

Inferior Extremity

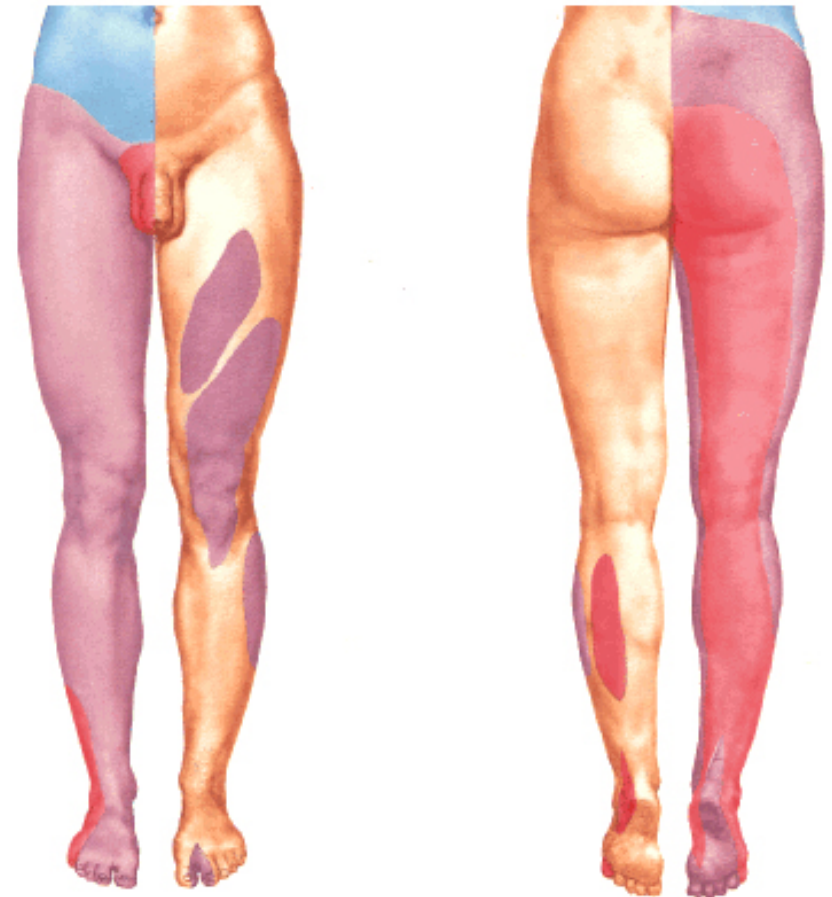
Inferior Extremity

Main Function

- Support
- Locomotion (propulsion)
- Weight Transmission

- Gluteal region
- Hip(coxa)
- buttock (natis)
- Three segments
 - ❖ Thigh (proximal)
 - ❖ Leg (middle)
 - ❖ Foot (distal)
- Knee
 - Anterior(patellar) region
 - Posterior region (popliteal fossa)
- Foot
 - Upper surface (dorsum)
 - Sole (Planter) surface

Anterior and Posterior Views



Inferior extremity – Bones & joints

Hip Girdle

- Hip bones

Thigh

- Femur

Knee

- Patella (knee cap)

Leg

- Tibia
- Fibula

Foot

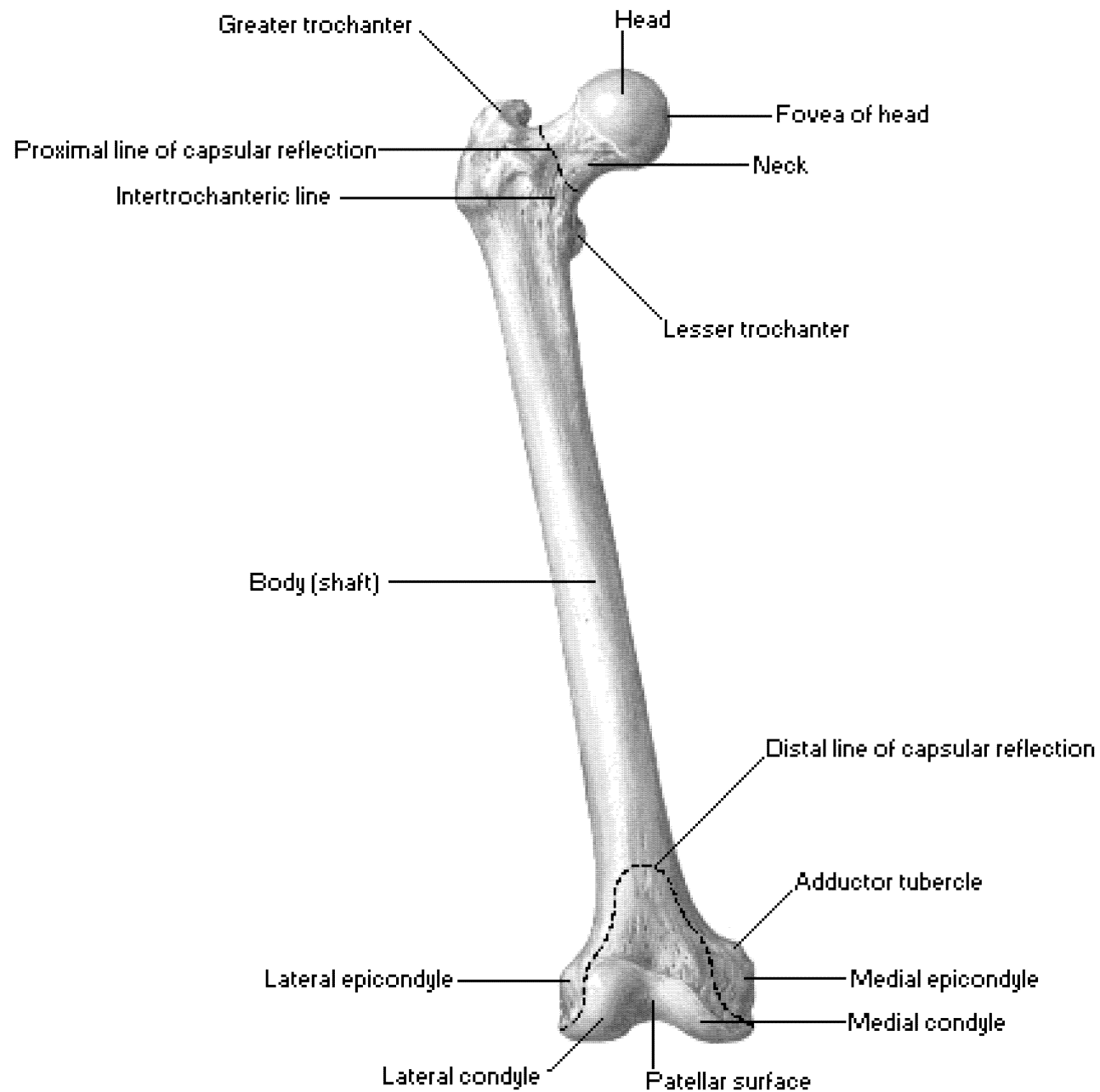
- 7 Tarsals
- 5 Metatarsals
- 14 Phalanges

