Dorsal regions

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14. **Lumbar region (regio „dorsi")**

1. Nuchal region

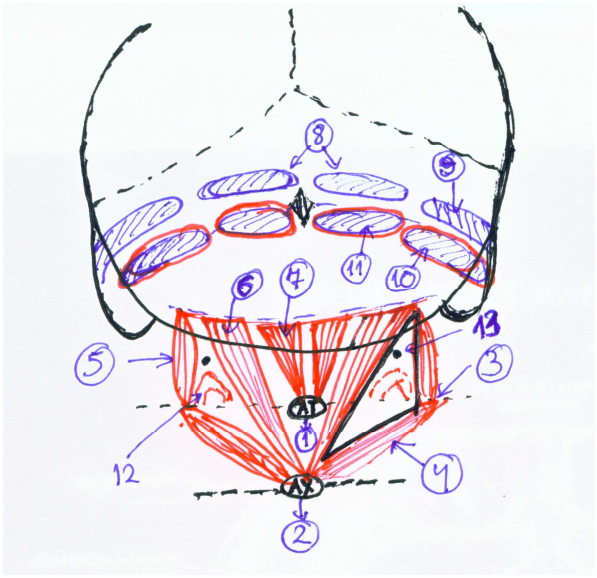
Boundaries (points of orientation):

Sup.: line between external occipital protuberance and the mastoid process.
Inf.: level of the vertebra prominens *(sp. process of C7vertebra)*
Med.: line between external occipital protuberance and vertebra prominens
Lat: the side of trapezius muscle from the mastoid process until the inferior boundary.

Layers:

1) skin
2) subcutaneous connective / adipose tissue (subcutaneous nerves)
3) *superficial layer of the cervical fascia*
4) in 3 layer the superficial nuchal muscles*:*
   a. ***trapezius m.*** **(CN XI)**[1]
   b. ***splenius capitis m.***
   c. ***semispinalis capitis m.***
   (they are pierced by the dorsal branches of cervical nerves)
5) *deep layer of the cervical fascia*
6) deep nuchal muscles – **suboccipital triangle**:
   - *boundaries:* see the picture
   - *the base:* posterior atlantooccipital membrane.
   - contents (both piercing the posterior atlantooccipital membrane):
     - ✓ vertebral a. <[2] subclavia a.
     - ✓ suboccipital n. (dorsal branch of C1)

[1] ( ) brackets behind some muscles sign the innervation („the most important innervations")
[2] < this sign behind the nerves and blood vessels shows the their origin or continuation



1-atlas, post. tubercle
2-axis, spinous proc.
3-atlas, transverse proc
4-obliquus capitis inf. m.
5-obliquus capitis sup. m.
6-rectus capitis post. major m.
7-rectus capitis post minor m.
8-trapezius m.
9-sternocleidomastoid m.
10-splenius capitis m.
11-semispinalis capitis m.
12-vertebral a.
13-suboccipital n.

Blood vessels- and nerves:

- ***occipital a.*** < carotis ext. a.
- ***greater occipital n.*** (medial, sensory ramus of C2 dorsal branch)
- ***third occipital n.*** (medial, sensory ramus of C3 dorsal branch)
- ***vertebral a.*** < subclavian a.
- ***suboccipital n.*** (C1 dorsal branch – innervates the suboccipital muscles)

Note:

- laterally we can observe the sternocleidomastoid m. (CN XI.) – behind it (Erb's point = punctum nervosum) appears the lesser occipital n. (cutaneous branch of the cervical plexus)
- in the midline is situated the nuchal ligament – a strong connective tissue

2. Scapular region

Boundaries (points of orientation):

Sup.: horizontal line connecting the acromion and the spinous process of Th1 vertebra
Inf.: horizontal line connecting the inf. scapular angle and posterior axillary fold
Med.: midline of the trunk
Lat.: an oblique line connecting the acromion with the lateral end of the inferior boundary

Layers:

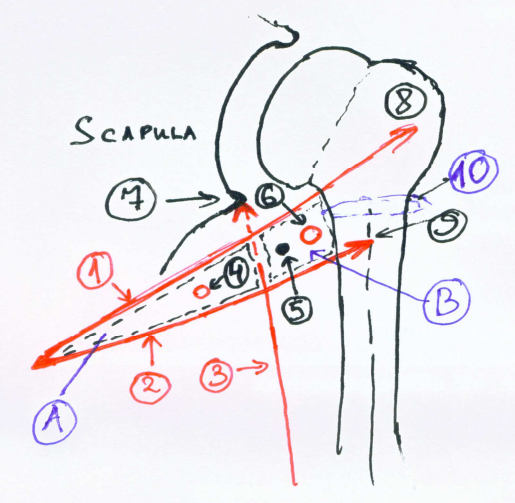
1) skin
2) subcutaneous connective / adipose tissue
3) fascia of the superficial muscles
4) ***trapezius m., deltoid. m.*** (spinous part)
5) *supra- et infraspinal fascia*
6) ***supraspinatus m., infraspinatus m., teres minor m., teres major m., latissimus dorsi m.*** (upper part), ***triceps m., levator scapulae m., rhomboideus major et minor mm.***

