Introduction
into the dissection course
Organization rules – main points

• 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 - scalpel
Instruments - scalpel
Instruments - scalpel
Instruments - scalpel
Instruments - scalpel
Instruments

tweezers abnd scissors

anatomical tweezers

straight blunt or straight sharp-blunt scissors
Instruments – scalpel

scalpel with changable blade
Instruments – scapel

separate handle and changeable blade
Instruments – scalpel
Instruments – scapel

iciones

wrongly fit blade
Nástroje – skalpel

😊 well fit blade 😊
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
Variations of connections of superficial veins within fossa cubitalis
Superficial veins of UL

hiatus basilicus

v. basilica

v. cephalica

rete venosum dorsale manus

fossa cubiti
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

• crossectomy
Topography of VSM

- compartimentum saphenum
- hiatus saphenus
- trigonum femorale
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.

- Saphenofemoral junction
- Hunterian perforator(s) in proximal thigh
- Dodd perforator(s) in distal thigh
- Boyd's perforator(s) around the knee
- Cockett's perforators of the posterior arch vein
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
- e.g.: 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
1. posterior horn
2. lateral horn
3. anterior horn
4. posterior funiculus
5. lateral funiculus
6. anterior funiculus
7. posterior (sensory) root
8. anterior (motor) root
9. spinal ganglion
10. intervertebral foramen
11. trunk of spinal nerve
12. meningeal branch
13. ramus communicans albus
14. posterior ramus of spinal nerve
15. anterior ramus of spinal nerve
16. ramus communicans griseus
17. ganglion of sympathetic trunk
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
Dermatome

skin area supplied by one spinal nerve (from one spinal segment)
Sensory innervation of upper limb
Sensory innervation of lower limb
Podkoží

HK

Subcutaneous layer of UL
Kožní inervace HK
Skin innervation of UL
Podkoží DK
Subcutaneous layer of LL
Kožní inervace HK

Skin innervation of LL