

OTA 106 Regional A & P Unit 3

Upper and Lower Extremities

GBlevins/Fall 2015



Knee (Tibiofemoral)/Foot joint:

A. Ligaments:

Knee:

Quadriceps femoris tendon
Tibial collateral ligament
Anterior cruciate ligament
Transverse ligament

Patellar ligament
Fibular collateral ligament
Posterior cruciate ligament

Ankle/foot:

Interosseous tibiofibular ligament
Posterior tibiofibular ligament
Short plantar ligament
Plantar aponeurosis
Plantar calcaneonavicular ligament (spring)

Anterior tibiofibular ligament
Long plantar ligament
Extensor retinacula
Interosseous membrane

B. Bursae:

Prepatellar bursa
Suprapatellar bursa

Deep Infrapatellar bursa
Subcutaneous infrapatellar bursa

C. Cartilage:

Lateral meniscus

Medial meniscus

D. Bones:

Knee:

Femur:

Lateral condyle
Medial condyle
Intercondylar fossa

Lateral epicondyle
medial epicondyle

Tibia:

Lateral condyle
Tibial tuberosity

Medial condyle
Intercondylar eminence

Fibula:

Head

Patella:

Foot:

Tibia:

Medial malleolus

Fibular notch

Fibula:
 Head Lateral malleolus

Tarsal (or tarsus) bones:
 Calcaneus Talus
 Navicular Cuboid
 Cuneiforms:
 (First (or medial), Second (or intermediate), Third (or lateral))

Metatarsal bones:
 Numbered 1-5 (big toe side is #1)

Phalangeal bones:
 Toes numbered 1-5 (big toe is #1)
 Proximal Middle (Intermediate) Distal

E. Clinical concerns:

Torn ACL

F. Surface Anatomy:

Knee:

| | |
|------------------------------|-------------------------------|
| Popliteal fossa: | Patella |
| Medial head of Gastrocnemius | Lateral head of Gastrocnemius |
| Soleus | Semimembranosus tendon |
| Biceps femoris tendon | Semitendinosus tendon |
| Vastus lateralis | Vastus medialis |

Foot:

| | |
|--|---------------------------------|
| Calcaneal tendon | Fibularis longus tendon |
| Lateral malleolus | Medial malleolus |
| Extensor digitorum longus tendon | Site of Dorsalis pedis |
| Great Saphenous vein | Tibialis anterior tendon |
| Extensor hallucis longus tendon | Extensor hallucis brevis tendon |
| Fibularis brevis tendon | Soleus |
| Gastrocnemius (medial and lateral heads) | |

Arches:

| | |
|---------------------------|--------------------------|
| Longitudinal Arch | Medial Longitudinal arch |
| Lateral longitudinal arch | Transverse Arch |

G. Muscle information from List

| | |
|------------------|----------------------|
| Rectus femoris | Vastus intermedialis |
| Biceps femoris | Vastus lateralis |
| Vastus medialis | Semimembranosus |
| Semitendinosus | Gastrocnemius |
| Soleus | Tibialis anterior |
| Fibularis longus | Fibularis brevis |

H. Nerves:

| | |
|-------------------------------|--------------------------------------|
| Femoral nerve | Sciatic nerve |
| Tibial nerve | Superficial fibular (peroneal) nerve |
| Deep fibular (peroneal) nerve | |

J. Arteries:

| | |
|----------------|------------------|
| Femoral artery | Popliteal artery |
|----------------|------------------|

Anterior tibial artery
Dorsalis pedis
Inferior gluteal artery
Medial circumflex femoral artery

Posterior tibial artery
Fibular (peroneal)
Lateral circumflex femoral artery

K. Veins:

Anterior tibial vein
Fibular (peroneal vein)
Femoral vein
Great saphenous vein
Plantar arch

posterior tibial vein
Popliteal vein
Small saphenous vein
Dorsal venous arch (network)

