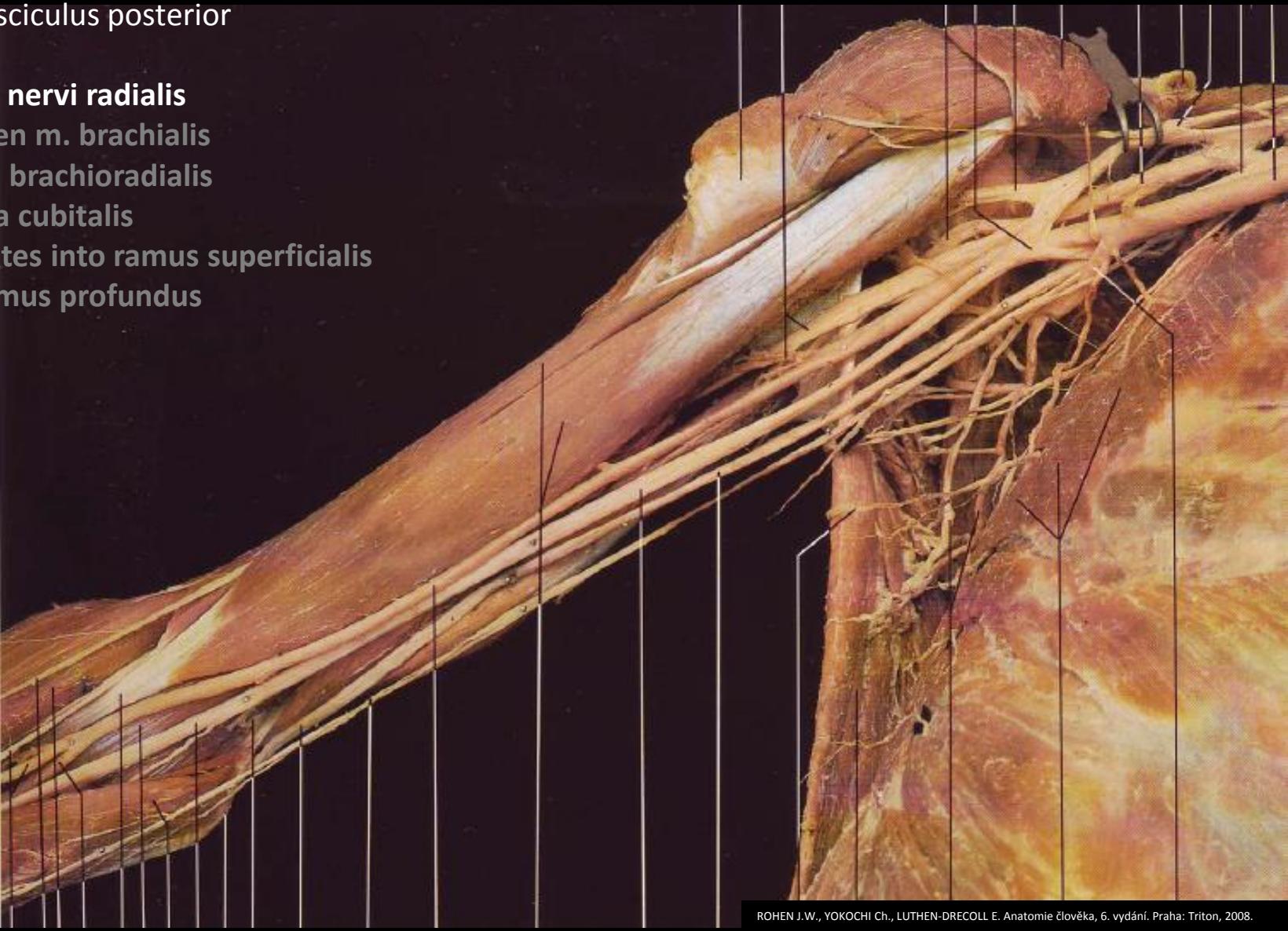
## foramen humerotricipitale

- with vasa circumflexa  
humeri posteriores



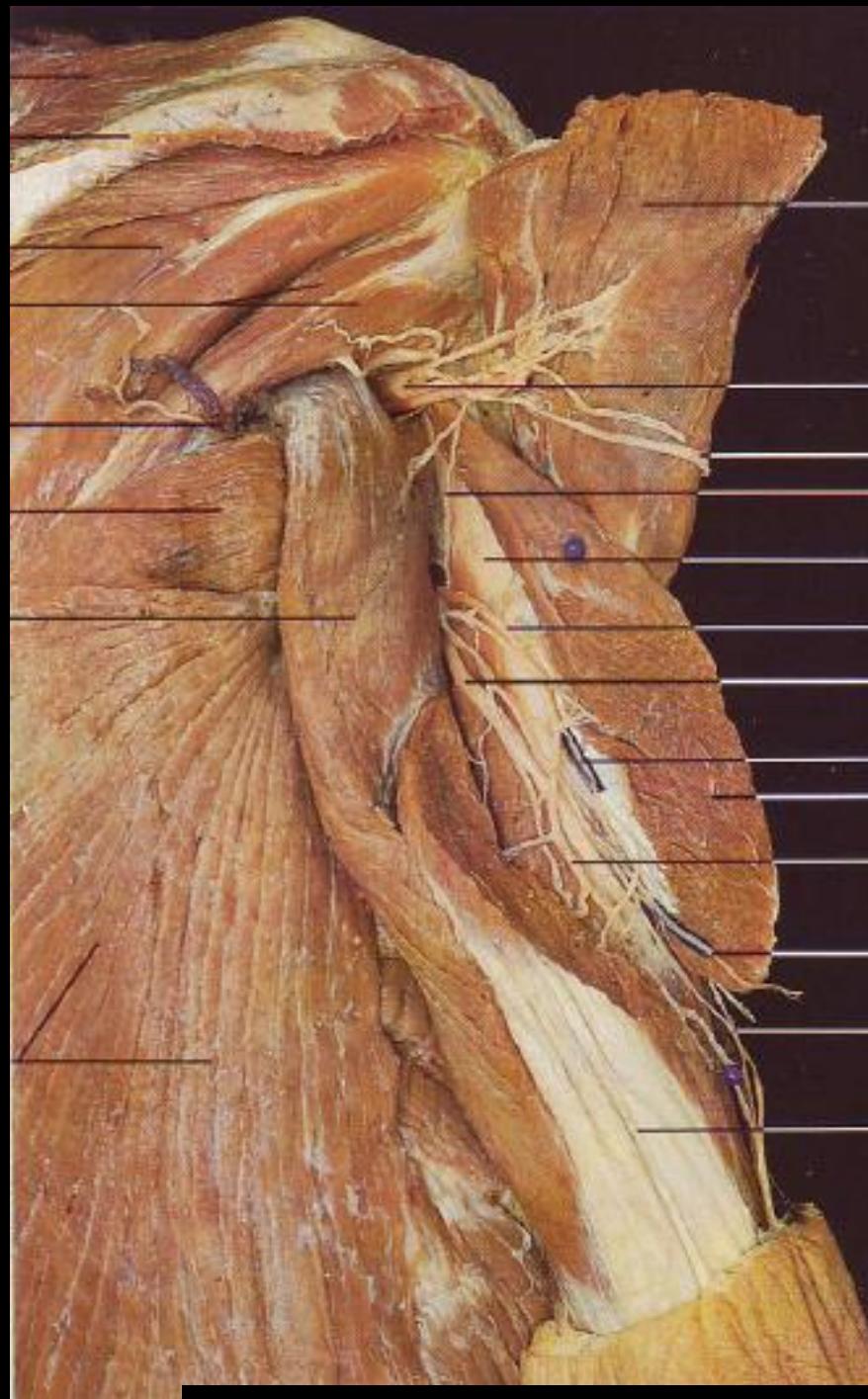
# Nervus radialis

- from fasciculus posterior
1. **canalis nervi radialis**
  2. **between m. brachialis  
and m. brachioradialis**
  3. **in fossa cubitalis**  
**bifurcates into ramus superficialis  
and ramus profundus**



