

AVALIAR A ANATOMIA DE SUPERFÍCIE DO MEMBRO PÉLVICO DO CÃO.

Orientar o membro em relação a sua posição in vivo.

- Usando os esqueletos da sala de dissecação, como auxílio, orientar o membro e decidir se você tem um membro esquerdo ou direito.
- Depois de ter feito isso, você pode agora determinar os vários aspectos topográficos do membro: cranial; caudais, lateral, medial, etc
- Uma vez que você estiver familiarizado com a orientação do membro continuar com a dissecação.

Identificar os pontos de referência óssea palpáveis

- Palpe o membro isolado e também do animal vivo (quando pertinente) . Localize os seguintes pontos de referência óssea.

- **Íleo** : Espinha e crista ilíaca.
- **Ísquio**: Tuberosidade isquiática.
- **Fêmur**: Trocanter maior; Crista troclear lateral e côndilo lateral.
- **Patela**.
- **Tíbia**: Côndilo lateral; Tuberosidade e crista tibial.
- **Fíbula**: Cabeça e fíbula e maléolo lateral.
- **Tarso**: Tuberosidade calcânea.
- **Ossos Metatarsais**.
- **Falanges**.

Identifique os pontos referência dos tecidos moles.

- Palpe o membro e localize as seguintes pontos de referência:
 - o tendão do ligamento patelar em continuidade com o quadríceps femoral da patela à crista tibial
 - os tendões que cruzam o tarso dorsalmente.
 - os tendões que se inserem no osso calcâneo.
 - o m. flexor digital superficial no aspecto plantar, quando contraído e relaxado.
- Você consegue nomear os músculos relacionados a estes tendões?

Localizar e manipular cada articulação, valorizando a amplitude completa de movimento

- Manipular cada articulação do membro, completando a tabela a seguir.

Lembre-se da classificação de cada articulação (ex:esferoide, cotílica etc) e sua amplitude de movimento normal.

Articulação	Tipo	Amplitude de movimento
Quadril		
Joelho		
Társica		
Metatársica-falangea		
Interfalângicas		

- Qual é o significado desta amplitude de movimento para cada conjunto? *Resposta.*

Esteja familiarizado com as diferentes zonas de inervação cutânea, recordando que nervos fornecem inervação cutânea para que partes

- que áreas da pele se tornam dessensibilizadas quando cada um dos seguintes nervos são danificados:

- femoral
- obturator
- gluteo
- isquiático/ciático
- tibial
- fibular

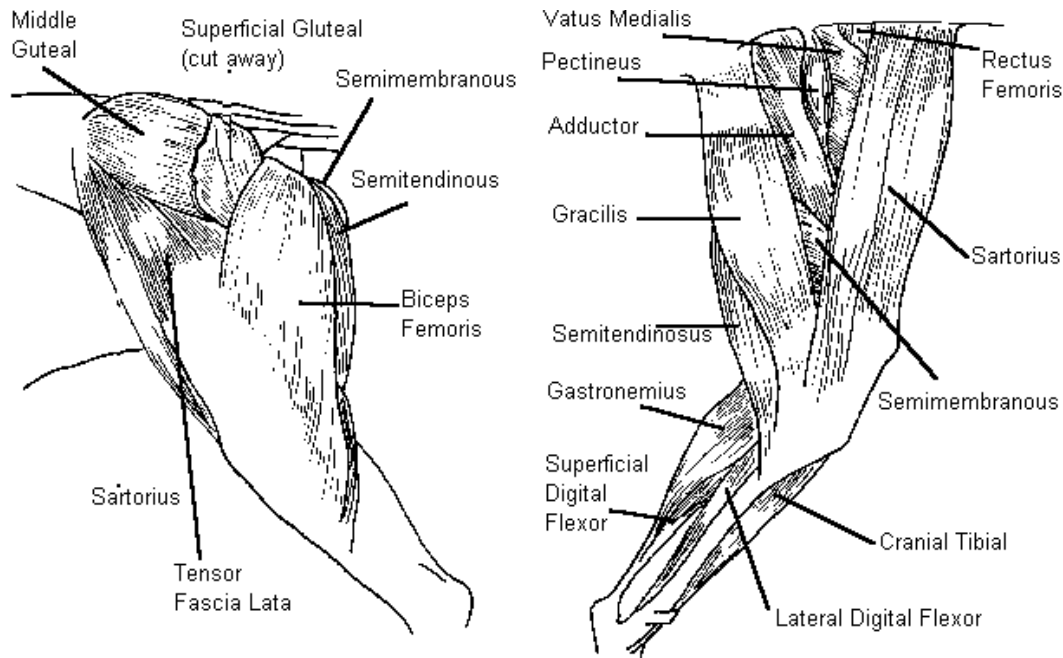
Retire a pele do membro inteiro e avalie a anatomia superficial

- Note a fáscia que cobre uniformemente todo o membro.
- Neste ponto da dissecação você deve ser capaz de ver dois grandes vasos superficiais descendo pelo membro, um na face lateral e outro na face medial. *Quais são eles?*
- *Agora remova a fáscia que deve revelar os nervos e vasos sanguíneos mais superficiais.*

IDENTIFICAR A MUSCULATURA INTRÍNSECA, OS VASOS SANGUÍNEOS E NERVOS ASSOCIADOS AO MEMBRO PÉLVICO.