Blood vessels and nerves:

- ***accessory n. (CN XI)*** - passing down, below the trapezius m.
- ***suprascapular a.*** (earlier called transverse scapular a.) < thyrocervical trunk < subclavian a. (anastomoses with the ***circumflex scapular a. –*** forms the ***arterial network of the scapula = rete of the scapula***)
- ***suprascapular n.*** < sup. trunk of the brachial plexus
- ***posterior circumflex humeral a.*** < axillary a. (anastomosis with the anterior circumflex humeral a.)
- ***axillary n.*** < post. fasciculus of the brachial plexus
- ***dorsal scapular n.*** < sup. trunk of the brachial plexus
- ***dorsal scapular a. (***earlier called ***cervicalis profunda***) < costocervical trunk < subclavian a. (also forms the anastomosis in ***rete of the scapula***)

Note:

- Transverse ligament of scapula bridges the suprascapular notch. Below it passes the suprascapular n., above it the suprascapular a.
- Bondaries and structures of the medial and lateral axillary hiatus (or triangular and quadrangular spaces):



1-teres minor m.
2-teres major m.
3-long head of triceps brachii m.
4-circumflex scapular a.
5-axillary n.
6-post. circumflex humeral a.
7-infraglenoid tubercle
8-greater tubercle of the humerus
9-crest of the lesser tubercle
10-surgical neck of the humerus
A-medial axillary hiatus / triangular space
B-lateral axillary hiatus / quadrangular space

3. Posterior brachial region

Boundaries (points of orientation):

Prox.: level of the posterior axillary fold
Dist.: three finger's breadth above the olecranon
Med.: medial bicipital groove
Lat: lateral bicipital groove

Layers:

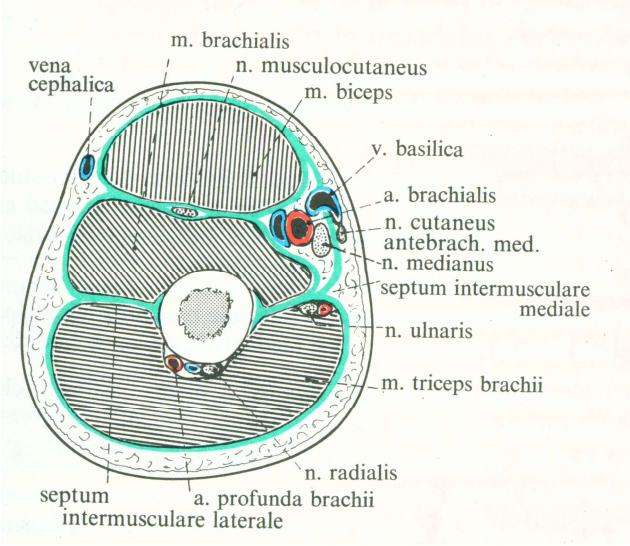
1) skin
2) subcutaneous connective / adipose tissue (subcutaneous nerves)
3) *brachial fascia*
4) ***triceps brachii m.*** (between the origin of the lateral and medial heads we can find the groove of the radial nerve with radial n. + deep brachial a.)

Blood vessels and nerves:

- ***post. cutaneous brachial n.*** < radial n.
- ***post. cutaneous antebrachial n.*** < radial n.
- ***radial n.*** < post. cord < brachial plexus
- ***deep brachial a.*** < brachial a.
- ***ulnar n.*** < med. cord < brachial plexus (later pierces the medial intermuscular septum)
- ***sup. ulnar collateral a.*** < brachial a.

Note:

- the structures of the posterior brachial and anterior brachial regions are devided by the lateral and medial intermuscular septa.
- Cross section of the upper arm:



4. Posterior cubital region

Boundaries (points of orientation):

Prox. and Dist.: transverse lines drawn three finger's breadth above and below the olecranon.

Med. and Lat: perpendicular lines through the medial and lateral epicondyles of the humerus.

