

Anatomy – Lower limb – Bones

Hip (innominate) bone *Acetabulum lat, pubic symph ant*
Ilium, pubis and ischium which fuse in Y-shaped epiphysis involving acetabulum

Acetabulum - Articulates with head femur

Ilium

Iliac crest from ASIS to PSIS

Gluteal surface - Three gluteal lines

Glut max above superior

Glut med between superior-middle

Glut min between middle-inferior

Pubis

Obturator groove lodges obturator nerve/vessels

Ischium

L-shaped

Ischial spine projects medially, divide greater/lesser sciatic notch

Lesser sciatic notch forms lesser sciatic foramen due to bridging of sacrotuberous ligament

Medial surface

Pectineal line, arcuate line

Lesser Sciatic Foramen

Between lesser sciatic notch ilium and sacrotuberous/sacrospinous ligaments

Contents Tendon obturator internus, Int pudental artery/vein, pudental nerve

Greater Sciatic Foramen

Between greater sciatic notch ilium and sacrotuberous/sacrospinous ligaments

Contents

Above Piriformis: sup gluteal vessels/nerve

Below Piriformis: inf gluteal/int pudental vessels; inf gluteal, pudental, sciatic, post fem cutaneous nerves

Femur *Linea aspera and intercondylar fossa post*

Head hyaline cartilage

Neck Upwards and medially

G trochanter - Glut min ant, med post, Piri

sup

Obturator externus/internus in troch fossa

Quadratus femoris

L trochanter - Psoas major/iliacus

Shaft

Linea aspera middle 1/3 shaft posteriorly

Vastus med/lat/int, Add magnus/longus/brevis,

Quadratus femoris, Short head biceps,

Pectineus

Medial and lateral condyles

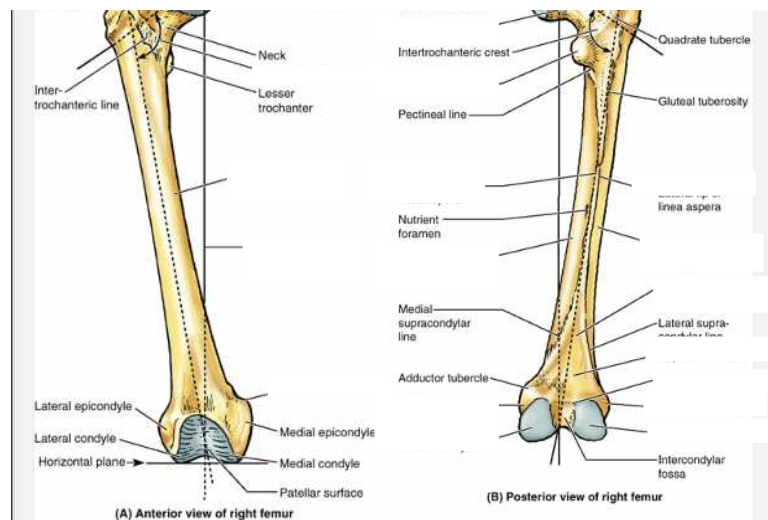
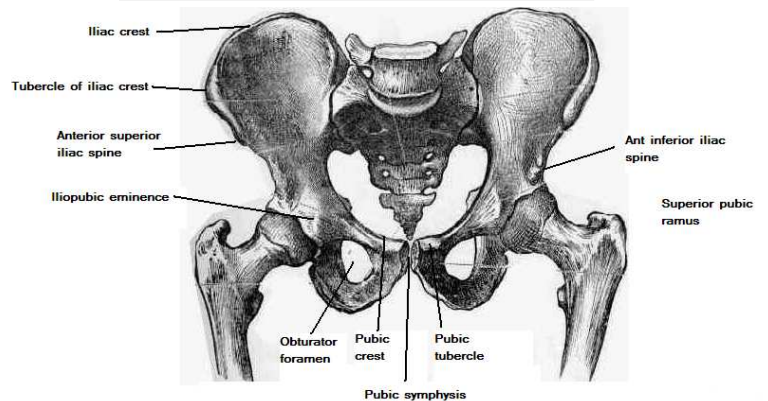
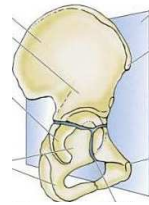
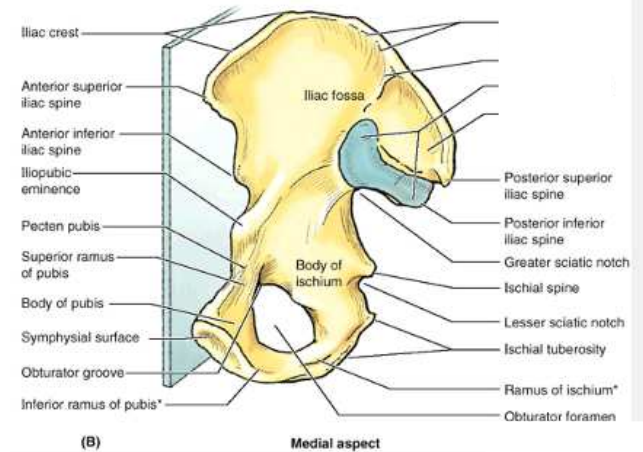
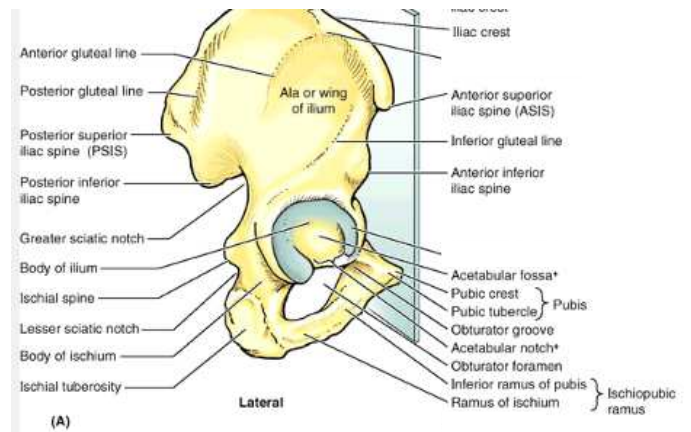
Intercondylar fossa between, Patella surf ant