- À medida que avançar com a identificação dos músculos do membro pélvico tentar encontrar sua origem e inserção. Estes podem ser profundos, então será preciso separar os músculos que rodeiam, a fim de localizá-los.
- Identificar os músculos superficiais do quadril, fêmur e perna.
- Examine os aspectos lateral e medial do membro. Deverá ser possível identificar os seguintes músculos intrínsecos superficiais do quadril, fêmur e perna

- 1 - Sartório**
- 2 – Tensor da fascia lata**
- 3 - Gluteo médio**
- 4 - Bíceps femoral**
- 5 - Semitendíneo**
- 6 - Semimembranoso**
- 7 - Grácilis**
- 8 - Adutor**
- 9 - Pectíneo**
- 10 - Gastrocnêmio**
- 11 - Flexor digital superficial**
- 12 - Tibial cranial**



- Tente localizar e identificar alguns dos seguintes principais nervos:

- 1) Nervo obturador
- 2a) Nervo glúteo cranial
- 2b) Nervo glúteo caudal
- 4) Nervo fibular
- 5) Nervo tibial

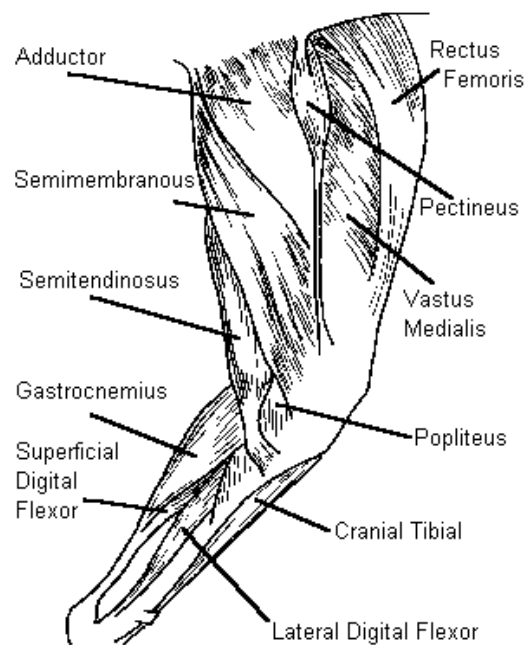
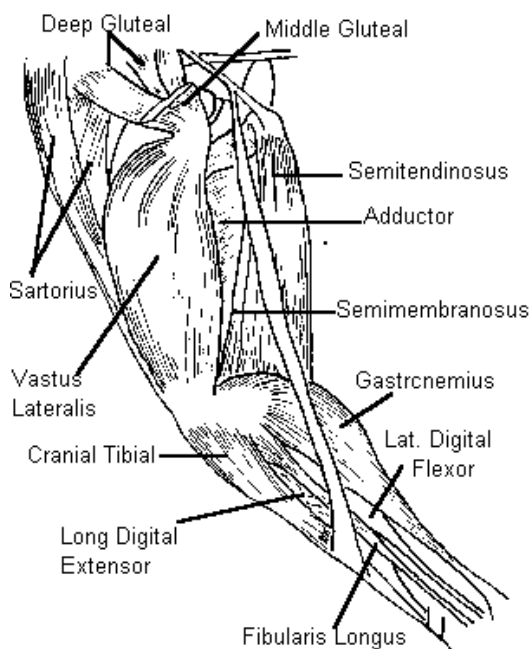
- A **artéria femoral** está no lado medial da coxa e é relativamente superficial. Um vaso relativamente menor a artéria safena aparece em continuidade com o vaso principal, corre subcutaneamente com parte cranial e caudal, suprindo as partes distais do membro pélvico. A maior parte da artéria aprofunda-se no músculo.
- Tente seguir o curso da **Veia safena**. *Estes são os vasos superficiais, e consistem em componentes lateral e medial. A veia safena medial está associada com a sua respectiva artéria e junta-se a veia femoral, mas encontra-se superficialmente na metade proximal da coxa. encontra-se superficialmente na metade proximal da coxa. A veia safena lateral, emerge na extremidade distal da tibio-fíbula. Segue a borda caudal do músculo gastrocnêmio para se juntar com a veia femoral ao nível das cabeças do músculo gastrocnêmio.*
- Trígono femoral: formado pelos seguintes elementos: artéria femoral, veia femoral e nervo safeno.

REMOVA AS CAMADAS DE MÚSCULOS SUPERFICIAIS PARA EXPOR OS MÚSCULOS PROFUNDOS

Identificar os músculos mais profundos da pelve, fêmur e perna.

- Retire o bíceps femoral e tensor da fáscia lata, grácilis e sartório para expor os músculos profundos do membro pélvico.
- Examine os dois aspectos lateral e medial e identificar os seguintes músculos:

- 13 - *Reto femoral*
- 14 - *Vasto lateral*
- 15 - *Vasto intermédio*
- 16 - *Vasto medial*
- 17 - *Glúteo profundo*
- 20 - *Extensor digital longo*
- 21 - *Fibular terceiro*
- 22 - *Fibular curto*
- 23 - *Fibular longo*
- 24 - *Poplíteo*
- 25 - *Flexor digital profundo*
- 26 - *Abdutor crural caudal*



- Tente localizar e identificar alguns dos seguintes principais nervos:

1) Nervo femoral

REMOVA A MUSCULATURA RESTANTE DO MEMBRO E EXAMINE AS ARTICULAÇÕES

Novamente familiarize-se com a amplitude de movimentos de cada articulação.

Identifique as estruturas colágenas associadas a cada articulação e determine qual a influência restritiva que elas têm

- Identifique o lábio acetabular fibrocartilaginoso que rodeia o acetábulo.
- Encontre o ligamento da cabeça do fêmur. Onde o fêmur se insere?
- Note que a articulação do joelho distalmente, possui ligamentos colaterais. Que restrições à articulação estes irão causar?

- Veja o ligamento patelar e o compare com aquele do joelho do cavalo e dos ruminantes e suínos
- Identificar as origens e inserção dos ligamentos cruzados do joelho.
- Qual seria o efeito sobre a articulação se o ligamento cruzado cranial for lesionado?
- Qual seria o efeito sobre a articulação se o ligamento cruzado caudal for lesionado?

Siga a extensão de cada cápsula articular e então seccione cada uma e observe os efeitos na estabilidade da articulação.

Observe que as articulações sinoviais no tarso comunicam-se entre si.

Desarticule cada articulação e examine as superfícies articulares.