Layers:

1) skin
2) subcutaneous connective / adipose tissue
3) fascia
4) triceps brachii m. and ***flex. carpi ulnaris m., brachioradialis m., ext. carpi radialis longus m., extensor digirorum m., extensor carpi ulnaris m.*** (originating portions) and ***anconeus m.***

Blood vessels and nerves:

- ***ulnar n.*** < med. cord < brachial plexus (in the groove for ulnar n., medially)
- ***post. cutaneous antebrachial n.*** < radial n.
- sup. ulnar collateral a. < brachial a.
- ramus post. recurrentis ulnaris < ulnar a.
- middle and radial collateral a. < deep brachial a.

Note: the collateral and reccurrent arteries form an anastomosis ***- rete olecrani***

5. Posterior antebrachial region

Boundaries (points of orientation):

Prox.: transverse line drawn three finger's breadth below the olecranon
Dist.: transverse line drawn across the caput ulnae
Lat: connecting line between the latateral epicondyle and the styloid proc. of the radius
Med.: connecting line between the medial epicondyle and the styloid proc. of the ulna

Layers:

1) skin
2) subcutaneous connective / adipose tissue (subcutaneous nerves and veins)
3) posterior antebrachial fascia
4) extensor muscles of the forearm *(see the note)*
5) interosseus membrane (deviding from the anterior region, serves as origin of muscles), ulna (medially), radius (laterally).

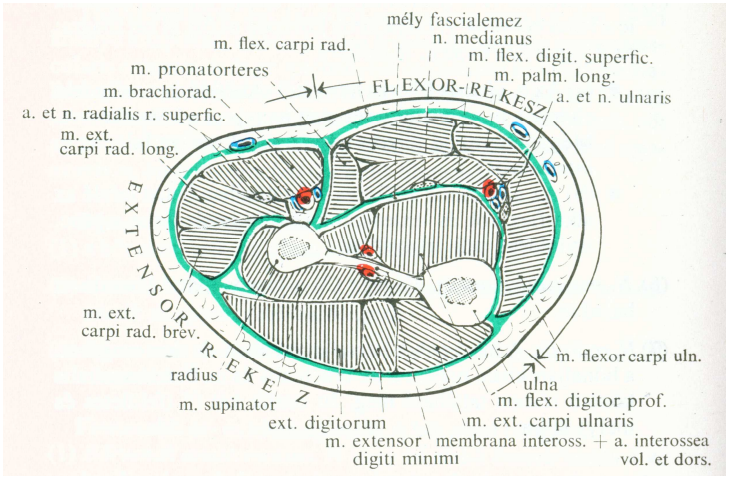
Blood vessels and nerves:

- ***cephalic v.*** > axillary v.
- ***basilic v.*** > brachial v.
- ***superficial branch of radial n.***
- ***dorsal branch of ulnar n.***
- med .cutaneous antebrachial n. < med. cord < brachial plexus
- lat cutaneous antebrachial n. < musculocutaneus n. < lat. cord
- ***post cutaneous antebrachial n.*** < radial n. < post. cord
- ***deep branch of radial n.*** (passing through **supinator canal** and innervates all extensor muscles)
- ***post interosseous a.*** < common interosseous a. < ulnar a.

Note:

- This region exhibits totally or partially the extensors of forearm. We can devide them into superficial and deep groups. The deep extensors in the distal one third become superficial and subdivide the superficial group into radial and ulnar groups:
  - ***Superficial radial extensor group (from radial direction):***
    - ✓ brachioradialis m.
    - ✓ extensor carpi radialis longus m.
    - ✓ extensor carpi radialis brevis m.
  - ***Superficial ulnar extensor group (from radial direction):***
    - ✓ extensor digitorum m.
    - ✓ extensor digiti minimi m.
    - ✓ extensor carpi ulnaris m.
  - ***Deep extensor group:***
    - ✓ supinator m. (proximally surrounding the radius)
    - ✓ abductor pollicis longus m. (the most radial)
    - ✓ ext. pollicis brevis m.
    - ✓ ext. pollicis longus m.
    - ✓ ext. indicis m. (the most ulnar)

- Cross section of the forearm:



6. Posterior carpal region

Boundaries (points of orientation):

Prox.: transverse line drawn across the head of the ulna
Dist.: transverse line drawn at the level of the base of the metacarpals
Uln. and Rad.: the respective margins of the wrist

Layers:

1) skin
2) subcutaneous connective / adipose tissue
3) fascia of forearm
4) *extensor retinaculum (dorsal carpal lig.)*
5) tendons of the extensor muscles
6) carpal bones (from radial direction):
   - Proximal row: scaphoid, lunate, triquetrum, pisiform
   - Distal row: trapezium, trapezoid, capitate, hamate

Blood vessels and nerves:

- ***cephalic v.***
- ***superficial branch of radial n.***
- ***basilic v.***
- ***dorsal branch of ulnar n.***
- ***radial a.*** < brachial a. (It pierces the first dorsal interosseus muscles and in the palamar region meets with the deep branch of ulnar a. (together form the deep palmar arch)
- ***dorsal carpal branch of the radial a.***, which will form with the ***dorsal carpal branch of ulnar a. the dorsal carpal net (rete carpi dorsale) - dorsal metacarpal arteries derived from this net***
- ***first dorsal metacarpal a.*** < radial a.

