Introduction into the dissection course

Organization rules – main poitns

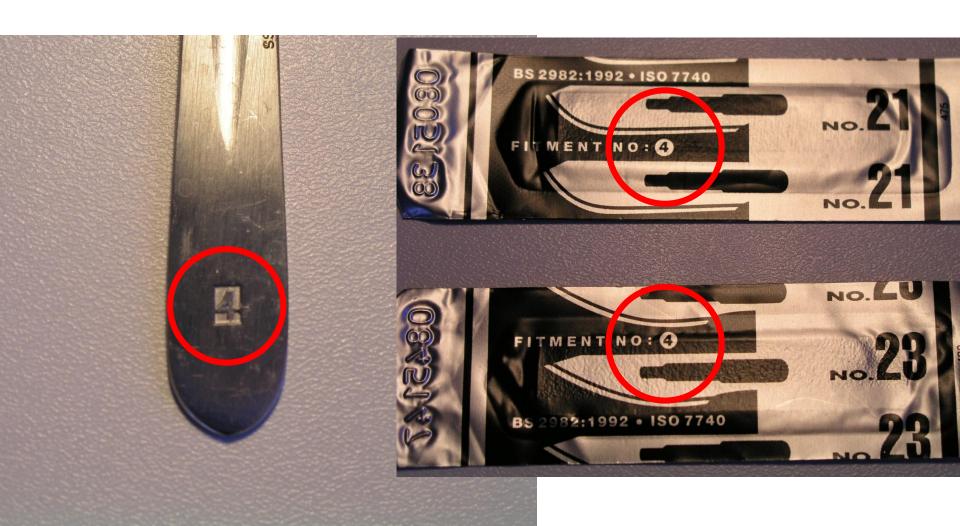
- Entry into the dissection room is only allowed for staff and students of the Second Faculty of Medicine.
- Before entering the dissection room is necessary to take white coat and change shoes.
- Eating, drinking or smoking is prohibited inside of dissection room!!!
- Taking pictures or videos is strictly prohibited!!!
- We recommend to use gloves.
- Autopsy waste, gloves and interchangeable blades of scalpel is only thrown into each specially marked containers.
- Every injury is reported to the appropriate teacher.

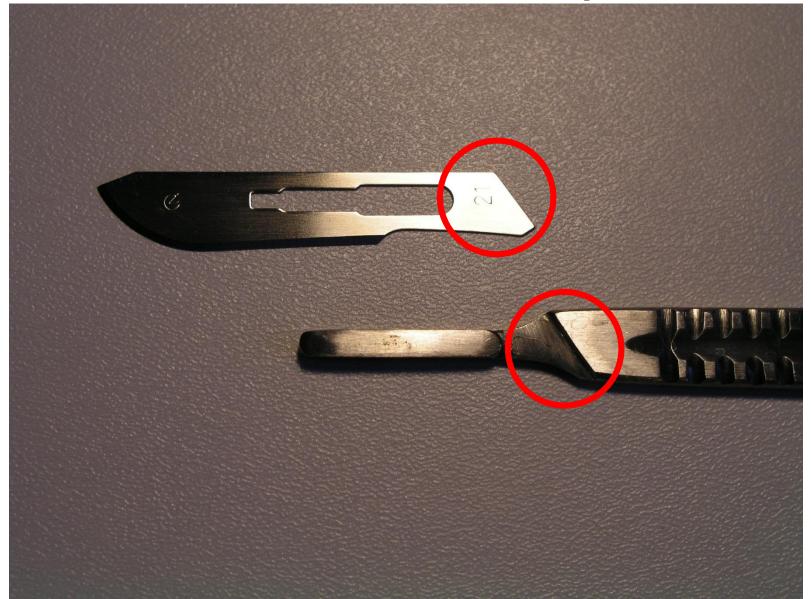
Cleaning

- Autopsy waste, gloves and interchangeable blade of scalpel is only thrown into each specially marked containers.
- Cleaning takes place continuously and then the end of every day
- Each table is covered with a wet cloth and then plastic sheet
- Pay attention to so called "urn bodies" will be explained later.