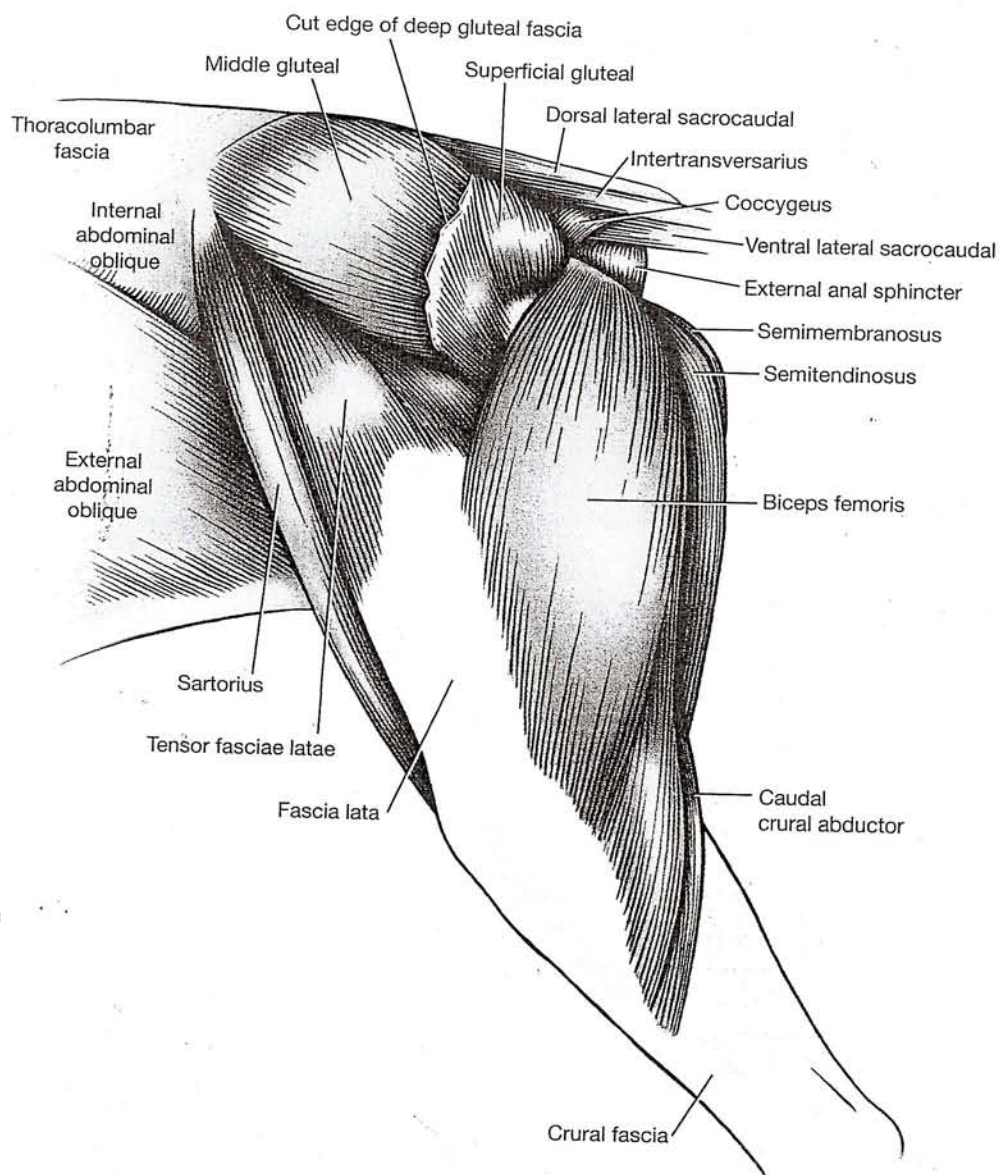


Fig. 2-41 Superficial muscles of left pelvic limb, lateral view.

there are fibers that run directly distally. Identify the lateral aspect of the tuber ischii and the sacrotuberous ligament that extends from it to the sacrum. The biceps femoris arises from these structures. Cranially, it inserts by means of the fascia lata and crural fascia. Carefully clean the caudal border and the adjacent surface of the muscle. The lymph node lying in the fat at its caudal border directly caudal to the stifle is the **popliteal lymph node**. Do not cut the cranially lying fascia lata, which serves as part of its insertion. Caudally, a strand of heavy fascia runs to the tuber calcanei and helps to form the **common calcanean tendon**.

Transect the biceps femoris. The sciatic nerve is interposed between the biceps femoris and the adductor. Observe the insertions of the biceps femoris.

ORIGIN: The sacrotuberous ligament and the ischiatic tuberosity.

INSERTION: By means of the fascia lata and crural fascia to the patella, patellar ligament, and cranial border of the tibia; by means of the crural fascia to the subcutaneous part of the tibial body and the tuber calcanei.

ACTION: To extend the hip, stifle, and hock. The caudal part of the muscle flexes the stifle.

INNERVATION: Sciatic nerve.

