

DISSECTION SCHEDULE

Session I - Hip (Front) & Thigh (Superficial)

Surface anatomy

- Inguinal region
- Gluteal region
- Thigh
- Leg
- Foot bones
- Hip bone
- Femur

Dissection

- Superficial fascia
- Great saphenous vein
- Superficial inguinal lymph nodes
- Superficial branches of femoral artery
- Superficial inguinal ring
- Spermatic cord
- Inguinal ligament
- Saphenous opening
- Deep fascia (fascia lata)

Self study

- *Features & attachments of Hip bone and femur*
- *Iliotibial tract and its functions*
- *Location and drainage of superficial inguinal lymph nodes*
- *Cutaneous nerves*
- *Origin, course, termination & tributaries of the great saphenous vein*

Session II - Hip (Front) & Thigh (Deep)

Dissection

- Femoral sheath
- Femoral artery & branches, profunda artery & its branches
- Femoral vein
- Femoral canal
- Femoral triangle
- Femoral nerve & branches
- Adductor canal

Muscles

- Sartorius
- Pectineus
- Iliopsoas
- Tensor fascia lata
- Rectus femoris
- Vastus lateralis
- Vastus medialis
- Vastus intermedius

Self study

- *Boundaries and contents of femoral triangle*
- *Formation and contents of Femoral sheath*
- *Femoral hernia*
- *Boundaries and contents of adductor canal*
- *Origin, course, termination & branches of femoral artery*
- *Origin, root value, course and distribution of femoral nerve*

Session III - Hip & Thigh (Medial Compartment)

Dissection

Vessels

- Medial circumflex femoral vessels
- Obturator vessels

Nerve

- Anterior and posterior branches of obturator nerve

Muscles

- Adductor longus
- Adductor brevis
- Pectineus
- Gracilis
- Adductor magnus
- Obturator externus

Self study

- Attachments, nerve supply and actions of
Adductor longus
Adductor brevis
Gracilis
Adductor magnus
Pectineus
Obturator externus
- Origin, root value, course and distribution of *Obturator nerve* Accessory obturator nerve
- Origin, course & termination of medial circumflex femoral artery

Session IV - Gluteal Region

Surface anatomy

- Gluteal fold, natal cleft
- Ischial tuberosity
- Posterior superior iliac spine

Dissection

- Cutaneous nerves

Muscles

- Gluteus maximus, medius & minimus
- Piriformis & quadratus femoris
- Tendon of obturator internus,externus
- Superior and inferior gemelli
- Hamstring muscles

Nerves

- Posterior cutaneous nerve of thigh
- Sciatic nerve
- Nerve to quadratus femoris
- Nerve to obturator internus
- Pudendal nerve
- Superior & inferior gluteal nerve

Vessels

- Superior & inferior gluteal vessels
- Internal pudendal vessels
- Medial circumflex femoral artery
- First perforating artery

Bursa

- Bursa under gluteus maximus

Ligaments

- Sacrotuberous & sacrospinous

Self study

- Cutaneous nerve supply of gluteal region
- Attachments, nerve supply and actions of
Gluteus maximus
Piriformis & obturator internus
Superior and inferior gemelli
Quadratus femoris
Gluteus medius
Gluteus minimus
- Origin, root value, course and distribution of
Sciatic nerve
Superior gluteal nerve
Inferior gluteal nerve
Pudendal nerve
Nerve to obturator internus
Nerve to quadratus femoris
- Origin, course, termination and branches of
Superior gluteal artery
Inferior gluteal artery
- *Cruciate anastomosis*
- *Trochanteric anastomosis*

Session V - Popliteal Fossa and Back of Thigh

Dissection

Muscles

- Biceps femoris (long & short head)
- Semitendinosus
- Semimembranosus
- Lateral and medial heads of gastrocnemius
- Gracilis
- Sartorius
- Popliteus

Nerves

- Posterior cutaneous nerve of thigh
- Sural nerve
- Lateral cutaneous nerve of calf
- Tibial nerve and its branches (muscular and genicular)
- Common peroneal nerve

Vessels

- Popliteal artery and its branches
- Popliteal vein and its tributaries
- Small saphenous vein

Self study

- *Boundaries and contents of popliteal fossa*
- *Origin, root value, course and distribution of Sciatic nerve
Tibial nerve
Common peroneal nerve*
- *Origin, course, termination and branches of Profunda femoris artery
Popliteal artery*
- *Formation, course, termination and tributaries of popliteal vein*
- *Attachments, nerve supply and actions of Biceps femoris
Semitendinosus
Semimembranosus*

Session VI - Hip joint

Dissection

Exposure of hip joint

- Hip joint capsule
- Ligaments - esp. iliofemoral ligament
- Bursae
- Ligament of head of femur

Self study

- *Hip joint
Type, articulation, ligaments, relations, nerve supply, blood supply, movements, applied anatomy*

John Hunter
(1728 –1793)



He was a Scottish surgeon regarded as one of the most distinguished scientists and surgeons of his day.

He was an excellent anatomist; his knowledge and skill as a surgeon was based on sound anatomical background. Among his numerous contributions to medical science are study of human teeth, development of a child, gun-wounds and the lymphatic system.