Three principal synovial joints

- Hip joint
- Knee joint
- Ankle joint
- & smaller joints of foot

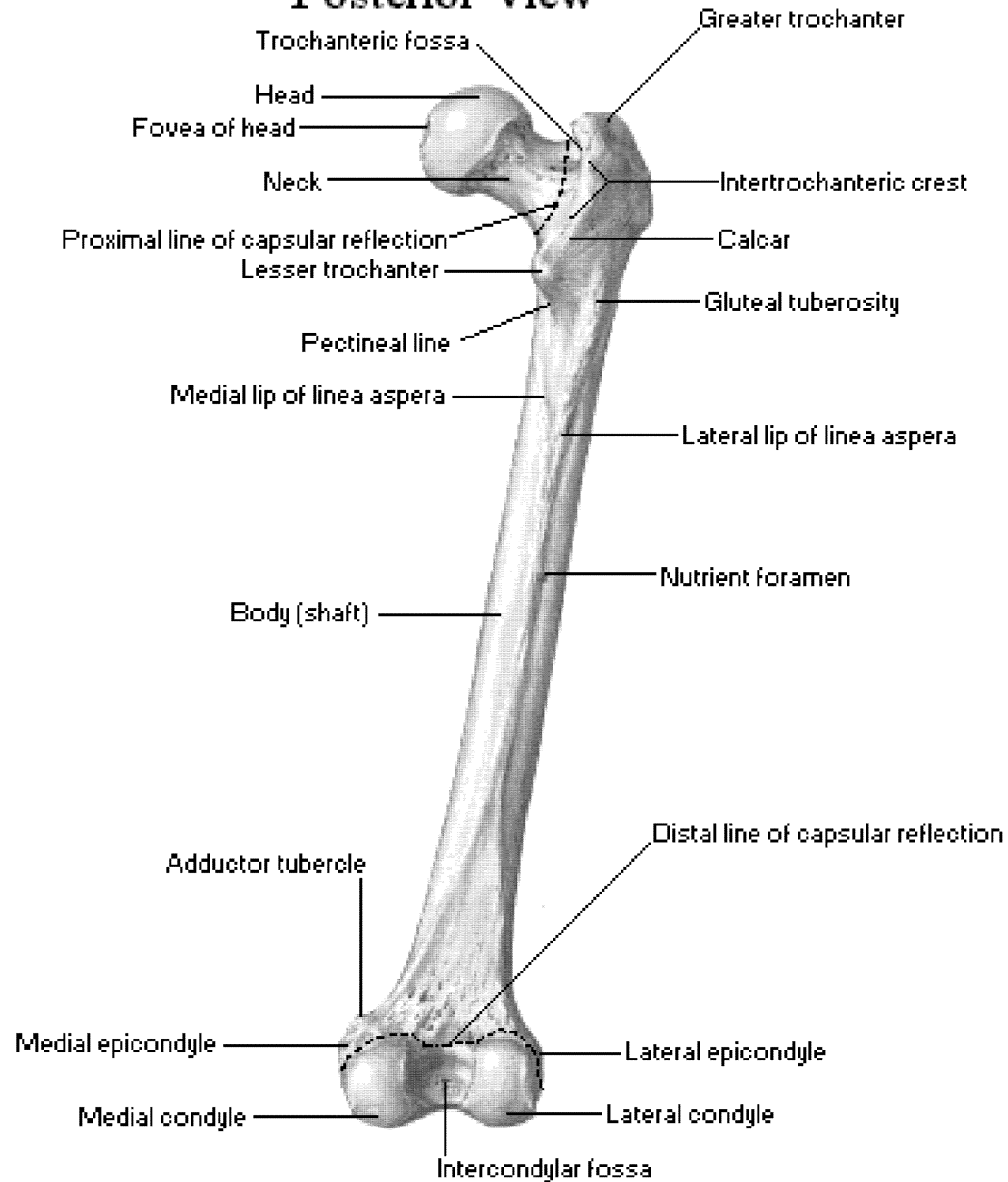
Femur

Anterior View

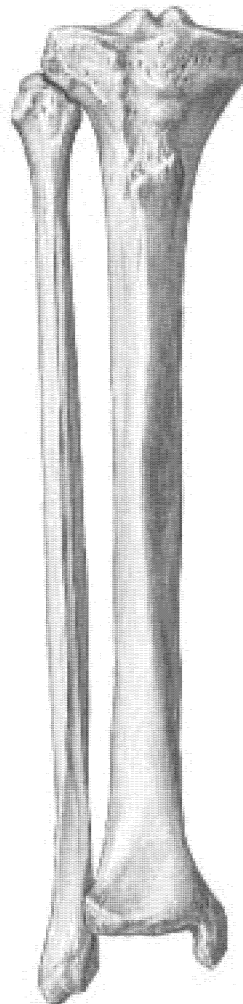


Femur

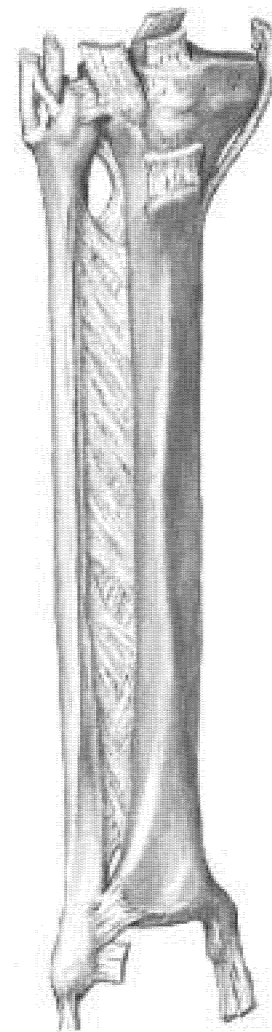
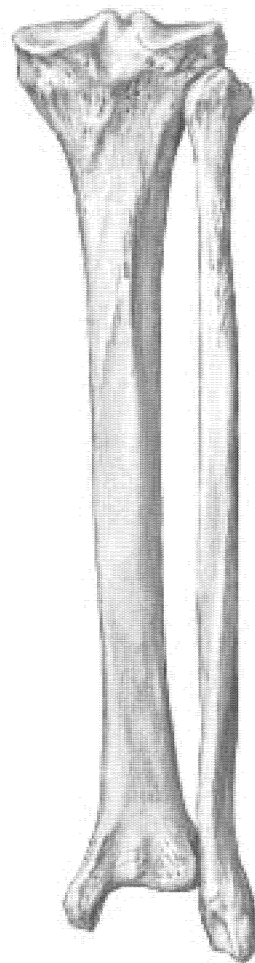
Posterior View



Anterior View



Posterior View



Bones of Foot

Dorsal View (Rt Foot)



Lateral View – Rt Foot



7 tarsals

metatarsals
phalanges

Medial View – Rt Foot



Lower Limb - Movements



Fascia lata- deep fascia of thigh

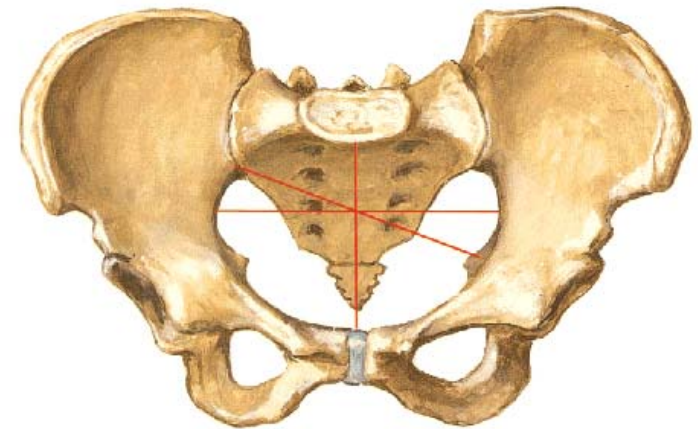
Attachments

upper

- On front to iliac crest
- Inguinal ligament
- Pubis , pubic arch , ischial tuberosity
- Laterally thickened to form ilio-tibial tract
- Sacrum , coccyx , sacro-tuberous lig.- through gluteal fascia

Lower

- Patella, tibial condyles & head of fibula



Modifications of deep fascia

- ❖ Saphenous opening
- ❖ Iliotibial tract
- ❖ Intermuscular septums

Near ankle joint

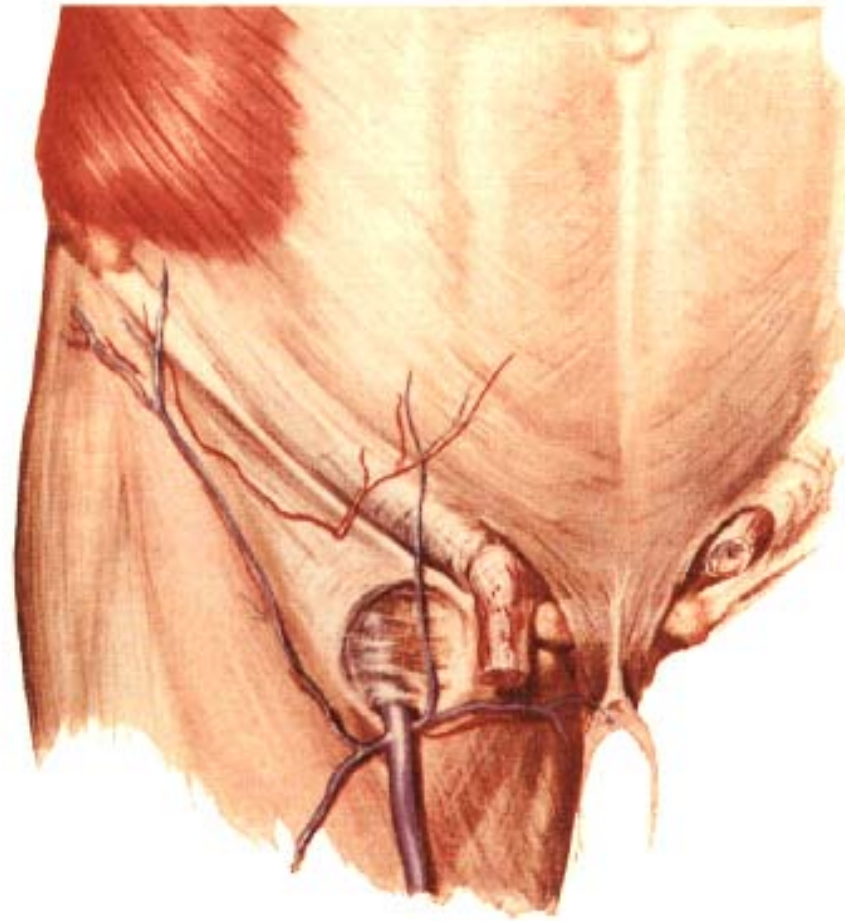
- ❖ Retinaculum –Flexor ,Extensor ,Peroneal

Sole

- ❖ Planter aponeurosis
- ❖ Deep transverse metatarsal ligaments
- ❖ Fibrous flexor sheath (toes)