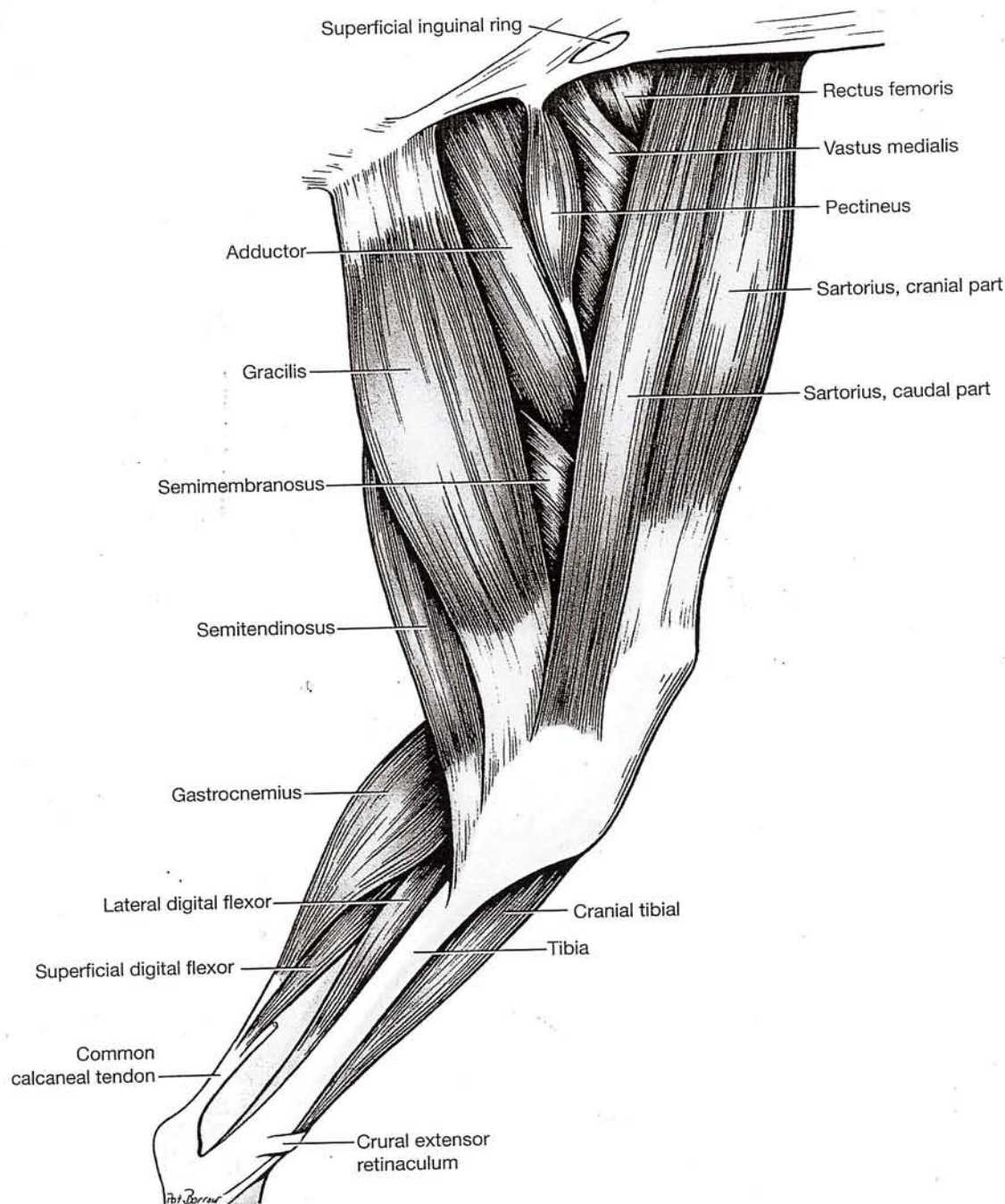


Fig. 2-42 Superficial muscles of left pelvic limb, medial view.

2. The **semitendinosus** (Figs. 2-41 through 2-47, 2-52, 2-54, 2-55, 2-57), near its origin, lies between the biceps femoris and semimembranosus. Near its insertion it lies on the medial head of the gastrocnemius and is covered by the gracilis. It is nearly as wide as it is thick and extends principally from the ischiatic tuberosity to the tibial body. By means of the crural fascia, it also attaches to the tuber calcanei. Completely free this muscle from surrounding structures but do not transect it.

ORIGIN: The ischiatic tuberosity.

INSERTION: The disto-cranial border of the tibia. The medial surface of the body of the tibia and the tuber calcanei by means of the crural fascia.

ACTION: To extend the hip, flex the stifle, and extend the hock.

INNERVATION: Sciatic nerve.

3. The **semimembranosus** (Figs. 2-41 through 2-47, 2-50, 2-52, 2-57) is greater in transverse sectional area than the semitendinosus but is not as long. It is wedged between the

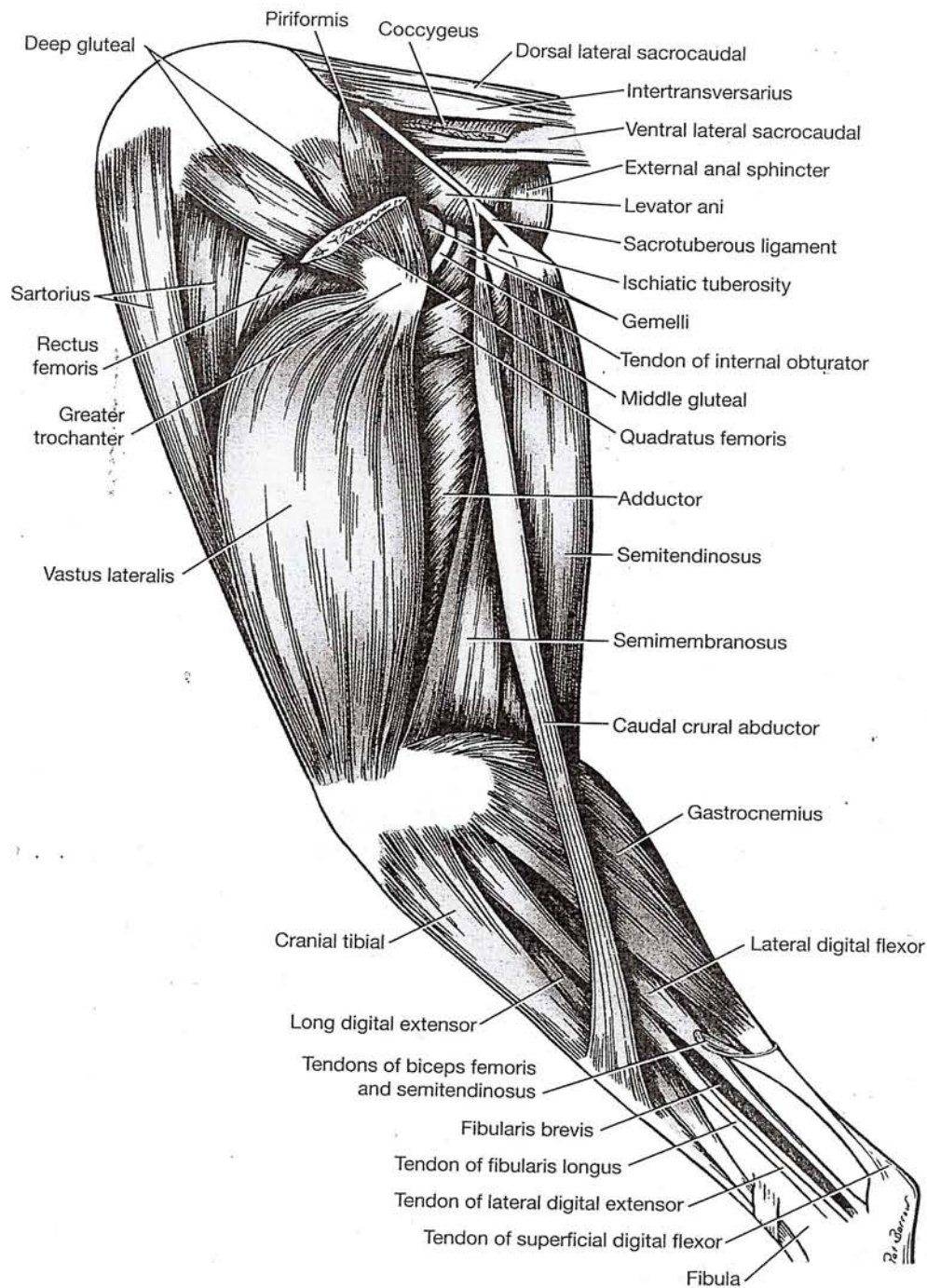


Fig. 2-43 Deep muscles of left pelvic limb, lateral view.

