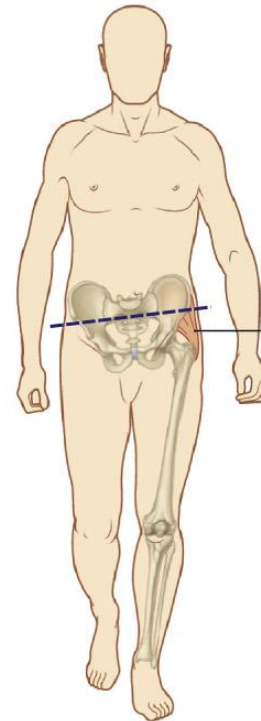
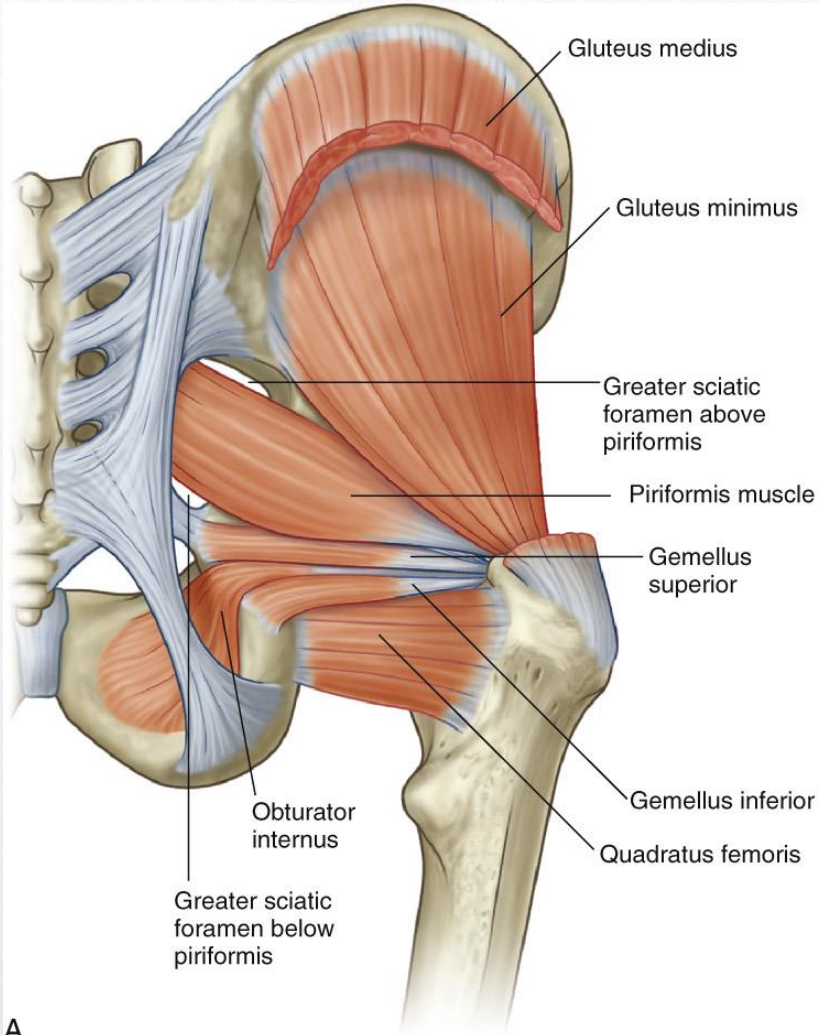


Muscles of the Gluteal Region



Contraction of gluteus minimus and medius on stance side prevents excessive pelvic tilt during swing phase on opposite side

A

Some of the most powerful in the body

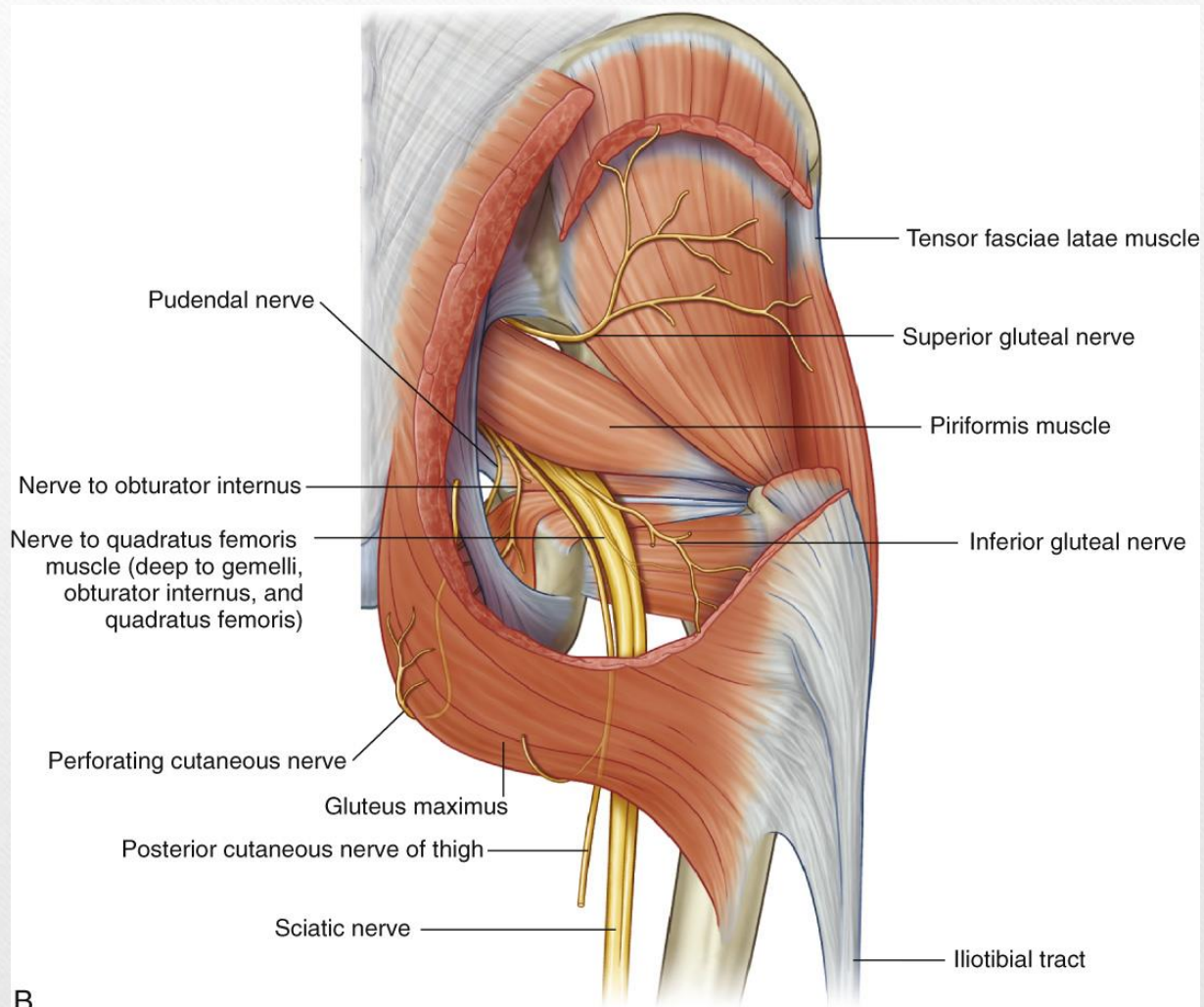
Extend the thigh during forceful extension

Stabilize the iliotibial band and thoracolumbar fascia

Related to shoulders and arms because of walking

Many of these muscles display inhibitory patterns to one another.

Nerves of the Gluteal Region

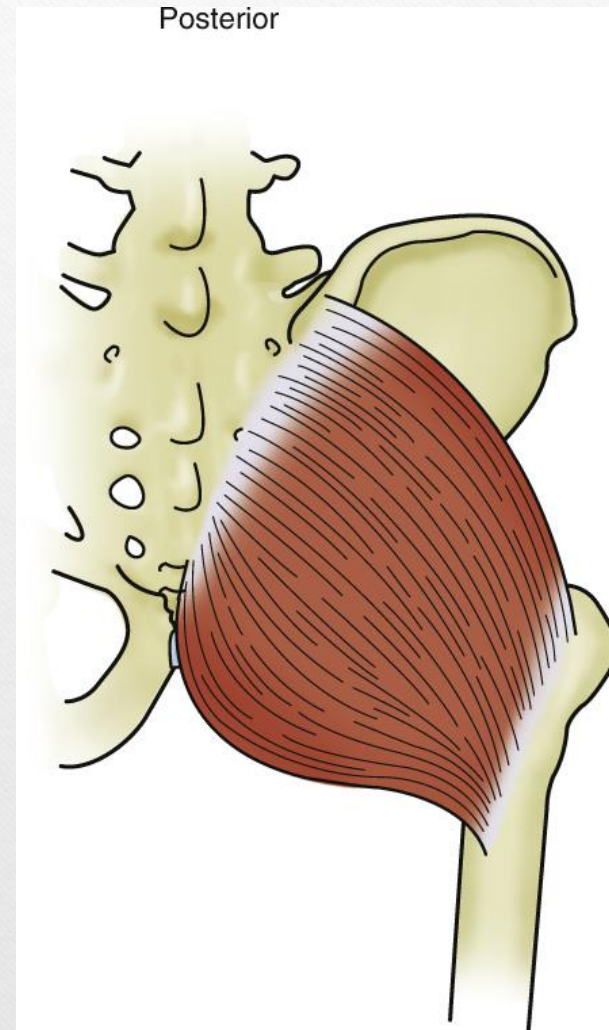


B

Muscles of the Gluteal Region I

Gluteus maximus

It extends and laterally rotates the thigh at the hip joint. It is active primarily during strenuous activity.



Gluteus medius

What is the referred pain pattern of the gluteus medius?

The low back, posterior crest of the ilium to the sacrum, and to the posterior and lateral areas of the buttock into the upper thigh.

Lateral



Muscles of the Gluteal Region II

Gluteus minimus

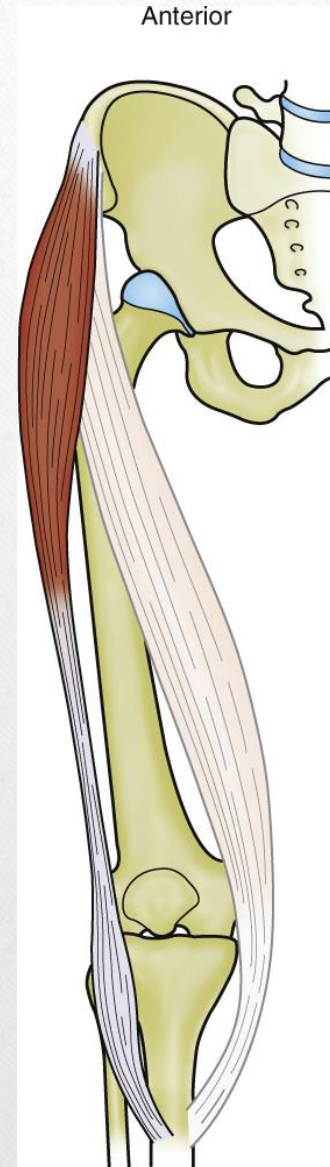
Gluteus means “buttocks”;
minimus means “smallest.”



Tensor fasciae latae

What is the isometric function of the tensor fasciae latae?

It tenses the iliotibial band and counterbalances the backward pull of the gluteus maximus. It also stabilizes the pelvis and the knee.