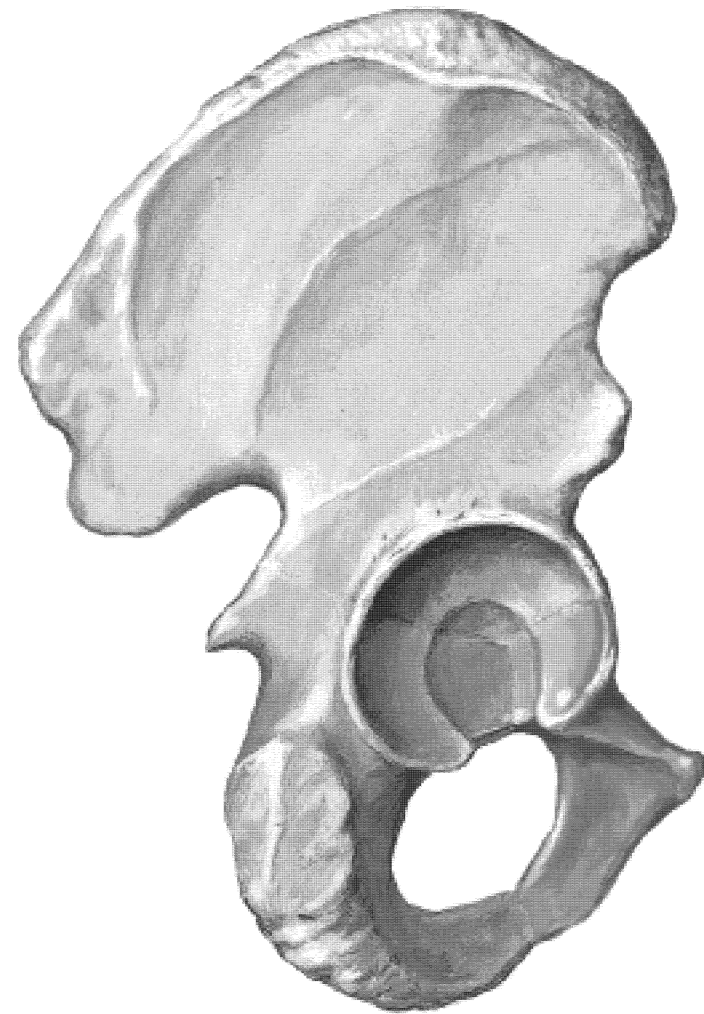
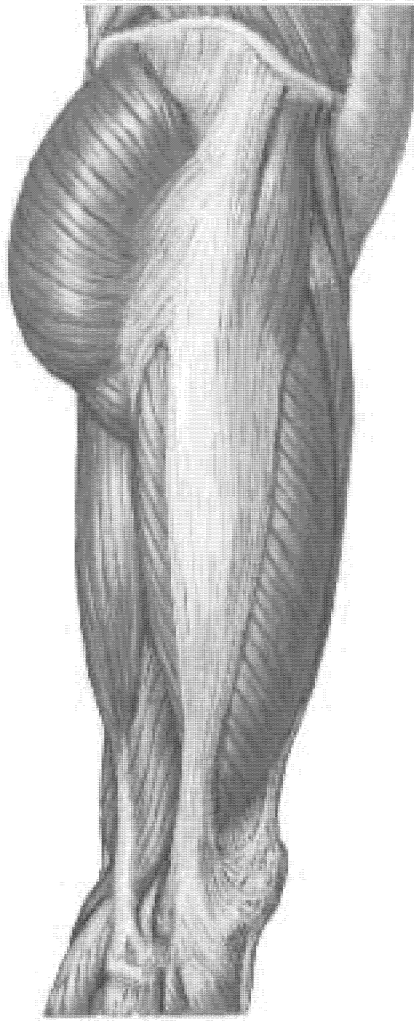
Saphenous opening

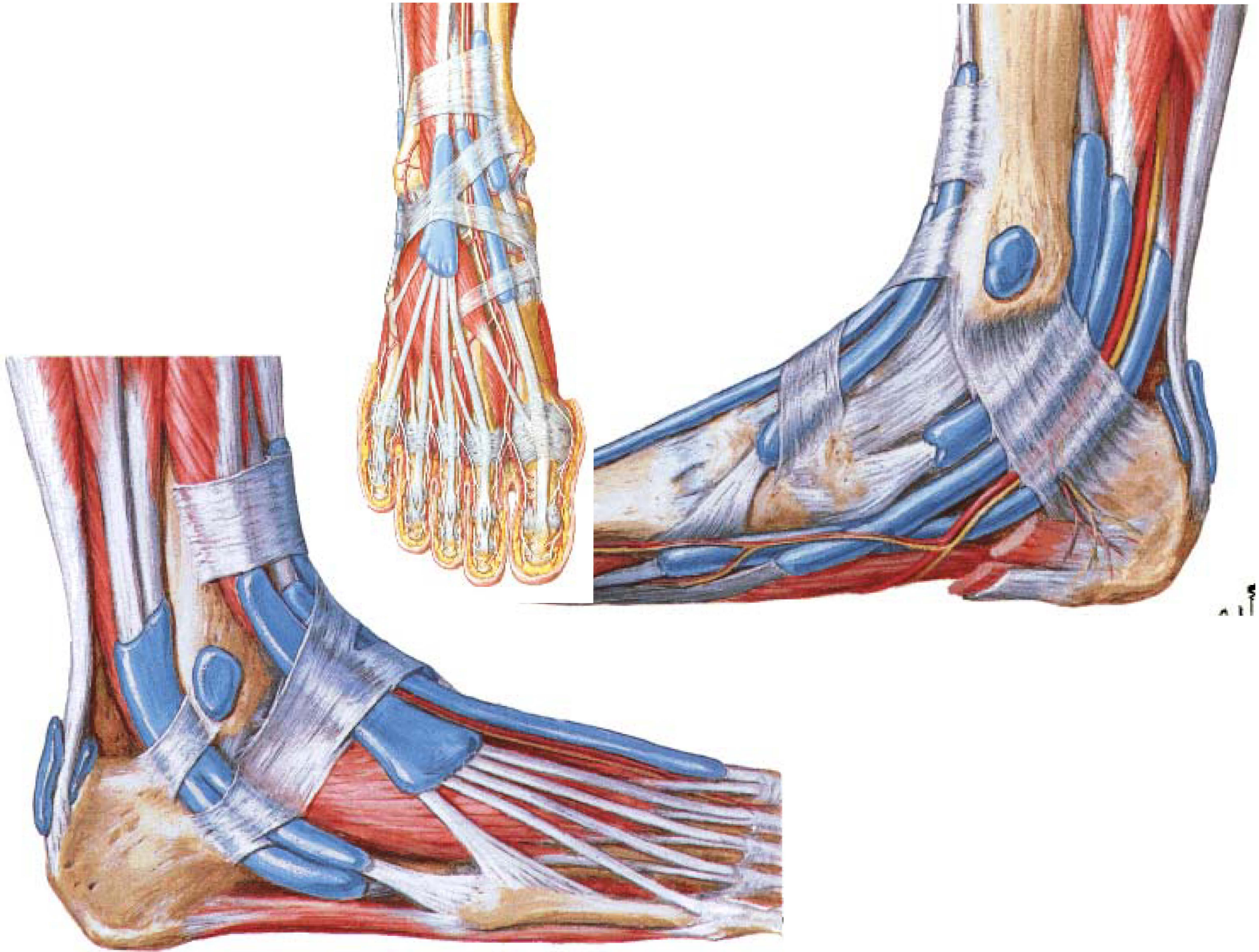
- Oval aperture in deep fascia of thigh
- 3-4 cm below & lateral to pubic tubercle
- 3 cm long , 1.5 cm wide
- Covered by cribriform fascia
- Sharp lateral & inferior margin (falciform)