semitendinosus and biceps femoris laterally and the gracilis and adductor medially. It has two bellies of nearly equal size. This short but thick muscle extends from the ischiatic tuberosity to the medial side of the distal end of the femur and the proximal end of the tibia. The insertions may be seen more adequately after the sartorius and gracilis muscles have been dissected.

ORIGIN: The ischiatic tuberosity.

INSERTION: The distal medial lip of the caudal rough surface of the femur and the medial condyle of the tibia.

ACTION: To extend the hip. The part that attaches to the femur extends the stifle; the part that attaches to the tibia flexes or extends the stifle, depending on the position of the limb.

INNERVATION: Sciatic nerve.

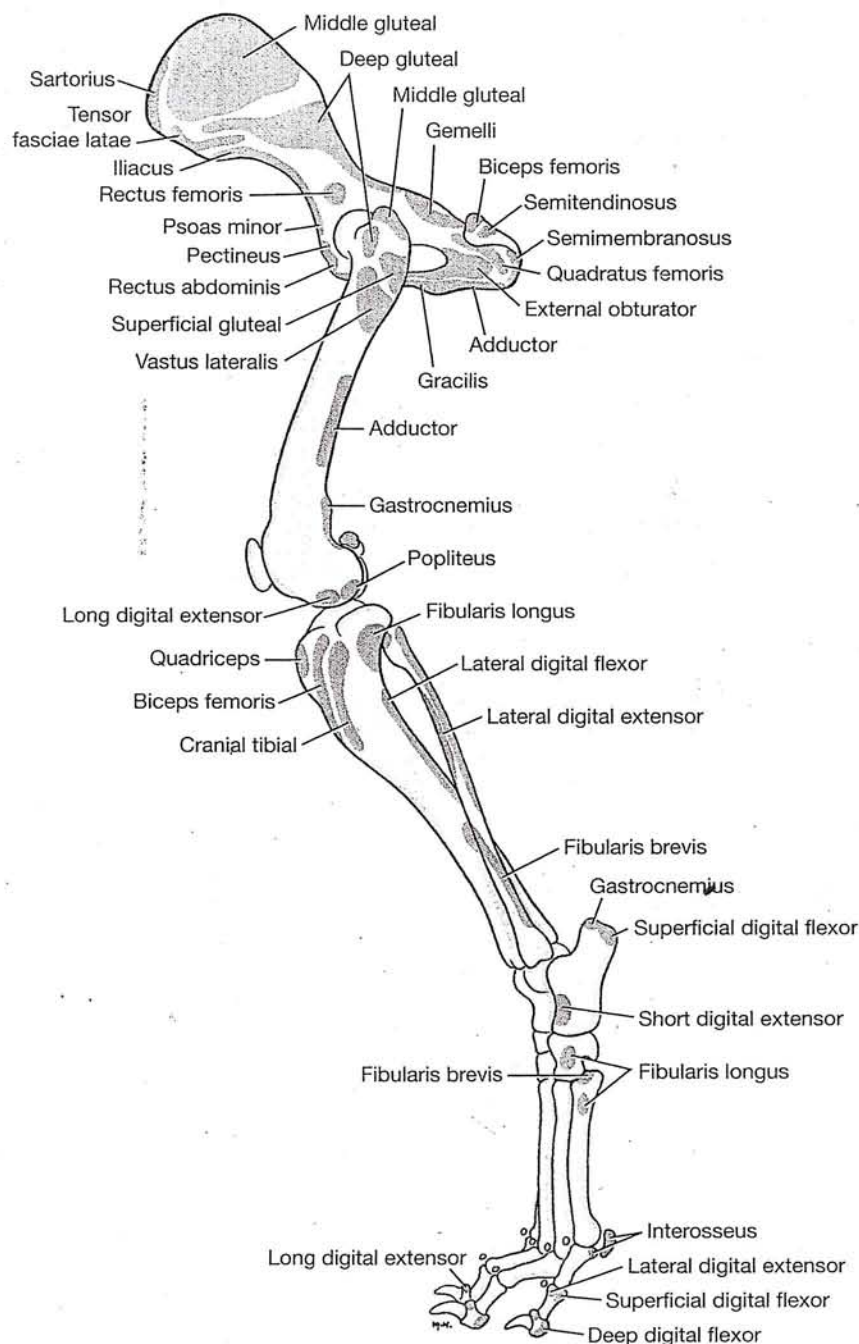


Fig. 2-44 Muscle attachments on pelvis and left pelvic limb, lateral view.

Medial Muscles of the Thigh

1. The **sartorius** (Figs. 2-41 through 2-45, 2-47, 2-52) consists of two straplike parts that lie on the cranial and craniomedial surfaces of the thigh. These parts extend from the ilium to the tibia. The **cranial part** forms the cranial contour of the thigh and may be nearly 1 cm thick there. The **caudal part** is on the medial side of the thigh and is thinner, wider, and longer than the cranial

part. Both muscle parts lie predominantly on the medial side of the large quadriceps femoris. Transect both parts and reflect the distal parts to their insertions on the patella and cranial border of the tibia.

ORIGIN: Cranial part—the crest of the ilium and the thoracolumbar fascia; caudal part—the cranial ventral iliac spine and the adjacent ventral border of the ilium.