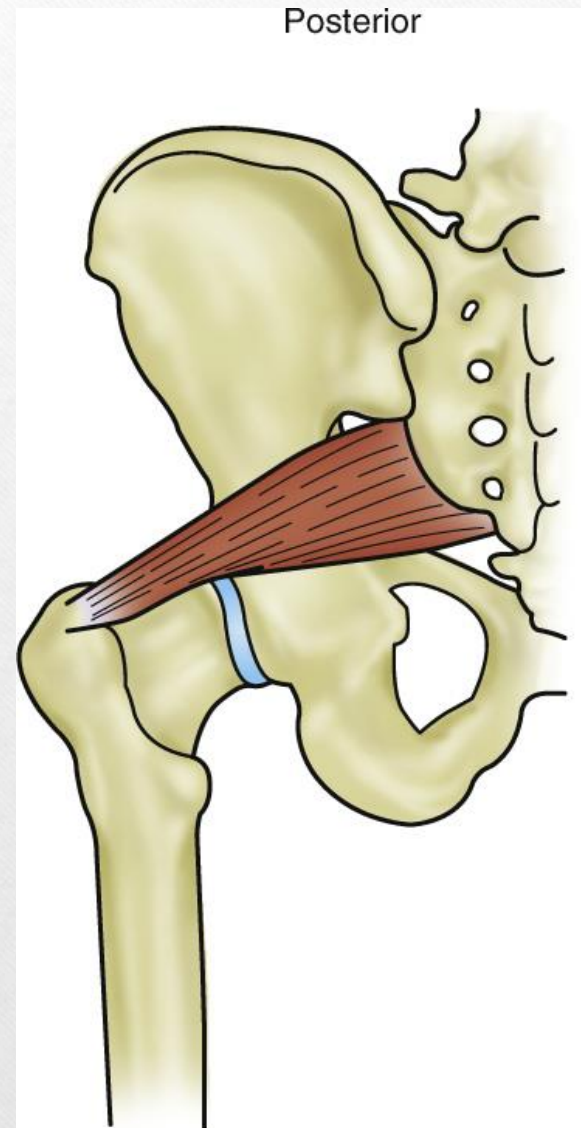


Deep Lateral Rotators of the Thigh at the Hip Joint I

Piriformis

What does piriformus mean?

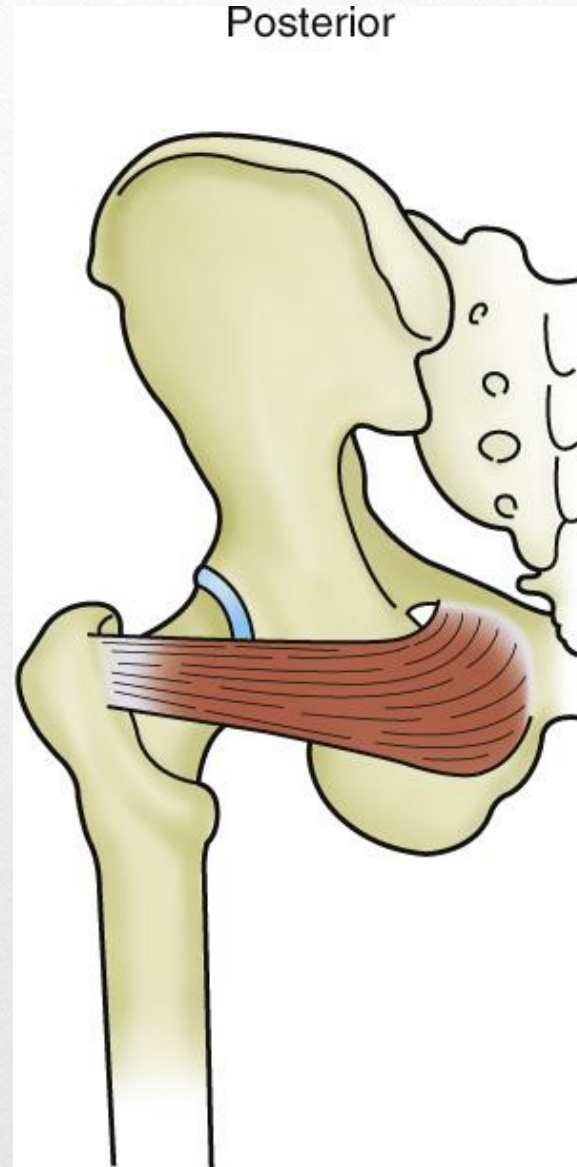
Pear-shaped.



Obturator internus

What is the concentric function of the obturator internus?

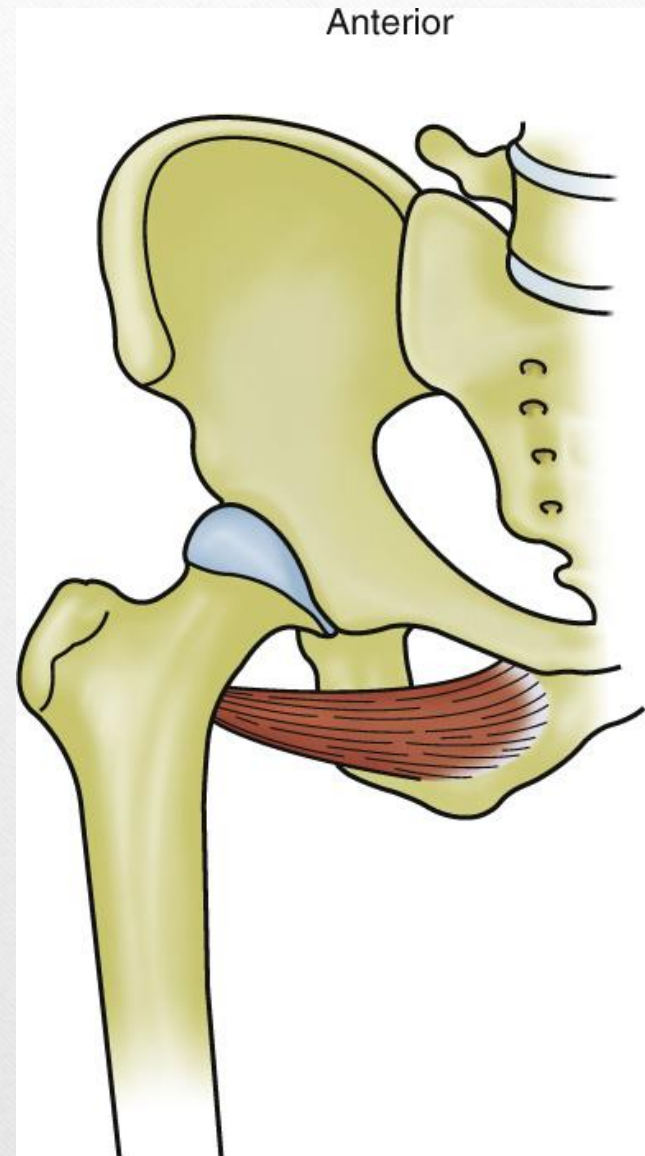
Lateral rotation of the thigh at the hip joint and abduction of the thigh at the hip joint if the thigh is first in a position of flexion at the hip joint.



Deep Lateral Rotators of the Thigh at the Hip Joint II

Obturator externus

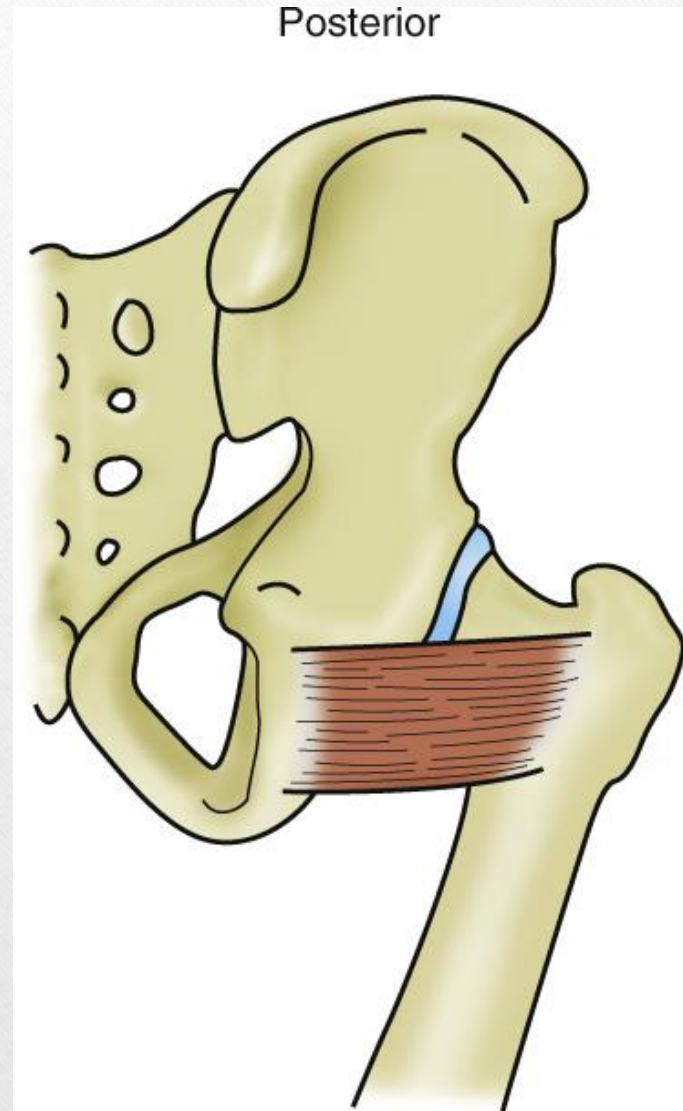
It stabilizes the hip joint



Quadratus femoris

What is the referred pain pattern of the quadratus femoris?

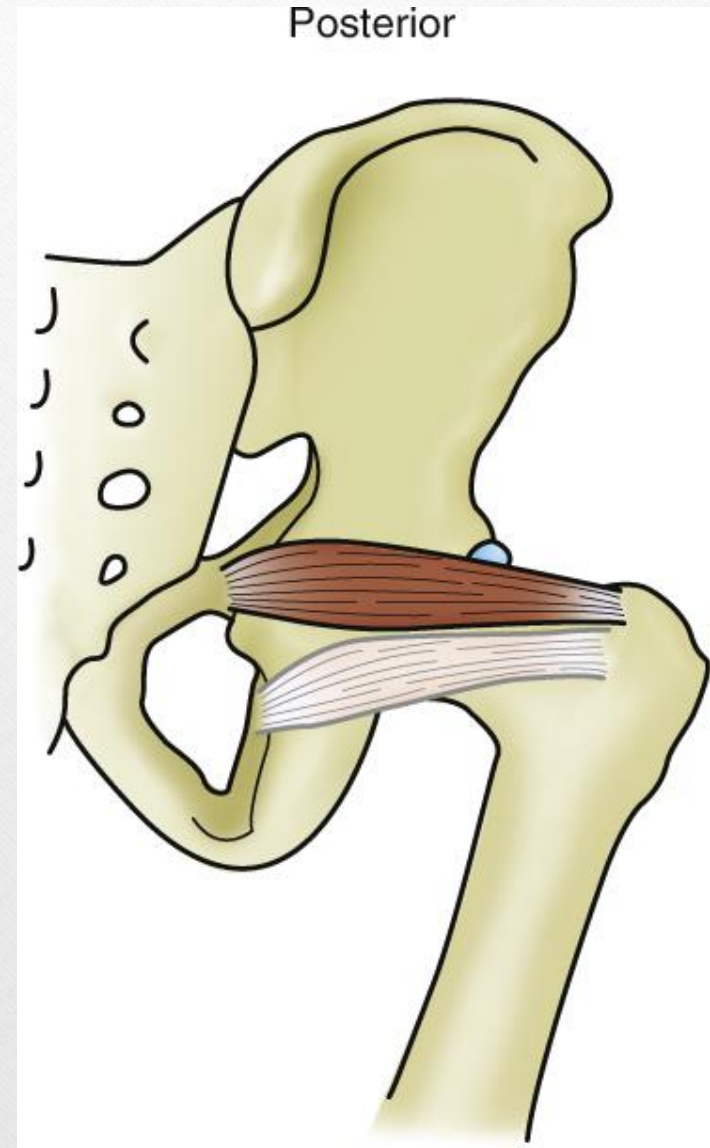
The sacroiliac region, the entire buttock, and down the posterior thigh to just proximal to the knee joint.