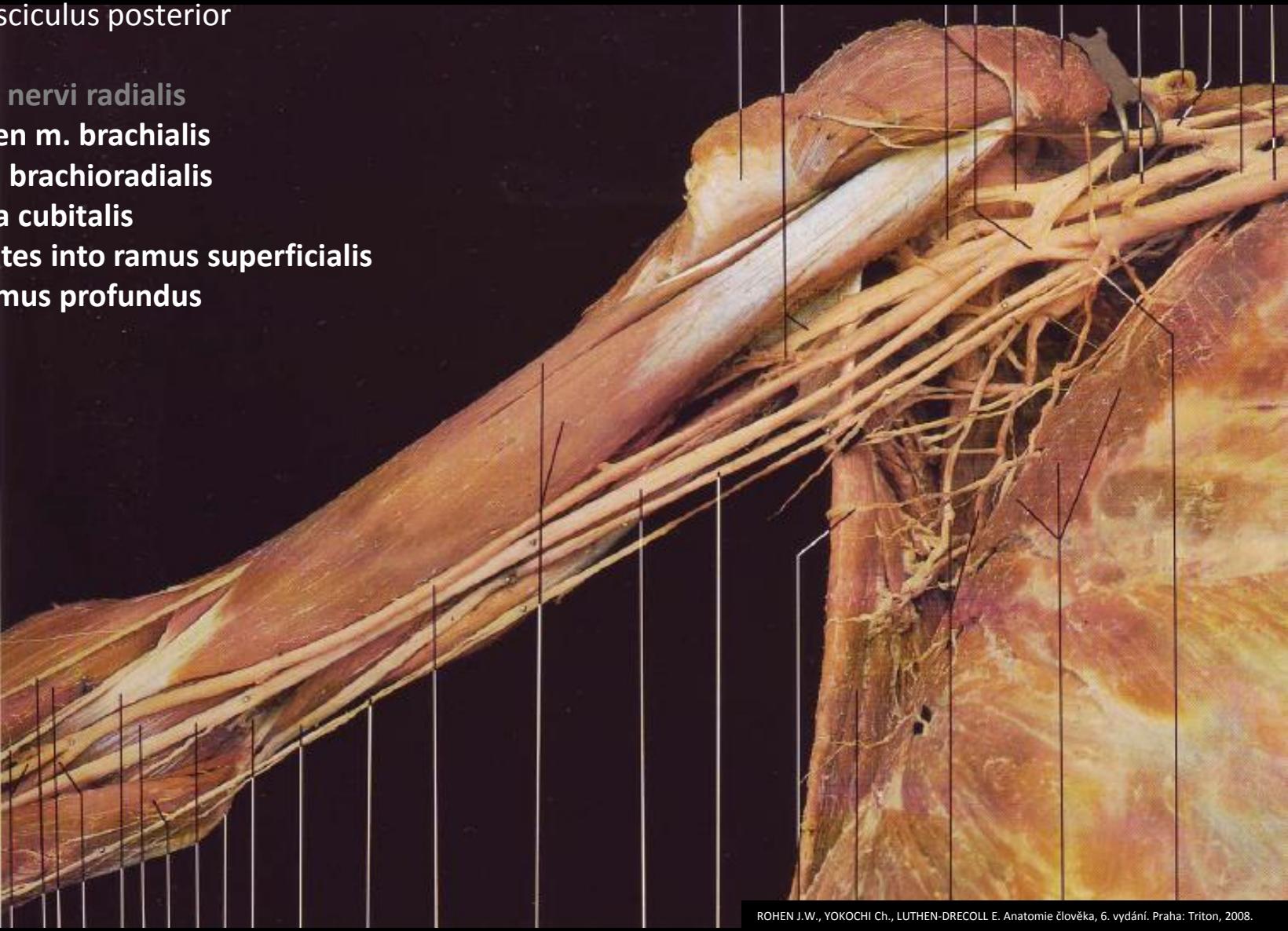
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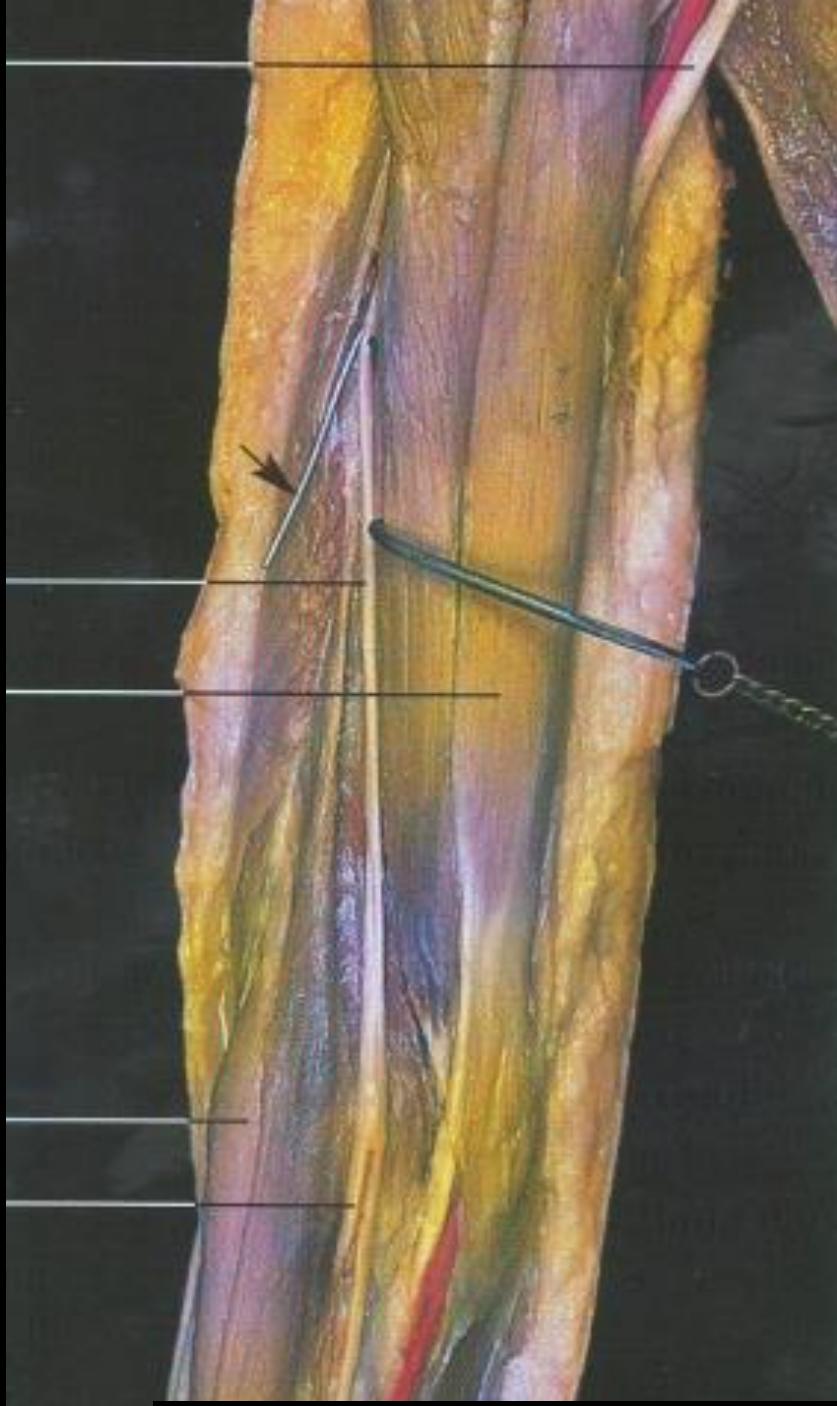
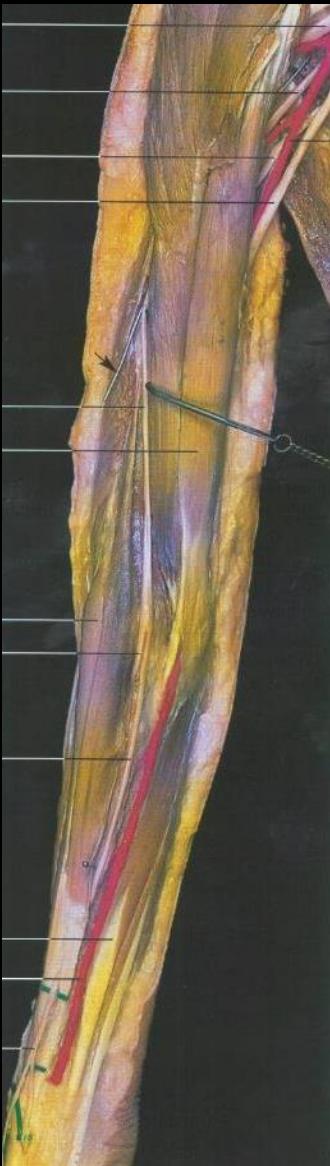
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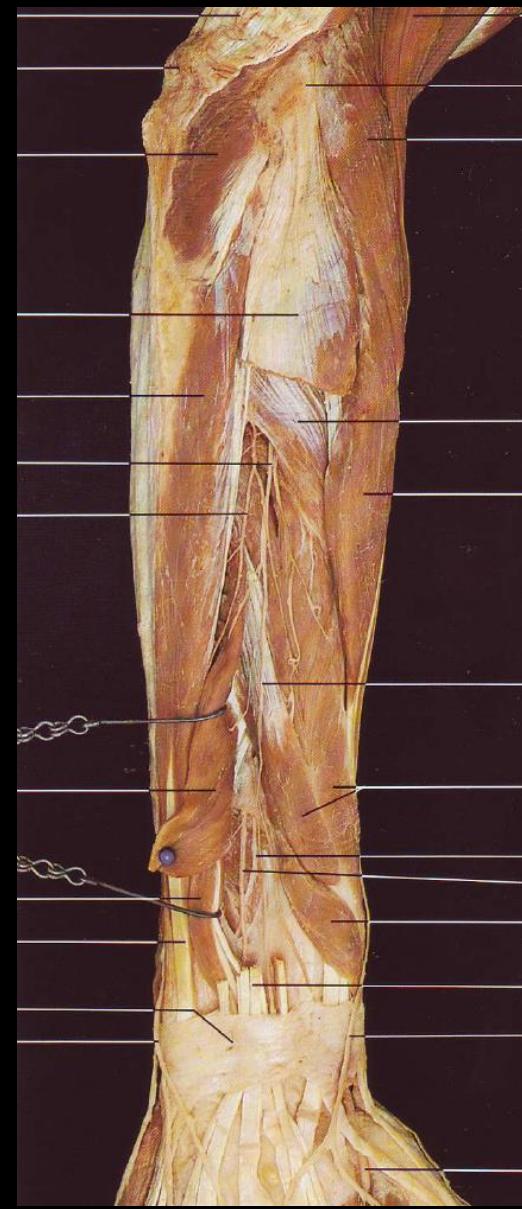
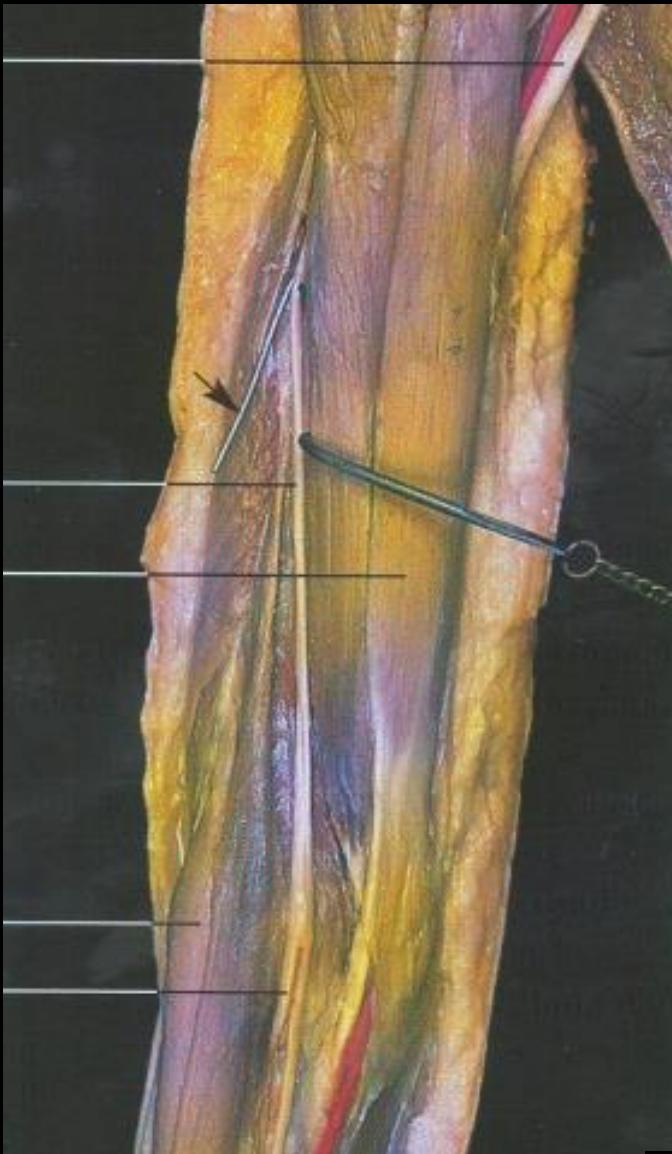
# Nervus radialis

- from fasciculus posterior
- 1. **canalis nervi radialis**
- 2. **between m. brachialis  
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**bifurcates into ramus**  
**superficialis**  
**and ramus profundus**



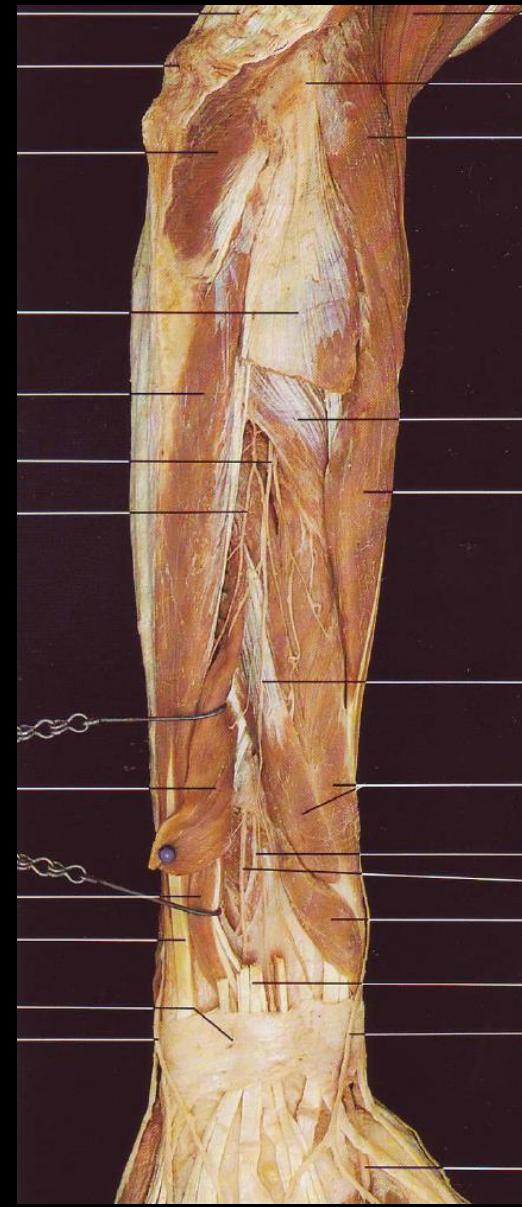
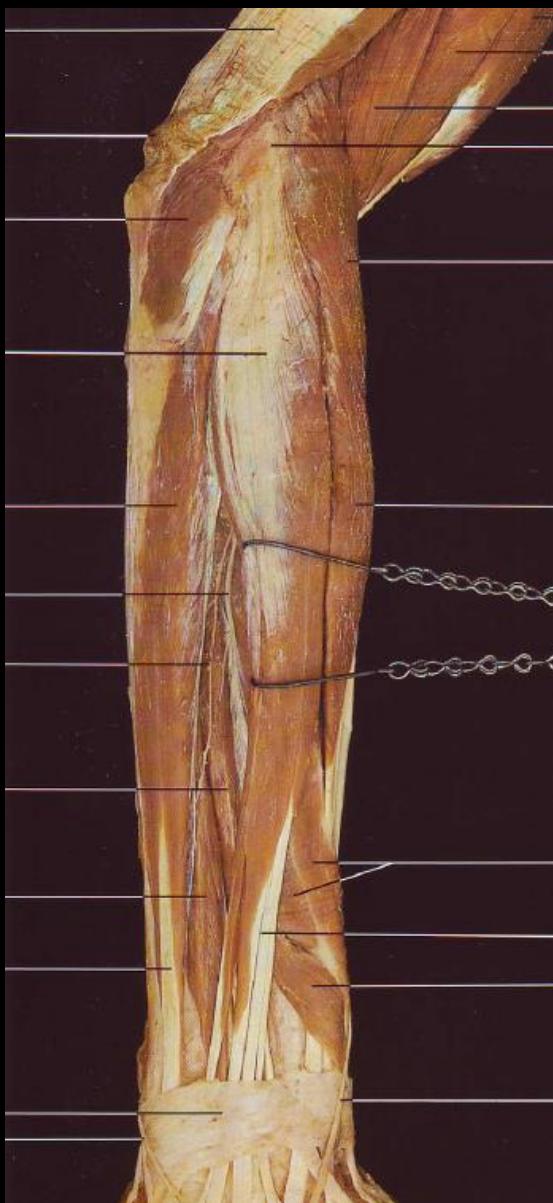
# Nervus radialis – ramus profundus