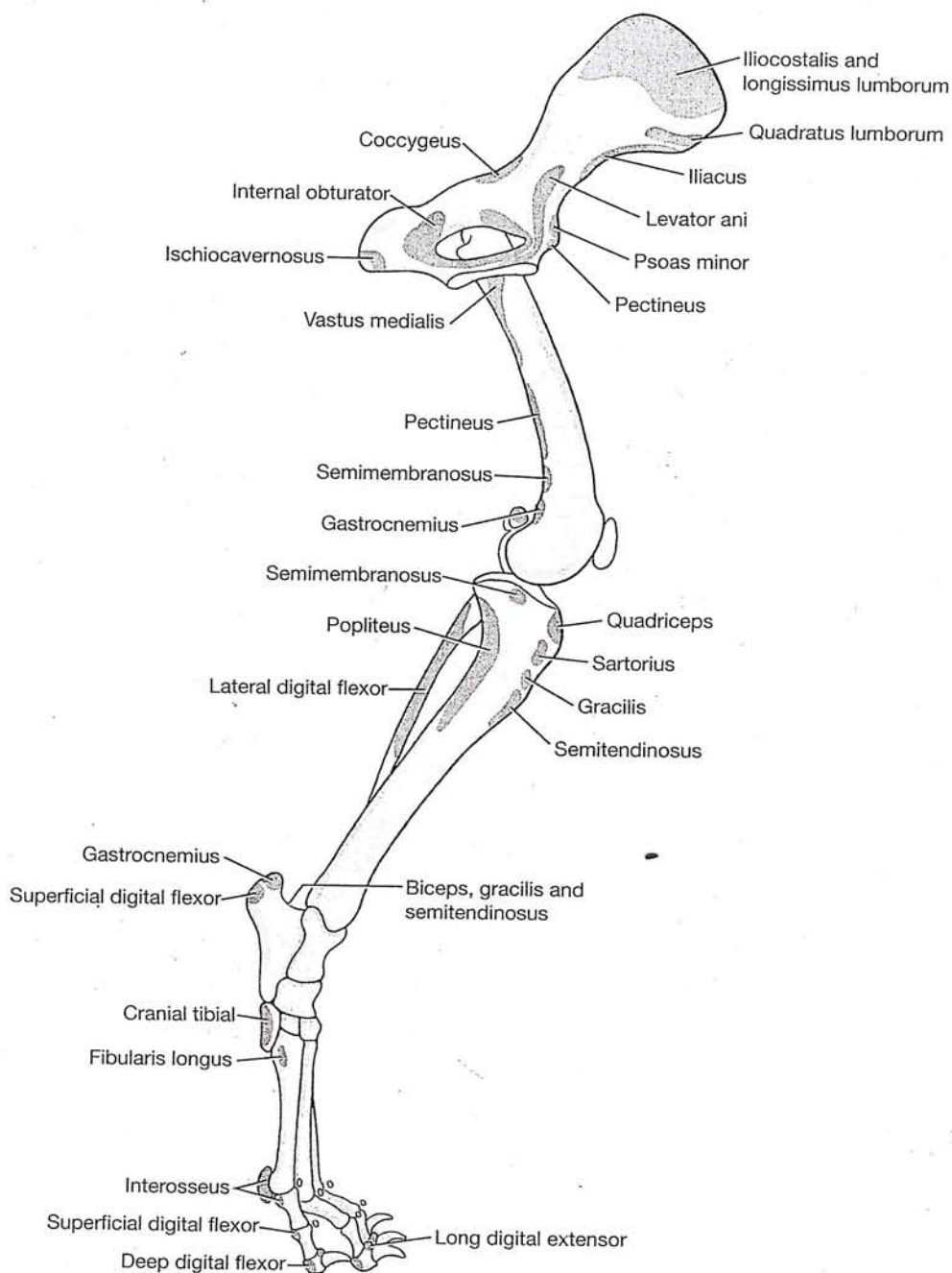


Fig. 2-45 Muscle attachments on pelvis and left pelvic limb, medial view.

INSERTION: Cranial part—the patella, in common with the rectus femoris of the quadriceps; caudal part—the cranial border of the tibia, in common with the gracilis.

ACTION: To flex the hip. The cranial part extends the stifle; the caudal part flexes the stifle.

INNERVATION: Femoral nerve.

2. The **gracilis** (Figs. 2-42, 2-44, 2-45, 2-47, 2-52, 2-54, 2-55) arises from the **symphyseal tendon**, a thick, flat tendon attached ventrally

to the symphysis pelvis. The aponeurosis of the gracilis covers the adductor. Transect the gracilis through its aponeurotic origin. Reflect it distally and observe its insertion as well as that of the semitendinosus on the cranial border of the tibia.

ORIGIN: The pelvic symphysis by means of the symphyseal tendon.

INSERTION: The cranial border of the tibia and, with the semitendinosus, the tuber calcanei.