Coxal Bone

Lateral View

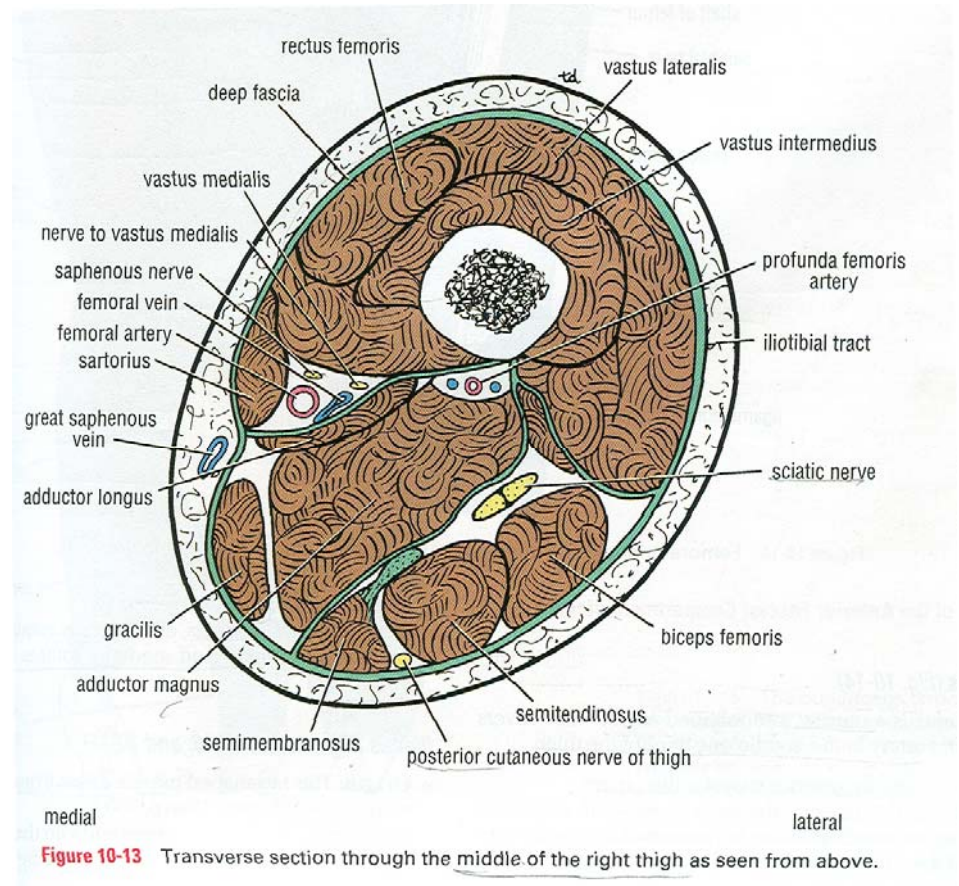




Inter-muscular compartments

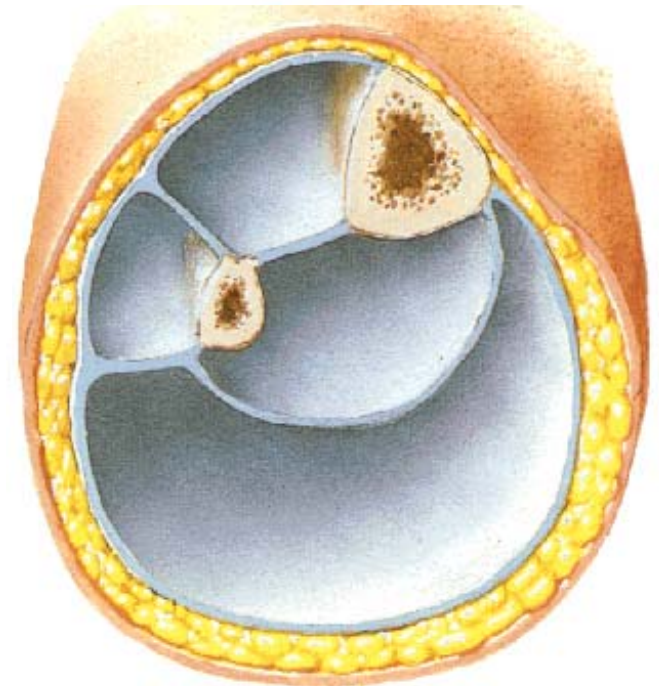
Thigh compartments

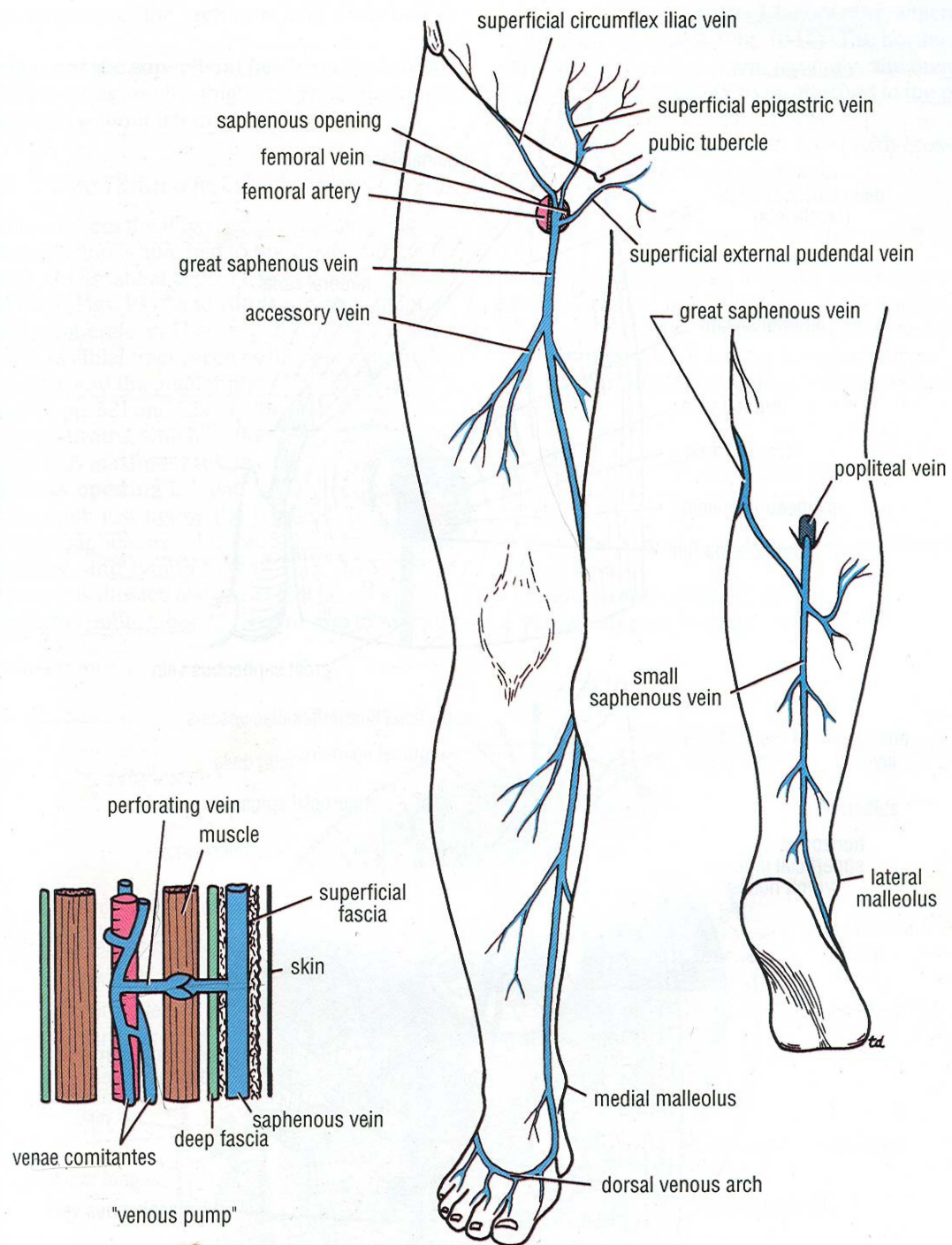
- Anterior (extensor) – femoral Nerve
- posterior (flexor , Hamstring) – sciatic (tibial division)
- Medial (adductor) – obturator Nerve