Deep Lateral Rotators of the Thigh at the Hip Joint III

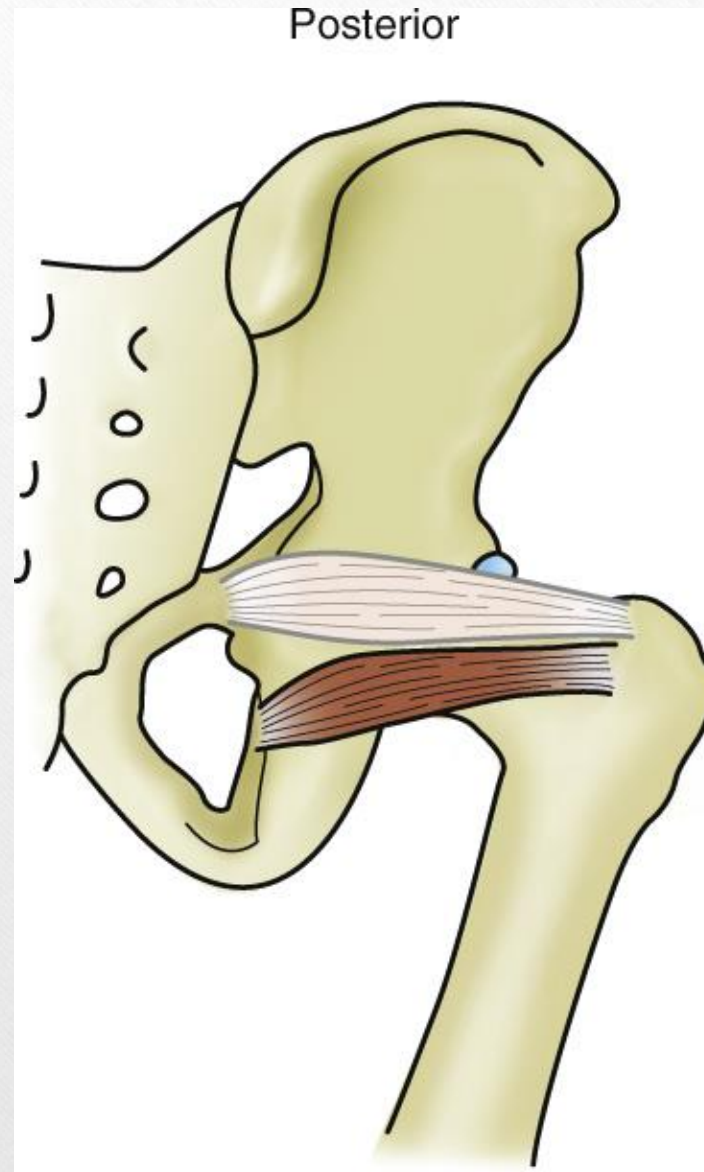
Gemellus superior

Gemellus means "twin."

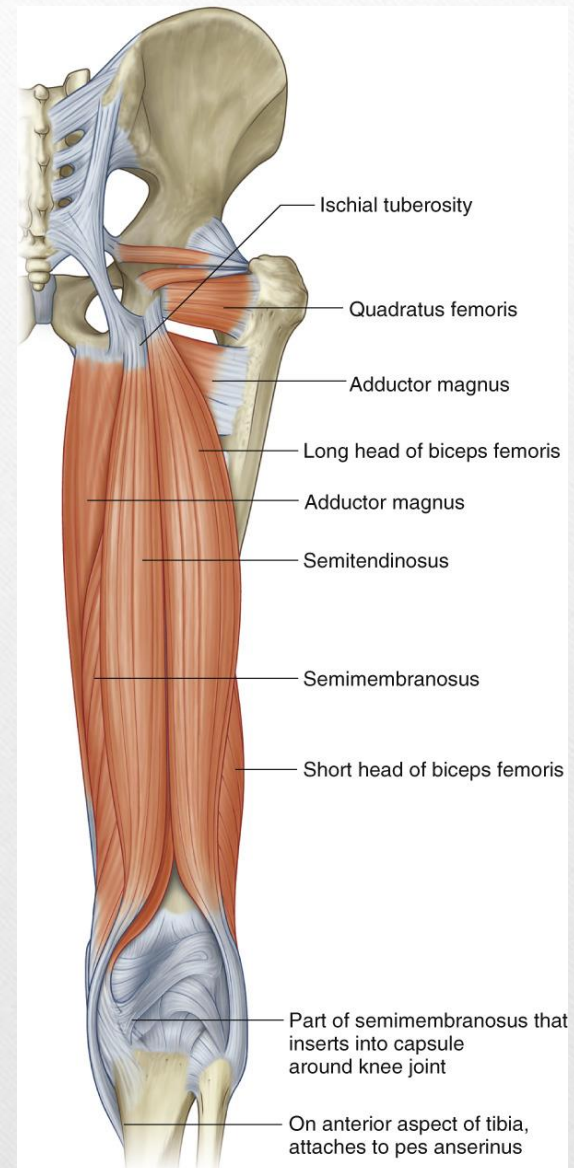


Gemellus inferior

These muscles share the referred pain pattern of the quadratus femoris.



Muscles of the Posterior Thigh

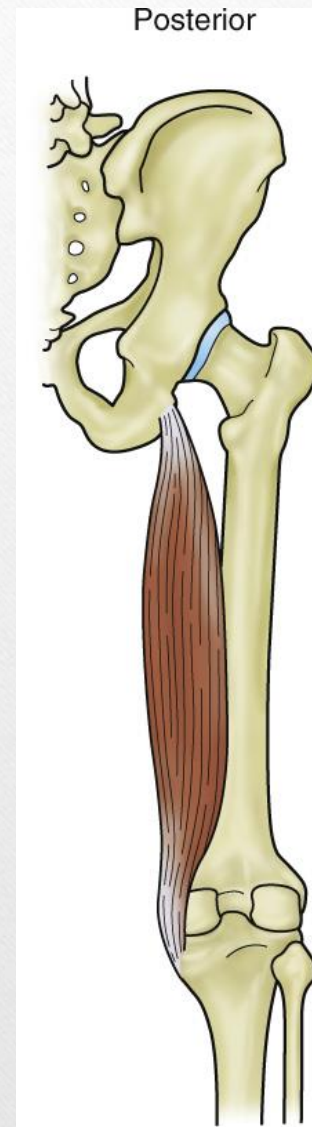


Muscles of the Posterior Thigh I

Semimembranosus

What does semimembranosus mean?

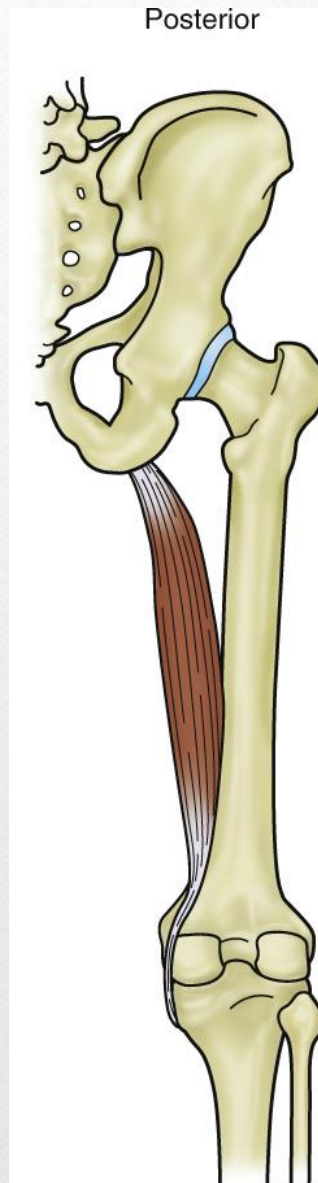
Half membrane.



Semitendinosus

What is the concentric function of the semitendinosus?

Flexion and medial rotation of the leg at the knee, extension of the thigh at the hip, and posterior tilt of the pelvis at the hip.

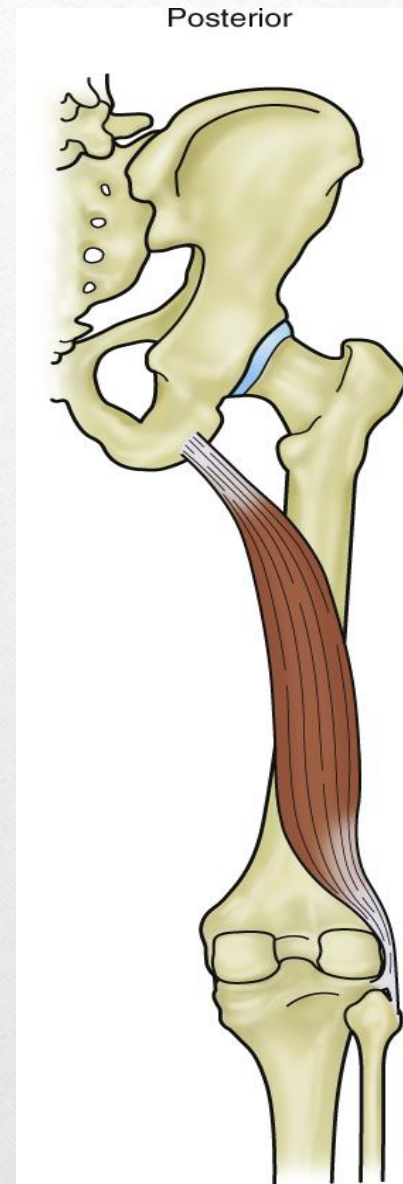


Muscles of the Posterior Thigh II

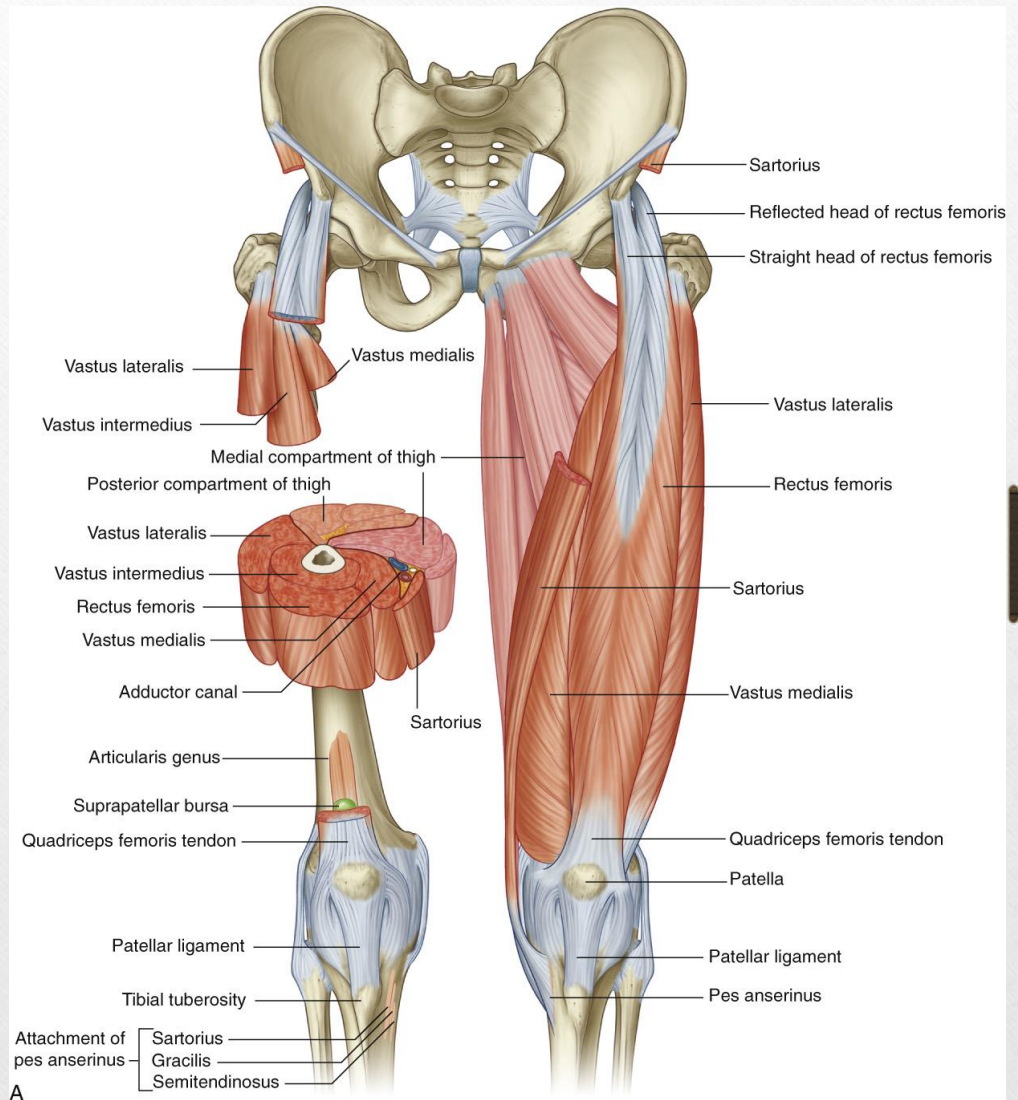
Biceps femoris

What is the referred pain pattern of the biceps femoris?