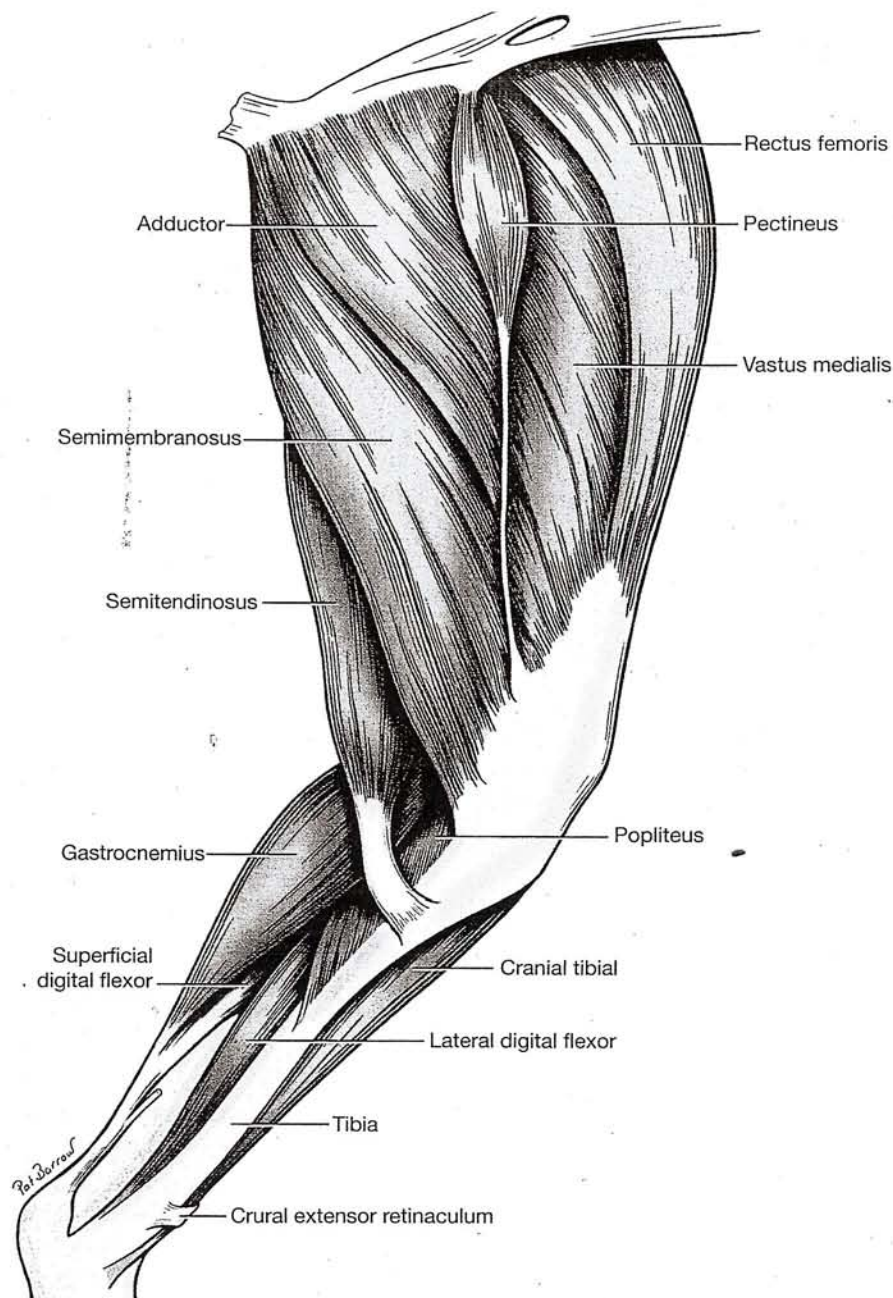


Fig. 2-46 Deep muscles of left pelvic limb, medial view.

ACTION: To adduct the limb, flex the stifle, and extend the hip and hock.

INNERVATION: Obturator nerve.

The **femoral triangle** (Fig. 2-79) is the shallow triangular space through which the femoral vessels run to and from the pelvic limb. It is located on the proximal medial surface of the thigh with its base at the abdominal wall. The triangle lies between the caudal belly of the sartorius cranially and the pectineus and adductor caudally. The iliopsoas and rectus femoris form the proximal lateral

part of the triangle. The vastus medialis forms the distal lateral part. This triangle contains, among other structures, the femoral artery and vein. Remove the medial femoral fascia and adipose tissue that covers and fills in around the femoral artery and vein. Notice that the vein lies caudal to the artery. The pulse is usually taken from the femoral artery here.

3. The **pectineus** (Figs. 2-42, 2-44 through 2-47, 2-49, 2-50) is a small, spindle-shaped muscle that belongs to the deep medial muscles of

they converge before forming an aponeurosis that runs under the biceps to the third trochanter. Clean the superficial gluteal and transect it 1 cm from the beginning of its aponeurosis of insertion. Do not transect the caudally lying **sacrotuberous ligament** (Figs. 2-43, 2-58). This is a collagenous band that runs from the sacrum to the lateral angle of the ischiatic tuberosity. Notice that the superficial gluteal arises from the proximal half of this ligament. Sever the deep gluteal fascia 1 cm cranial to its junction with the muscle fibers of the superficial gluteal.

ORIGIN: The lateral border of the sacrum and the first caudal vertebra, partly by means of the sacrotuberous ligament; the cranial dorsal iliac spine by means of the deep gluteal fascia.

INSERTION: The third trochanter.

ACTION: To extend the hip and abduct the limb.

INNERVATION: Caudal gluteal nerve.

3. The **middle gluteal** (Figs. 2-41, 2-43, 2-44, 2-50, 2-57) is a large, ovoid muscle that lies between the tensor fasciae latae and the superficial gluteal. Clean the surface of the muscle by reflecting the deep gluteal fascia dorsocranial to the iliac crest. This reveals that the fibers of the muscle for the most part parallel its long axis. Carefully separate the cranioventral part of the middle gluteal from the underlying deep gluteal. The entire caudodorsal border of the middle gluteal is covered by the superficial gluteal. The deep caudal portion of the middle gluteal is readily separated from the main muscle mass and is called the **piriformis muscle** (Fig. 2-43). Starting at the middle of the cranioventral border of the middle gluteal, transect the entire muscle and reflect the distal half toward its insertion on the apex of the greater trochanter of the femur.

ORIGIN: The crest and gluteal surface of the ilium.

INSERTION: The greater trochanter.

ACTION: To extend and abduct the hip and to rotate the pelvic limb medially.

INNERVATION: Cranial gluteal nerve.

4. The **deep gluteal** (Figs. 2-43, 2-44, 2-48, 2-50) is fan shaped and completely covered by the middle gluteal. Its fibers converge to insert on the cranial face of the greater trochanter.

ORIGIN: The body of the ilium; the ischiatic spine.

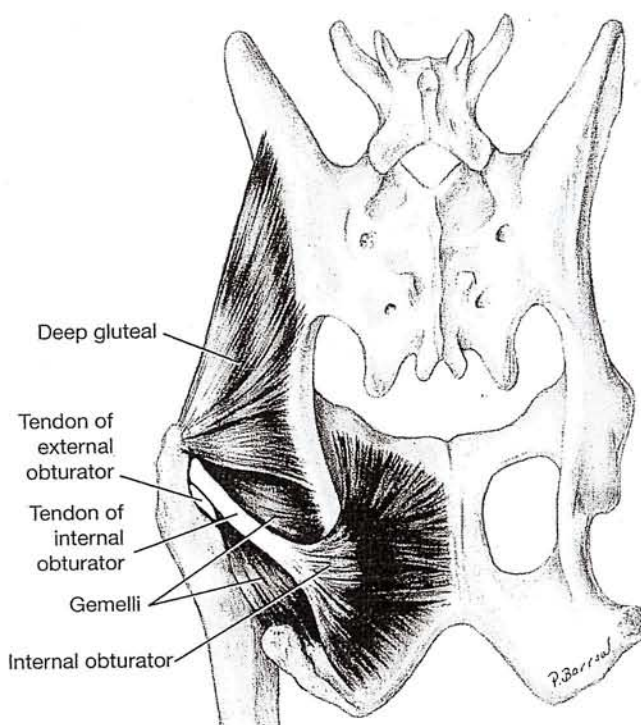


Fig. 2-48 Muscles of left hip joint, dorsal aspect.