Note:

Six osteofibrous compartments are composed by septa arising from the extensor retinaculum and inserting on the longitudinal bony crests of the radius. Their contents from radial direction:

I. abductor pollicis longus m.
ext. pollicis brevis m.
II. ext. carpi radialis longus m.
ext. carpi radialis brevis m.
III. ext. pollicis longus m.
IV. ext. digitorum m.
ext. indicis m.
V. ext. digiti minimi m.
VI. ext. carpi ulnaris m.

The tendons in I. and III. compartment border the anatomical snuff box (tabatiere – foveola radialis).

7. Dorsum of the hand

Boundaries (points of orientation):

Prox.: basis of the metacarpals
Dist.: the heads of metacarpals
Uln.Rad.: respective margins of the hand

Layers:

1) skin
2) subcutaneous connective / adipose tissue (subcutaneous veins and nerves)
3) fascia
4) flat tendons of the extensor muscles:
- of the thumb – 3 tendons bound the anatomical snuff box (foveola radialis) – a triangular area:
  - ✓ *radially*: tendon of abductor pollicis longus m. and tendon of ext. pollicis brevis m.
  - ✓ *ulnarly*.: tendon of ext. pollicis longus m.
  - ✓ *(*proximal border the *extensor retinaculum)*
- of fingers II – IV by the ext. digitorum m.
- of ext. indicis m., which follow the tendon of ext. digitorum m.
- of ext. digiti minimi m., which follow the tendon of ext. digitorum m.

5) metacarpals - between them there are four dorsal interosseous muscles. (covered by fascia)

Blood vessels and nerves:

- ***rete venosum dorsale manus***
- ***begining of cephalic v.***
- ***begining of basilic v.***
- ***superficial branch of radial n.*** (next to the cephalic v.)
- ***dorsal branch of ulnar n.*** (next to the basilic v.)
- common dorsal digital nerves (from previous two branches – *for further branches see the note)*
- first dorsal metacarpal a. < radial a.
- dorsal metacarpal aa. < rete carpi dorsale
- Proper dorsal digital arteries and nerves

Note:

- common dorsal digital nerves branch like proper dorsal digital nerves (5 radial and 5 ulnar) which innervate the 5-5 halves of the skin on the fingers until the middle phalanges.
- the tendon of finger IV. is connected to those of fingers III. and V. by oblique fibrose cords (**connexus intertendineus)**.
- the radial a. perforates the first dorsal interosseus m. and penetrates the palmar region to form the deep palmar arch.

- blood vessels and nerves of the **foveola radialis** *(boudaries see above)*:
  - **radial a.**
  - *dorsal carpal branch of radial a.*
  - *radial dorsal a. of thumb* < radial a.
  - *above it: cephalic v.*
    and superficial branch of radial n..

8. Gluteal region

Boudaries (points of orientation):

Sup.: iliac crest
Inf.: gluteal groove
Med.: lateral sacral crest
Lat.: a perpendicular line from the anterior superior iliac spine

Layers:

1) skin
2) thick subcutaneous adipose tissue (with subcutaneouse nerves: superior, middle and inferior cluneal nerves)
3) fascia (laterally the tensor fasciae latae m.)
4) ***gluteus max. m.*** (inf. gluteal n.)
5) connective tissue layer which contains several nerves and blood vessels embedded into fat
6) middle muscle layer, from above:
   - ***gluteus medius*** *m.(sup. gluteal n.)* – site of intramuscular injections!!!
   - ***piriformis m.***
   - ***tendon of obturator internus m.****, which is flanked by*
   - ***gemelli mm.*** *(together form the so-called „Austrian flag" – red;white;red)*
   - ***quadratus femoris m.***
7) deep intermuscular space
8) deep muscular layer:
   - ***gluteus minimus m.*** (sup. gluteal n.)
   - ***obturator externus m.*** (beneath: quadratus femoris m.)