Instruments – tweezers/forceps

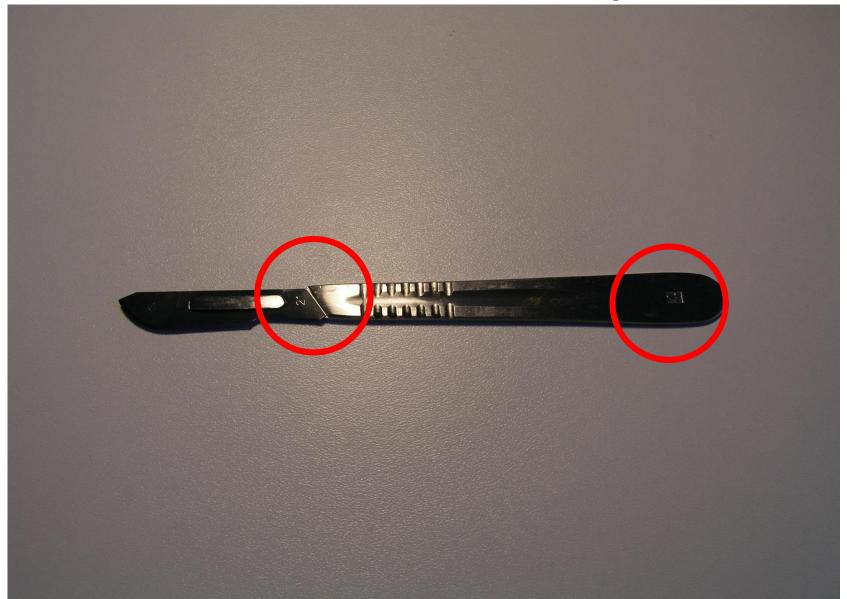












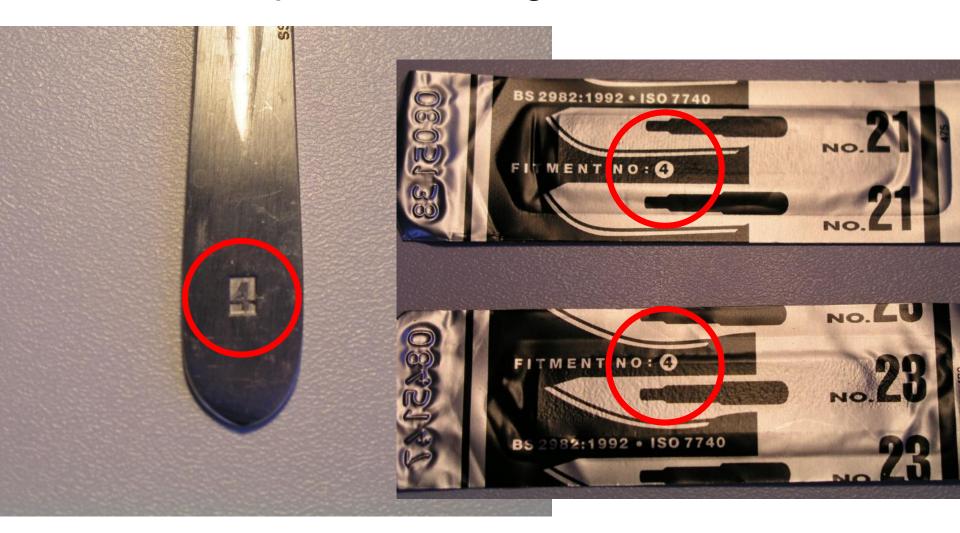
Instruments tweezers abnd scissors

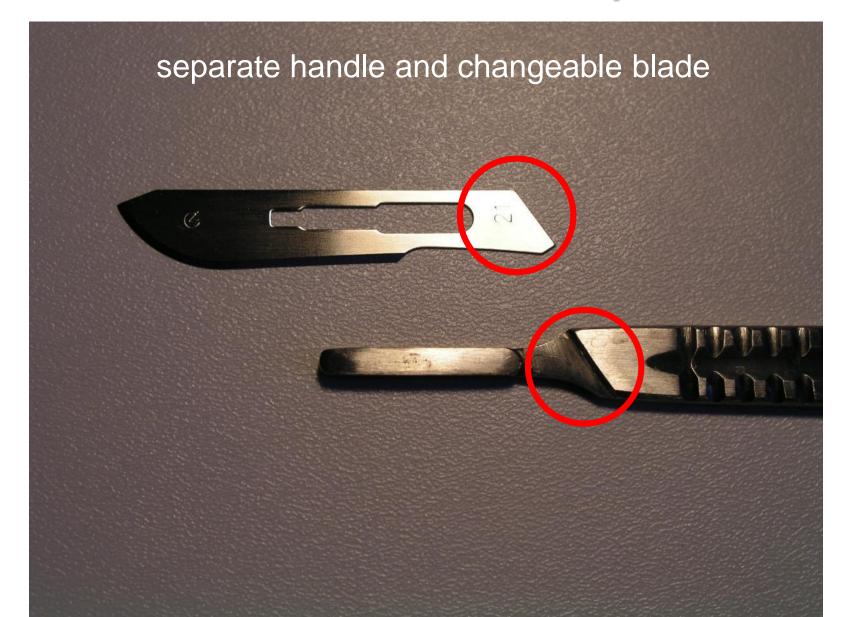
anatomical tweezers

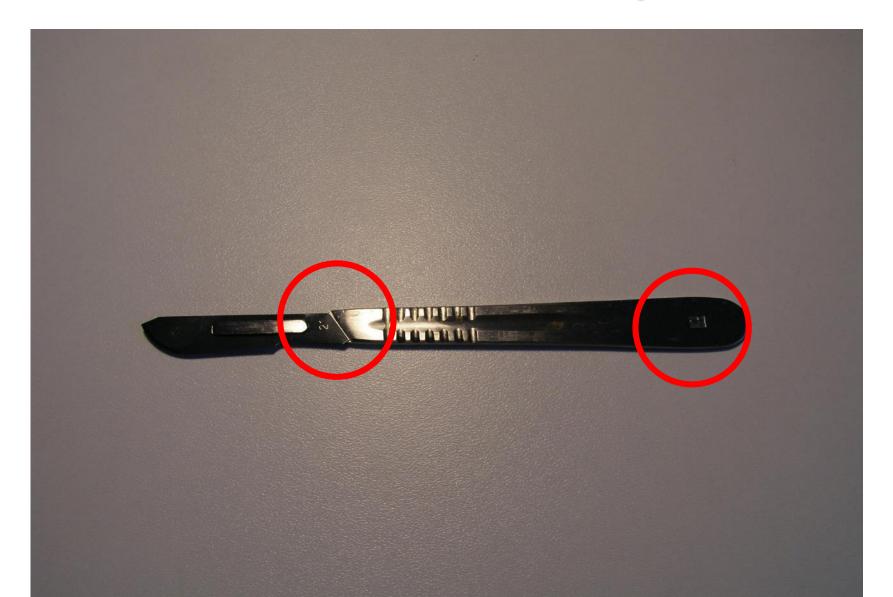
straight blunt *or* straight sharpblunt scissors