Hunter's canal - Adductor / Subsartorial canal

Session VII - Front & Sides of Leg and Dorsum of Foot

Bones

- Tibia
- Fibula
- Bones of foot

Dissection

Front of leg & dorsum of foot

- Dorsal venous arch
- Great saphenous vein
- Small saphenous vein
- Superficial peroneal nerve
- Superior and inferior extensor retinacula
- Tibialis anterior
- Extensor hallucis longus
- Extensor digitorum longus
- Peroneus tertius
- Anterior tibial vessels
- Dorsalis pedis artery
- Deep peroneal nerve

Lateral side

- Superior and inferior peroneal retinacula
- Peroneus longus
- Peroneus brevis

Medial side

Tendons and insertion of

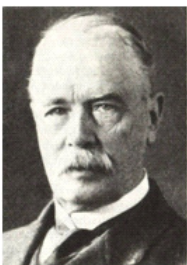
- Sartorius
- Gracilis
- Semitendinosus
- Semimembranosus

Self study

- *Attachments and functions of retinacula & intermuscular septa*
- *Attachments, nerve supply, and actions of*
Tibialis anterior
Extensor hallucis longus
Extensor digitorum longus
Peroneus tertius
Extensor digitorum brevis
Peroneus longus
Peroneus brevis
- *Origin, course, termination & branches of*
Anterior tibial artery
Dorsalis pedis artery
- *Origin, root value, course and distribution of*
Common peroneal nerve
Superficial peroneal nerve

Friedrich Trendelenburg

(1844-1924)



Trendelenburg was a great practical surgeon who was keenly interested in the history of surgery. His doctoral thesis '*De Veterum Indorum Chirurgia*' discussed ancient Indian surgery.

Trendelenburg's test for varicose veins - to test the saphenofemoral incompetence.

Trendelenburg's sign - tilting of the pelvis to the sound side on failure of the abductor mechanism of the hip joint

Session VIII - Back of Leg

Dissection

- Sural nerve
- Small saphenous vein
- Flexor retinaculum
- Medial & lateral heads of gastrocnemius
- Plantaris
- Soleus
- Tendocalcaneus
- Popliteus
- Flexor digitorum longus
- Flexor hallucis longus
- Tibialis posterior
- Tibial nerve
- Posterior tibial vessels
- Peroneal artery

Self study

- *Superficial veins of lower limb*
- *Lymphatics & lymph nodes of lower limb*
- *Attachments, nerve supply and actions of Gastrocnemius, soleus & plantaris*
Tibialis posterior
Flexor digitorum longus
Flexor hallucis longus
Popliteus
- *Flexor retinaculum - attachments and relations*
- *Origin, course, termination and branches of posterior tibial & peroneal artery*
- *Origin, root value, course and distribution of tibial nerve*
- *Anastomosis around knee joint & ankle joint*

Session IX - Sole of Foot

Dissection :

- Plantar aponeurosis
- Fibrous flexor sheaths

- Abductor hallucis
- Flexor digitorum brevis
- Abductor digiti minimi

- Medial and lateral plantar nerves & vessels

- Flexor hallucis longus tendon
- Flexor digitorum longus tendon
- Flexor accessorius
- Lumbricals

- Flexor hallucis brevis
- Adductor hallucis
- Flexor digiti minimi brevis

- Deep branch of lateral plantar nerve
- Plantar arch

- Plantar and dorsal interossei
- Sesamoid bones
- Tendon of peroneus longus
- Tendon of tibialis posterior

Self study

- *Arches of foot*
Types
Factors maintaining the arches
Functions
Abnormalities
- *Functional importance of the intrinsic muscles of the sole of the foot in maintenance of arches of foot*

(Attachments of individual muscles need not be known)

Session X - Knee joint

Dissection

- Articular capsule
- Collateral ligaments
- Ligamentum patellae, oblique popliteal ligament
- Medial and lateral menisci
- Infrapatellar synovial fold and pad of fat
- Anterior and posterior cruciate ligaments
- Bursae around knee
- Tendon of popliteus and arcuate ligament

Self study

- *Knee joint*
 - Type*
 - Articulation*
 - Ligaments*
 - Relations*
 - Interior*
 - Blood supply*
 - Nerve supply*
 - Movements*
- *Locking and unlocking of knee joint*
- *To draw and label interior of knee joint*

Session XI - Ankle joint and Joints of foot

Dissection

- Capsule & ligaments of ankle joint
- Plantar calcaneonavicular ligament
- Long plantar ligament

Self study

- *Ankle joint*
 - Type, articulation, ligaments, blood supply, nerve supply & movements*
- *Subtalar and transverse tarsal joints*
- *Inversion and eversion movements*

DEMONSTRATIONS

- 1 Hip bone
- 2 Inguinal lymph nodes; femoral triangle & adductor canal
- 3 Femur; adductor muscles; obturator nerve
- 4 Gluteal region - gluteal muscles & sciatic nerve
- 5 Hamstring muscles; popliteal fossa
- 6 Hip joint
- 7 Tibia, fibula, patella
- 8 Muscles, vessels & nerves of the leg
- 9 Arches of foot; applied anatomy of foot
- 10 Knee joint, interior of knee
- 11 Ankle joint; inversion / eversion of the foot

TOPICS ANNEXED TO SESSION GOALS

- Great saphenous vein
- Femoral hernia
- Lumbar plexus
- Cutaneous nerves of gluteal region
- Trochanteric and cruciate anastomoses
- Lymphatic drainage of lower limb
- Intermuscular septa & retinacula of leg
- Anastomosis around knee & ankle
- Intrinsic muscles of sole
- Locking of knee joint
- Intertarsal joints

Topics for Clinical Integration (covered in Applied Anatomy lecture)

- Nerve injuries and nerve conduction
- Varicose veins
- Fracture neck of femur and dislocation of head of femur
- Surgical approaches