The ischial tuberosity, the back of the knee, and the entire posterior thigh and leg to midcalf.

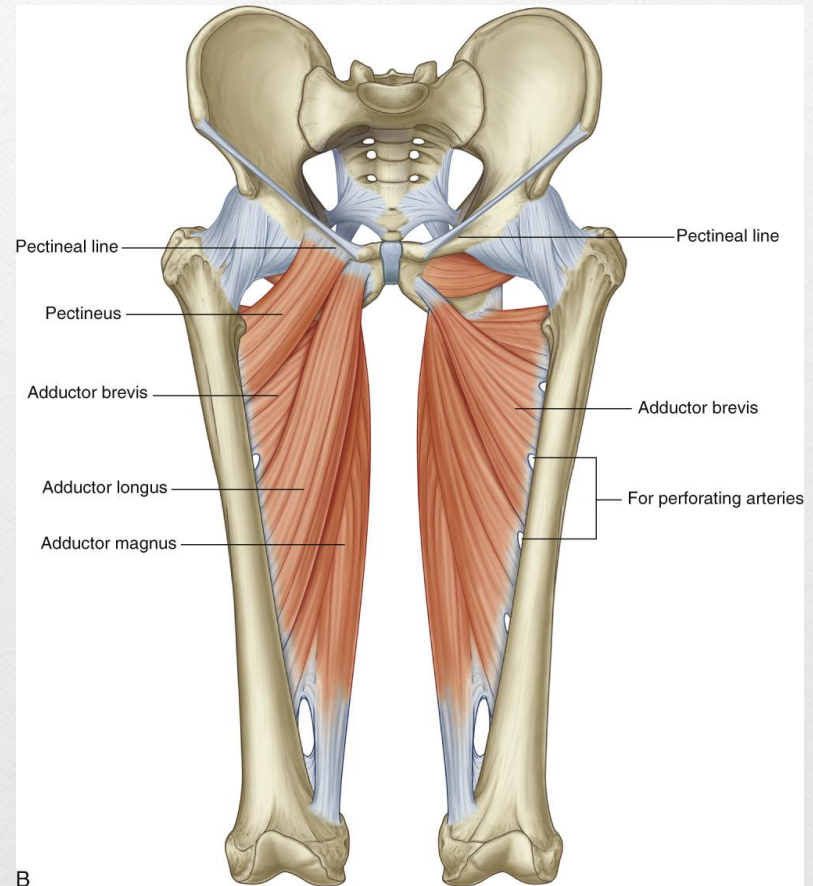


Muscles of the Anterior and Medial Thigh



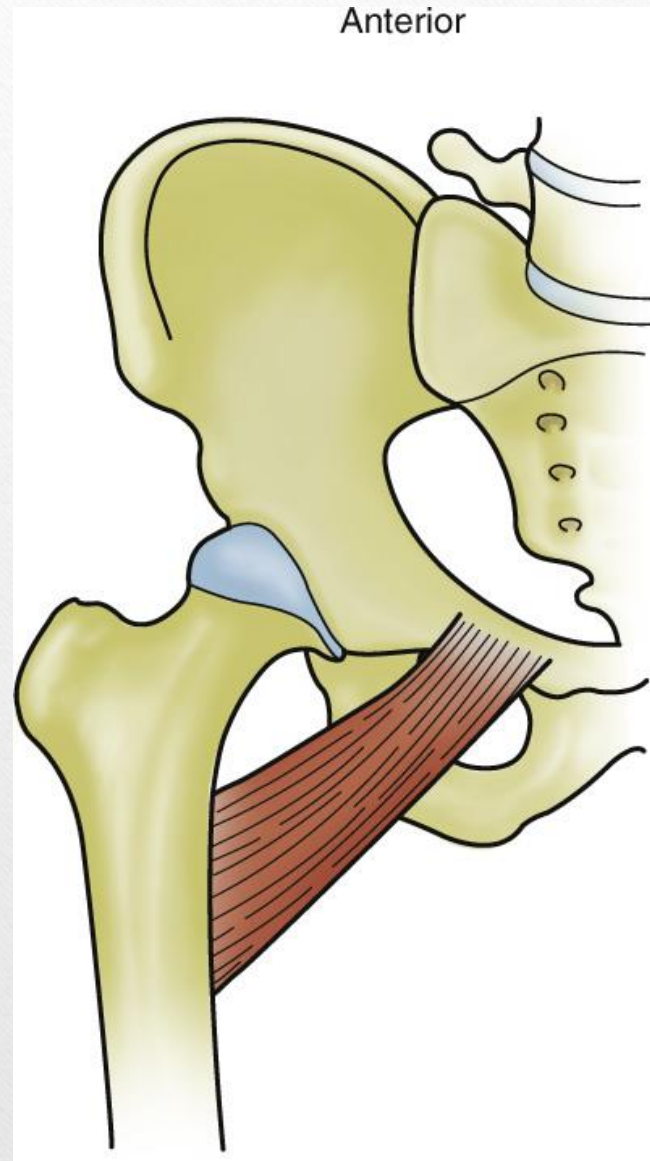
Muscles of the Anterior and Medial Thigh II

Pectineus, adductor longus,
and adductor brevis muscles



Muscles of the Medial Thigh I

Pectineus



Muscles of the Medial Thigh II

Adductor brevis

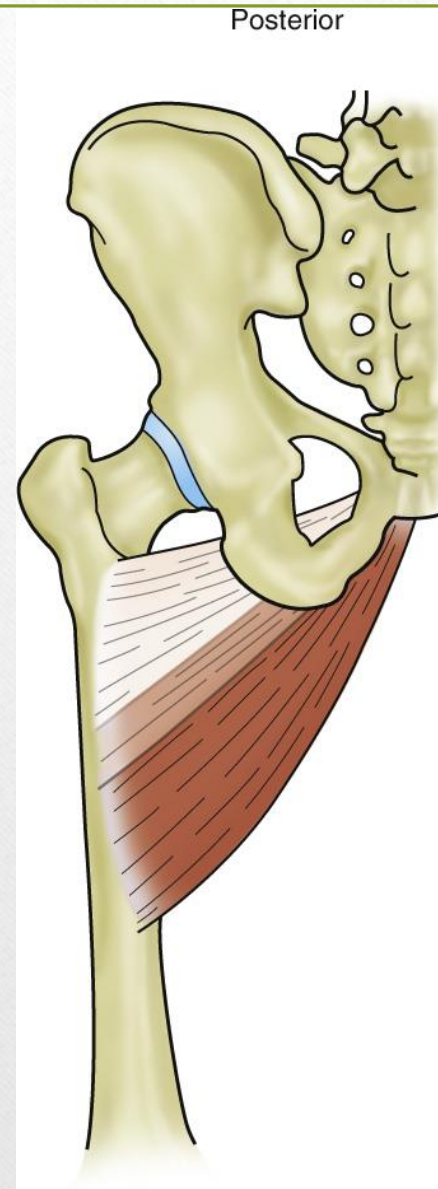
What is the concentric function of the adductor brevis?

Adduction and flexion of the thigh at the hip joint and anterior tilt of the pelvis at the hip joint.

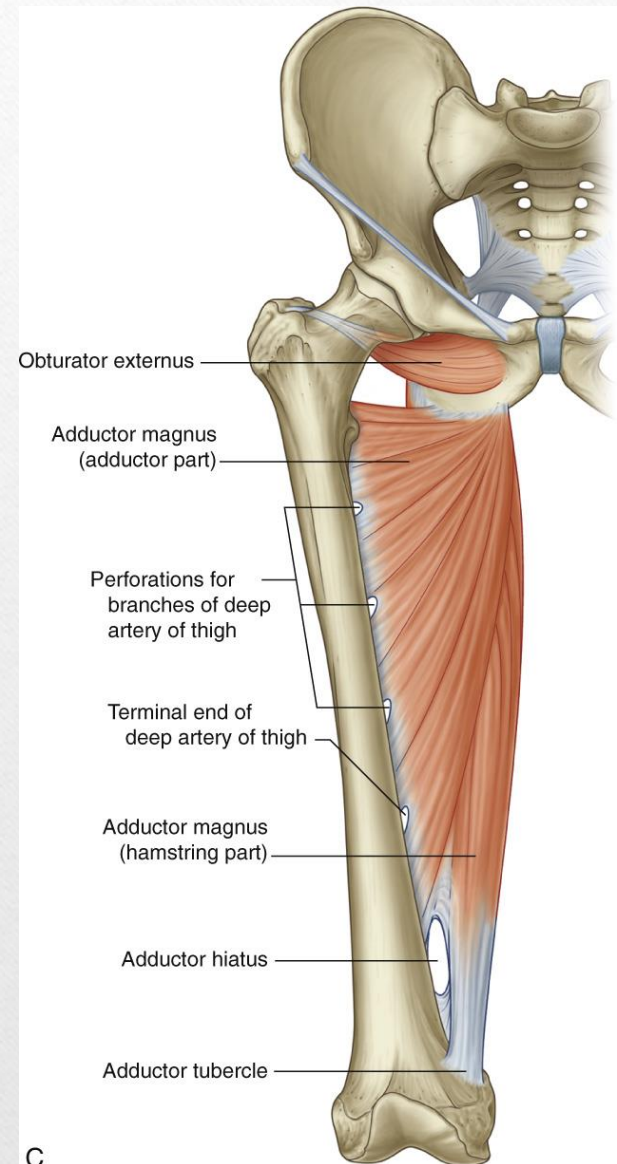


Adductor longus

The adductor longus shares the same concentric function. Pain in this muscle appears deep in the groin.