- from fasciculus posterior
- 1. canalis nervi radialis
- 2. between m. brachialis and m. brachioradialis
- 3. in fossa cubitalis bifurcates into ramus superficialis and ramus profundus
- 4. **canalis supinatorius**
- 5. **into dorsal muscles group of forearm (= n. interosseus posterior)**



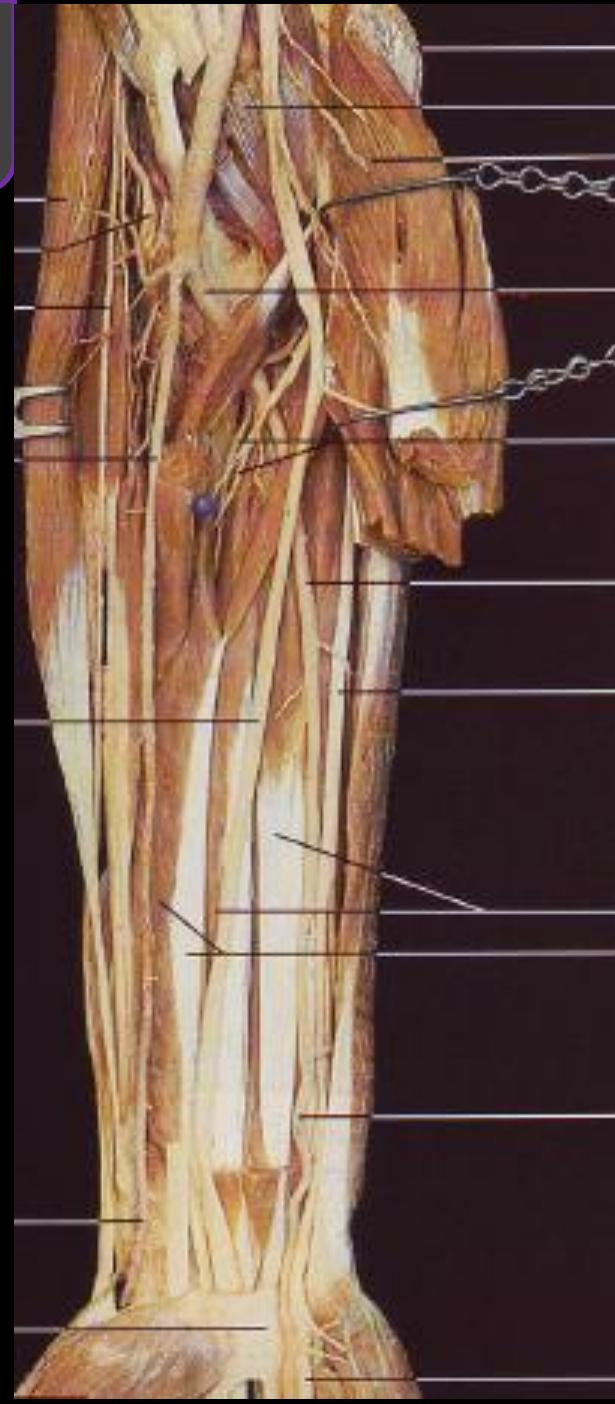
# Nervus radialis – ramus profundus

- from fasciculus posterior
- 1. canalis nervi radialis
- 2. between m. brachialis  
and m. brachioradialis
- 3. in fossa cubitalis  
bifurcates into ramus  
superficialis  
and ramus profundus
- 4. **canalis supinatorius**
- 5. **into dorsal muscles group  
of forearm**  
(= n. interosseus posterior)



# N. radialis – ramus superficialis

- from fasciculus posterior
- 1. canalis nervi radialis
- 2. between m. brachialis  
and m. brachioradialis
- 3. in fossa cubitalis  
bifurcates into ramus  
superficialis  
and ramus profundus
- 4. **between m. brachioradialis  
and m. flexor carpi radialis**
- 5. **across foveola radialis**



# Topographical anatomy is the base



# Vessels of lower limb

## Arteries:

Arcus aortae

Aorta thoracica

Aorta abdominalis

Arteria iliaca communis

1. Arteria iliaca externa

2. Arteria femoralis

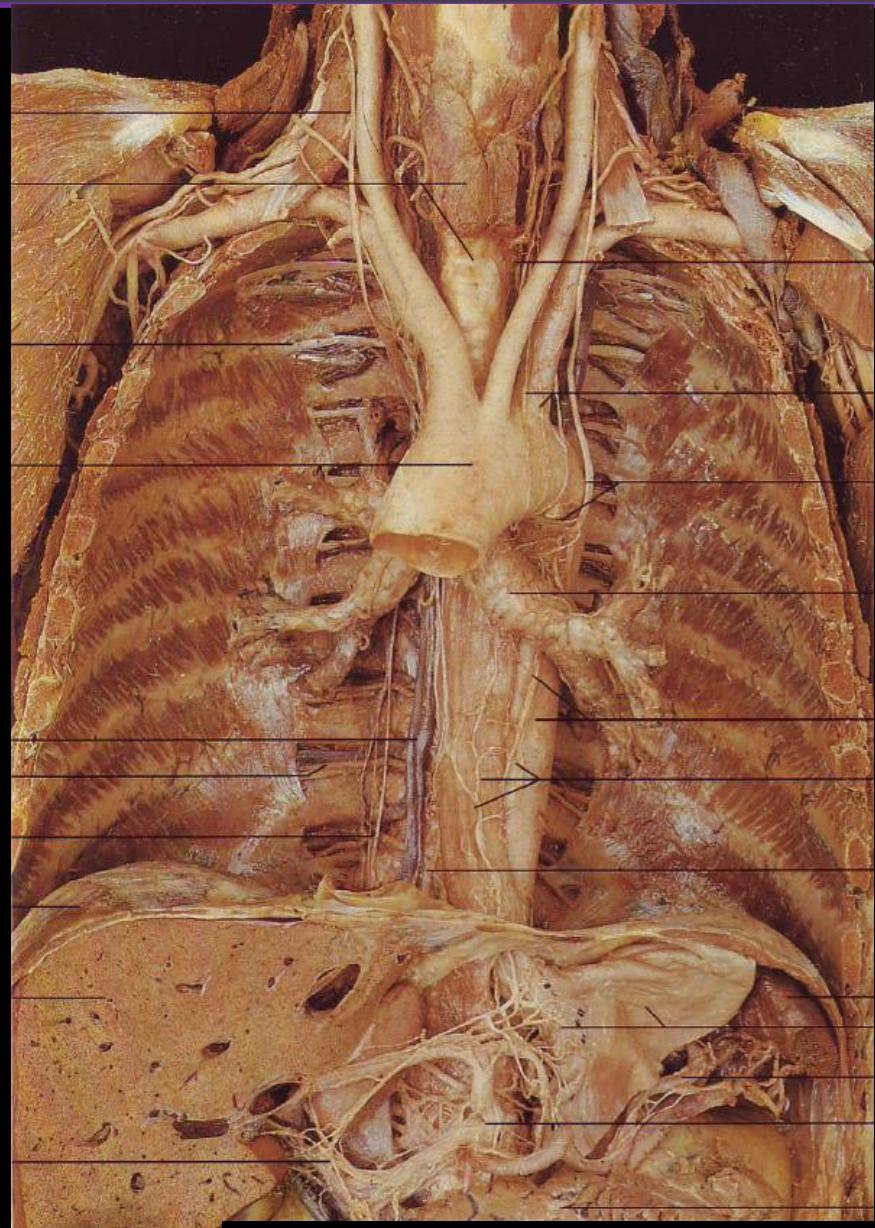
3. Arteria poplitea

4. Arteria tibialis posterior

– a. dorsalis pedis

5. Arteria tibialis anterior

– a. plantaris medialis et lateralis



# Vessels of lower limb

## Tepny:

Arcus aortae

Aorta thoracica

Aorta abdominalis

Arteria iliaca communis

1. Arteria iliaca externa

2. Arteria femoralis

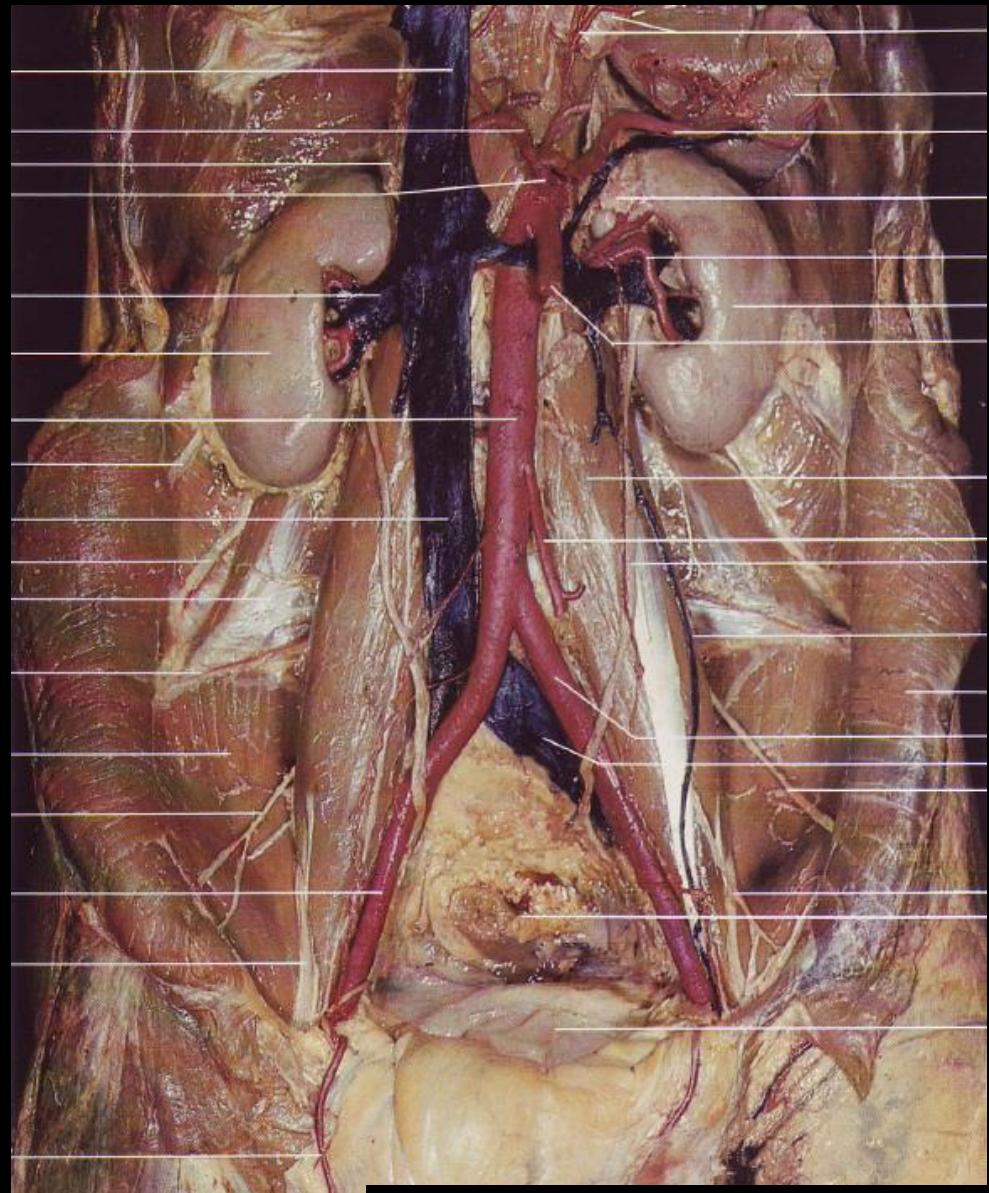
3. Arteria poplitea

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– a. plantaris medialis et lateralis