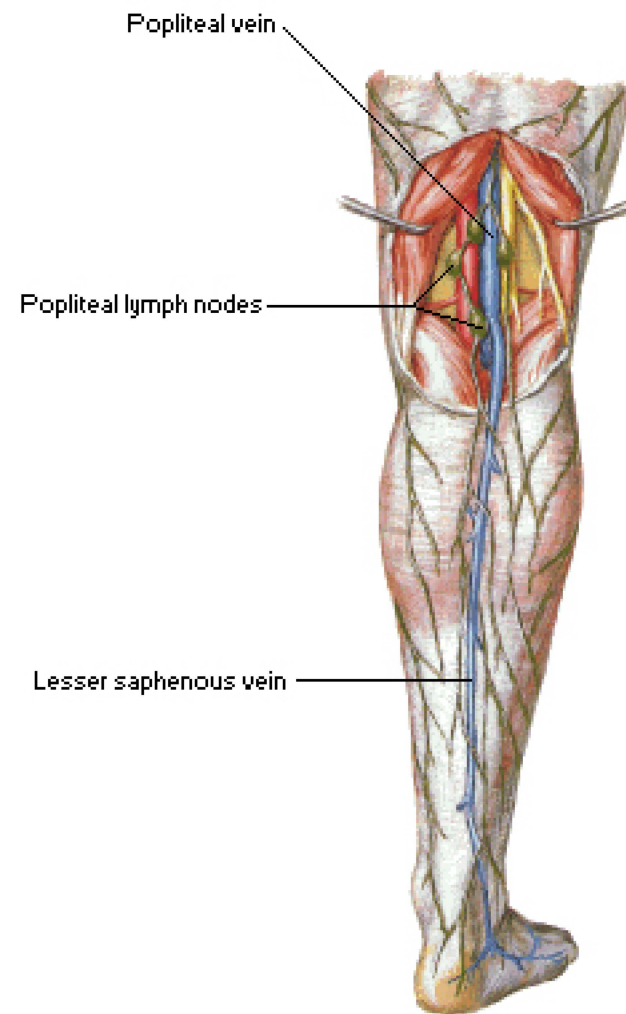


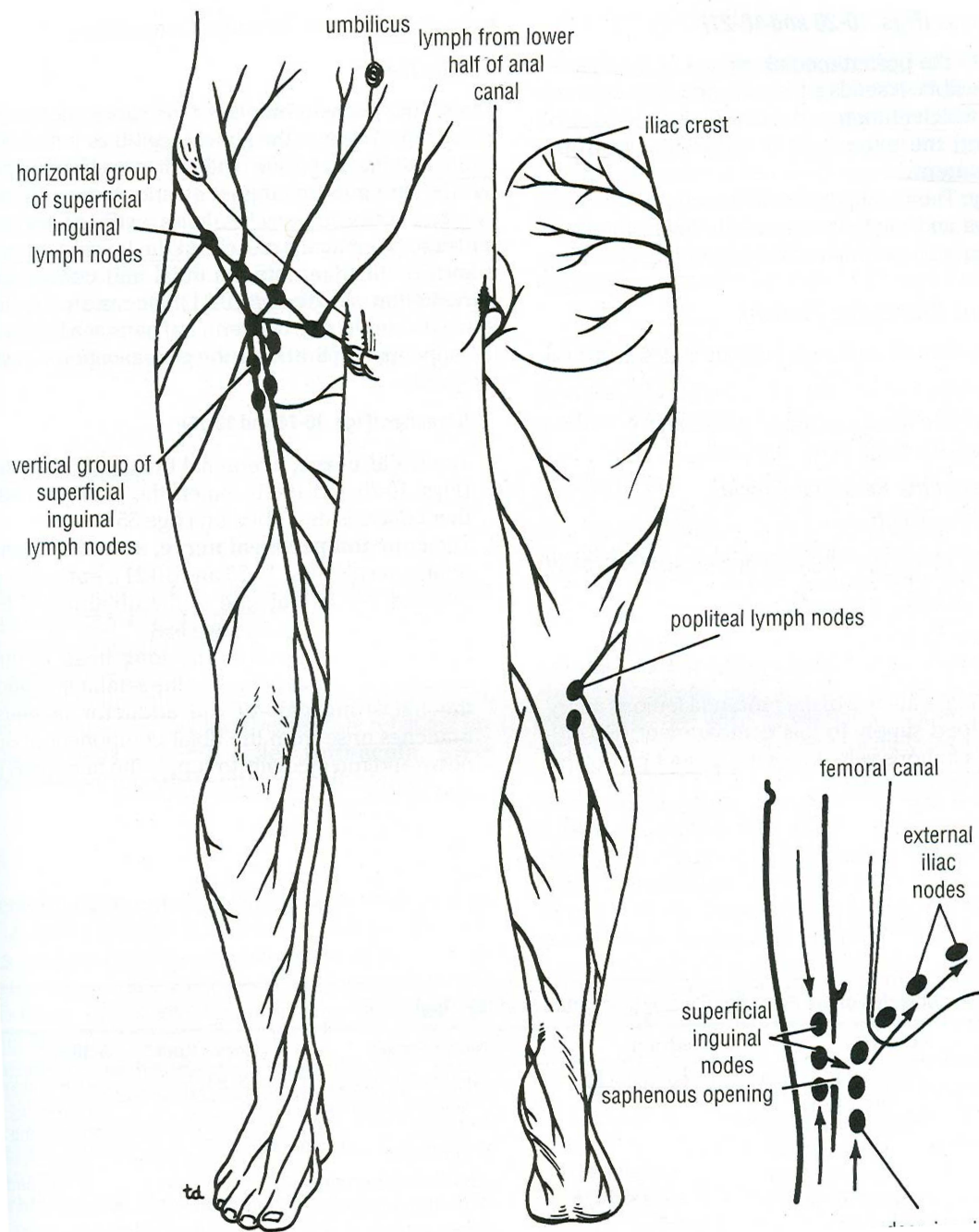
Leg

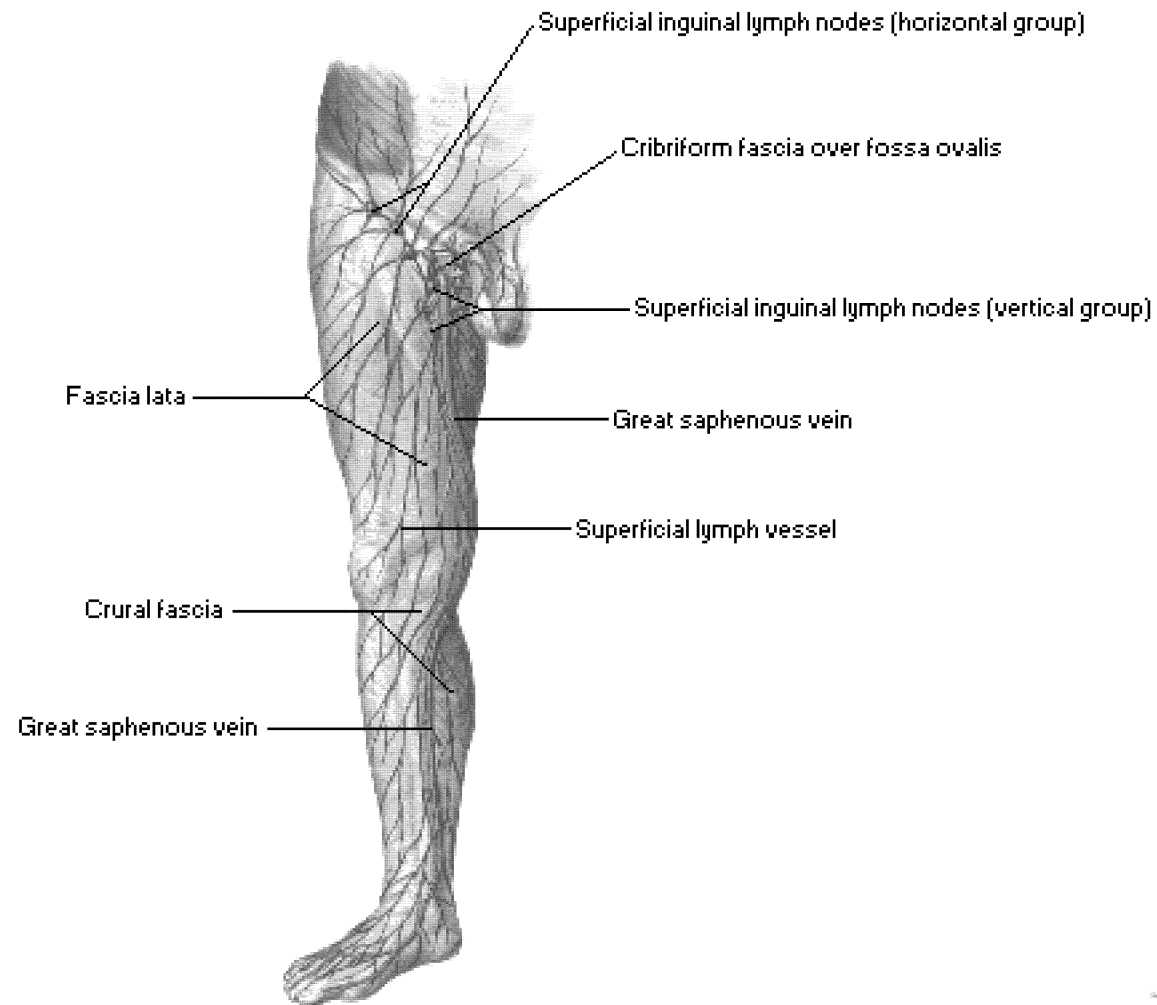
- Anterior (extensor) – deep peroneal
- Lateral (peroneal) – superficial peroneal
- Posterior (Flexor) (superficial & deep) – sciatic (tibial)



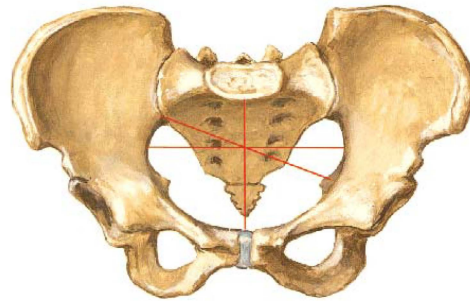
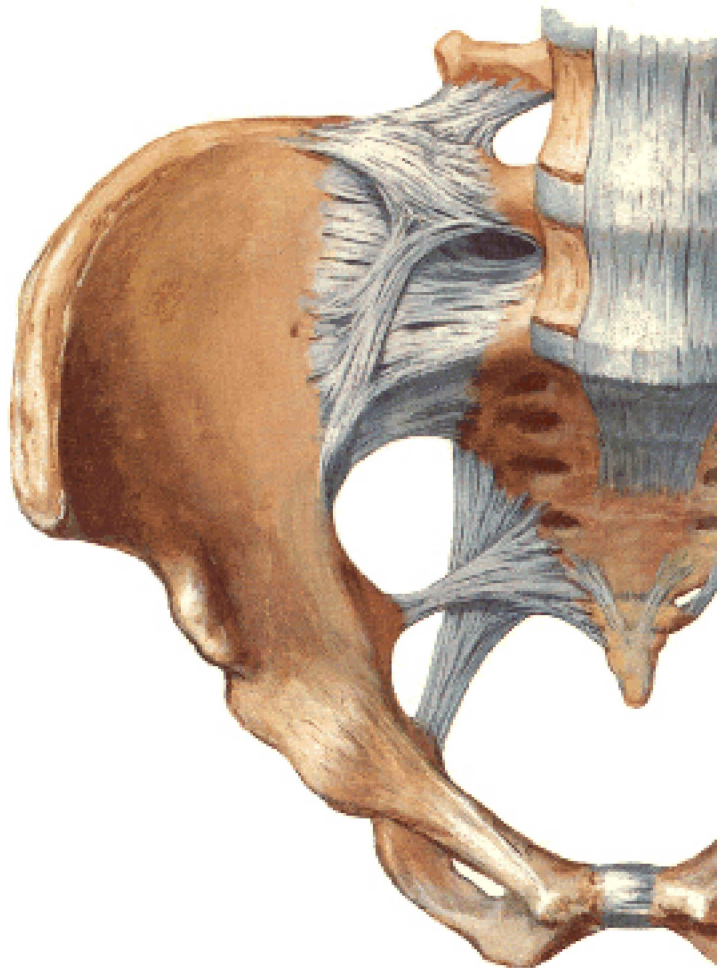