scalpel with changable blade





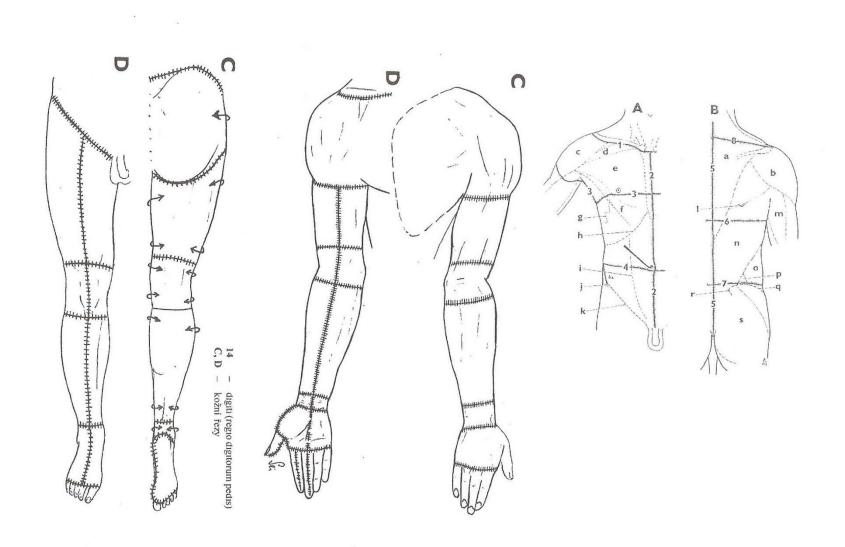




Nástroje – skalpel



Skin sections



Veins of UL

- superficial system
- deep system
 - accompany arteries
 - doubled up to axilla
 - frequent connections around artery
 - frequent valves
- v. subclavia
 - small tributaries only

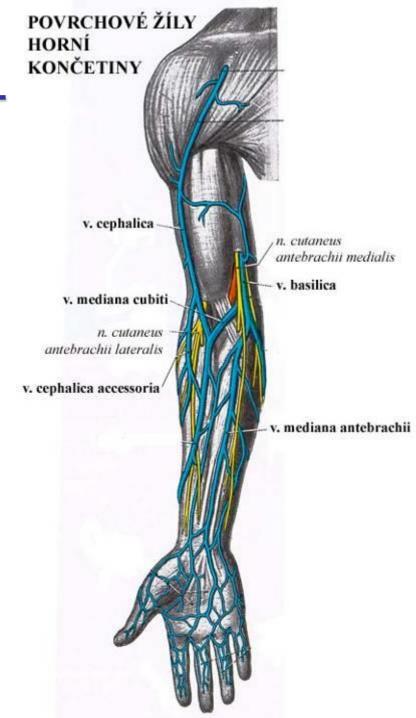




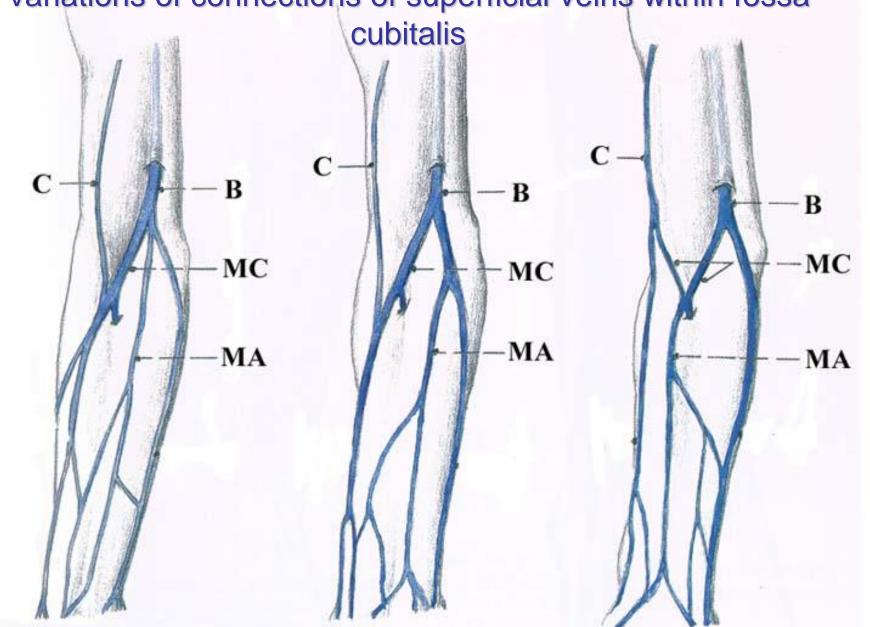
Superficial veins of UL

- v. axillaris
 - v. cephalica
 - vv. thoracoepigastricae
 - vv. costoaxillares
- v. brachialis (doubled)
 - v. basilica

