

**SKELETON OF THE LOWER
EXTREMITY**
(ossa membri inferioris)

SKELETON OF THE LOWER EXTREMITY

(ossa membri inferioris)

- Organ of support and locomotion
- In comparison with the UE– more robust bones
- Very limited mobility (joints)

Skeleton of pelvic girdle

hip bone/pelvic bone– **os coxae**
(**os ilium, os ischii, os pubis**)

Skeleton of free extremity

femur– **femur**

knee-cap – **patella**

Shin bone– **tibia**

fibula– **fibula**

Tarsal bones– **ossa tarsi**

Metatarsal bones– **ossa metatarsi**

Phalanges of toes (**ossa digitorum pedis – phalanges**)

Cingulum membri inferioris

Os coxae (hip bone)

os ilium, os pubis, os ischii

- Flat bone- it is formed by the fusion of three primary bones at the end of teenage years

acetabulum

facies lunata

fossa acetabuli

incisura acetabuli

foramen obturatum

Iliac bone– os ilium

corpus

ala

• medial surface

fossa iliaca

facies auricularis

tuberositas iliaca

linea arcuata

crista iliaca

spina iliaca anterior superior

spina iliaca anterior inferior

spina iliaca posterior superior

spina iliaca posterior inferior

• lateral surface

linea glutea posterior

linea glutea anterior

linea glutea inferior

Sciatic bone– os ischii

corpus

ramus pars pubica

pars acetabularis

tuber ischiadicum

spina ischiadica

incisura ischiadica major

incisura ischiadica minor

Pubic bone– OS pubis

corpus

ramus inferior
facies symphysialis
crista phallica

ramus superior
eminentia iliopubica
pecten ossis pubis
tuberculum pubicum
sulcus obturatorius

Femur – femur

Proximal end:

caput femoris

fovea capitis femoris

collum femoris

trochanter major

trochanter minor

linea intertrochanterica

crista intertrochanterica

fossa trochanterica

corpus femoris

linea aspera

labium mediale

labium laterale (tuberositas glutea)

Distal end:

condylus medialis

condylus lateralis

epicondylus medialis

epicondylus lateralis

facies patellaris

facies poplitea

fossa intercondylaris

linea intercondylaris

Patella – knee-cap

basis patellae

apex patellae

facies articularis patellae- lateral and medial facet

facies anterior

OSSIFACATION OF PATELLA

Tibia – shine bone

Proximal end:

condylus medialis

condylus lateralis

facies articularis superior

eminentia intercondylaris

tuberculum intercondylare mediale

tuberculum intercondylare laterale

area intercondylaris anterior

area intercondylaris posterior

facies articularis fibularis

corpus

tuberositas tibiae

linea musculi solei

margo medialis

margo anterior

margo interosseus

Distal end:

malleolus medialis

sulcus malleoli medialis

facies articularis malleoli medialis

incisura fibularis

facies articularis inferior (distalis)

Fibula – fibula

Proximal end:

caput fibulae (facies articularis capitis fibulae)
apex capitis fibulae

corpus:

margo anterior
margo medialis
margo posterior
margo interosseus

Distal end:

malleolus lateralis
facies articularis malleoli lateralis
sulcus malleoli lateralis
fossa malleoli lateralis

ossa pedis– bones of the foot

I. Tarsal bones– ossa tarsi

II. Metatarsal bones– ossa metatarsi

III. Phalanges of toes– ossa digitorum pedis

Tarsal bones– ossa tarsi (7)

talus

calcaneus

Navicular bone

Cuboideal bone

Cuneiform bones

(mediale, intermedium et laterale)

Talus

Proximal part:

corpus tali

- **dorsally**: trochlea tali-
facies superior et maleolaris
(lateralis, medialis)
- **plantar**: facies articularis calcanearis-
posterior, media, anterior
sulcus tali- sinus tarsi
- **processus posterior tali**-
tuberculum mediale et laterale-
sulcus tendinis m. flexoris hallucis longi
- **processus lateralis tali**

collum tali

Distal part

- **caput tali- facies
articularis navicularis**

Calcaneus

- **tuber calcanei (processus medialis et lateralis)**
- **sustentaculum tali (sulcus tendinis musculi flexoris hallucis longi)**
- **trochlea peronealis- sulcus tendinis musculi peronei longi**
- **facies articularis cuboidea**
- **facies articularis talaris posterior, media et anterior**
- **sulcus calcanei**
 - **sulcus tali + sulcus calcanei = sinus tarsi**

Navicular bone

- **facies articularis talaris**- concave
- **facies articularis cuneiformis**- convex- 3 facets
- **tuberositas ossis navicularis**- plantar

cuboid

- **f. articularis calcanearis**, 2 facets for 4th and 5th metatarsal bone
- Surface for articulation with os cuneiforme laterale
- **tuberositas ossis cuboidei**
- **sulcus tendinis musculi peronei longi**

Cuneiform bones:

mediale, intermedium et laterale

mediale: the largest, edge of wedge-dorsally

intermedium: edge of wedge - plantar

laterale: edge of wedge - plantar

They participate in the arch foot

Metatarsal bones– ossa metatarsi (I. – V.)

basis (tuberositas ossis metatarsi I. et V.)

corpus

caput

Phalanges of toes– ossa digitorum pedis

1st – phalanx proximalis et distalis

2nd – 5th toe – phalanx proximalis, media et distalis

basis phalangis

corpus phalangis

trochlea (distal phalanx– tuberositas phalangis distalis)

Ossa sesamoidea

- **patella**
- Below the head of the 1st metatarsal bone: two bones (lateral and medial) **in metatarsophalangeal joint**
- Sometimes also below the head of 2nd and 5th met. bone, within the tendon of m.peroneus longus

Tank you for your attention!

Obrázky:

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