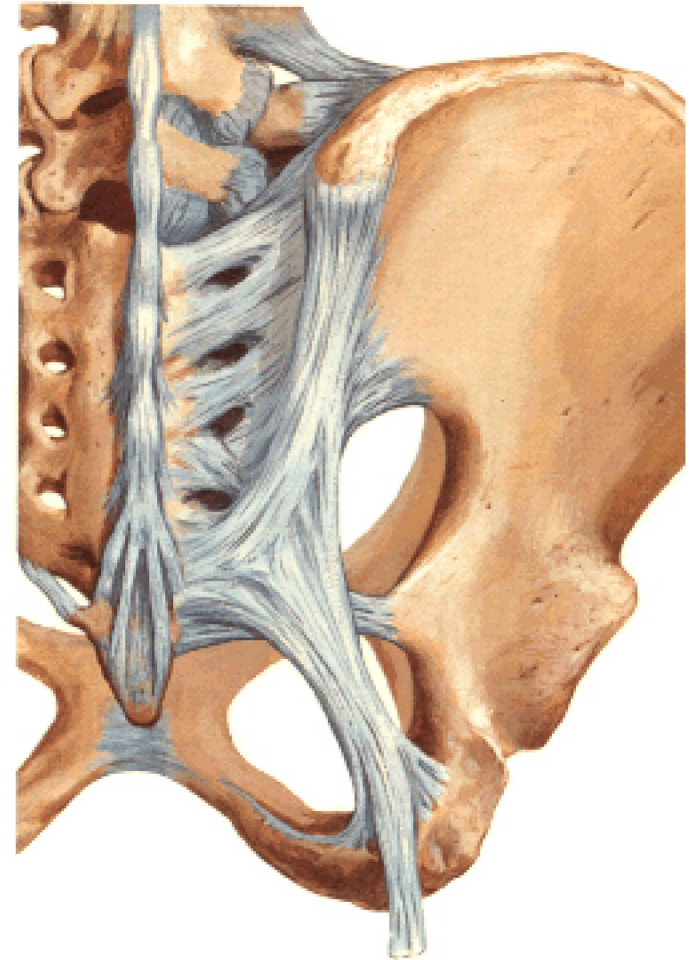




Anterior View

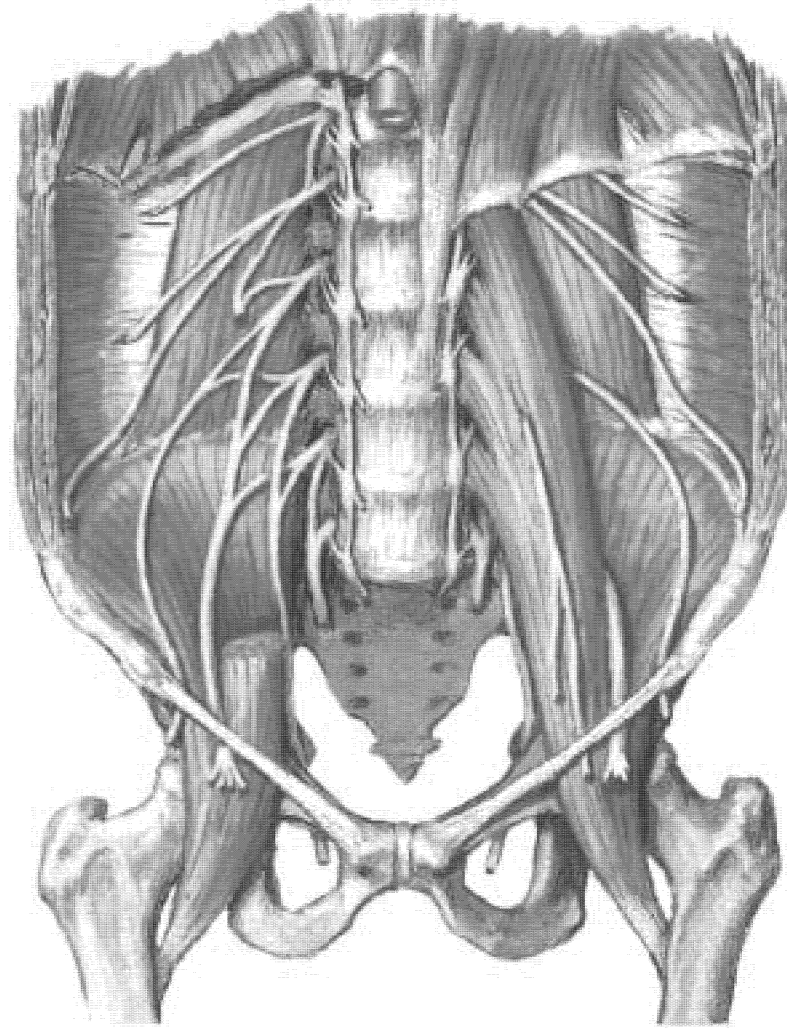
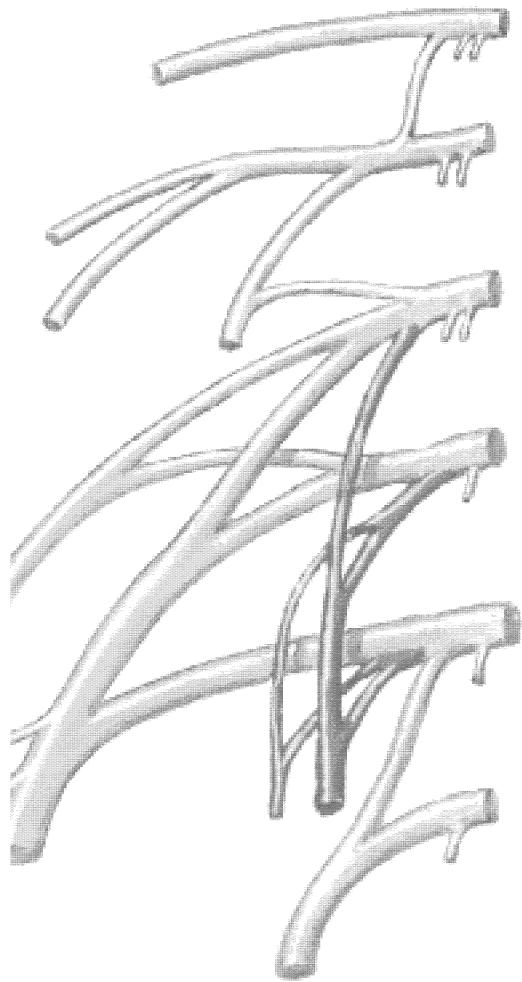