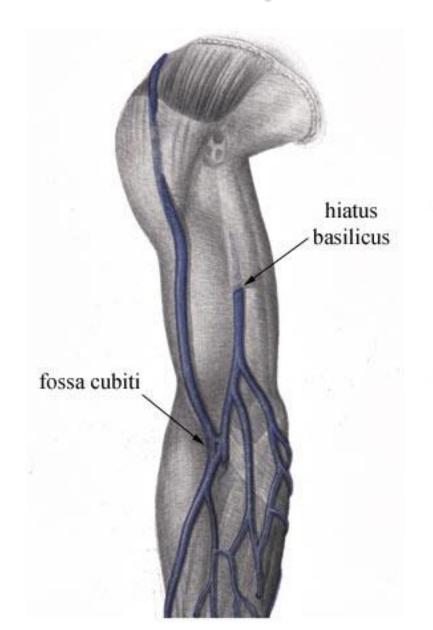
v. mediana cubiti + antebrachii rete venosum dorsale manus rete carpi dorsale vv. intercapitulares

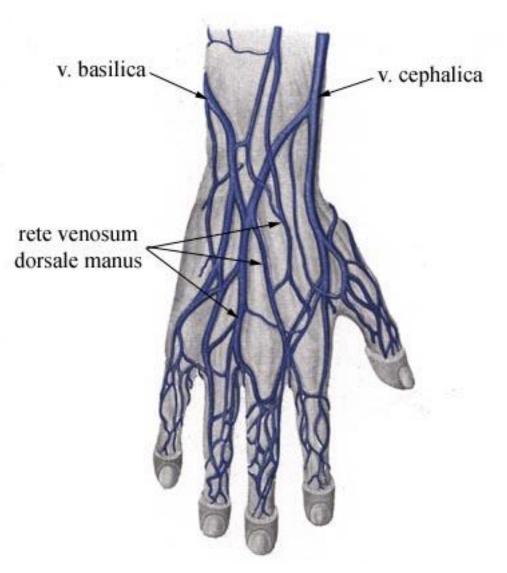


VARIACE NAPOJENÍ POVRCHOVÝCH ŽIL V LOKETNÍ JAMCE Variations of connections of superficial veins within fossa



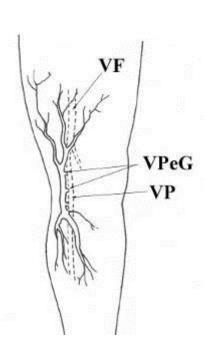
Superficial veins of UL





Veins of lower limb

- superficial system
 - compartimentum saphenum
- deep system
 - accompany arteries
 - doubled up to fossa poplitea
 - frequent connections around artery
 - frequent valves
- systema venosum laterale (Albanesei)