Blood vessels and nerves:

- **Contents of suprapiriform hiatus (VAN structures):**
  - ***sup. gluteal v.*****<** int. iliac v. < inf. vena cava
  - ***sup. gluteal a.*** (superficial and deep branches) < int. iliac a. (=hypogastric a.)
  - ***sup. gluteal n.*** < sciatic plexus

- **Contents of infrapiriform hiatus:**
  - ***sciatic n.*** < sciatic plexus < sacral plexus
  - ***a. comitans n. ischiadici (=artery to sciatic nerve)*** < inf. gluteal a.
  - ***post. femoral cutaneous n.*** < sciatic plexus
  - ***int. pudendal v.*** < int. iliac v.
  - ***int. pudendal a.*** < int. iliac a.
  - ***pudendal n.!!!*** < pudendohaemorrhoidal plexus
  - ***inf. gluteal v.*** < int. iliac v.
  - ***inf gluteal a.*** < int. iliac a.
  - ***inf.gluteal n.*** < sacral plexus
- ***medial circumflex femoral a.*** < deep femoral a. < femoral a.
  Its branches enter this region between the gemellus inf. m. and quadratus femoris m., as well as between the quadratus femoris m. and adductor magnus m.

Note:

- The sacrospinous and sacrotuberous ligaments extend like a fan from the lateral margin of the sacral bone and the coccyx to the ischial spine and to the ischial tuberosity. Owing to these two ligaments, the greater sciatic notch is converted into the greater sciatic foramen, the lesser sciatic notch into the lesser sciatic foramen. The piriformis m. passes through the greater sciatic foramen and subdivides it to **supra- and infrapiriform hiatus,** where several blood vessels and nerves pass through*(see previously)*
- The tendon of obturator internus m. passes through the lesser sciatic foramen and attaches in trochanteric fossa. It is flanked by gemelli muscles („Austrian flag"), which originate from the ischial spine (gemellus sup. m.), the ischial tuberosity (gemellus inf. m.) and attach also in trochanteric fossa. Additionally levator ani m. closes inferiorly the lesser pelvis among others attached on sacrospinous ligament. Therefore greater sciatic foramen (include supra- and ifrapiriform hiatuses) leads onto lesser pelvis, while lesser sciatic foramen into perineum (ischioanal fossa). Pudendal structures exit through the infrapiriform hiatus from lesser pelvis and compass the ischial spine and enter to the ischioanal fossa (accurately to pudendal canal = **Alcock's canal**). We can observe them above the origin of sup. gemellus m.
- The uppermost horizontal fibres of the *adductor magnus m.* = *adductor minimus m.*

9. Posterior femoral region

Boundaries (points of orientation):

Sup.: gluteal groove

Inf.: the line three finger's breadth above the centre of the popliteal fossa

Med.Lat: lateral and medial edges of the thigh

Layers:

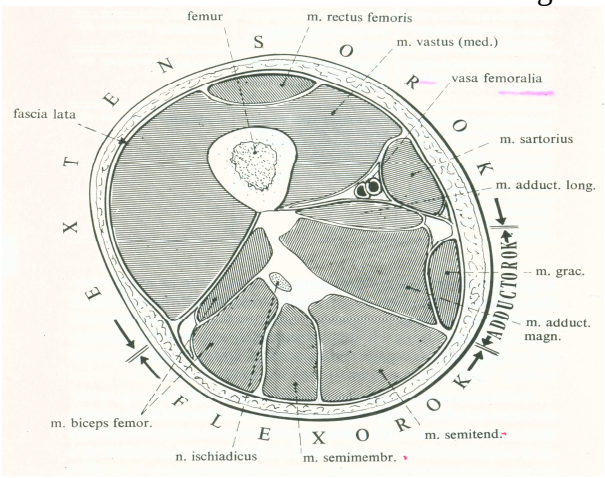
1) skin
2) subcutaneous adipose tissue (subcutaneous nerves and veins)
3) *fascia lata*
4) *flexors of the thigh:*
   - *medially:* semitendinosus m.; semimembranosus m.;
   - *laterally:* biceps femoris m. (long and short heads)
5) connective tissue layer between the flexors and adductors
6) *adductor magnus m. which forms the base of the region*

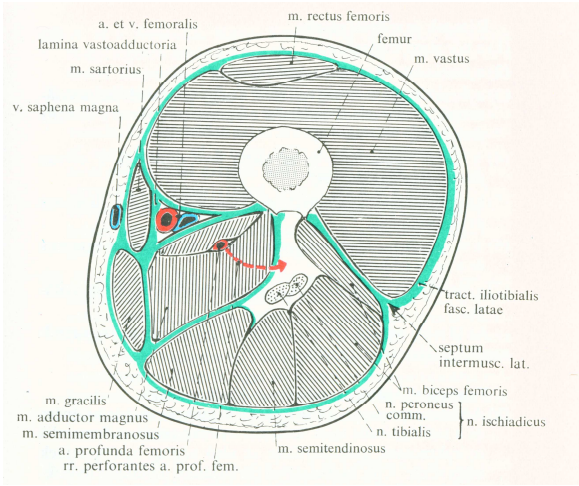
Blood vessels and nerves:

- ***sciatic n.*** < sciatic plexus < sacral plexus
  It's branching in this region into ***tibial n.*** (medially) and ***common fibular (peroneal) n.*** (laterally)
- ***perforant a. (first, second and third)*** < deep femoral a. < femoral a.
- ***post. femoral cutaneous n.*** < sciatic plexus
- ascending posterior femoral subcutaneous branch of lesser saphenous v. (vein of Giacomini) < lesser saphenous v. < popliteal v.