Muscles of the Anterior and Medial Thigh III

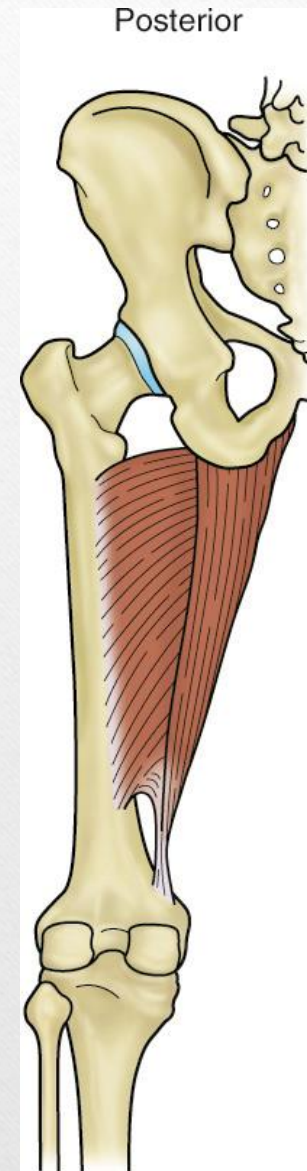


Muscles of the Medial Thigh III

Adductor magnus

What is the referred pain pattern of the adductor magnus?

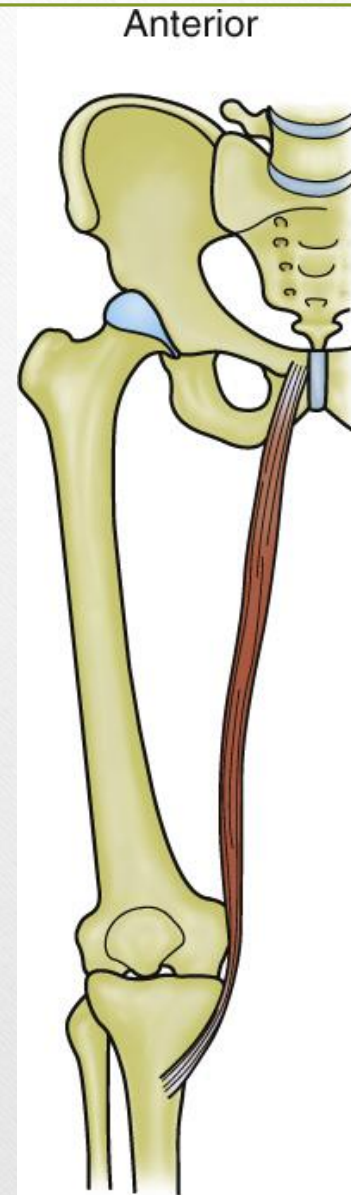
Deep in the groin, into the medial thigh and downward to the knee and leg; it may mimic hamstring tension.



Gracilis

What does gracilis mean?

Slender.

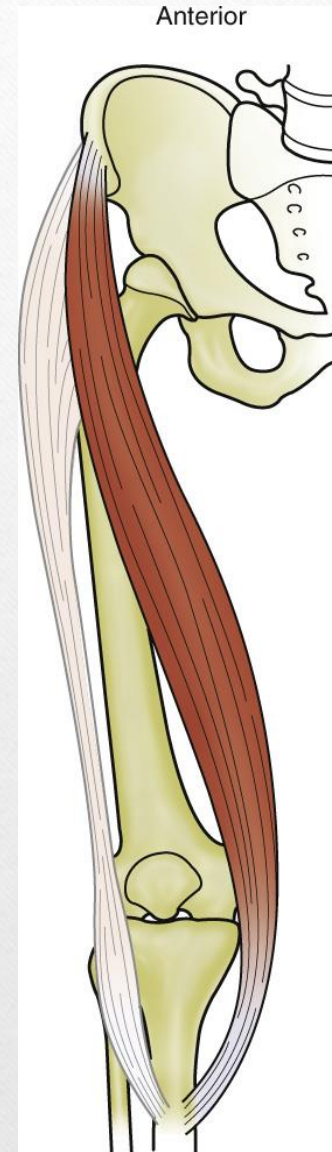


Muscles of the Anterior Thigh I

Sartorius

What is the referred pain pattern of the sartorius?

The entire anterior thigh, with concentration at the knee.

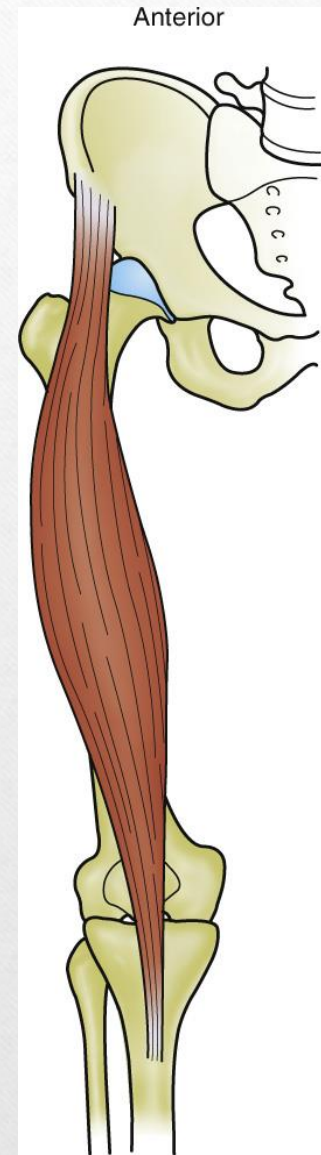


Muscles of the Anterior Thigh II Quadriceps Femoris Group

Rectus femoris

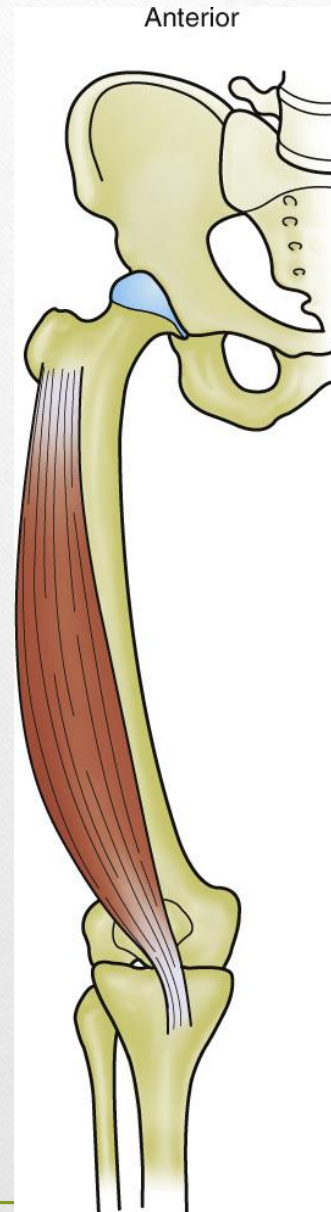
What is the concentric function of the rectus femoris?

Extension of the leg at the knee joint, flexion of the thigh at the hip joint, and anterior tilt of the pelvis at the hip joint.



Vastus lateralis

Together, the rectus femoris, vastus lateralis, vastus medialis, and vastus intermedius are known as the quadriceps femoris group.

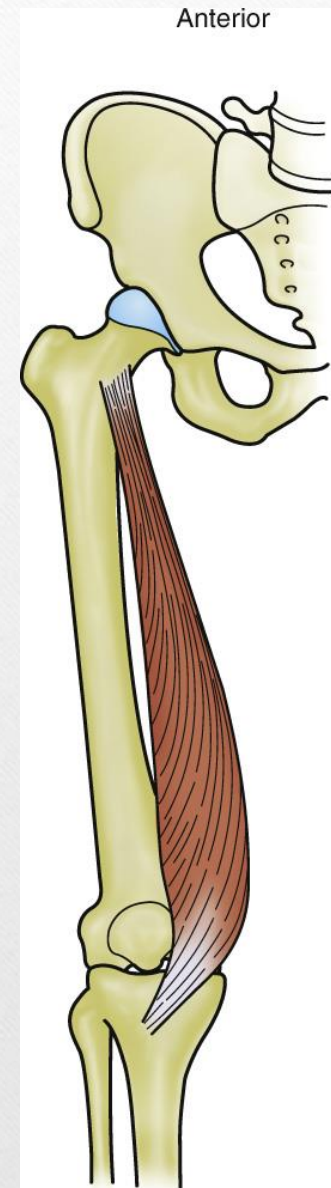


Muscles of the Anterior Thigh III Quadriceps Femoris Group

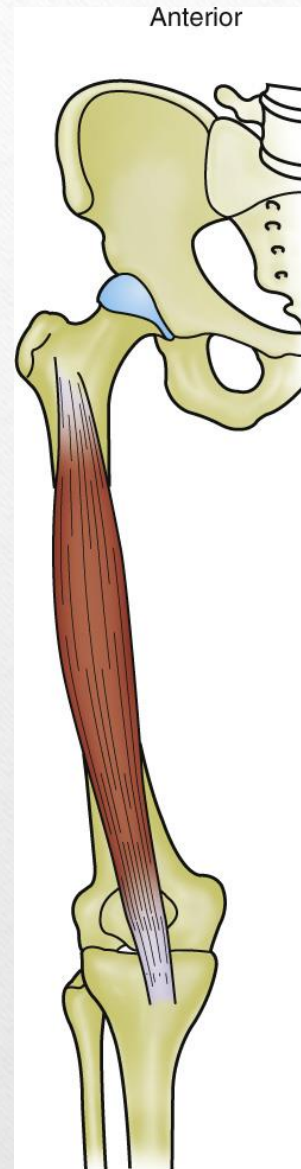
Vastus medialis

What is the referred pain pattern of the vastus intermedius?

Entire anterior thigh, with concentration at the knee.



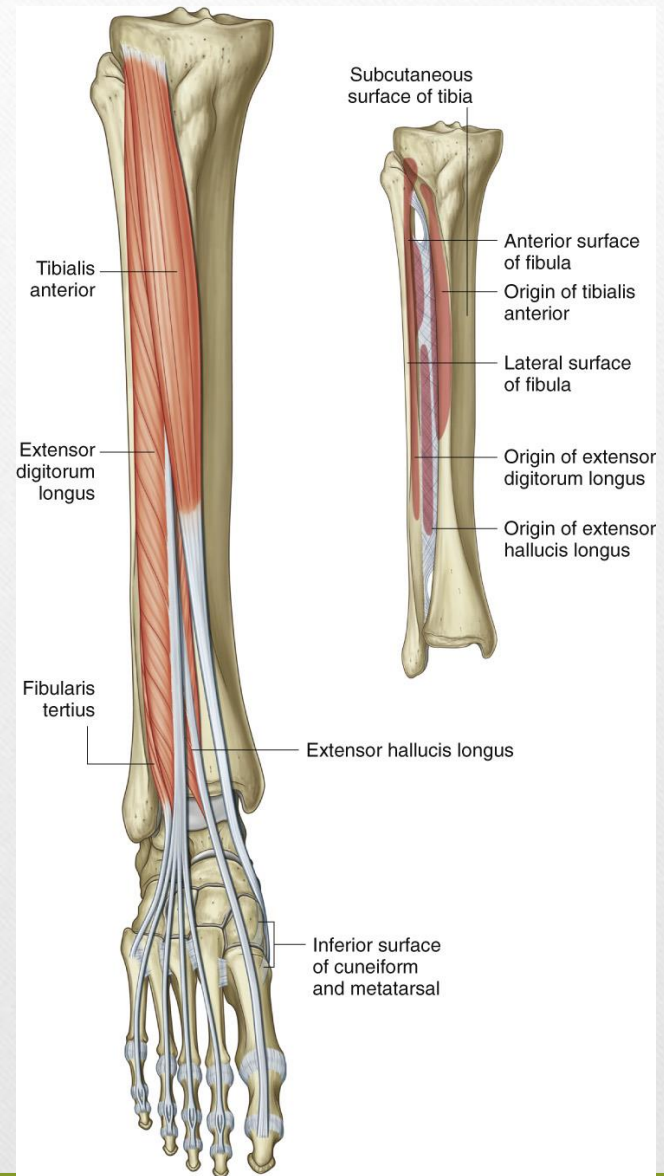
Vastus intermedius



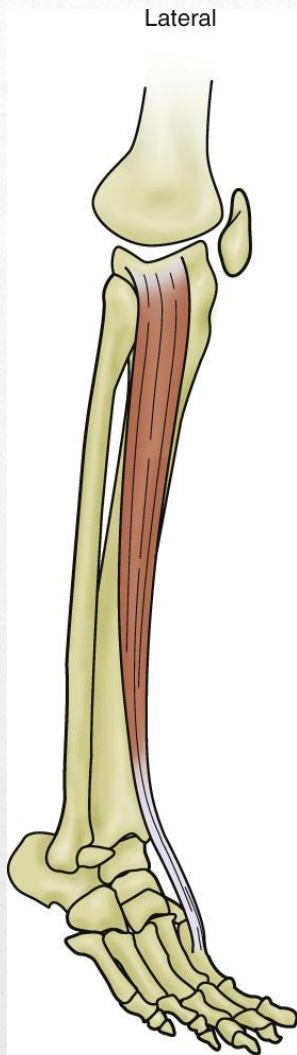
Muscles of the Leg and Foot

Muscles of the Anterior and Lateral Leg

The muscles of the leg are primarily important for their actions at the foot.