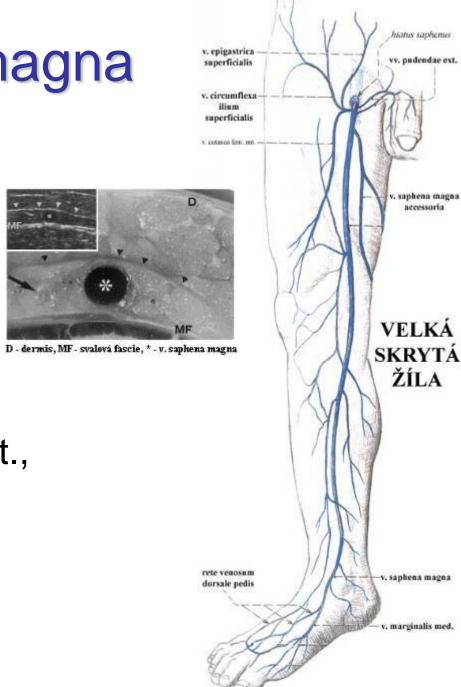




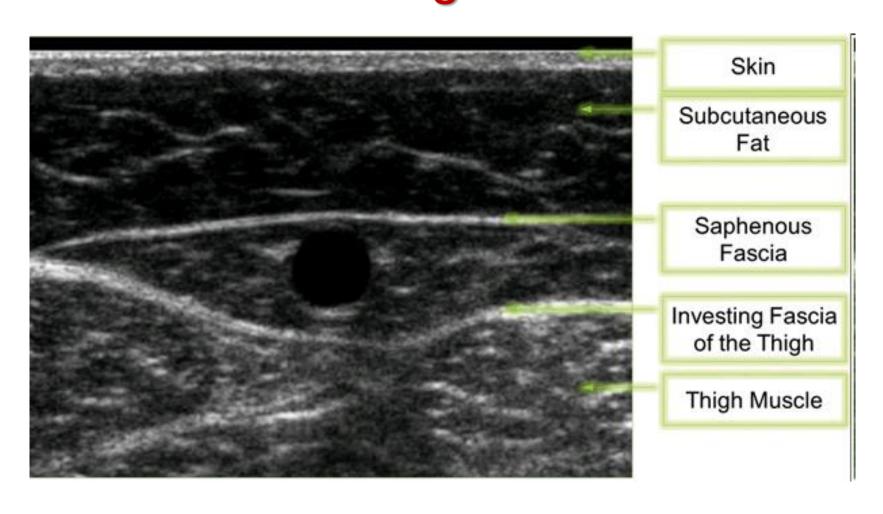


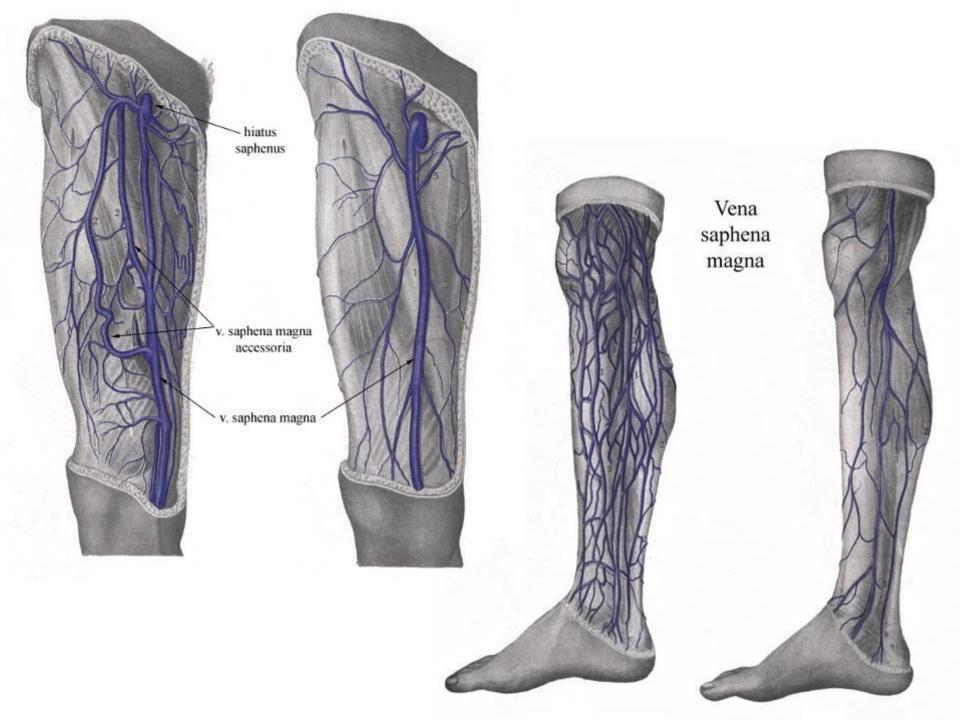
Vena saphena magna

- confluens venosus subinguinalis
- valvula terminalis + preterminalis
- v. s. m. accessoria
 - ant., post., superficialis
- v. circumflexa femoris ant., post.
- runs with n. saphenus
- ultrasound: "Egyptian / Cleopatra's eye"



Ultrasound image of vena saphena magna





Confluens venosus subinguinalis

clinical term "Crosse"

- = terminal portion of VSM bordered with valves
- v. epigastrica superficialis
- v. circumflexa ilium superficialis
- v. pudenda externa superficialis

v. saphena magna accessoria anterior et posterior

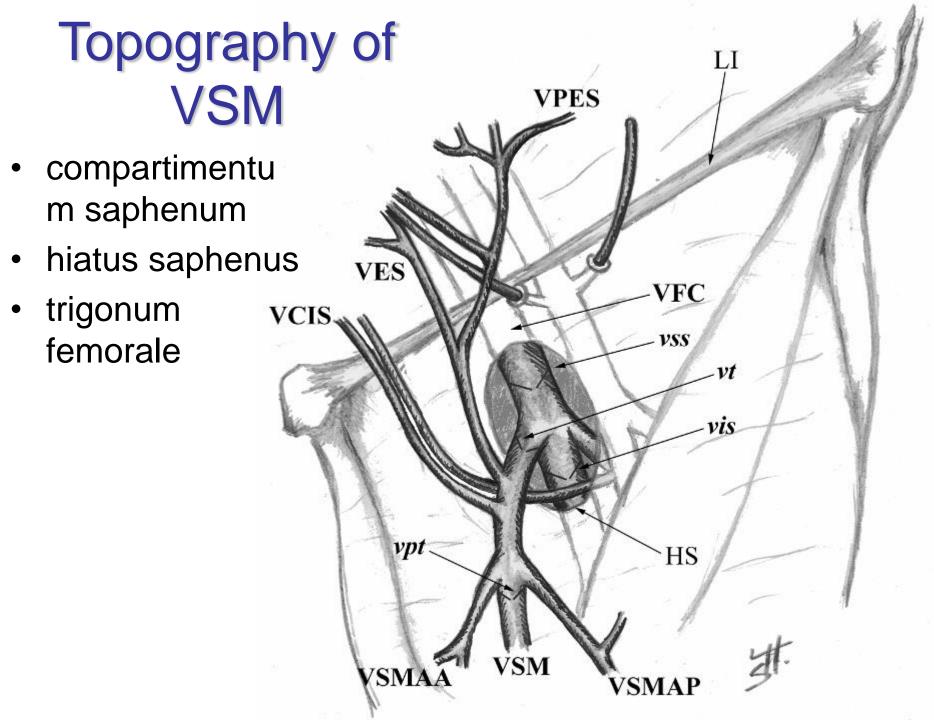
VFC

VSMAP

VPES

VSMA

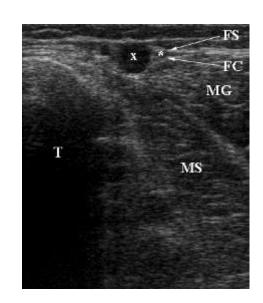
crossectomy

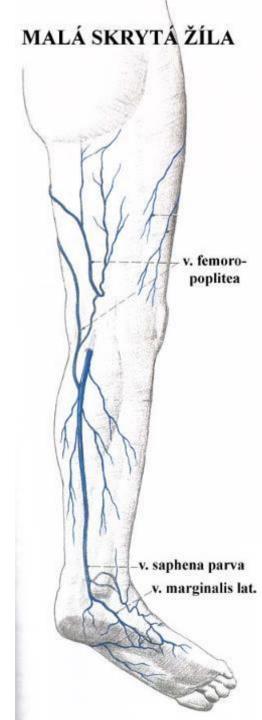


Vena saphena parva

- valvula terminalis + preterminalis
- v.s.p. accessoria superficialis
- extensio cranialis venae saphenae parvae (obsolete "v. femoropoplitea)
- runs with n. suralis