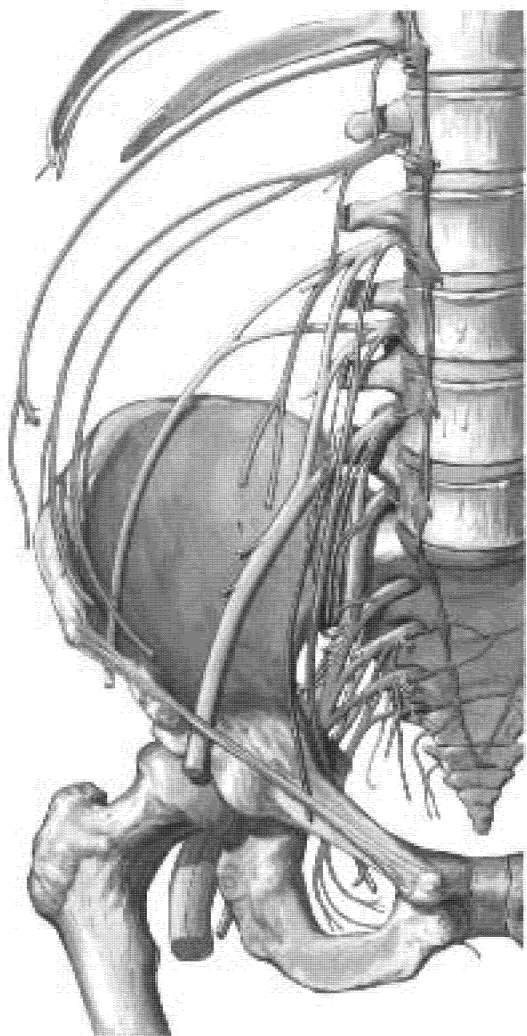
Posterior View

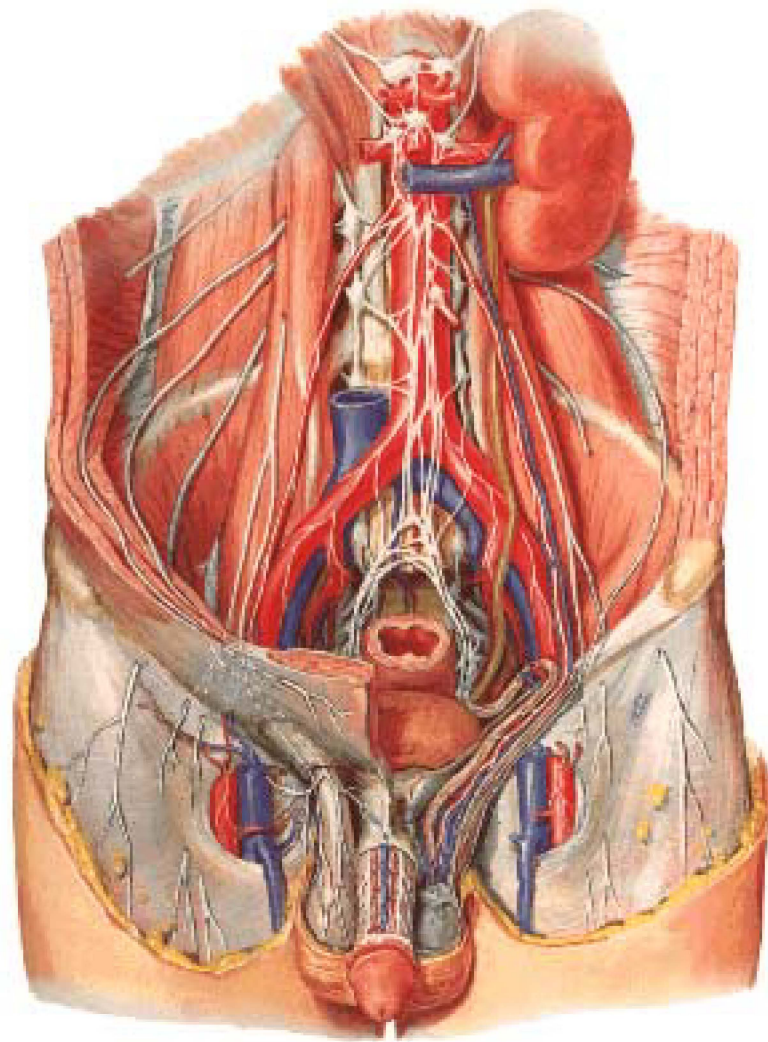


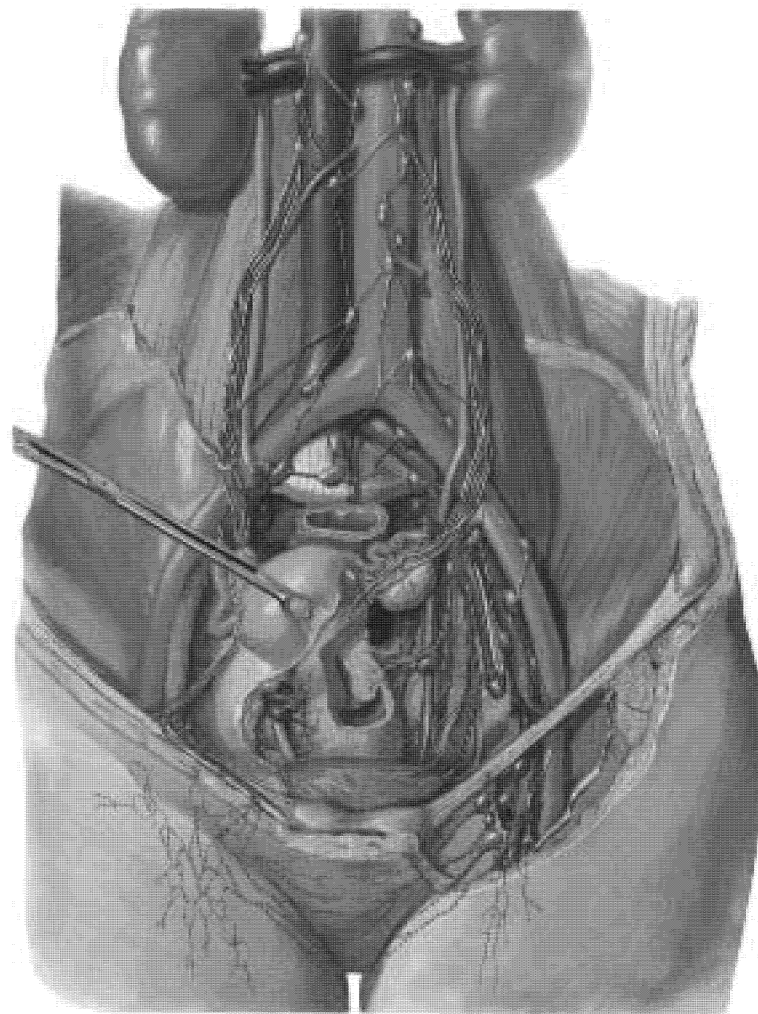
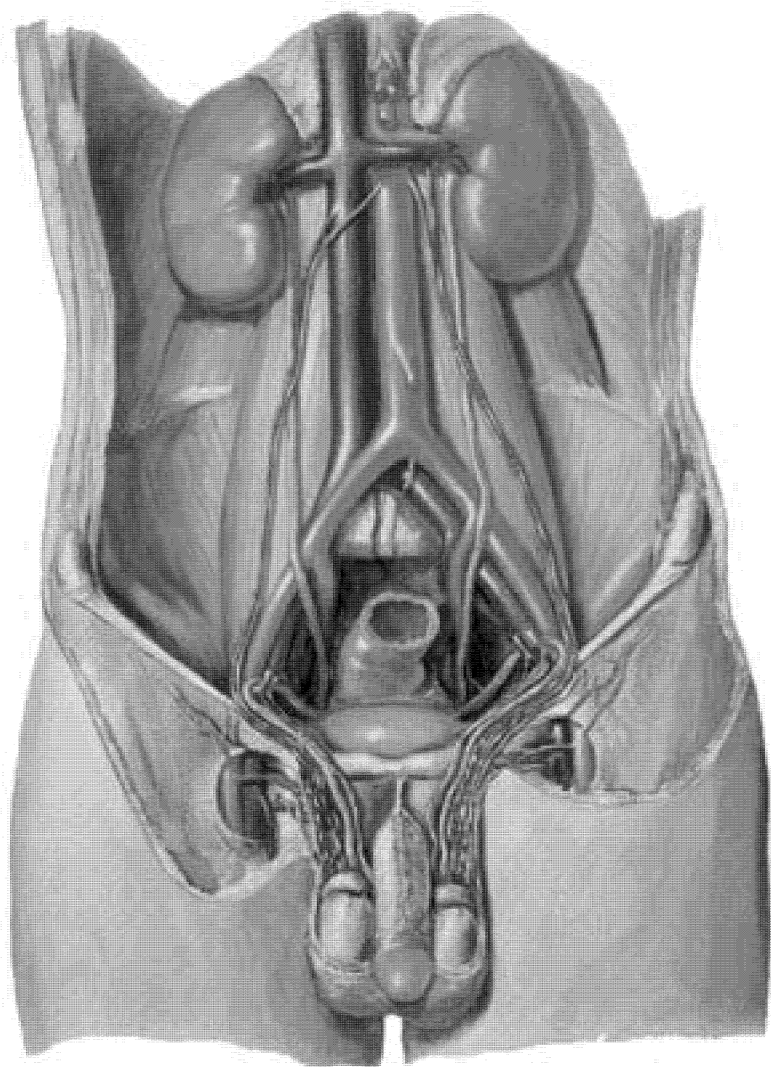
Lumbar Plexus