# Vessels of lower limb

## Arteries:

Arcus aortae

Aorta thoracica

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Arteria iliaca communis

1. Arteria iliaca externa

2. Arteria femoralis

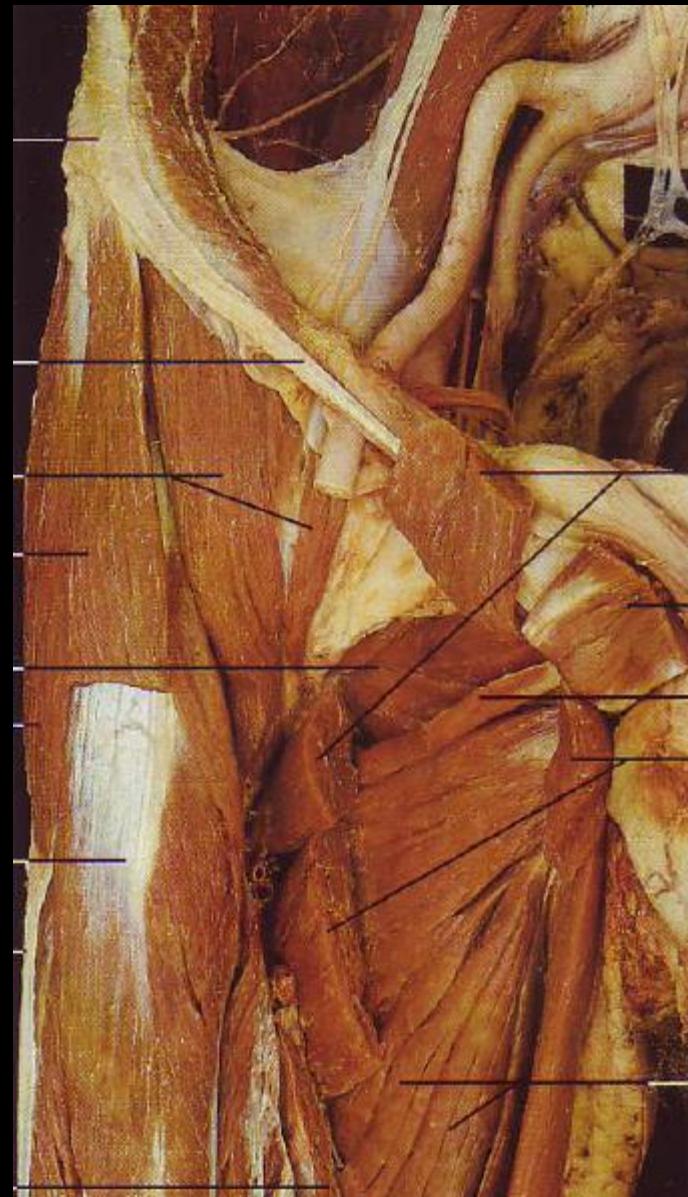
3. Arteria poplitea

4. Arteria tibialis posterior

– a. dorsalis pedis

5. Arteria tibialis anterior

– a. plantaris medialis et lateralis



# Arteria iliaca externa

- ventral branch from arteria iliaca communis
- courses with greater pelvis

## Course:

1. towards lacuna vasorum (vascular space)

## Important branches:

### Arteria epigastrica inferior

- ascends between mezi fascia transversalis and ligamentum interfoveolare

### Arteria circumflexa ilium profunda

- along external margin of greater pelvis



# Arteria femoralis

- continuation of arteria iliaca externa
- runs along ventromedial aspect of thigh

## Course:

1. from lacuna vasorum
2. within trigonum femorale and fossa iliopectinea
3. through canalis adductorius (of Hunter)
4. through hiatus adductorius

## Important branch:

### Arteria profunda femoris

- between m. adductor longus  
and m. adductor magnus

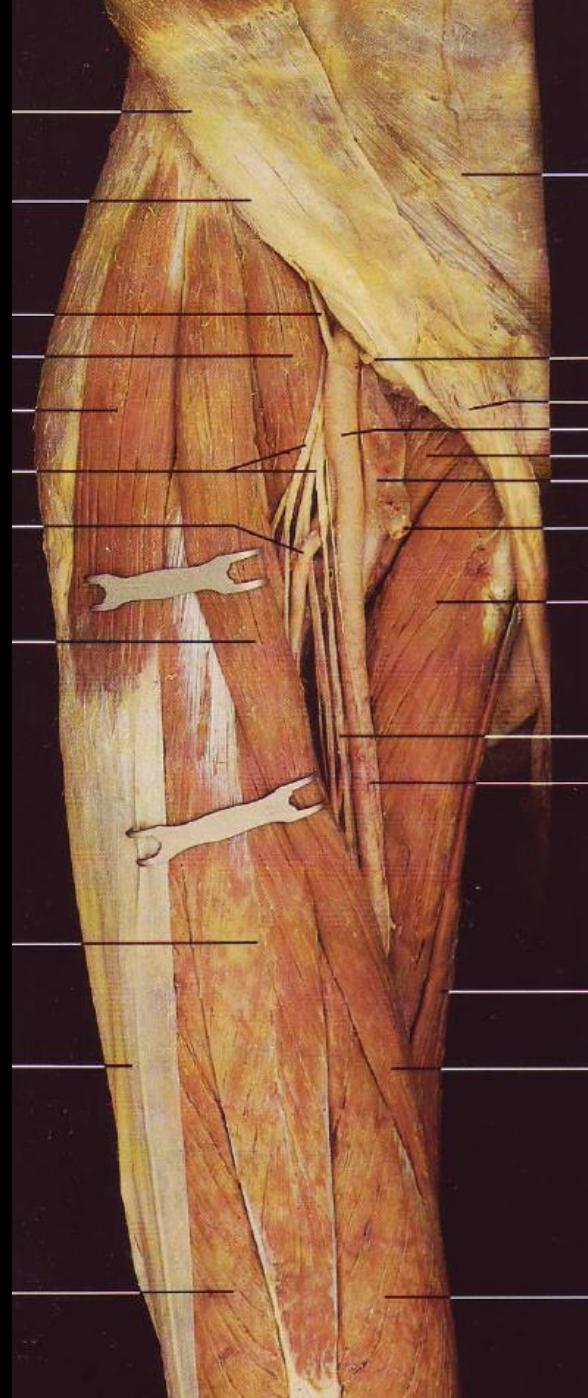
## Smaller branches

Arteria circumflexa ilium superficialis

Arteria epigastrica superficialis

Arteria pudenda externa profunda et superficialis

Arteria genus descendens



# Arteria femoralis

- continuation of arteria iliaca externa
- runs along ventromedial aspect of thigh

## Course:

1. from lacuna vasorum
2. within trigonum femorale and fossa iliopectinea
3. through canalis adductorius (of Hunter)
4. through hiatus adductorius

## Important branch:

### Arteria profunda femoris

- between m. adductor longus  
and m. adductor magnus

Branches of arteria profunda femoris

Arteria circumflexa femoris medialis et lateralis

Arteria perforans prima, secunda, tertia



# Arteria poplitea

- continuation of arteria femoralis
- within fossa poplitea

## Course:

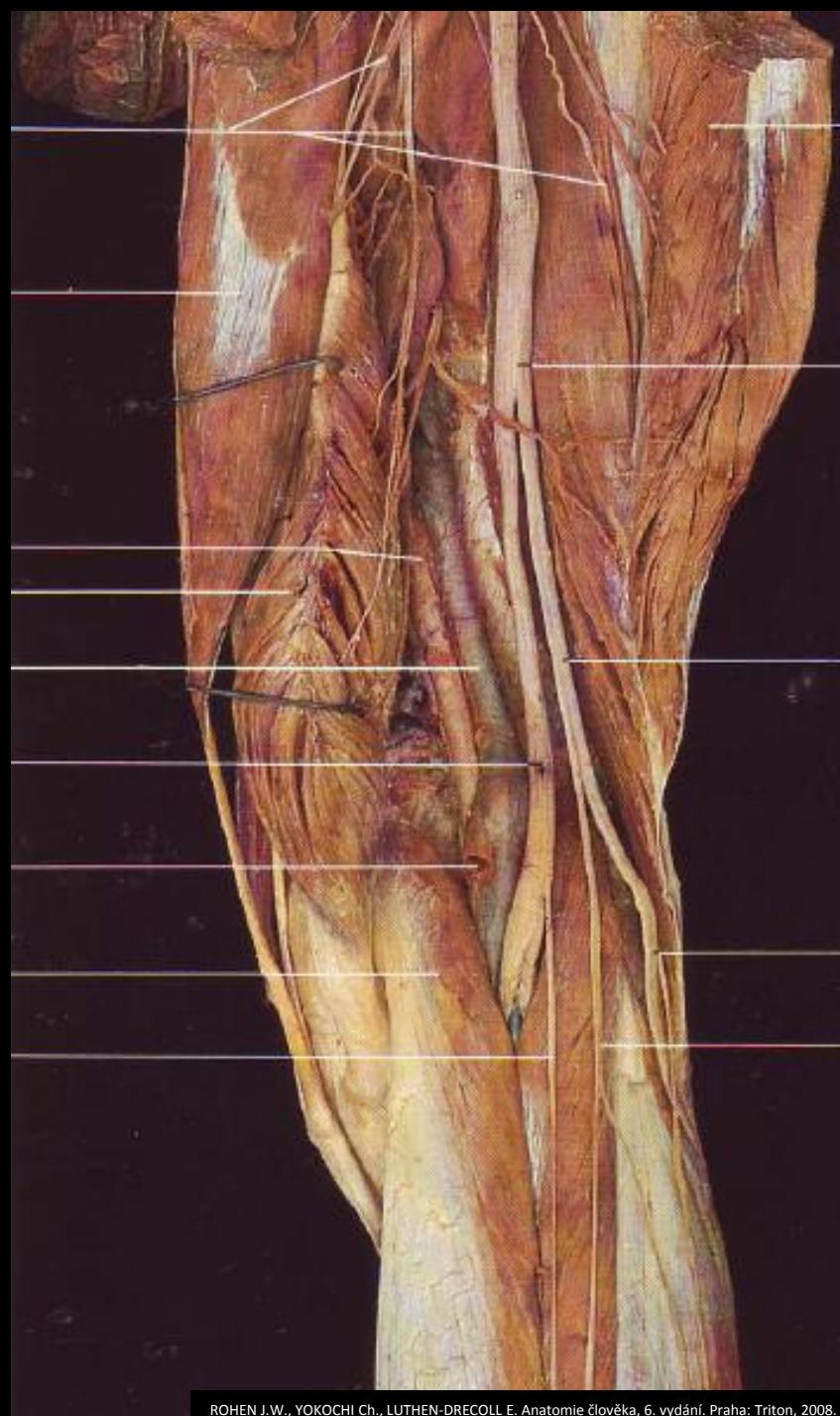
1. from hiatus adductorius
2. medially, under  
v. poplitea and n. tibialis
3. down to inferior margin of m. popliteus

Branches of arteria poplitea

Arteria genus superior medialis et lateralis

Arteria genus media

Arteria genus inferior medialis et lateralis



# Arteria poplitea

- continuation of arteria femoralis
- within fossa poplitea

## Course:

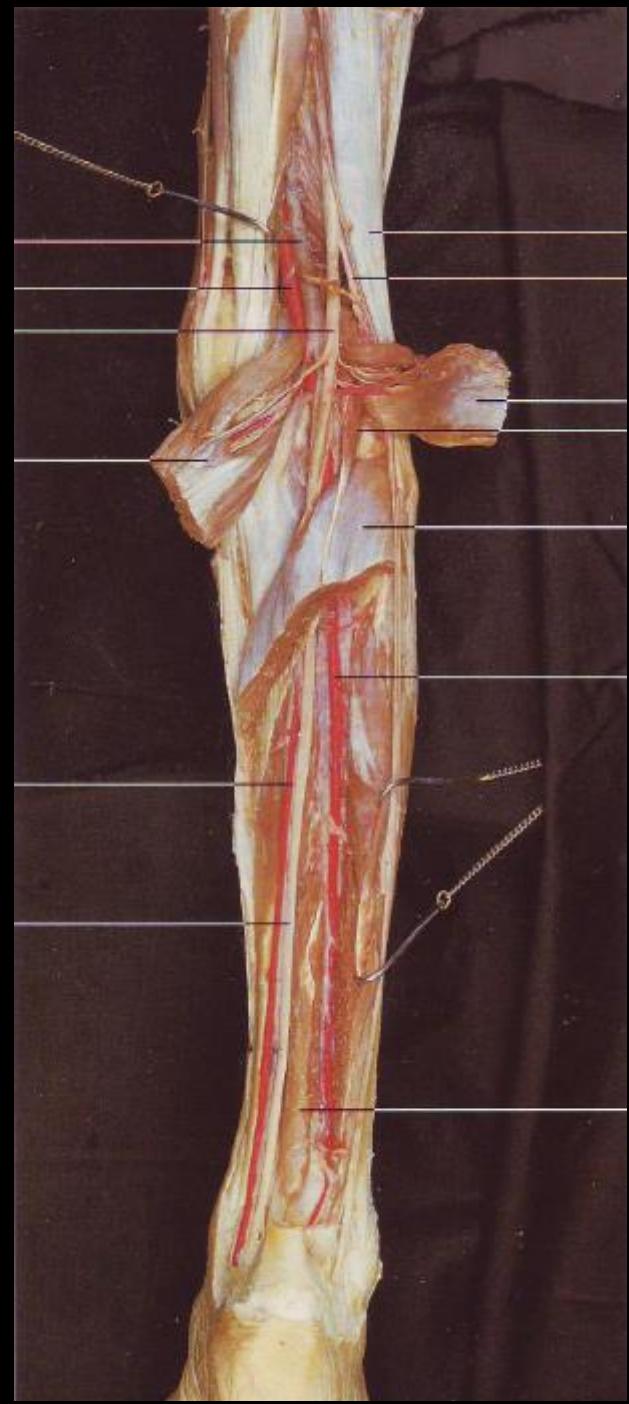
1. from hiatus adductorius
2. medially, under  
v. poplitea and n. tibialis
3. down to inferior margin of m. popliteus