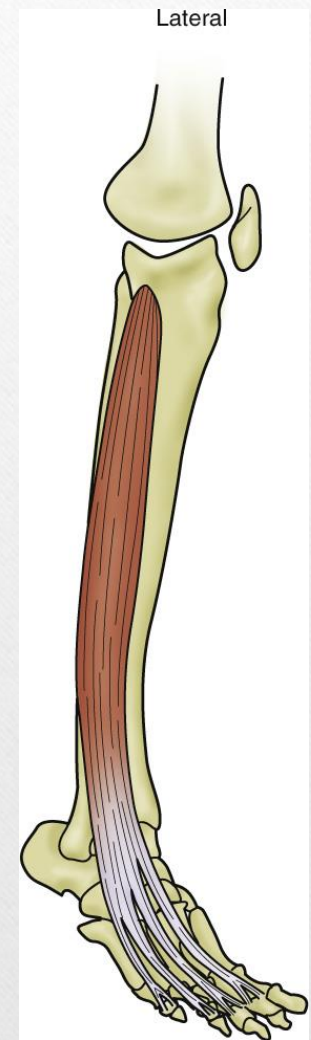
Anterior Muscles I



Tibialis anterior

What does tibialis mean? (Related to the shinbone.)

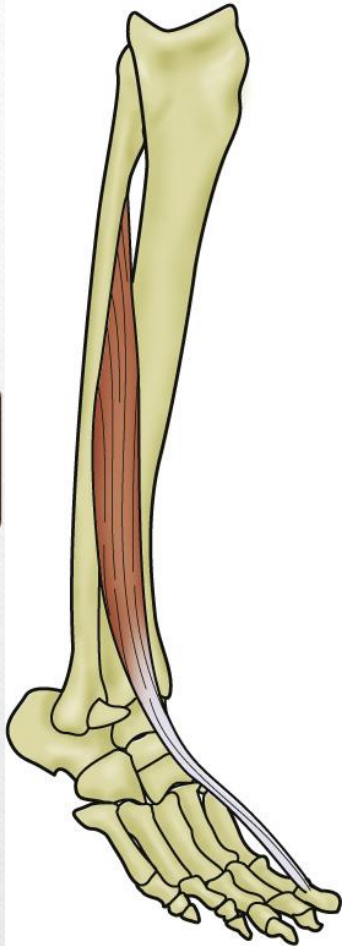
*What is the concentric function of the extensor digitorum longus?
(Extension of toes 2 to 5 at the metatarsophalangeal and interphalangeal joints, dorsiflexion of the foot at the ankle joint, and eversion of the foot at the tarsal joints.)*



Extensor digitorum longus

Anterior Muscles II

Lateral

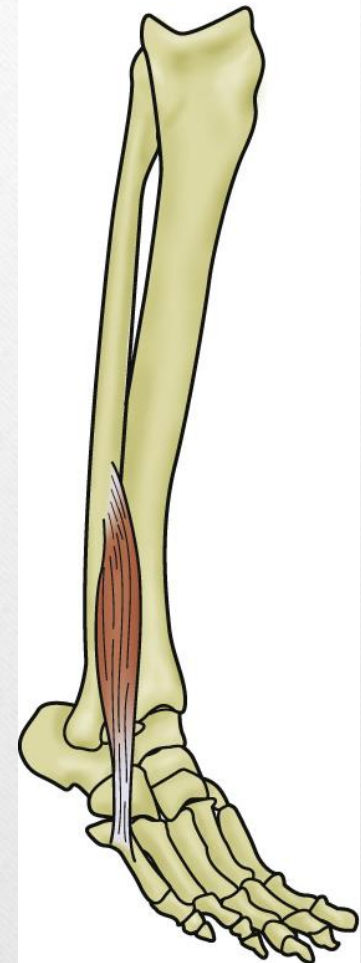


Extensor hallucis longus

Extensor hallucis longus translates to “long one that stretches the big toe.”

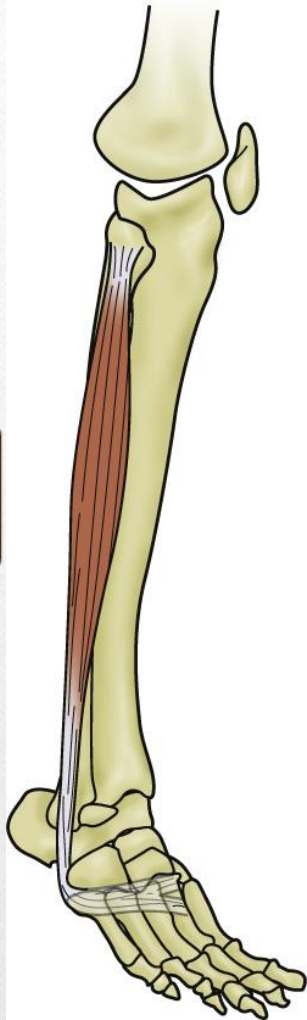
What is the referred pain pattern of the fibularis (peroneus) tertius? (Down the leg and into the toes.)

Lateral



Fibularis (peroneus) tertius

Lateral



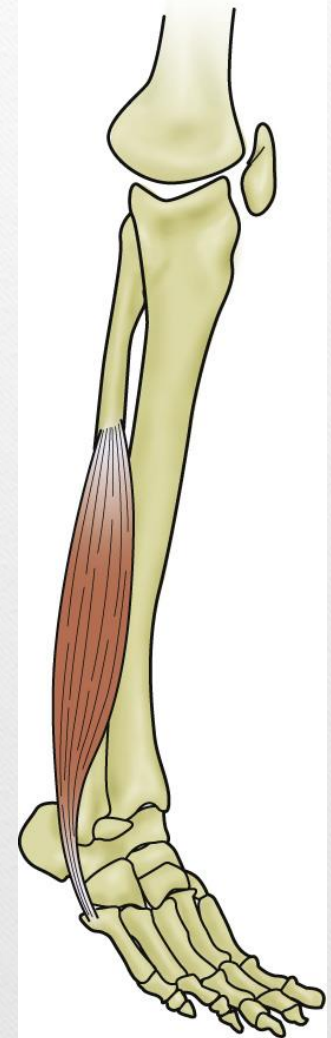
Fibularis (peroneus) longus

Lateral Muscles

What is the isometric function of the fibularis (peroneus) longus? (It stabilizes the ankle joint.)

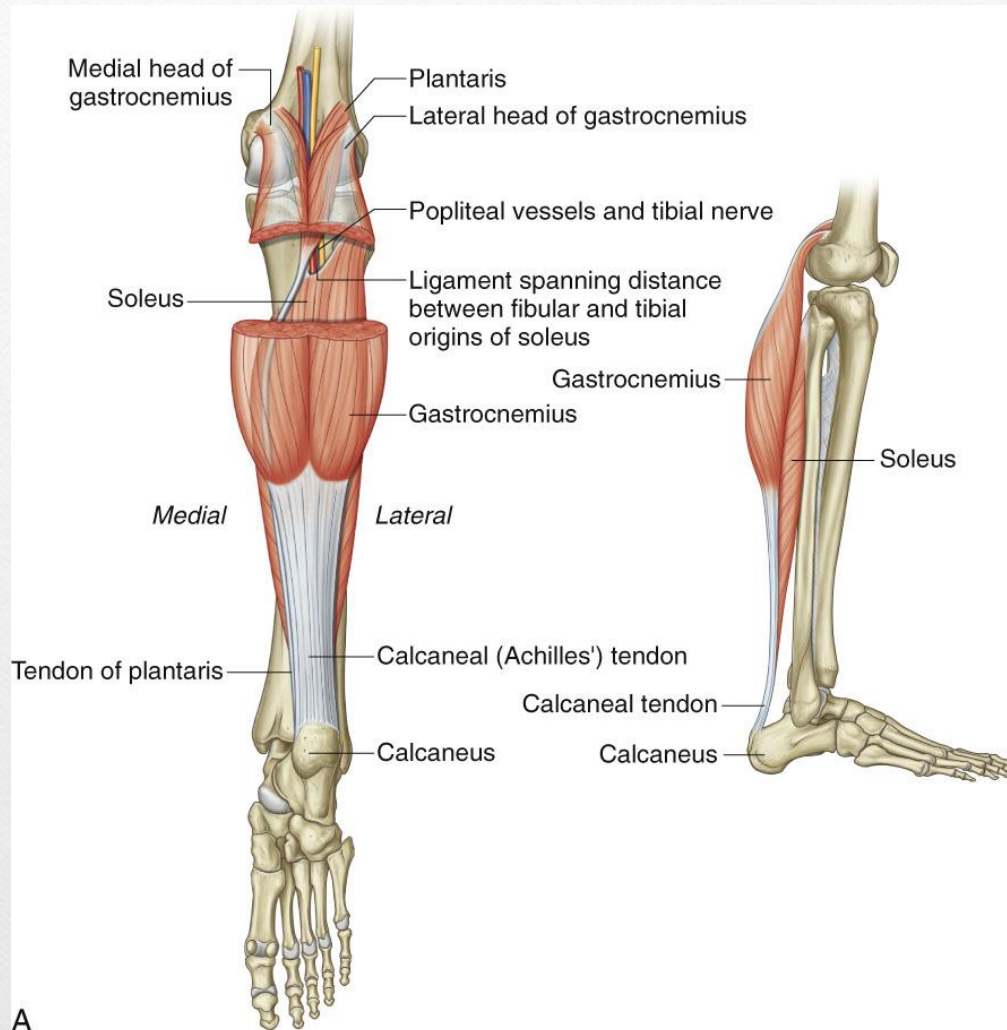
What is the referred pain pattern of the fibularis (peroneus) brevis? (To the lateral malleolus and the heel.)