venae intersaphenae

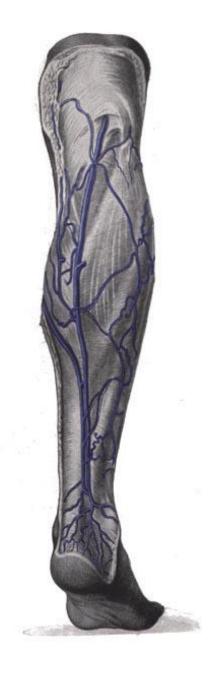






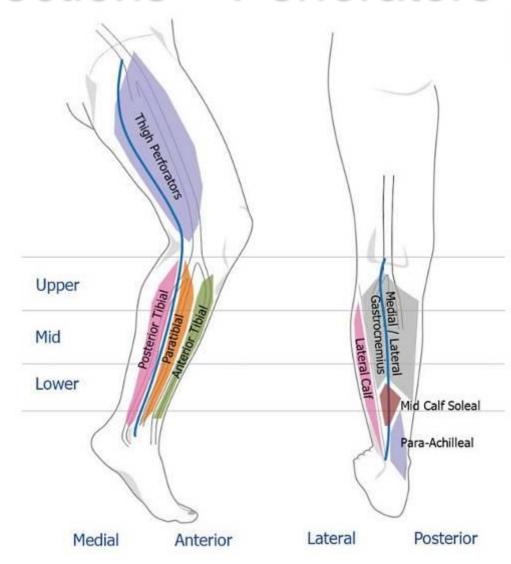
vena saphena parva

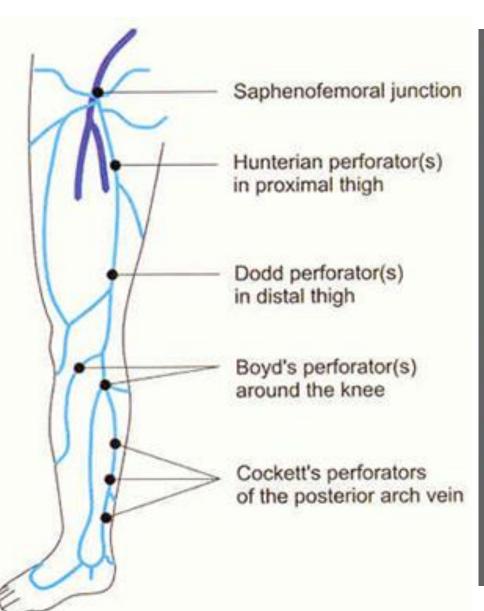


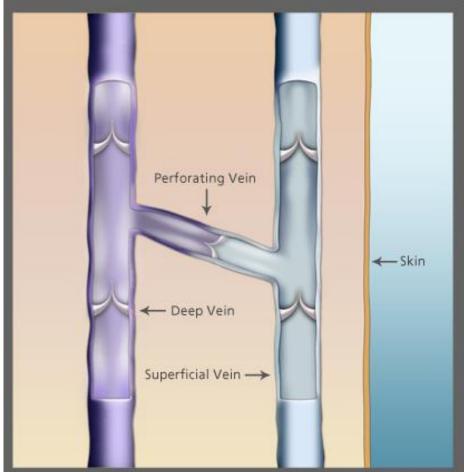


Venae perforantes Transfascial connections = Perforators

- first drawn by Leonardo da Vinci
- interconnect deep (80% of blood) and superficial systems
- contain valves
- insufficient valves
 → varices
- 6 groups according to position