Branches of arteria poplitea

Arteria genus superior medialis et lateralis

Arteria genus media

Arteria genus inferior medialis et lateralis



# Arteria tibialis anterior

- ventral continuation of arteria poplitea
- within anterior compartment of leg
- with n. fibularis profundus

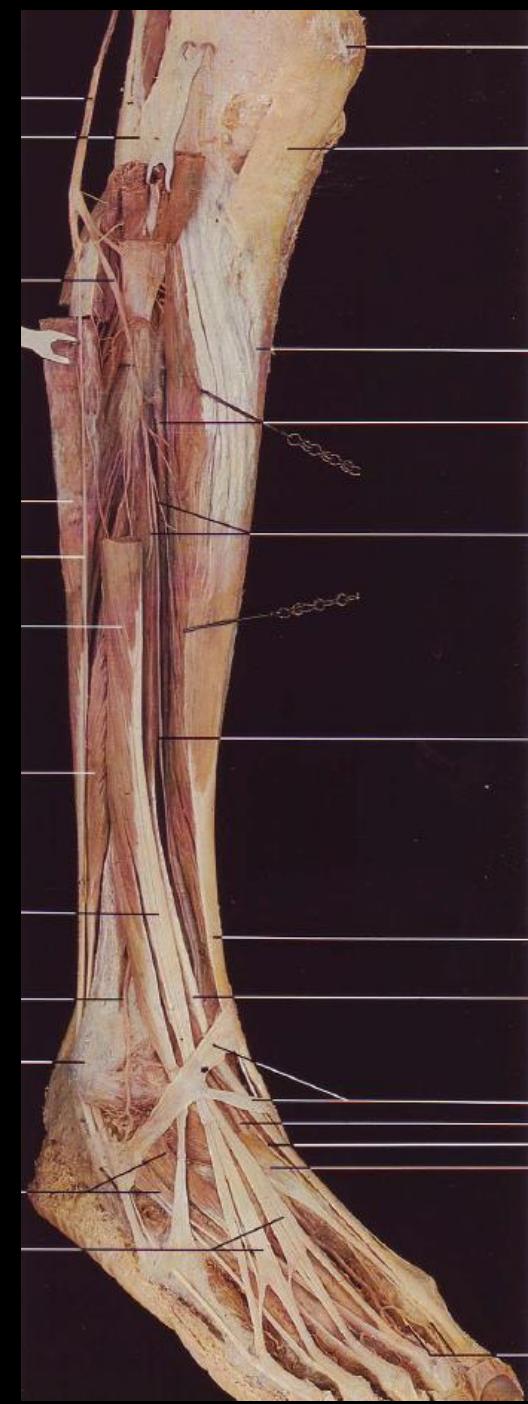
## Course:

1. through membrana interossea cruris
2. between m. tibialis anterior  
and m. extensor hallucis longus

## Important branches:

### Arteria dorsalis pedis

- continuation on the dorsum of foot
- between tendons of m. extensor hallucis longus  
and m. extensor digitorum longus

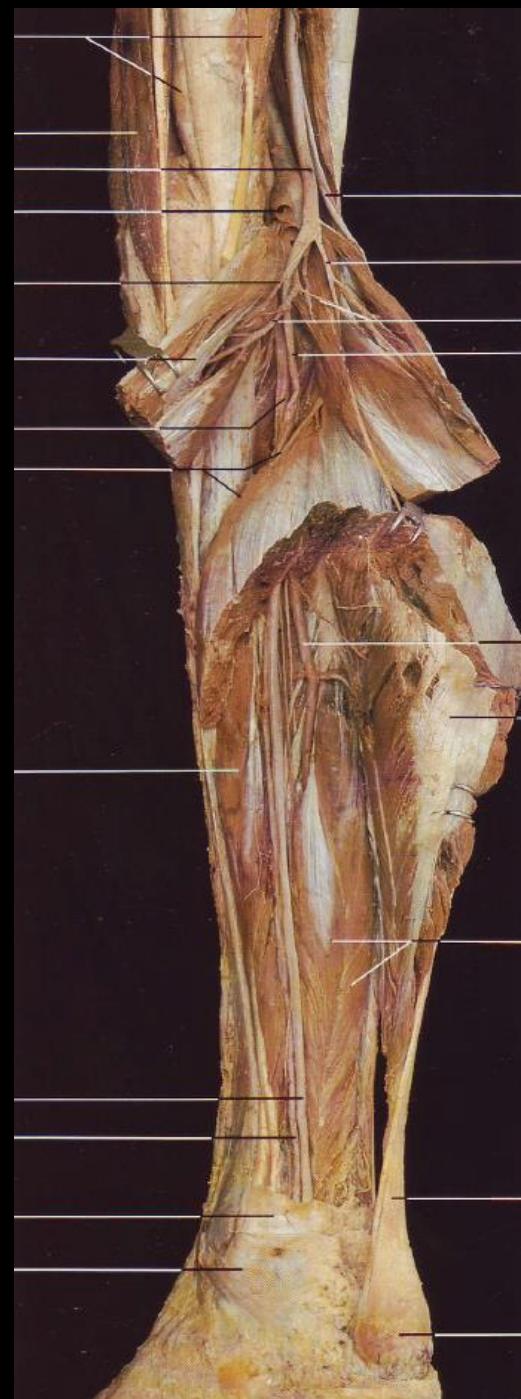


# Arteria tibialis posterior

- dorsal continuation of arteria poplitea
- within posterior compartment of leg
- with n. tibialis

## Course:

1. under arcus tendineus musculi solei
2. through canalis malleolaris



# Arteria tibialis posterior

- dorsal continuation of arteria poplitea
- within posterior compartment of leg
- with n. tibialis

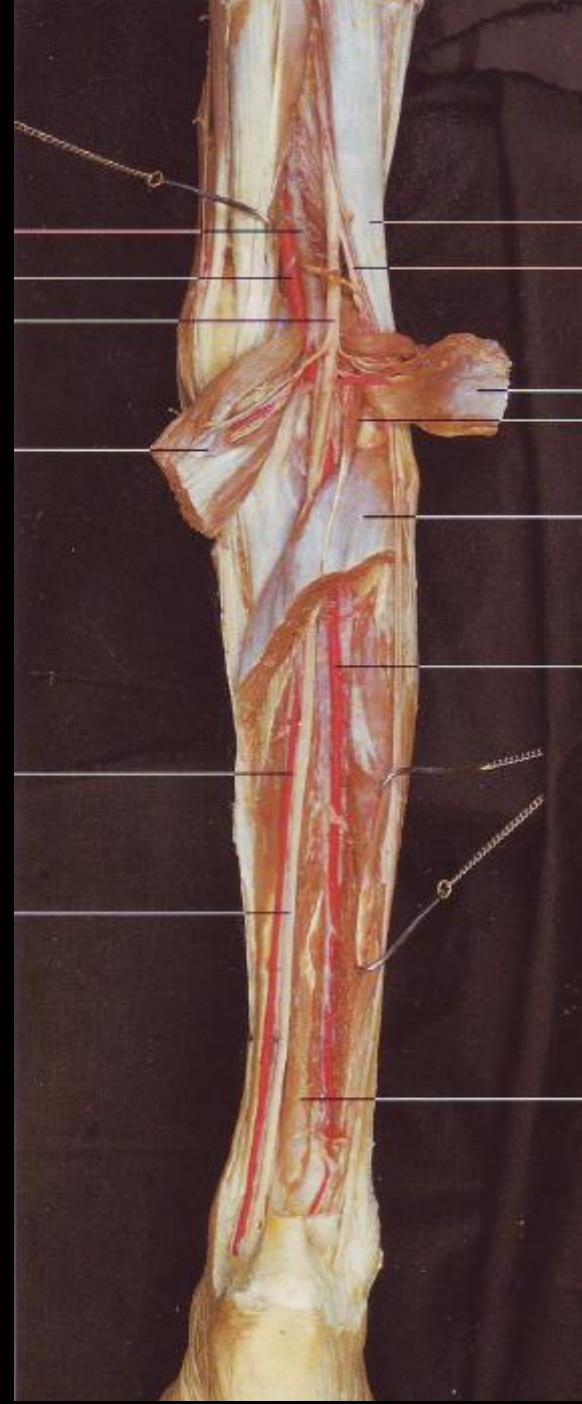
## Course:

1. under arcus tendineus musculi solei
2. through canalis malleolaris
  - here bifurcates into a. plantaris medialis et lateralis

## Important branches:

### Arteria fibularis

- within canalis musculofibularis (of Hyrtl)



# Arteria tibialis posterior

- dorsal continuation of arteria poplitea
- within posterior compartment of leg
- with n. tibialis

## Course:

1. under arcus tendineus musculi solei
2. through canalis malleolaris
  - here bifurcates into a. plantaris medialis et lateralis

## Important branches:

### Arteria fibularis

- within canalis musculofibularis (of Hyrtl)

### Arteria plantaris medialis

- along the medial side of sole

### Arteria plantaris lateralis

- along the lateral side of sole

both join to form **arcus plantaris**



# Veins of lower limb

## Deep veins:

- follow arteries and are doubled as high as fossa poplitea

**Venae tibiales anteriores**

**Venae tibiales posteriores**

**Venae fibulares**

**Vena poplitea**

**Vena femoralis**

**Vena profunda femoris**

**Vena femoralis communis**

## Superficial veins:

**Vena saphena magna**

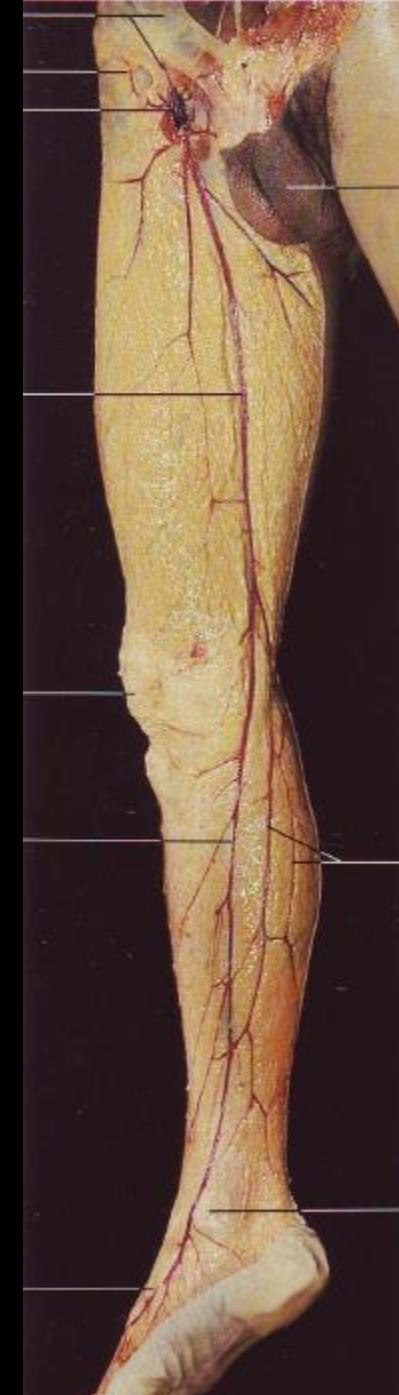
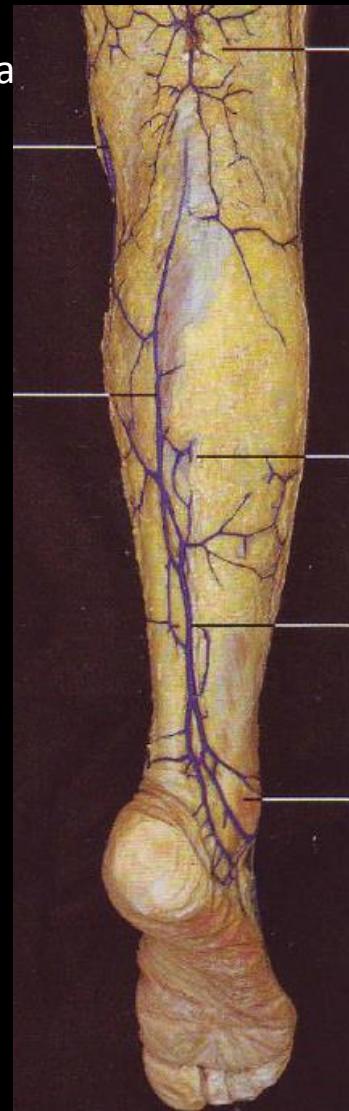
- along the medial side of leg and thigh
- with n. saphenus (in leg only)