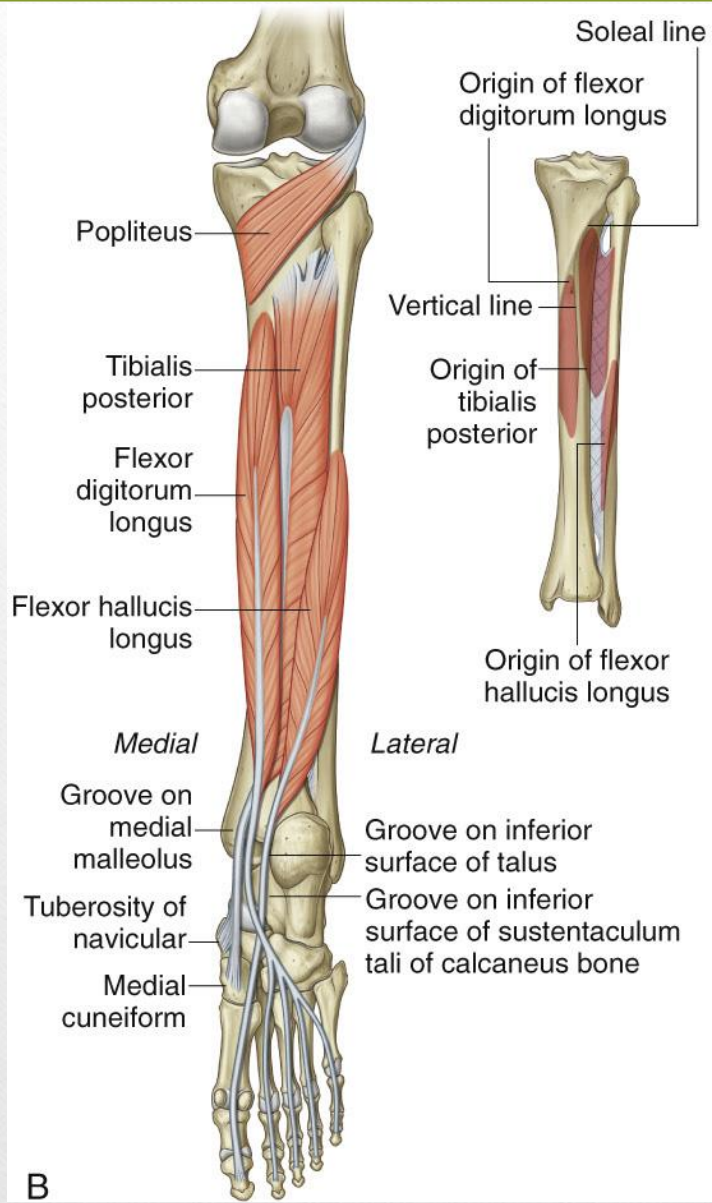
Lateral



Fibularis (peroneus) brevis

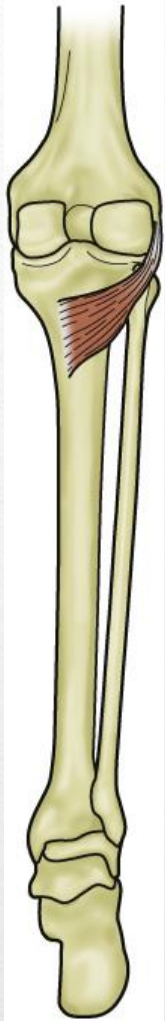
Muscles of the Posterior Leg





B

Posterior



Popliteus

Muscles of the Posterior Leg I

Popliteus means "hollow of the knee."

What is the concentric function of the tibialis posterior? (Plantar flexion of the foot at the ankle joint and inversion of the foot at the tarsal joints.)

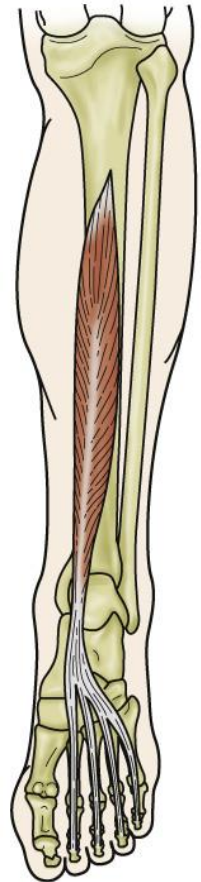
Posterior/Inferior



Tibialis posterior

Muscles of the Posterior Leg II

Posterior/Inferior



Flexor digitorum longus

What is the eccentric function of the flexor digitorum longus? (It allows extension of the toes and allows dorsiflexion and eversion of the foot.)

What does hallucis mean? (Related to the big toe.)

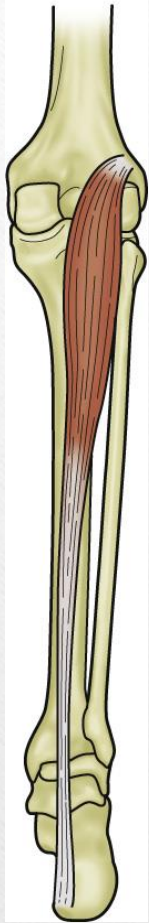
Posterior/Inferior



Flexor hallucis longus

Muscles of the Posterior Leg III

Posterior

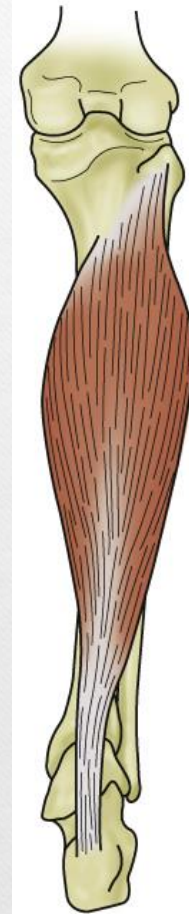


Plantaris

Plantaris means the sole of the foot.

What does soleus mean? (Sandal or sole of the foot.)

Posterior



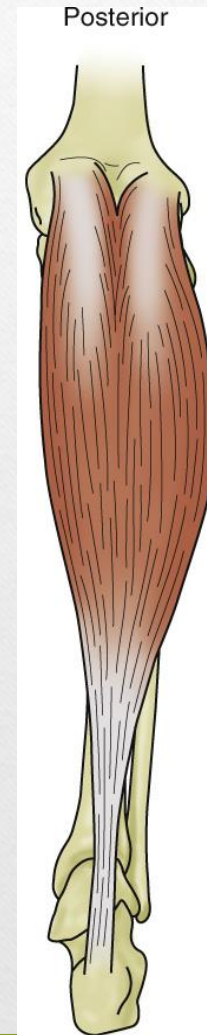
Soleus

Muscles of the Posterior Leg IV

Gastrocnemius

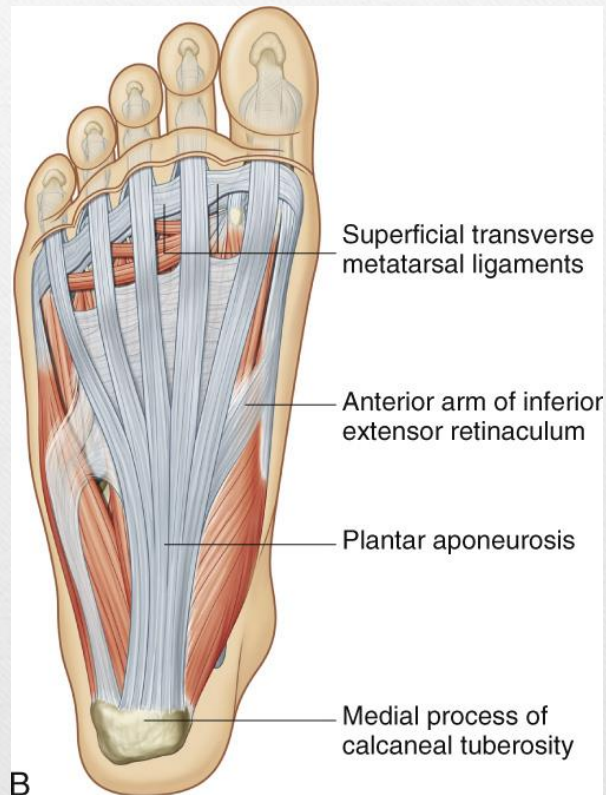
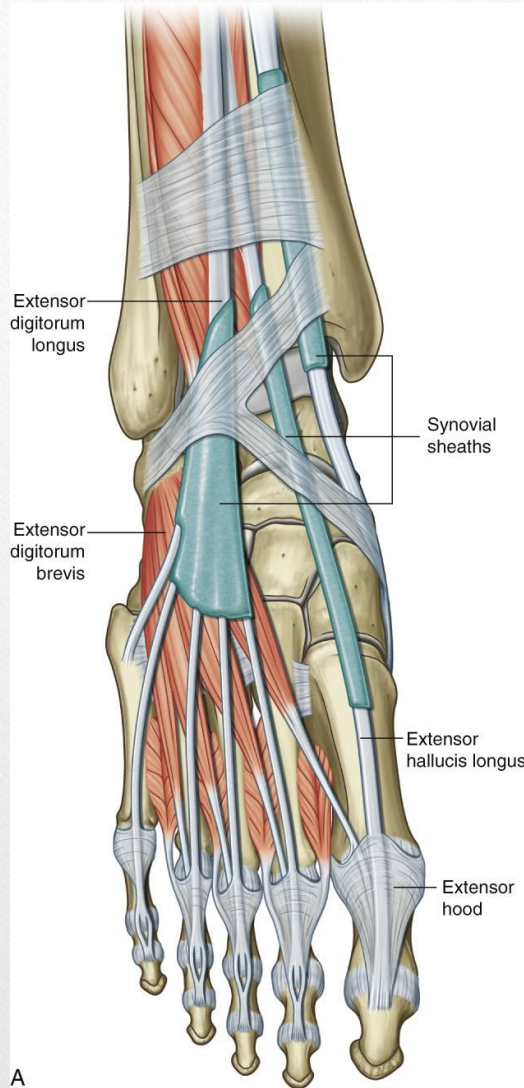
What is the referred pain pattern of the gastrocnemius?

Down the posterior leg to the heel and the sole of the foot into the plantar surface of the toes. It can be a factor in knee pain as well.



Intrinsic Muscles of the Foot

Intrinsic muscles of the foot are small muscles located wholly within the foot.



A

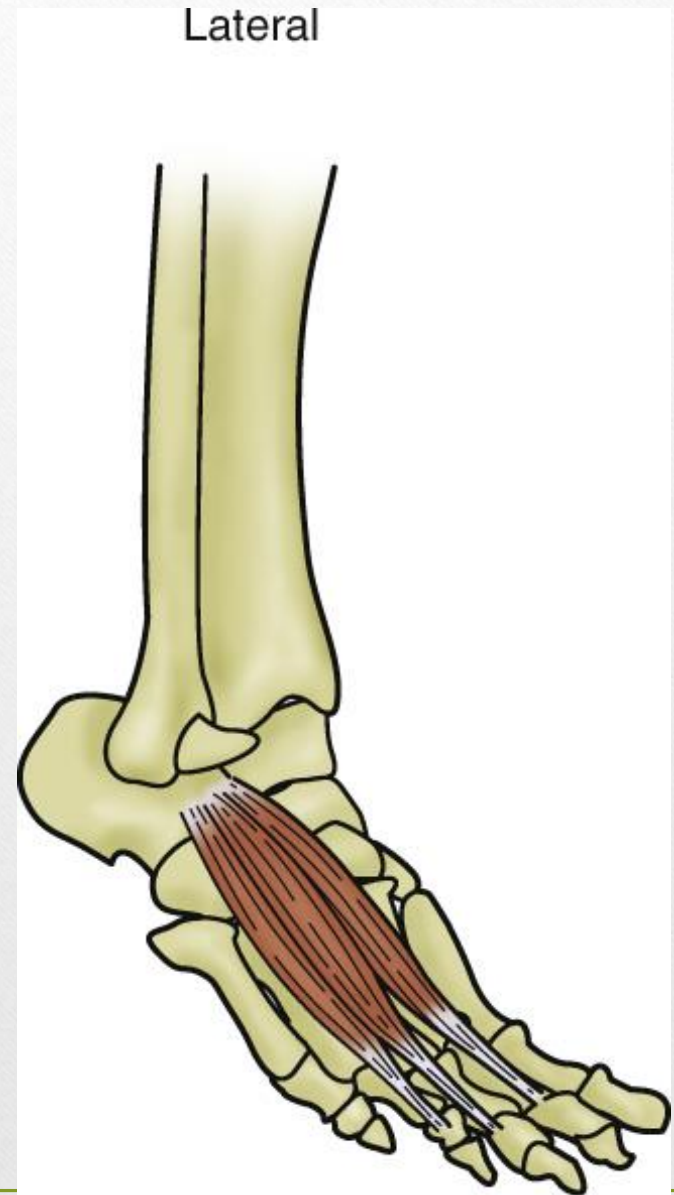
B

Dorsal Aspect

Extensor digitorum brevis

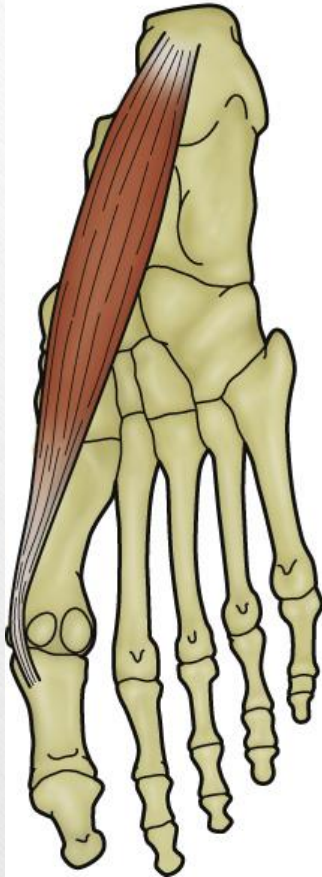
What is the referred pain pattern of the extensor digitorum brevis?