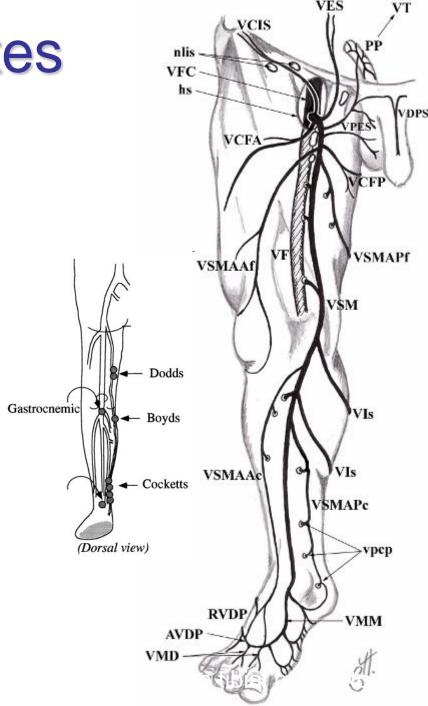




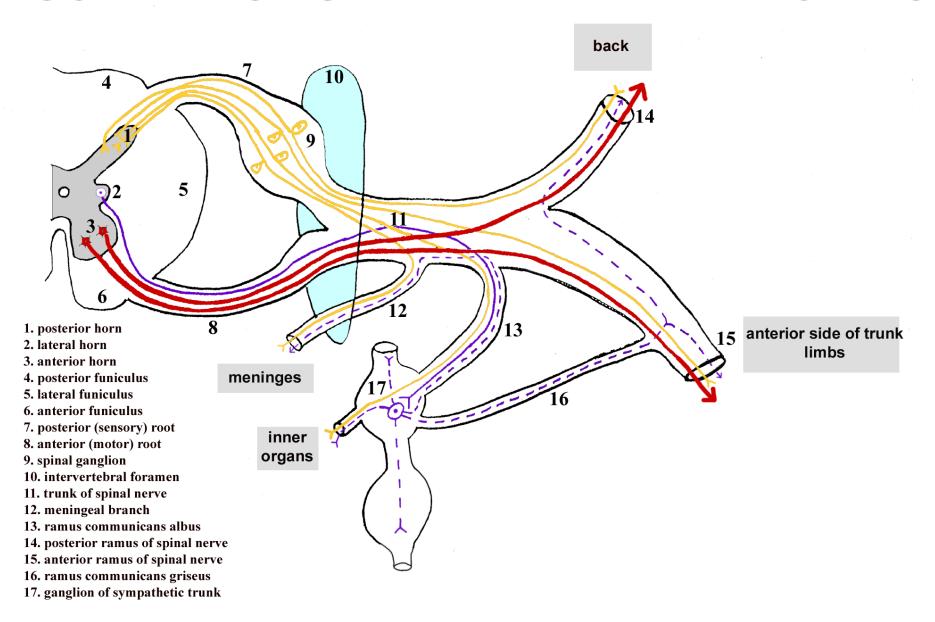
Perforating veins connect the deep system with the superficial system

Venae perforantes

- simple, double or multiple
- run with small artery and cutaneous nerve (Staubesand's triad)
- 6 groups: foot, ankle, leg, knee, thigh, buttocks
- eponyms: Cockett, Boyd, Dodd
- <u>e.g.:</u> venae perforantes cruris posteriores tibiales = Cockett's perforators
 - interconnect v.s.m. accessoria posterior and venae tibiales posteriores
 - 18.5, 13.5 a 7 cm proximal to sole

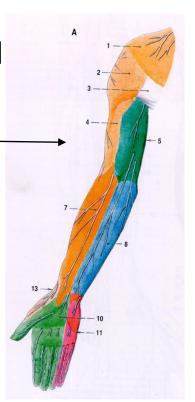


SCHEME OF SPINAL NERVE BRANCHING



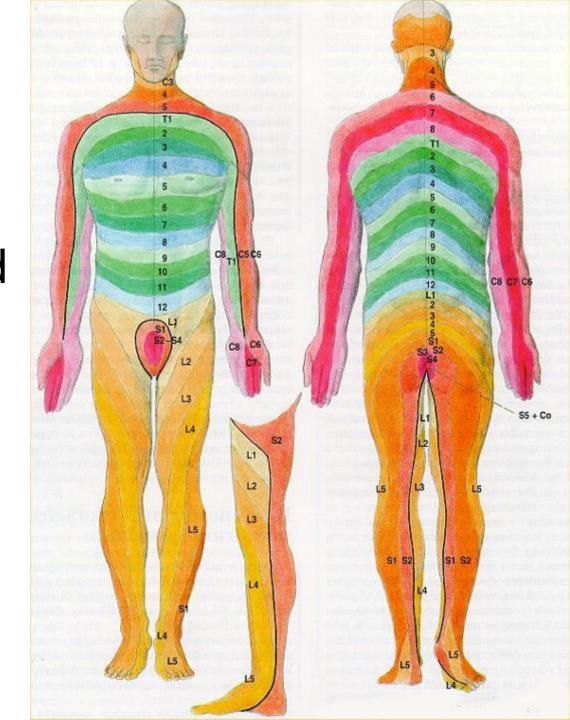
Sensory skin innervation

- area radicularis (dermatome)
 - skin area supplied by 1 radix spinalis (from 1 spinal segment)
- area nervina
 - skin area supplied by 1 peripheral sensory nerve (usually from more spinal segments)
- area radicularis visceralis
 - Internal organ area supplied by viscerosensory nerves of 1 spinal segment
- Head's zone
 - segmental projection of sensitivity from organs to the certain skin areas

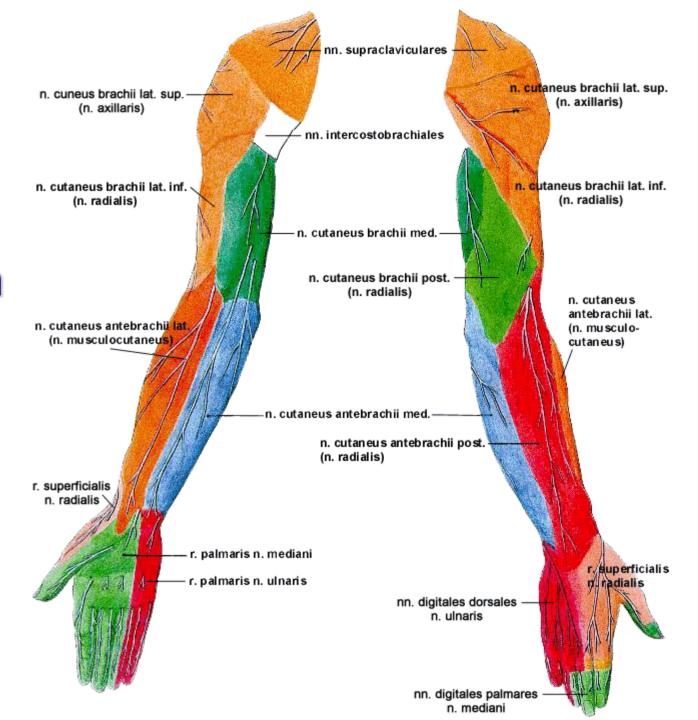


Dermatom e

skin area supplied by one spinal nerve (from one spinal segment)