**Vena saphena parva**

- along the dorsal aspect of leg
- with n. suralis

**Extensio cranialis venae sphenae parvae**

- along the dorsal aspect of thigh
- with n. cutaneus femoris posterior



# Nerves of lower limb

## Plexus lumbalis:

Nervus femoralis

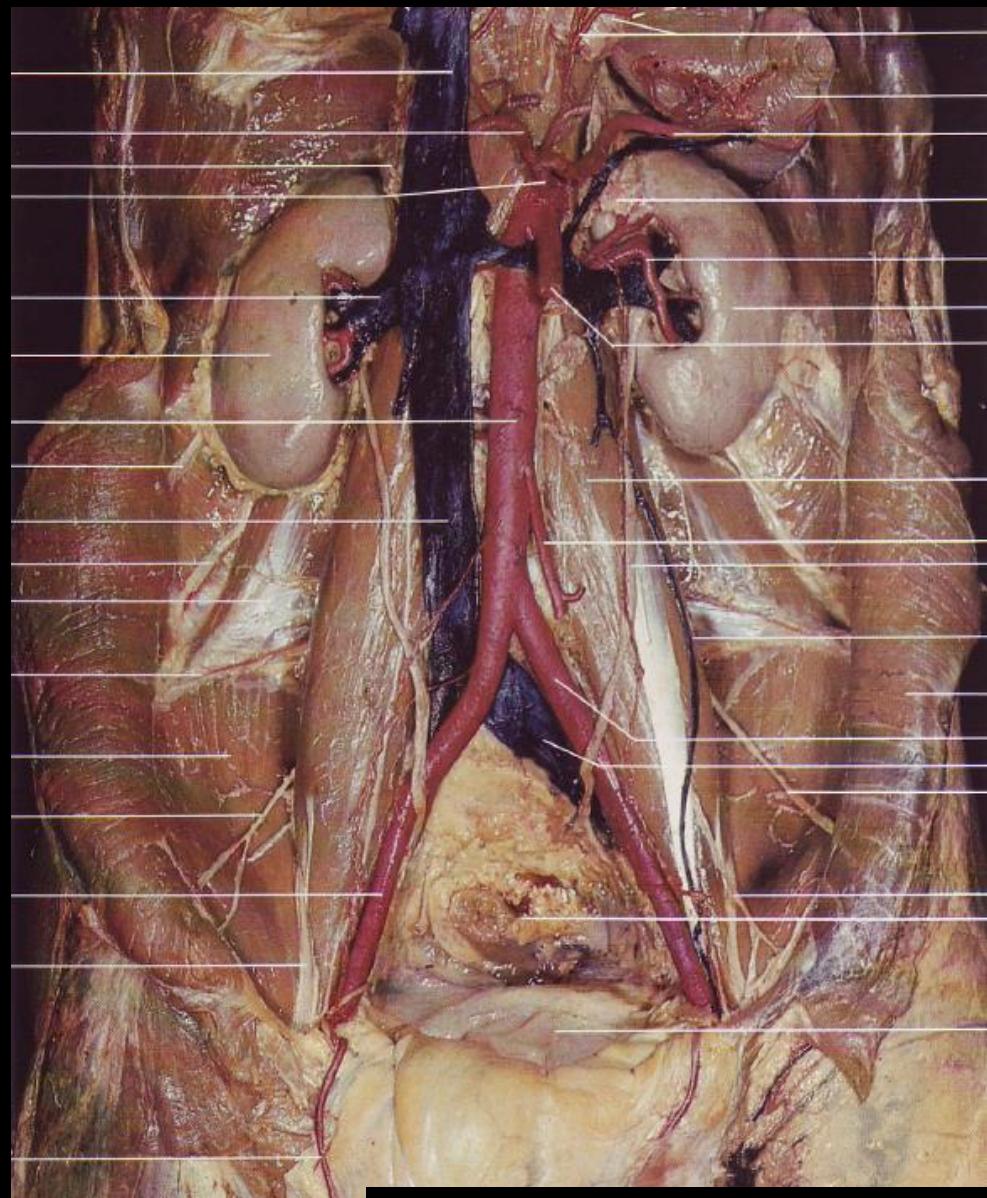
Nervus obturatorius

## Plexus sacralis:

Nervus ischiadicus

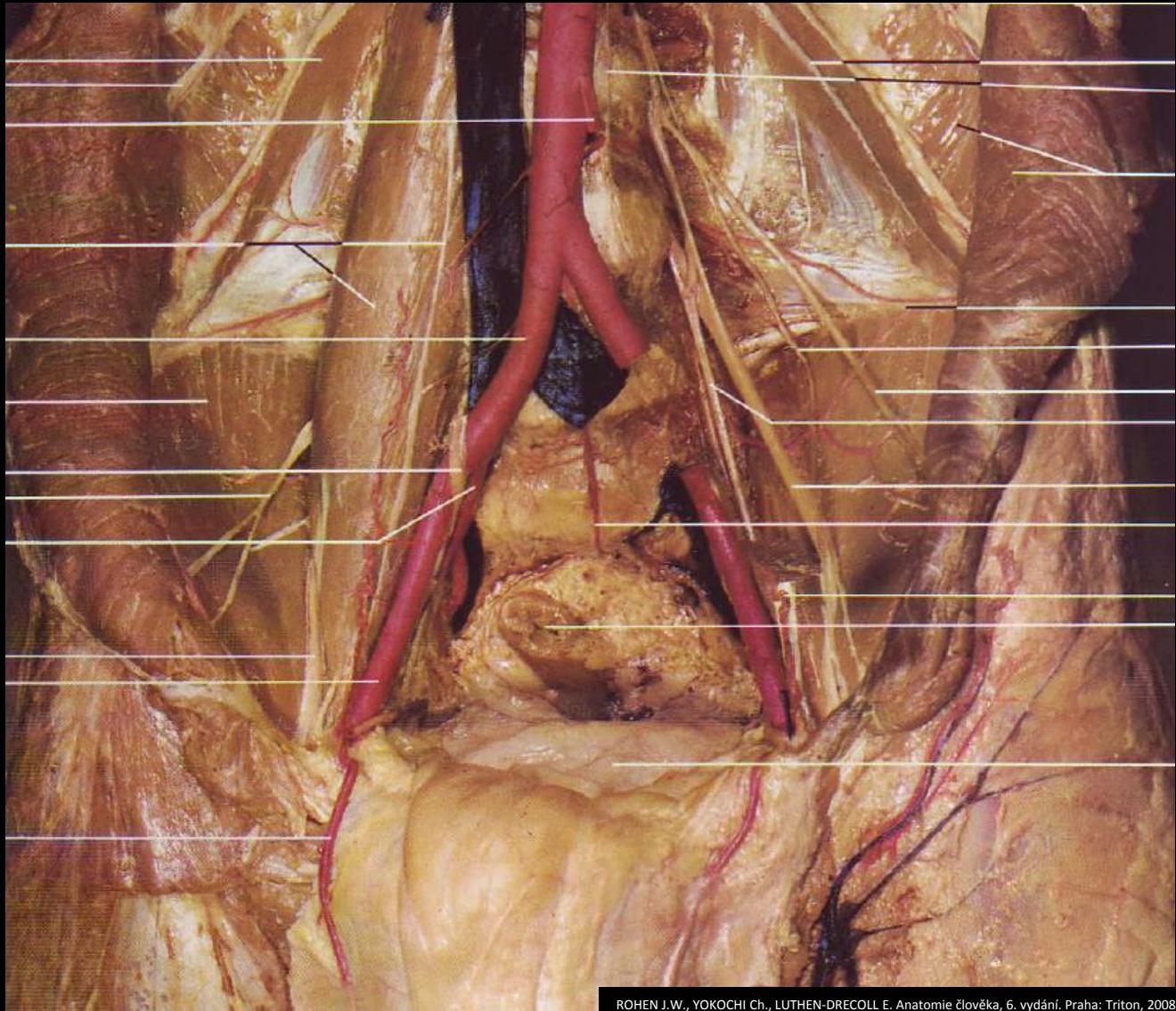
Nervus gluteus superior

Nervus gluteus inferior



# Nervus femoralis

- lateral to m. psoas major
1. through lacuna musculorum (muscular space) – here is medial to m. iliopsoas



# Nervus femoralis

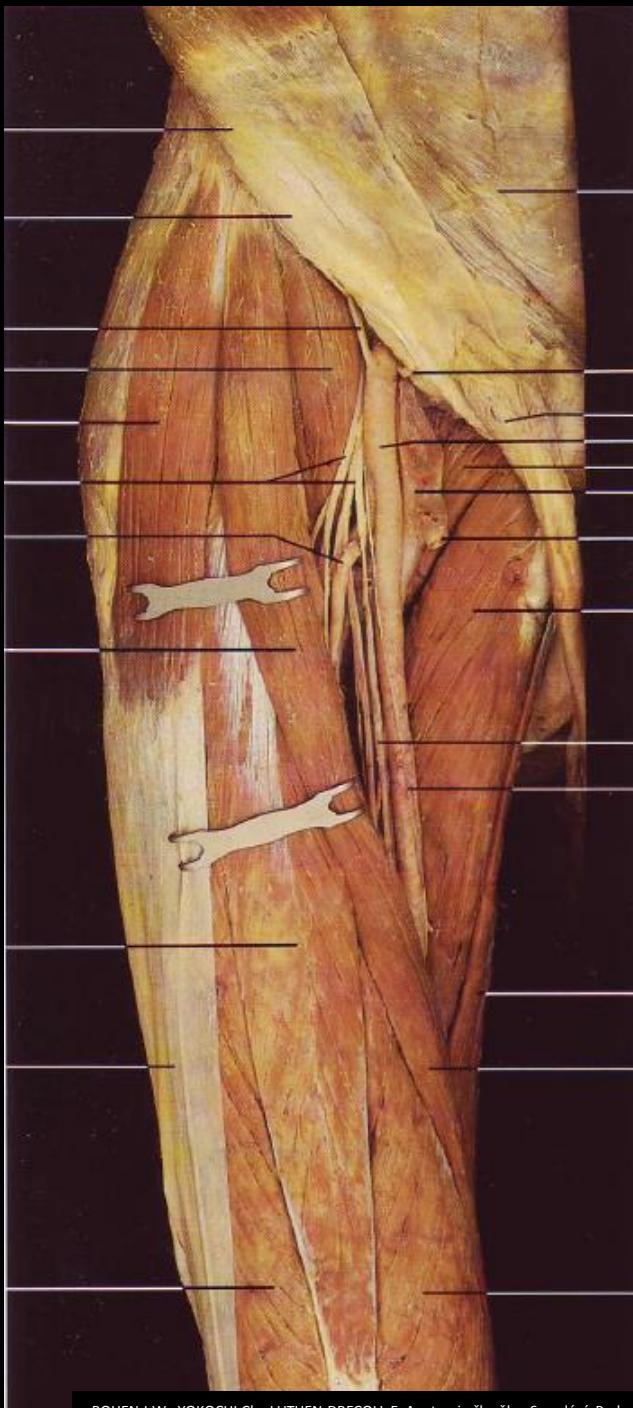
- lateral to m. psoas major

1. lacuna musculorum
2. trigonum femorale  
and fossa iliopectinea

Important branches:

## Nervus saphenus

1. canalis adductorius (of Hunter)
2. pierces lamina vastoadductoria superficially
3. medial aspect of thigh, together with v. saphena magna



# Nervus femoralis

- lateral to m. psoas major
1. lacuna musculorum
  2. trigonum femorale  
and fossa iliopectinea
- Important branches:
- Nervus saphenus**
1. canalis adductorius (of Hunter)
  2. pierces lamina vastoadductoria superficially
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# Nervus femoralis

- lateral to m. psoas major
1. lacuna musculorum
  2. trigonum femorale  
and fossa iliopectinea

Important branches:

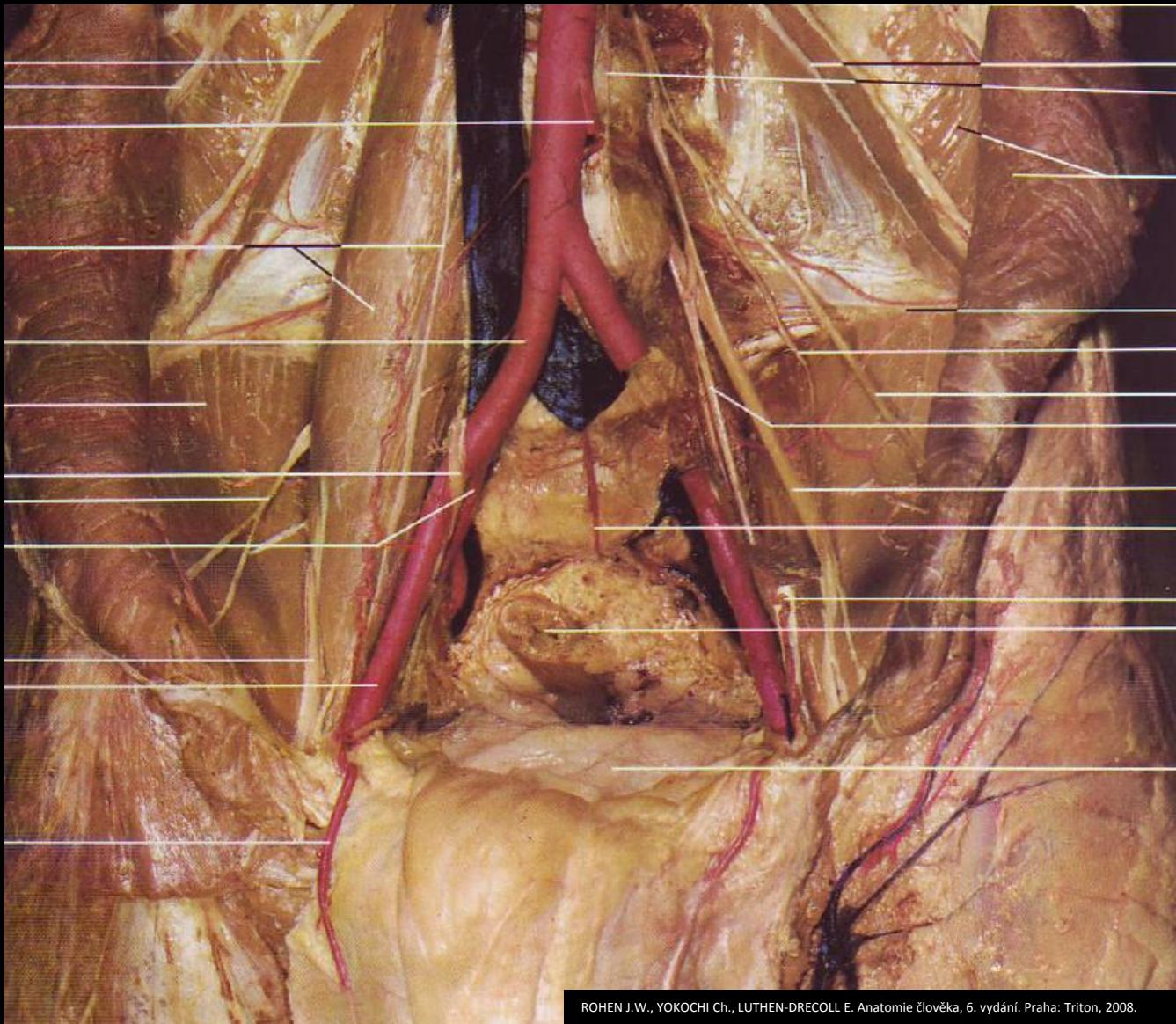
## Nervus saphenus

1. canalis adductorius (of Hunter)
2. pierces lamina vastoadductoria superficially
3. medial aspect of thigh, together with v. saphena magna



# Nervus obturatorius

- medial to m. psoas major
1. canalis obturatorius with vasa obturatoria
  2. within medial muscle group of thigh



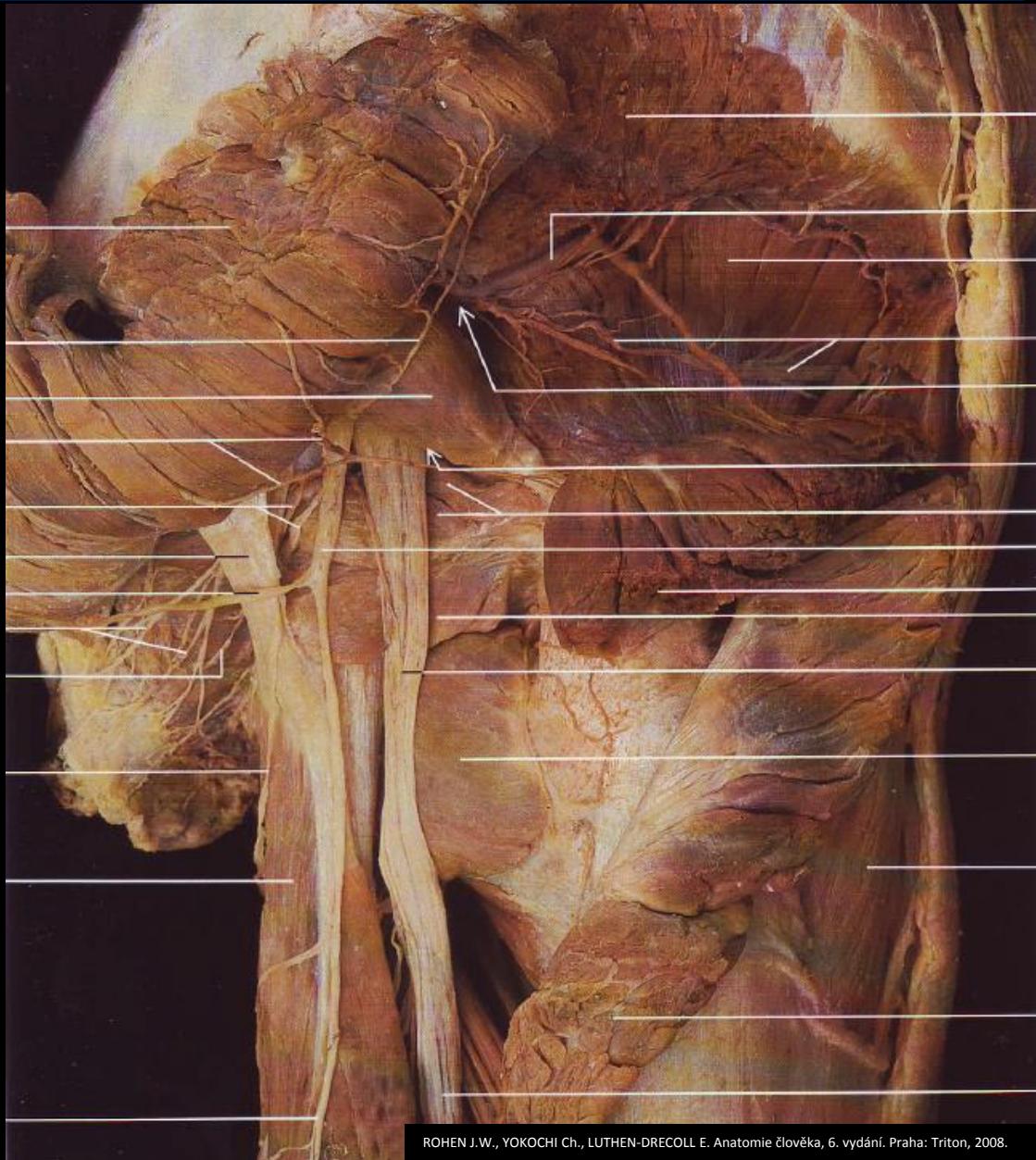
# Nervus ischiadicus

- from plexus sacralis
- 1. foramen infrapiriforme
- 2. between m. biceps femoris  
and m. semitendinosus  
et semimembranosus
- 3. fossa poplitea – bifurcation into n. tibialis  
and n. fibularis communis



# Nervus ischiadicus

- from plexus sacralis
- 1. foramen infrapiriforme
- 2. between m. biceps femoris  
and m. semitendinosus  
et semimembranosus
- 3. fossa poplitea – bifurcation into n.  
tibialis and n. fibularis communis



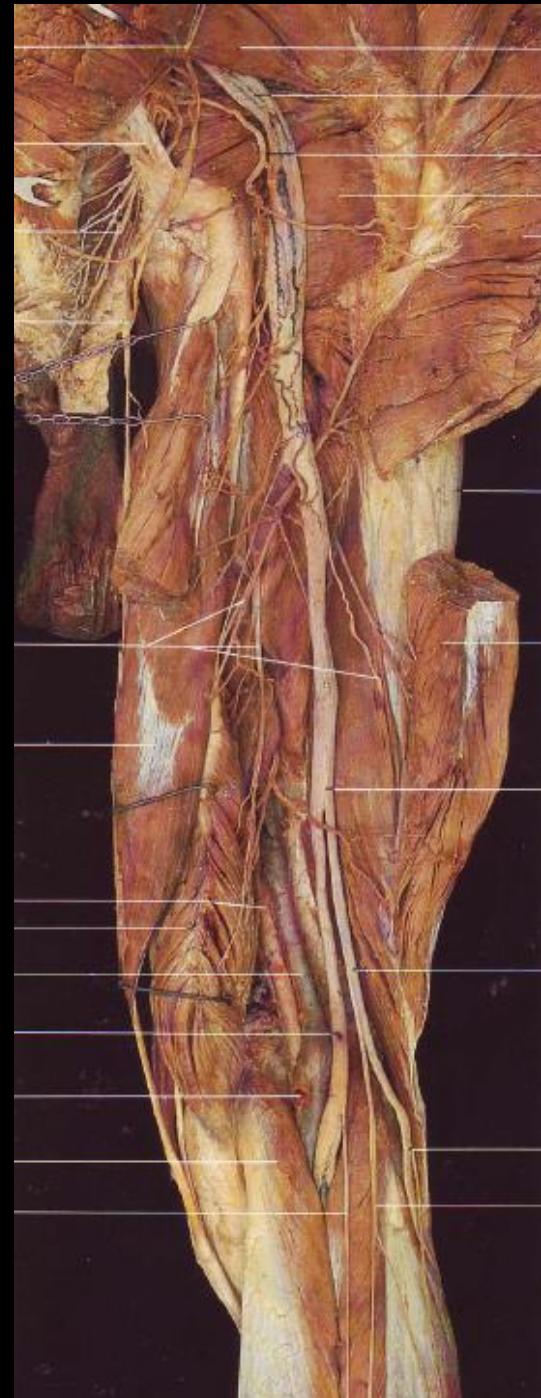
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# Nervus ischiadicus

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- 1. foramen infrapiriforme
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and m. semitendinosus  
et semimembranosus
- 3. fossa poplitea – bifurcation into n. tibialis  
and n. fibularis communis



# Nervus fibularis communis

- lateral terminal branch of n. ischiadicus
- 1. fossa poplitea
- 2. behind caput fibulae
- 3. canalis fibularis – bifurcation into n. fibularis superficialis et profundus



# Nervus fibularis communis

- lateral terminal branch of n. ischiadicus
  - 1. fossa poplitea
  - 2. behind caput fibulae
  - 3. canalis fibularis – bifurcation into n. fibularis superficialis et profundus



# Nervus fibularis superficialis

- **superficial terminal branch of n. fibularis communis**
    1. **between m. fibularis longus and m. fibularis brevis**
    2. **pierces fascia cruris superficially on ventral aspect of leg**
    3. **superficial to retinaculum mm. extensorium superius et inferius**
    4. **descends to dorsal aspect of foot**



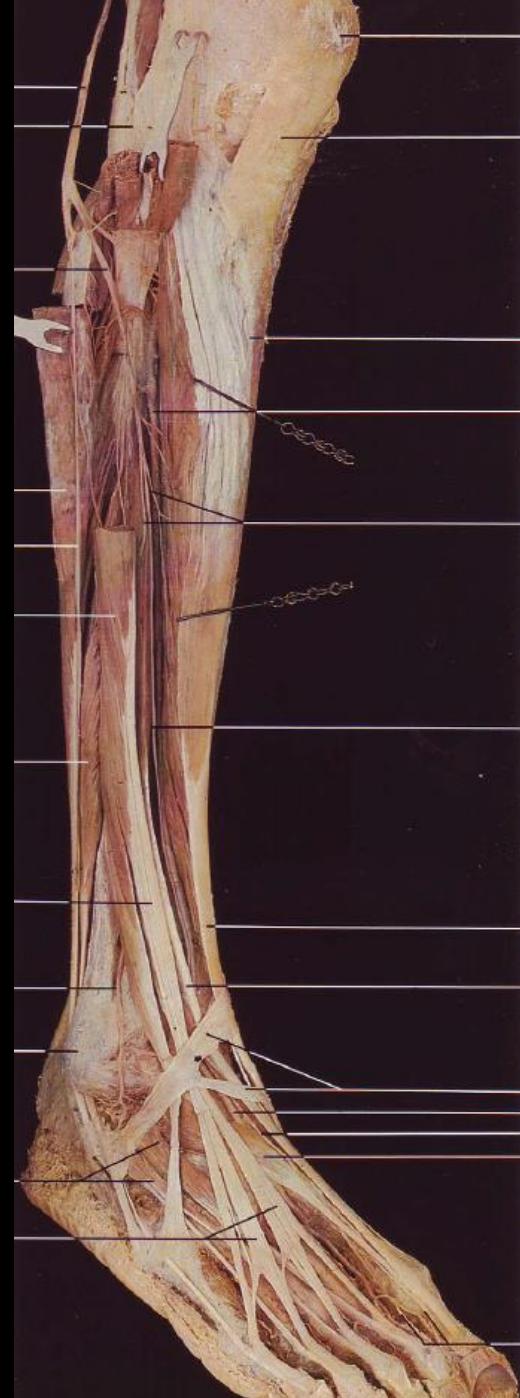
# Nervus fibularis superficialis

- superficial terminal branch of n. fibularis communis
1. between m. fibularis longus and m. fibularis brevis
  2. pierces fascia cruris superficially on ventral aspect of leg
  3. superficial to retinaculum mm. extensorium superius et inferius
  4. descends to dorsal aspect of foot