Medial epicondyle - *TCL, medial head gastroc*

Lateral epicondyle - *FCL, plantaris, popliteus*

Articulations: talus, fibula, femur at patellofemoral joint

Tibia *Med mall lat, sharp ant border*



Articulations - Femoral condyles, Talus, Fibula – prox/distal
Tibial plateau

Tubercles of intercondylar eminence

Many	ant horn med meniscus
Amorous	ant cruciate
Ladies	ant horn lat meniscus
Like	post horn lat meniscus
My	post horn med meniscus
P.....	post cruciate

Tibial tuberosity - Quadriceps insertion via patella ligament

Shaft - Triangular; Borders – anterior/medial/lateral interosseii;

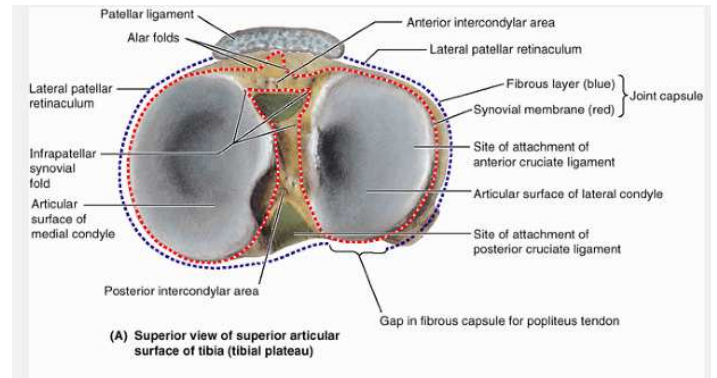
Soleal line

Distal end - Articulation with talus and fibula

Medial malleolus

Crossed ant by Tib ant, EDL, EHL, Ant tib artery/dorsalis pedis, deep peroneal nerve, peroneus tertius, great saph nerve/vein

Crossed post: Tib post, FDL, FHL, Post tib art/ nerve



Fibula Flat lat malleolus, quad head, articulations for tibia med

Head Quadrilateral in section

Articular facet for superior tibiofibular joint

Styloid process - Arcuate popliteal lig and FCL and biceps tendon attached

Neck

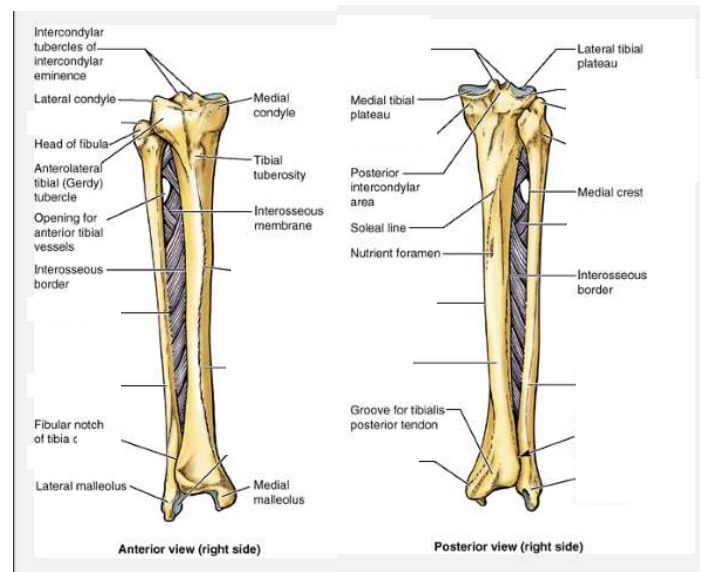
Shaft Anterior, Interosseous, Posterior borders

Anterior (medial) surface, Lateral surface

Posterior surface - Medial crest divides it into med/lat

Lateral malleolus - further distally than medial, Facet for talus

Malleolar fossa behind this surface - Post tibiofibular ligament and post talofibular ligaments arise



Patellar stability

Flat, triangular bone, front of knee joint

Large sesamoid in quadriceps tendon → patellar ligament → tibial tuberosity

Mechanical deterrent to lateral dislocation:

Bony factors: prominence of lateral femoral condyle

Ligamentous factors: tension in medial patellar retinacular fibres

Muscular factors: medial insertion of lowest fibres vastus medialis

Foot

Tarsus, Metatarsus, Phalanges

Calcaneus

Largest tarsal

Articulates with talus above and cuboid in front

Sustenaculum tali that projects from medial surface

Upper surface

Post facet articulates with talus in talocalcaneal joint

Ant/mid articular facets form subtalar joint for inver/ever

Talus

Carries whole body weight, Lies on calcaneus, No muscular attachments

Body - Sup art surface trochlear - Convex from back, concave side side

Neck, Head Convex articular surface anteriorly for articulation with navicular (talonavicular joint)

Flattened inferiorly for articulation with calcaneus