Note:

- Cross section of the thigh:





10. Posterior genicular region (popliteal fossa)

Boudaries (points of orientation):

Sup.Inf.: three finger's breadth above and below the midpopliteal groove
Med.: vertical line across the medial epicondyle
Lat: vertical line across the capitulum of fibula

Layers:

1) skin
2) subcutaneous adipose tissue
3) *popliteal fascia*
4) space of popliteal fossa which is bounded:
   - ✓ *superiorly and medially:* by semitendinosus m. and semimembranosus m.
   - ✓ *superiorly and laterally:* by biceps femoris m.
   - ✓ *inferiorly medially and laterally:* by the med. and lat. heads of gastrocnemius m. The lateral head originates with the plantaris m.
5) The floor of the popliteaal fossa is formed by
   - o lower edge of the adductor magnus (Adductor hiatus)
   - o popliteal surface of the femur
   - o between them the tendineal hiatus (above)
   - o the fibrous capsule of the knee joint (in the middle)
   - o popliteus m. (below)

Blood vessels and nerves:

- ***lesser (small) saphenous v.*** > popliteal v.
- ***common peroneal (fibular) n.*** < sciatic n.
- ***tibial n.*** **< sciatic n.**
- ***popliteal v.*** > femoral vein (superficially)
- ***popliteal a.*** < femoral a. (deeper)
- ***lat. sural cutaneous n.*** < common peroneal n.
- ***med. sural cutaneous n.*** < tibial n.
- *superior medial and lateral genicular arteries* < popliteal a.
- *inferior medial and lateral genicular arteries* < popliteal a.

Note:

- *General rules on limbs:* 1) the position of the veins is superficial and are found deeper arteries; 2) distally one artery is accompanied by two veins.
- „**NeVA rule**" - describes the position of vessels and nerves in the popliteal fossa – it means that **Ne**rves, **V**ein, **A**rtery follow each other in this order from superficial to deep.
- *Medially located the* semimembranosus m. and the semitendinosus m. The semitendinosus m. is attached in the **superficial pes anserinus** (=foot of goose) – the common insertion of gracilis, sartorius, semitendinosus muscles. The semimembranosus m. is attached in **deep pes anserinus,** furthermore in the capsule of knee joint /*oblique popliteal ligament*/.
- *Laterally lies the* biceps femoris m.
- *superior medial and lateral genicular arteries and inferior medial and lateral genicular arteries* participate in configuration of *articular rete of knee joint.*

11. Posterior crural region (posterior region of the leg)

Boundaries (points of orientation):

Sup.: a transverse line three finger's breadth below the popliteal fold
Inf.: a transverse line connecting the malleoli
Med. and Lat: perpendicular lines through the respective malleoli

Layers:

1) skin
2) subcutaneous connective / adipose tissue (small saphenous v.; sural n. which is united from the lat. and med. cutaneous sural nerves)
3) superficial flexor compartment, with triceps surae m.:
   - ***gastrocnemius m. (lat. and med. heads)***
   - ***soleus m.***
   - ***plantaris m.*** *(„freshmen's nerve"= the long tendon of it)*

4) *the deep lamina of the crural fascia* (in duplicature of the fascia we can observe post. tibial a. and veins, as well as the tibial n.)
5) deep flexor compartment (from medial to lateral):
   - ***flexor digitorum longus m.***
   - ***tibialis post. m.***
   - ***flexor hallucis longus m.***

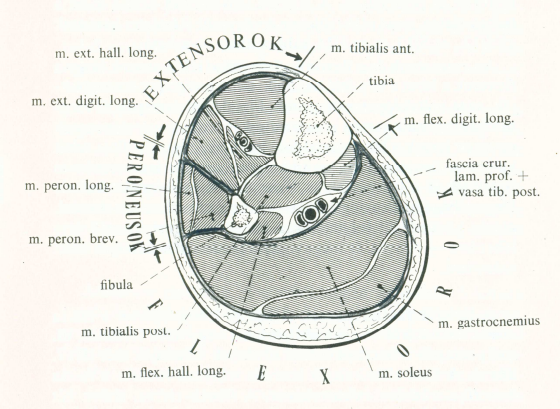
Blood vessels and nerves:

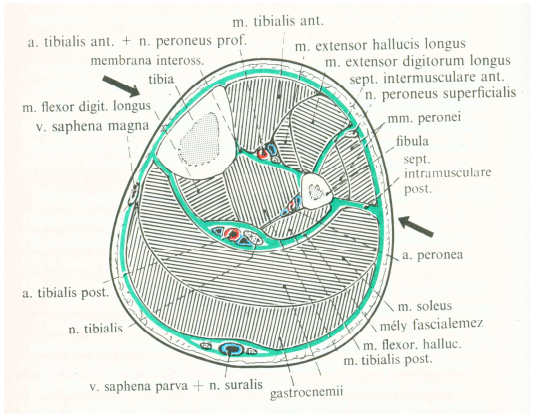
- **small saphenous v.** > popliteal v.
- ***lat. cutaneous sural n.*** < common peroneal n.
- ***med. cutaneous sural n.*** < tibial n.
- **sural n. –** unites from previous two
- **post. tibial a.** < popliteal a.
- post. tibial veins - accopany post. tibial a.
- **tibial n.** < sciatic n.
- **peroneal a. (fibular a.)** < post. tibial a.
- ***n. of canalis musculoperoneus*** **<** tibial n.

Note:

- *canalis musculoperoneus* – composed by tibialis post. m. and flexor hallucis longus m. + fibula The ***peroneal a. (fibular a.)*** and the **n. of *canalis musculoperoneus*** pass in it.
- *chiasma crurale* – above the medial malleolus we can observe that the tendon of the flexor digitorum longus crosses superficially the tendon of tibialis posterior.

- Cross section of the leg:





12. Lateral malleolar region

Boundaries (points of orientation):

Sup.: a transverse line one finger's breadth above the level of the lateral malleolus
Inf.: the lateral edge of the sole of the foot
Ant.: the line drawn along the anterior border of the fibula as far as the tip of the lateral malleolus, and continued as an arched line to the tuberosity of the fifth metatarsal.
Post.: midline of the leg

Layers:

1) skin
2) subcutaneous connective tissue
3) two ligamentous parts of the fascia cruris: the **superior and inferior peroneal retinacula.**
4) tendons of **peroneus brevis m** (ant.) and **peroneus longus m.** (post.) together in a commom synovial sheat.

Blood vessels and nerves:

- ***small saphenous v.***(behind lat. malleolus)
- ***sural n.*** – accompanying former vein
- *posterior lateral malleolar a.* < fibular a.
- *lateral calcaneal branches* < fibular a.

13. The sole of the foot (plantar region)

Boudaries (points of orientation):

Ant.: the skin folds at the base of the toes
Post.Med.Lat: the edges of sole and the heel

Layers: (primarily the midplantar compartment - layers of the *intermediate plantar eminence*):

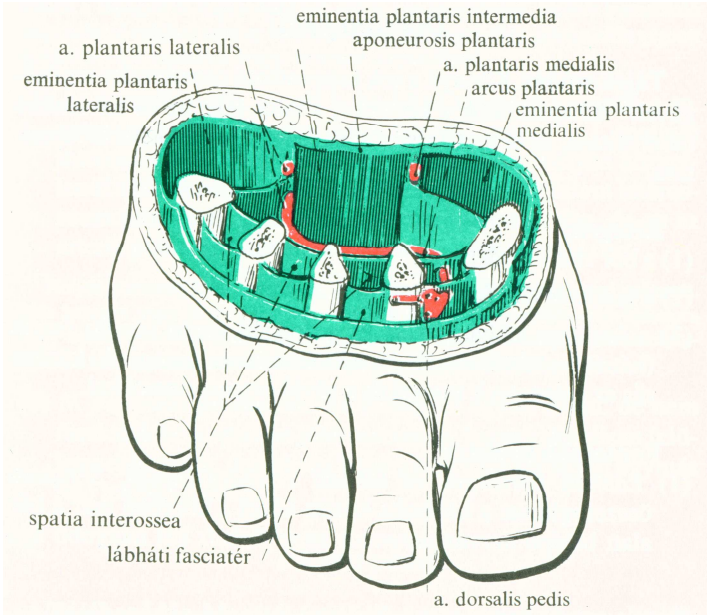
1) skin
2) subcutaneous adipose tissue
3) *plantar aponeurosis* (the strong triangular part of the plantar fascia)
4) flexor digitorum brevis m.
5) tendons of flexor digitorum longus m, quadratus plantae m. and lumbricales mm.
6) deep connective tissue space
7) *back:* the plantar surface and ligaments of tarsal bones
   front: adductor hallucis and the m.interosseus muscles
8) **tendon of peroneus longus m**., which passes in own groove (on cuboid) surrounded by the *long plantar lig.* We can observe the insertion on medial cuneiform and on the base of the first metatarsal.