Sensory innervation of upper limb



nn. clunium sup. n. ili ohypogastricus n. iliohypogastricus nn. clunium medii n. ili oin gui nalis r. femoralis n. genotofemoralis nn, clunium inf n. cutaneus rr. cutan ei ant. n. cutaneus femoris lat. n. femoralis femoris lat. r. cutaneus n. obturatorii n. cutaneus femoris post. rr. cutan ei ant. n. femoralis n. cutaneus surae lat. (n. fibularis communis) n. cutaneus surae lat.-(n. fibularis communis) n. saphenus n. suralis (n. cutaneus surae med.+ r. communicans fibularis) n. cutaneus dorsalis med.+intermedius (n. fibularis superficialis) r. superficialis n. cutaneus dorsalis lat. n. plantaris lat. rr. calcane n. fibularis (n. suralis) med. profundus n. plantaris med. (n. tibialis)

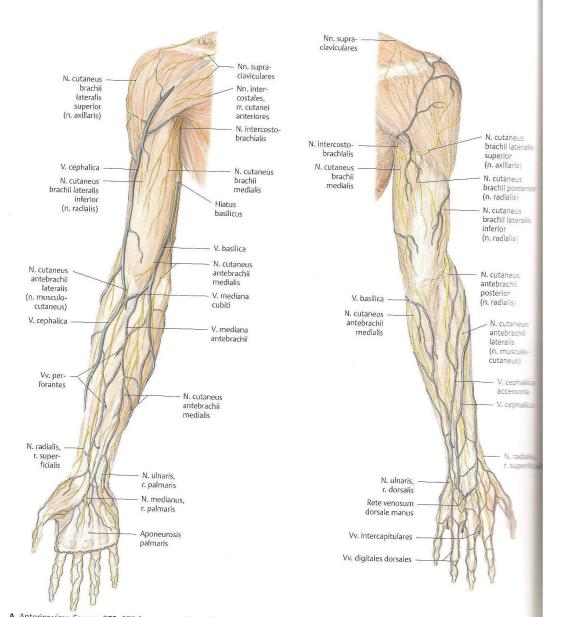
Sensory innervation of lower limb

Podkoží HK Subcutanoues layer of UL

Superficial Veins & Nerves of the Upper Limb

Fig. 24.26 Superficial cutaneous veins and nerves of the upper limb

Upper Limb



Kožní inervace HK Skin innervation of UL

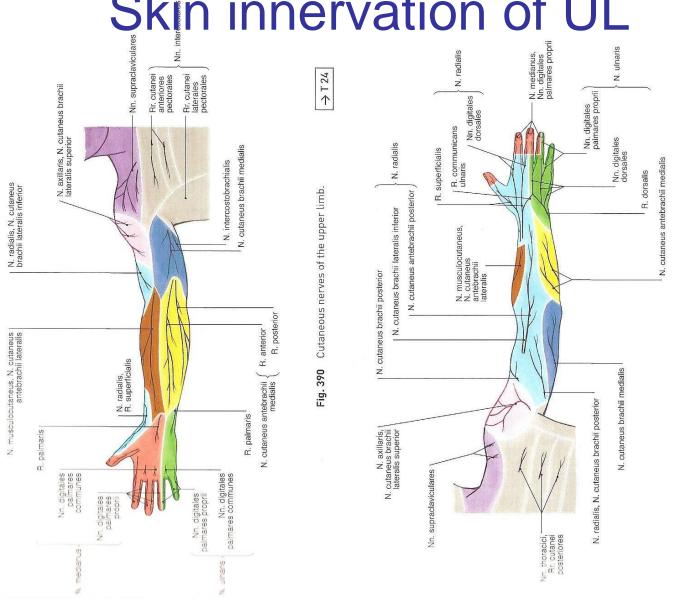


Fig. 391 Cutaneous nerves of the upper limb.

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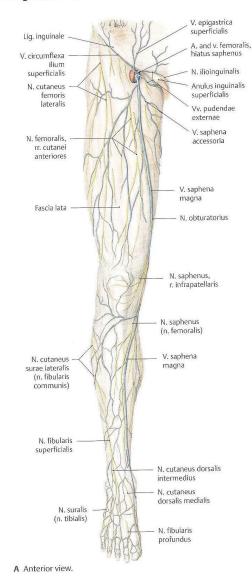
Podkoží DK

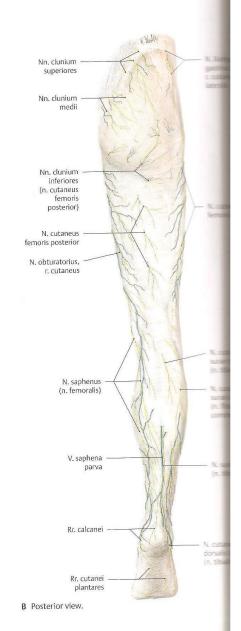
Subcutanoues layer of LL

Superficial Nerves & Vessels of the Lower Limb

Fig. 29.26 Superficial cutaneous veins and nerves of right lower limb

Lower Limb





Kožní inervace HK

Skin innervation of LL

