Color codes:- Anterior compartment of the thigh, Medial comp, Posterior comp, Gluteal muscle, Leg ant, Leg post, Leg lateral.

| Muscle | Origin | Insertion | Nerve | Action |
|--|--|--|--|--|
| Sartorius | Anterior superior iliac spine | Upper medial surface of shaft of tibia | Femoral nerve Anterior Division | Flexes, abducts, laterally rotates thigh at hip joint Flexes and medially rotates leg at knee joint |
| Pectineus | Superior ramus of pubis | Upper end of linea aspera of shaft of femur | Femoral nerve Anterior Division and sometimes obturator nerve The anterior division | Flexes and adducts thigh at hip joint |
| Psoasmajor | Transverse processes, bodies, and intervertebral discs of the 12th thoracic and five lumbar vertebrae | Lesser trochanter | Lumbar plexus | it Flexes thigh on trunk; if thigh is fixed (The insertion is fixed while the origin is moving) |
| lliacus | lliac fossa of hip bone | Lesser trochanter | by the Femoral nerve in the pelvis | It flexes the trunk on thigh as in sitting up from lying down. |
| Quardicipes femoris Consisting of: | | the four heads are | | Extends the leg at |
| 1- The rectus femoris | Originates by two heads Reflected head from ilium above acetabulum Straight head from anterior inferior iliac spine | attached to the patella and, via the ligamentum patellae, to the | femoral nerve Posterior Division | flexes thigh at hip joint (only the rectus femoris head). |
| 2- The vastus intermedius | Anterior and lateral surfaces of shaft of femur | tibial tuberosity (the real | | femoris is the main extensor of the |
| 3- The vastus lateralis | Upper end and shaft of femur | insertion) | | knee joint |
| 4- The vastus medialis | Upper end and shaft of femur | | | |

| Adductor longus | Body of pubis, medial to pubic tubercle | Posterior surface of shaft of femur (linea aspera) | Obturator nerve The anterior division | Adducts thigh at hip joint |
|---------------------------------|---|---|---|---|
| Adductor brevis | Inferior ramus of pubis | Posterior surface of shaft of femur (linea aspera) | Obturator nerve The anterior Division and occasionally The posterior division | Adducts thigh at hip joint |
| Adductor magnus (pubic part) | lschio-pubic ramus | mainly linea aspera, gluteal tuberosity and medial supracondylar line | obturator nerve The posterior division | Adducts thigh at hip joint |
| Gracilis muscle | Inferior ramus of pubis, ramus of ischium | Upper part of shaft of tibia on medial surface (SGS) area | Obturator nerve The anterior division | Adducts thigh at hip joint; flexes leg at knee joint |
| Obturator externus | Outer surface of obturator membrane and pubic and ischial rami | Medial surface of greater trochanter | Obturator nerve The posterior division | Laterally rotates thigh at hip joint, One of the short lateral rotator muscles of the hip joint |
| Gluteus maximus | 1-Ilium (area behind the posterior gluteal line) 2 -Back of sacrum and coccyx 3- Back of sacrotuberous ligament | The superficial three –fourths are inserted into the iliotibial tract The lower deep part is inserted into the gluteal tuberosity of femur | Inferior gluteal nerve | Extends thigh, some lateral rotation (main extensor of the hip joint) Supports the Extended knee joint through Iliotibial tract |
| Tensor fasciaelatae | lliac crest | lliotibial tract | Superior gluteal nerve | Assist gluteus maximus in extending the knee joint |

| Gluteus medius Gluteus minimus | llium | Greater trochanter of femur | Superior gluteal nerve | Abduction (main abductor of the hip joint) Medial rotation (anterior fibers) Both muscle contract reflex on each side alternatively during walking to prevent tilting of the pelvis to the | |
|--|--|--|---|--|--|
| | | | | unsupported side | |
| Short Lateral rotator muscles 1-Piriformis 2-Superior gemellus 3-Obturator internus 4-Inferior gemellus 5-Quadratus femoris 6-Obturator externus | | | | | |
| Bicepsfemoris | 1-Long head: ischial tuberosity 2-Short head: linea aspera, lateral supracondylar ridge of shaft of femur | Head of fibula | Long head: tibial portion of sciatic nerve Short head: common peroneal portion of sciatic nerve | Flexes and laterally rotates leg at knee joint; long head also extends thigh at hip joint | |
| Semitendinosus | lschial tuberosity | Upper part of medial surface of shaft of tibia (SGS area) | Tibial portion of sciatic nerve | Flexes and medially rotates leg at knee joint; extends thigh at hip joint | |
| Semimembranosus | lschial tuberosity | Medial condyle of tibia | Tibial portion of sciatic nerve | Flexes and medially rotates leg at knee joint; extends thigh at hip joint | |
| Adductor magnus (hamstring portion) Or ischial part | lschial tuberosity | Adductor tubercle of femur | Tibial portion of sciatic nerve | Extends thigh at hip joint | |

Leg anterior, Leg lateral, Leg posterior.

| The tibialis anterior | All the muscles of the anterior compartment of the leg originate from Lateral surface of the shaft of tibia (tibialis anterior) or The anterior surface of shaft of fibula (extensor | | The main actions of these muscles are Extension of the foot at the ankle joint | | |
|---|--|---|--|--|--|
| Extensor digitorum longus | | Deep Peroneal Nerve | | (dorsiflextion) to raise the toes up (in other words to stand up on the heels) In addition | |
| Extensor hallucis longus | | | | any muscle that got (tibialis) in its name will invert the foot at subtalar and | |
| Peroneus tertius | surface) the remaining three muscles | | | joints while any muscle got (peroneus) in its name will Everts foot at subtalar and transverse tarsal joints | |
| Useful thing: Tom has very nice dogs and pigs | | | | | |
| Peroneus longus | from the lateral surface of shaft of fibula | Base of first metatarsal and the medial cuneiform bone (passes through a groove in the Cuboid bone. | Superficial | both flex the foot at the ankle joint Evert the foot at the subtalar and | |
| peroneus brevis | Lateral surface of shaft of fibula | | peroneal nerve | transverse tarsal joints | |

| Gastrocnemius (superficial) | Lateral head from lateral condyle of femur Medial head from above medial condyle | Via tendo calcaneus into posterior surface of calcaneum | | Plantar flexes foot at ankle joint Flexes knee joint |
|---------------------------------------|--|--|--------------|---|
| Soleous (superficial) | Shafts of tibia and fibula | Via tendo calcaneus into posterior surface of calcaneum | Tibial nerve | Together with gastrocnemius and plantaris is powerful plantar flexor of ankle |
| Plantaris (superficial) | Note: This muscle some times is absent | | | joint; provides main propulsive force in walking and running |
| Popliteus (deep) | | | | |
| Flexor digitorum longus (deep) | Tibial nerve | | | |
| Flexor hallucis longus (deep) | | | | |
| Tibialis posterior (deep) | | | | |
| Useful thing: Tom does very nice hats | | | | |

Made by: Waseem Aldemeri

"do not cry" -Dr.Amjad Shatarat

Contact me if you see anything wrong in the summary or if you have any ideas.