Blood vessels and nerves:

- **medial plantar a.** (superficial and deep branch) < post. tibial a.
- **lateral plantar a.** (superficial and deep branch) < post. tibial a.
- **medial plantar n.** (med. and lat. branch) < tibial n.
- **lateral plantar n.** (superficial and deep branch)< tibial n.
- **plantar arch –** strong anastomosis between the lateral plantar a. and branch of dorsalis pedis a. < ant. tibial a. – the plantar metatarsal arteries origin from it.
- common plantar digital nerves (from med. and lat. plantar nerves)
- proper plantar digital nerves (from previous - in 7/3 halves of skin of the toes from med./lat palntar nerves)
- common plantar digital arteries
- proper plantar digital arteries (from previous ones)

Note:

- mentioned tarsals (from medial to lateral):
  - medial, intermediate and lateral cuneiform
  - behind them the navicular bone
  - laterally the cuboid bone
- fascia of the sole sends two septa (med. and lat. intermusculare septum) to to the first and fifth metatarsus:



Following the course of the septa, longitudinal grooves (medial and lateral plantar grooves) divide the region into three compartments: medial, intermediate (midplantar) and lateral plantar eminences.

- **chiasma plantaris** – the tendon of the flexor digitorum longus m. crosses superficially the tendon of flexor hallucis longus m.
- the complete thenar muscle set in the hand contains - opponens, flexor, abductor, adductor. Compared with medial and lateral plantar emineces, they are deficient.
- **muscles of the medial plantar eminence**:
  - medially: abductor hallucis m.
  - in the middle: flexor hallucis brevis m. (between the two heads there is the tendon of hallucis longus muscle)
  - deeply and laterally: adductor hallucis m. (oblique and transverse heads)
- **muscles of the lateral plantar eminence:**
  - laterally: abductor digiti minimi m.
  - next to it: opponens digiti minimi m.
  - medially: vestigial flexor digiti minimi m.

14. Lumbar region (regio „dorsi”)

Boundaries (points of orientation):

Sup.: horizontal line connecting the inf. scapular angle and posterior axillary fold
Inf.: iliac crest
Med.: midline of the trunk
Lat: perpendicular lines along the midaxillary line

Layers:

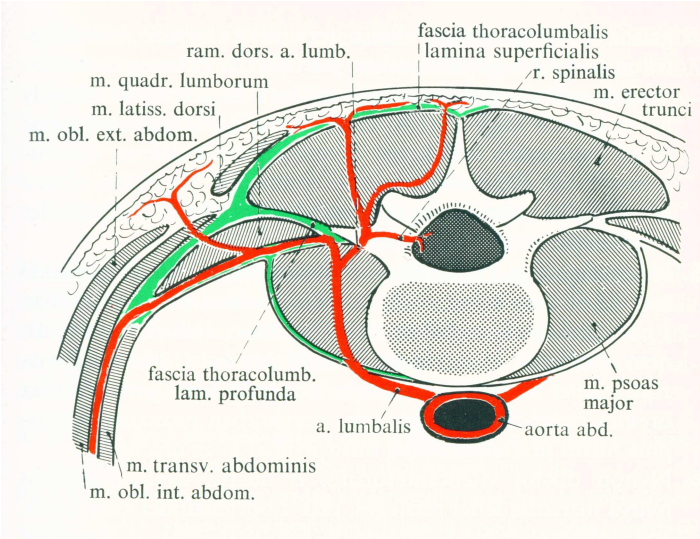
1) skin
2) latissimus dorsi, **thoracolumbar fascia** (lumbodorsal fascia)
3) erector spinae m., obliquus abdominis int m., transversus abdominis m.
4) quadratus lumborum m.

Blood vessels and nerves:

- dorsal braches of spinal nerves

Note:

- **lumbar triangle (Petit’s):**
  - ✓ *boundaries:*
    - latissimus dorsi m. *(innervation: thoracodorsal n.)*
    - ext. abd. oblique m.
    - iliac crest
  - ✓ *the floor*: int. abd. oblique m.
  - ✓ *content*: lumbar a. < abdominal aorta
  - ✓ *relevance*: lumbar hernia (rare)
- **Thoracolumbar fascia** – It has two laminae (superficial and deep), between them we can find the erector spinae m. *(innervation: dorsal rami)*
- cross section through the posterior abdominal wall:



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