# Nervus fibularis profundus

- deep terminal branch of n. fibularis profundus
  - with vasa tibialia anterora
1. within anterior compartment of thigh
  2. between m. tibialis anterior and m. extensor hallucis longus
  3. deep to retinaculum mm. extensorium superius et inferius
  4. deep at dorsal aspect of foot with vasa dorsalia pedis



# Nervus fibularis profundus

- deep terminal branch of n. fibularis profundus
  - with vasa tibialia anterora
1. within anterior compartment of thigh
  2. between m. tibialis anterior and m. extensor hallucis longus
  3. deep to retinaculum mm. extensorium superius et inferius
  4. deep at dorsal aspect of foot with vasa dorsalia pedis



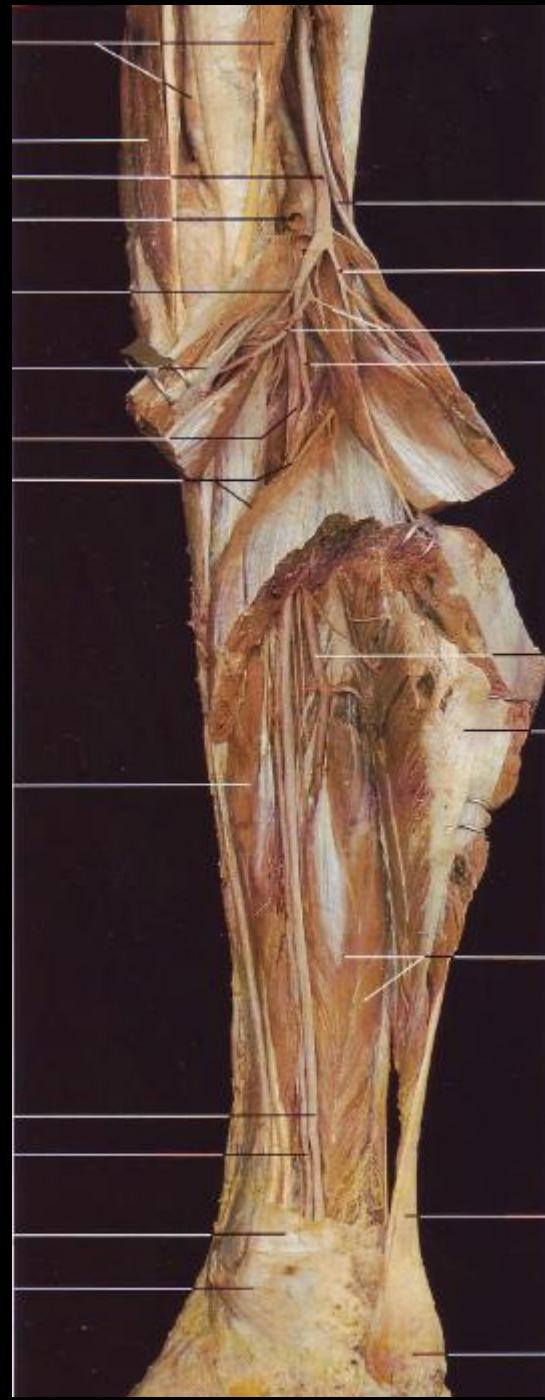
# Nervus tibialis

- medial terminal branch of n. ischiadicus
  - with vasa tibialia posteriora
1. fossa poplitea
  2. under arcus tendineus musculi solei
  3. between m. triceps surae  
a deep layer of posterior muscle group of leg
  4. through canalis malleolaris (below retinaculum mm. flexorum) – bifurcation into n. plantaris medialis et lateralis



# Nervus tibialis

- medial terminal branch of n. ischiadicus
  - with vasa tibialia posteriora
1. fossa poplitea
  2. under arcus tendineus musculi solei
  3. between m. triceps surae  
a deep layer of posterior muscle group of leg
  4. through canalis malleolaris (below retinaculum mm. flexorum)
    - bifurcation into n. plantaris medialis et lateralis



# Nervus tibialis

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  - with vasa tibialia posteriora
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  2. under arcus tendineus musculi solei
  3. between m. triceps surae  
a deep layer of posterior muscle group of leg
  4. through canalis malleolaris (below retinaculum mm.  
flexorum) – bifurcation into n. plantaris medialis et  
lateralis
  5. into sole

Terminal branches:

Nervus plantaris medialis

Nervus plantaris lateralis



# Nervus tibialis

- medial terminal branch of n. ischiadicus
  - with vasa tibialia posteriora
1. fossa poplitea
  2. under arcus tendineus musculi solei
  3. between m. triceps surae  
a deep layer of posterior muscle group of leg
  4. through canalis malleolaris (below retinaculum mm.  
flexorum) – bifurcation into n. plantaris medialis et  
lateralis
  5. into sole

**Terminal branches:**

**Nervus plantaris medialis**

**Nervus plantaris lateralis**



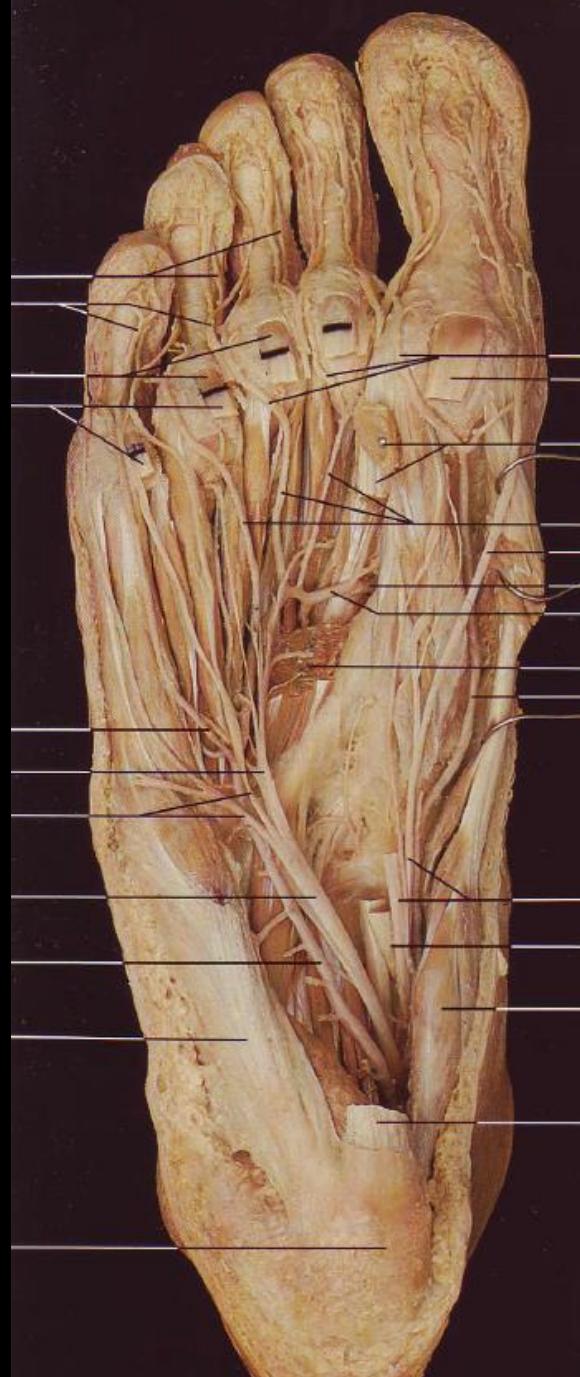
# Nervus tibialis

- medial terminal branch of n. ischiadicus
  - with vasa tibialia posteriora
1. fossa poplitea
  2. under arcus tendineus musculi solei
  3. between m. triceps surae  
a deep layer of posterior muscle group of leg
  4. through canalis malleolaris (below retinaculum mm.  
flexorum) – bifurcation into n. plantaris medialis et  
lateralis
  5. into sole

Terminal branches:

Nervus plantaris medialis

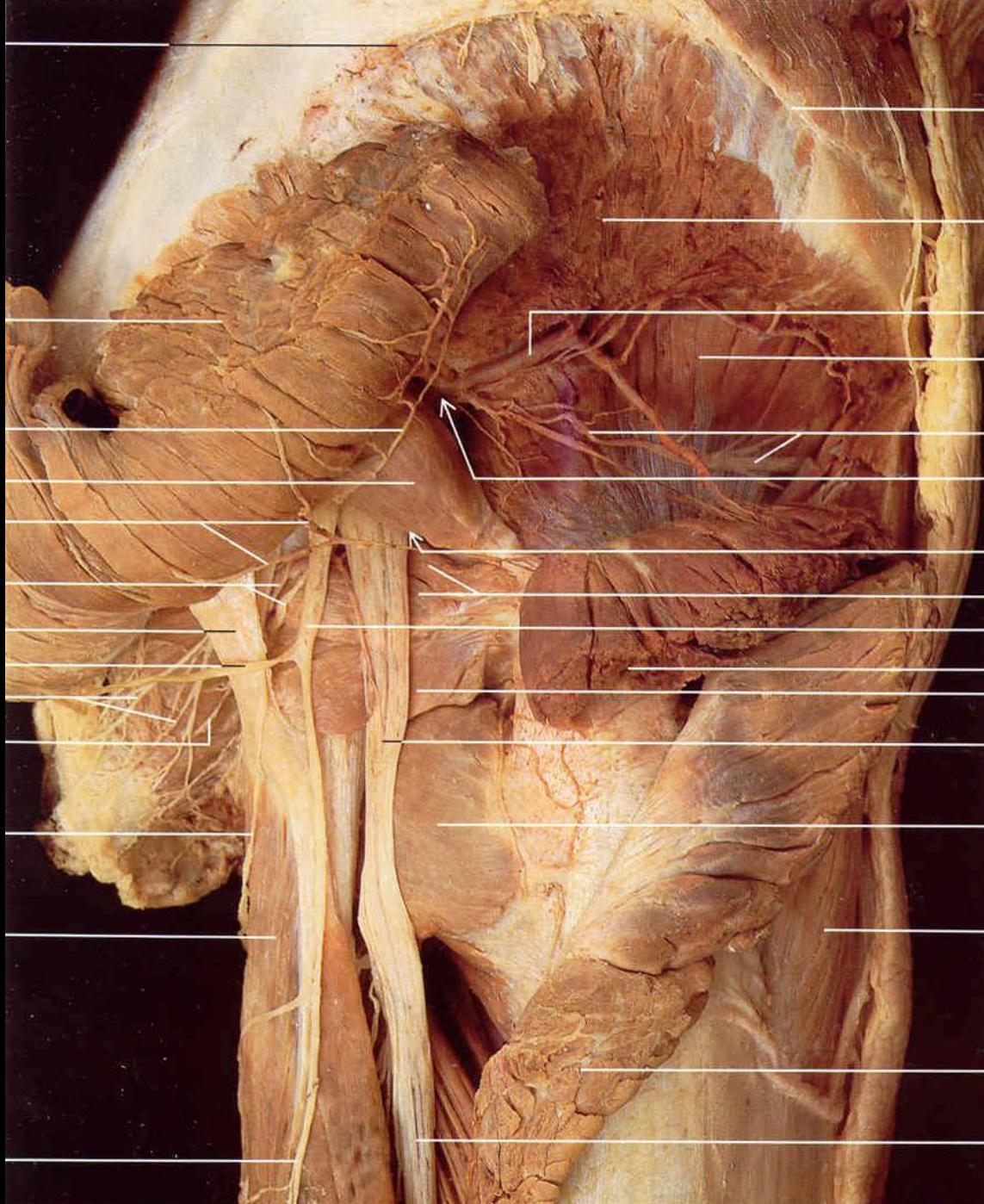
Nervus plantaris lateralis



# Nervi glutei

## Nervus gluteus superior

- with vasa glutea superiore
- 1. foramen suprapiriforme



## Nervus gluteus inferior

- with vasa glutea inferiora
- 1. foramen infrapiriforme