The entire foot, with areas concentrated at the large toe, the ball of the foot, and the heel.



Plantar Aspect: Superficial Layer I

Inferior

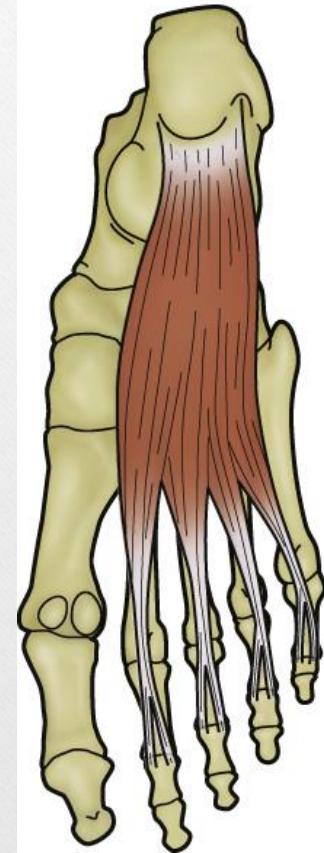


Abductor hallucis

What is the concentric function of the abductor hallucis? (Abduction and flexion of the big toe at the metatarsophalangeal joint.)

What is the eccentric function of the flexor digitorum brevis? (It restrains extension of toes 2 to 5.)

Inferior



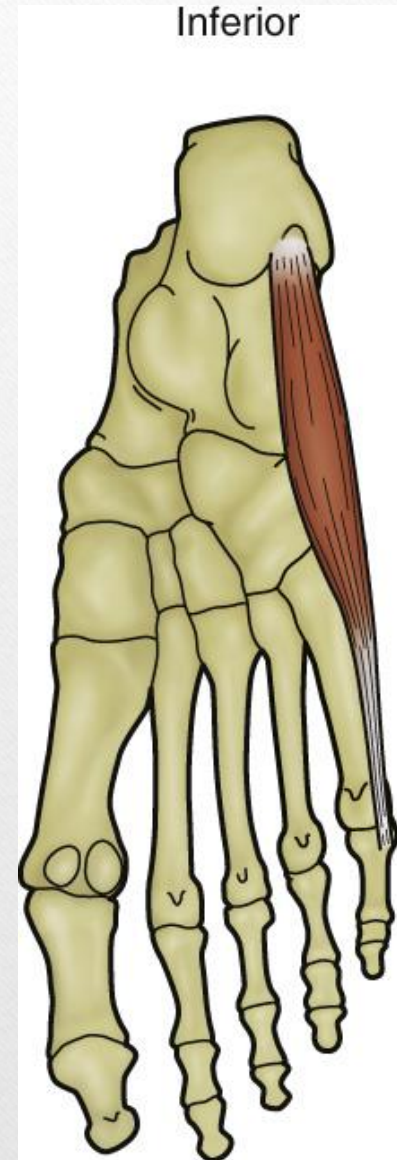
Flexor digitorum brevis

Plantar Aspect: Superficial Layer II

Abductor digiti minimi pedis

What is the concentric function of the abductor digiti minimi pedis?

Abduction and flexion of the little toe at the metatarsophalangeal joint.



Plantar Aspect: Second Layer

Inferior/Plantar surface



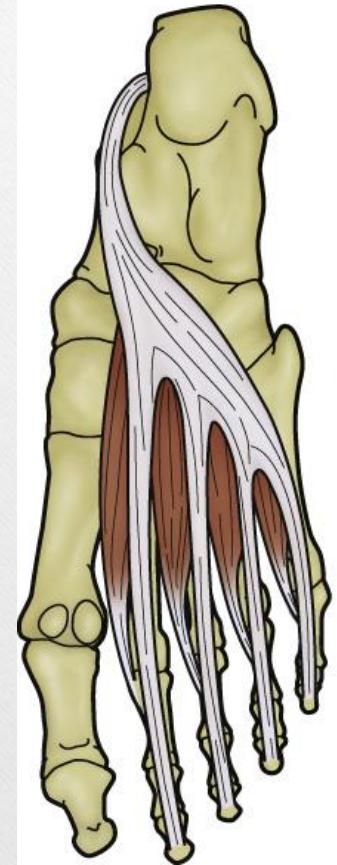
Quadratus plantae

Both of these muscles are in the second layer of the plantar aspect.

What is the referred pain pattern of both of these muscles?

The entire foot, with areas concentrated at the large toe, the ball of the foot, and the heel.

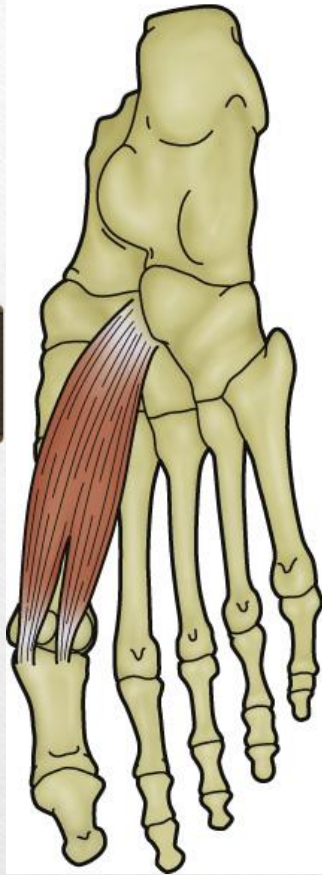
Inferior/Plantar surface



Lumbricales pedis

Plantar Aspect: Third Layer I

Inferior

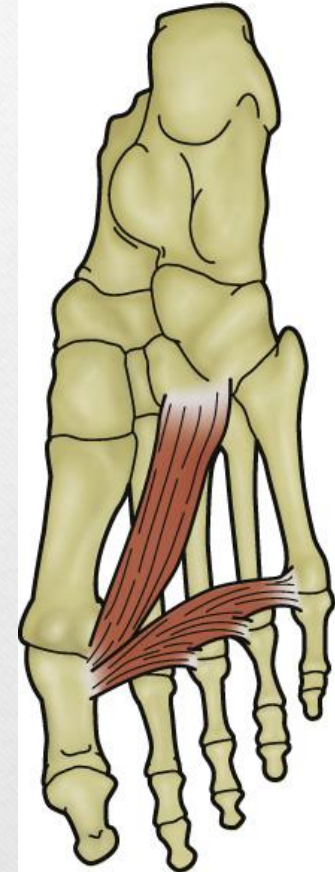


What is the concentric function of the flexor hallucis brevis? (Flexion of the big toe at the metatarsophalangeal joint.)

What is the eccentric function of the adductor hallucis? (It restrains abduction and extension of the big toe.)

Flexor hallucis brevis

Inferior/Plantar surface

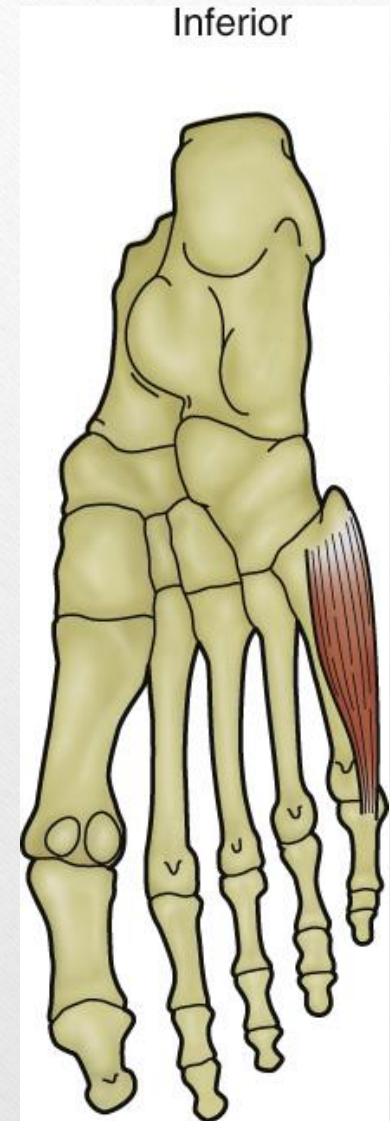


Adductor hallucis

Plantar Aspect: Fourth Layer

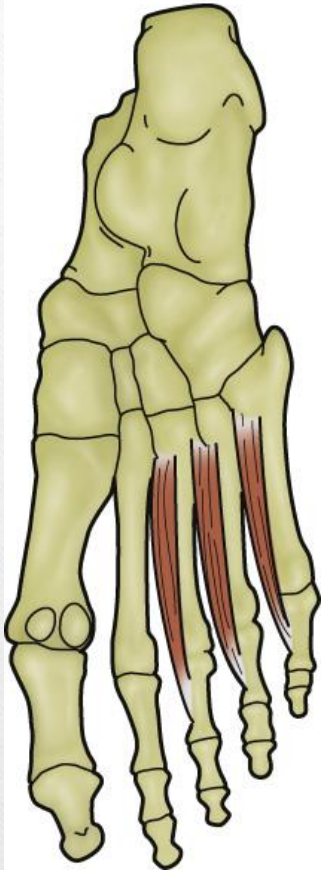
Flexor digiti minimi pedis

The flexor digiti minimi pedis flexes the little toe and restrains its extension.



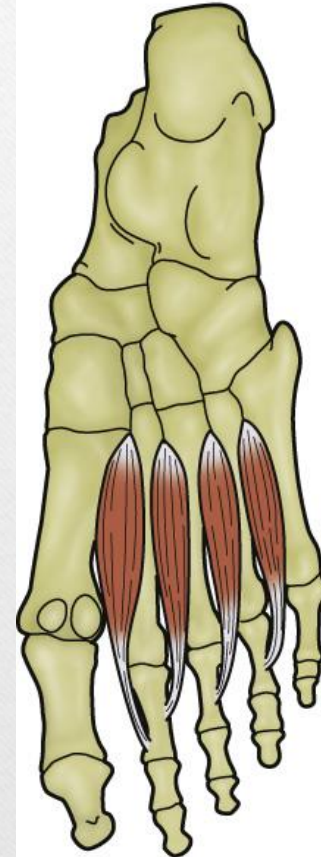
Plantar Aspect: Fourth Layer

Inferior



Interossei plantares

Inferior



Interossei dorsales pedis

Which toes are affected by the interossei plantares?

Toes 3 to 5.

What is the concentric function of the interossei dorsales pedis?

The abduction of toes 2 to 4 at the metatarsophalangeal joints, the flexion of toes 2 to 4 at the metatarsophalangeal joints, and extension of toes 2 to 4 at the proximal and distal interphalangeal joints.

To Test

Access Code: **L4MM2**

Please write down code. You will be asked for it

Once you have successfully passed the test (70% correct), please email Kim Jackson at kim_hotschool@yahoo.com. We will email you your CE certificate within 7 business days.