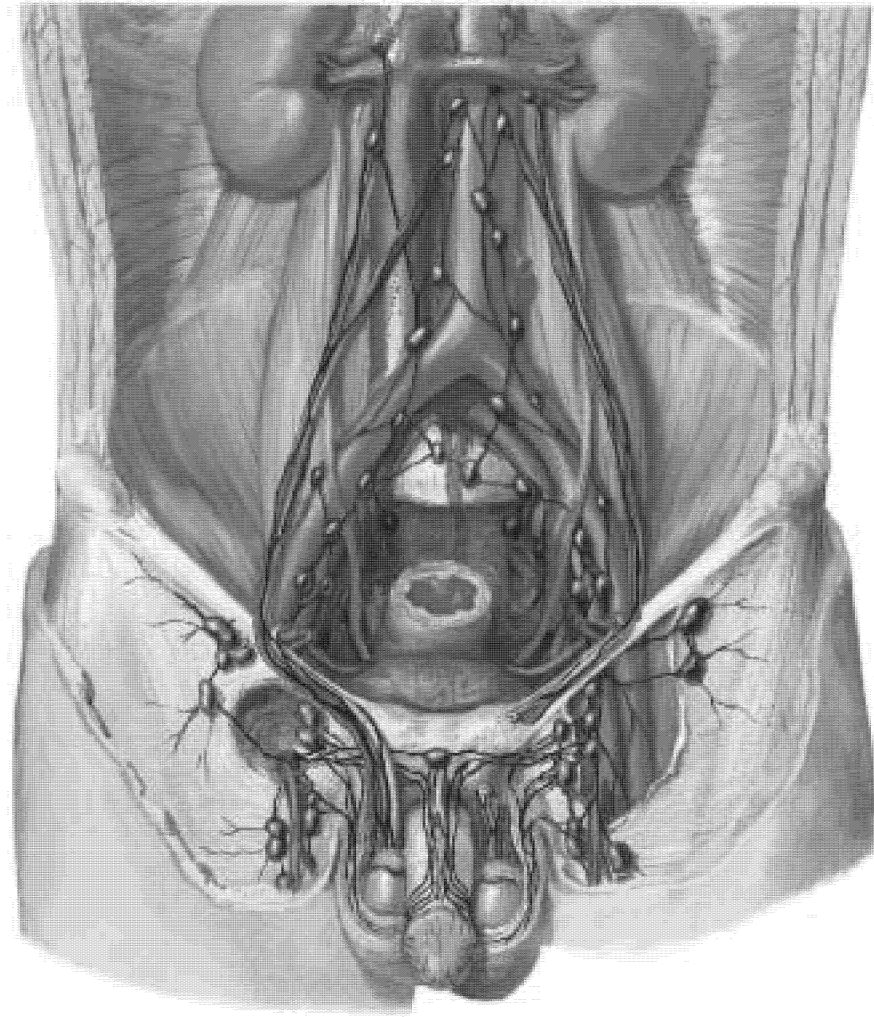
Schema

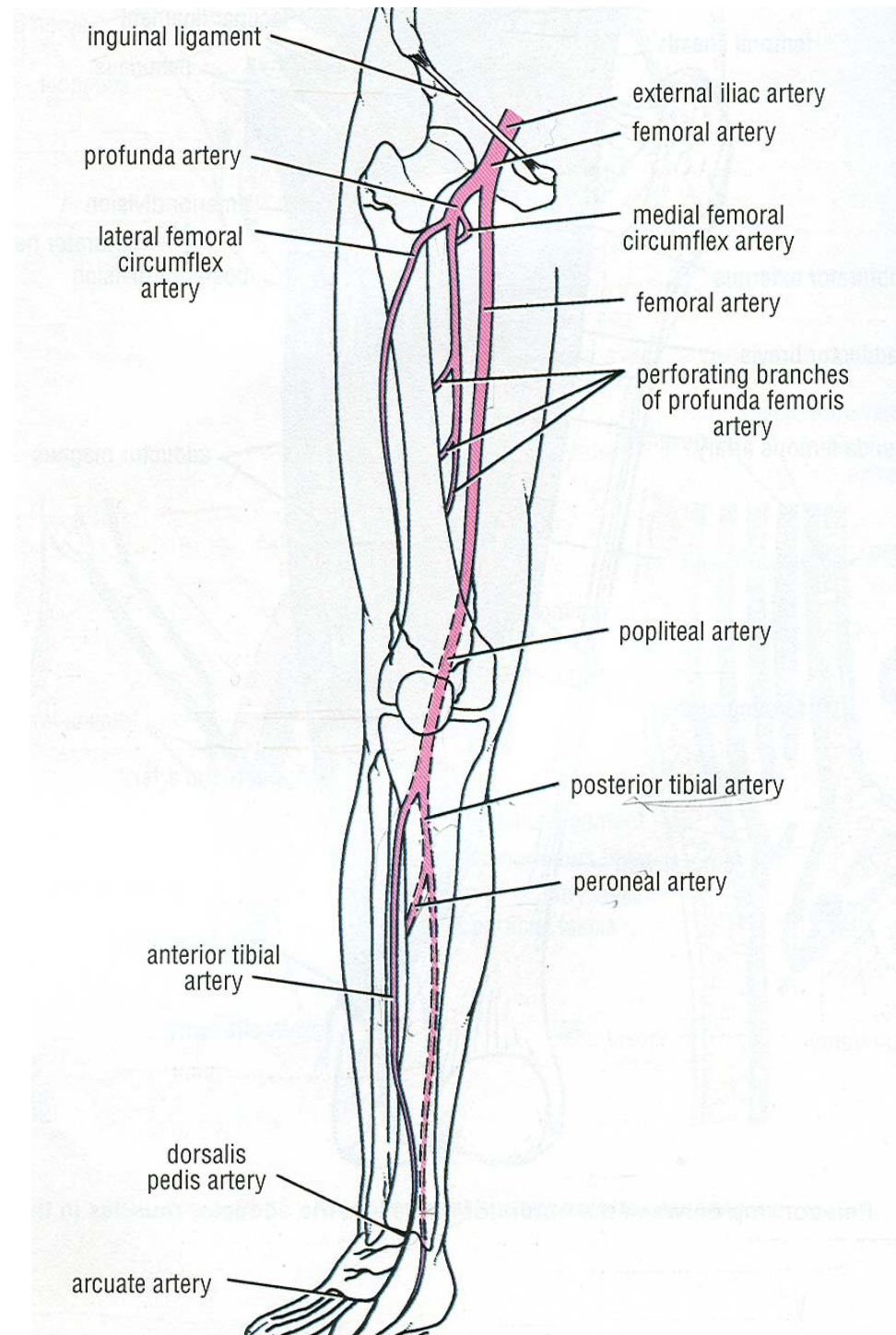






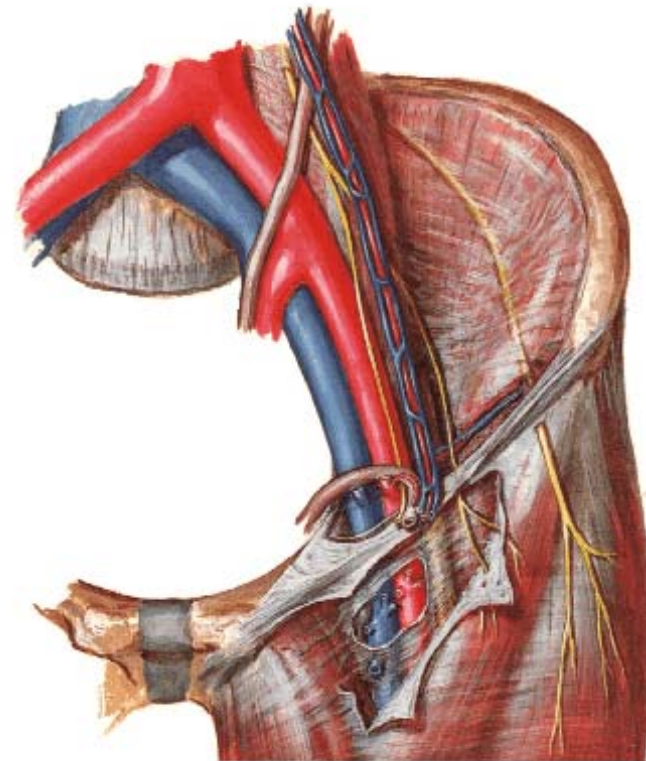






Femoral Sheath

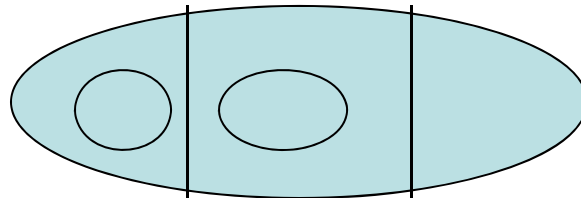
- Funnel shaped extension of fascial lining of abdominal cavity
- surrounding upper 4 cms of femoral artery & vein



Femoral Sheath

Walls

- Ant.wall – fascia transversalis
- Post. Wall – fascia iliaca
- Lateral wall longer & vertical
- Divided in three compartments by two vertical antero-post. septa



Femoral canal & ring

- Medial compartment of femoral sheath
- Conical in shape , wide above, narrow below
- Base or upper end called Femoral Ring
- Closed by condensation of extraperitoneal tissue called femoral septum
- Wider in females due to wider pelvis & small femoral vessels

Femoral canal & ring

- Oval shaped
- 1 inch diameter

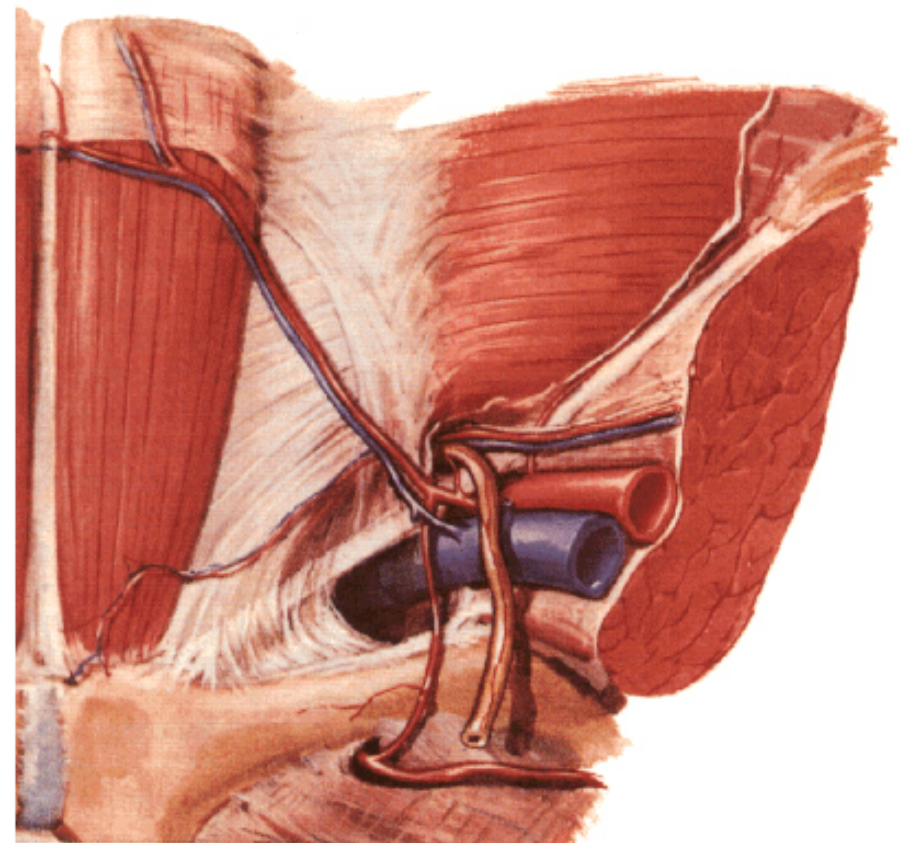
Boundary

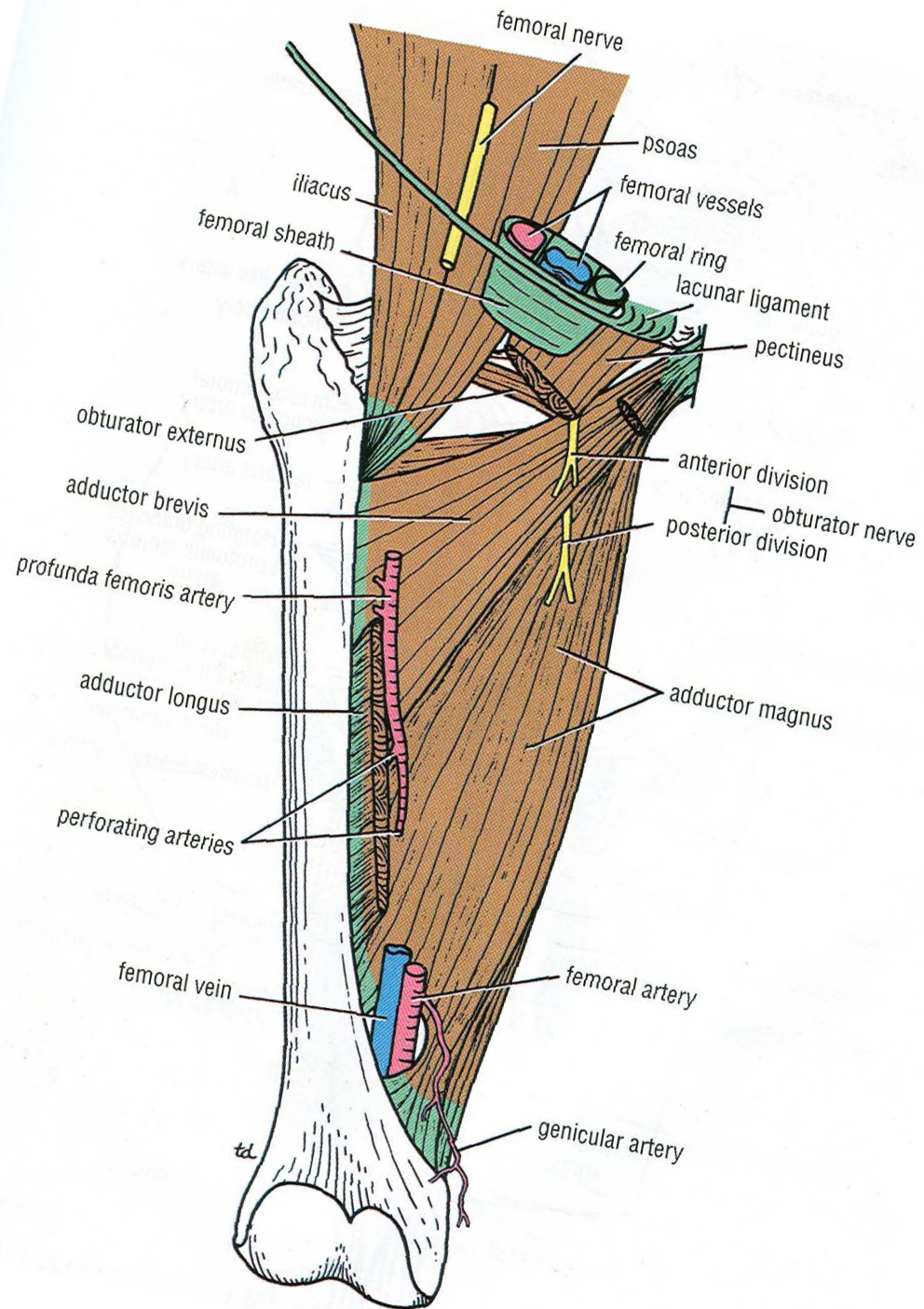
- Ant.- inguinal ligament
- Post.- pectineus & covering fascia
- Laterally- IM septum
- Medially- Lacunar ligament

Content

- Lymph node (cloquet or Rossenmuller) with lymphatics & areolar tissue – drain glans penis in males & clitoris in females

Inguinal Region
Dissection - Posterior [Internal] View





Bony Attachments of Muscles of Hip and Thigh

Anterior View