INSERTION: The cranial aspect of the greater trochanter.

ACTION: To extend and abduct the hip and to rotate the pelvic limb medially.

INNERVATION: Cranial gluteal nerve.

The **articularis coxae** (Fig. 2-50, B) is a small, spindle-shaped muscle lying on the craniolateral aspect of the hip joint capsule. It is covered by the deep gluteal muscle. It arises from the lateral surface of the ilium along with the rectus femoris and inserts on the neck of the femur. (No dissection is necessary.)

Caudal Hip Muscles

The four muscles of this group are important because of their proximity to the hip. They lie caudal to the hip and extend from the inner and outer surfaces of the ischium to the femur. All rotate the limb laterally. This action opposes the medial rotation by the gluteals so that the thigh moves in a sagittal plane at the hip.

1. The **internal obturator** (Figs. 2-43, 2-45, 2-48, 2-50) is fan shaped on the dorsal surface of the ischium and pubis. Its muscle fibers converge toward the lesser ischiatic notch. The body of the muscle may be exposed at its origin on the dorsal surface of the ischium by removing the

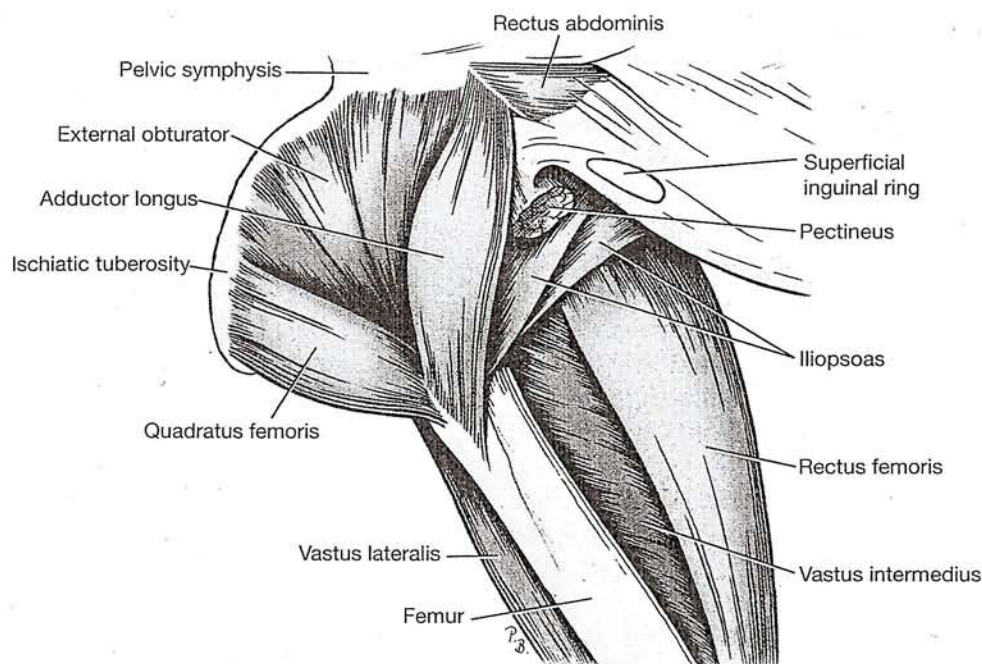


Fig. 2-49 Deep muscles medial to left hip joint.

loose fat and the fascia caudomedial to the sacrotuberous ligament. The most caudal fibers of the internal obturator run cranio-laterally toward the lesser ischiatic notch, where the tendon of the muscle begins. The tendon of the internal obturator passes over the lesser ischiatic notch ventral to the sacrotuberous ligament. Transect the sacrotuberous ligament and reflect the adjacent soft tissues to expose the tendon of insertion of the internal obturator muscle running to the trochanteric fossa. Transect the tendon of the internal obturator as it crosses the gemelli and reflect it to observe the bursa that lies between the tendon and the lesser ischiatic notch.

ORIGIN: The symphysis pelvis and the dorsal surface of the ischium and pubis.

INSERTION: The trochanteric fossa of the femur.

ACTION: To rotate the pelvic limb laterally at the hip.

INNERVATION: Sciatic nerve.

2. The **gemelli** (Figs. 2-43, 2-44, 2-48, 2-50), two muscles fused together, lie under the tendon of the internal obturator. They are interposed between the quadratus femoris and external obturator distally and the deep gluteal proximally. The gemelli are deeply grooved by the tendon of the internal obturator so that their edges overlap this tendon.

ORIGIN: The lateral surface of the ischium, caudal to the acetabulum and ventral to the lesser ischiatic notch.

INSERTION: The trochanteric fossa.

ACTION: To rotate the pelvic limb laterally at the hip.

INNERVATION: Sciatic nerve.

3. The **quadratus femoris** (Figs. 2-43, 2-44, 2-49, 2-50) is short and thick. It lies deep to the biceps femoris, where it is interposed between the adductor medially, the biceps femoris laterally, and the external obturator and gemelli dorsally. Its fibers are at right angles to the long axis of the thigh. It should be examined from both the medial and lateral sides. The dorsal border of the quadratus femoris lies closely applied to the ventral border of the gemelli.

ORIGIN: The ventral surface of the caudal part of the ischium.

INSERTION: Intertrochanteric crest.

ACTION: To extend the hip and rotate the pelvic limb laterally.

INNERVATION: Sciatic nerve.

4. The **external obturator** (Figs. 2-44, 2-48 through 2-50) is fan shaped and arises on the ventral surface of the pubis and ischium. It covers the obturator foramen. Its caudal border is covered by the quadratus femoris, whereas its

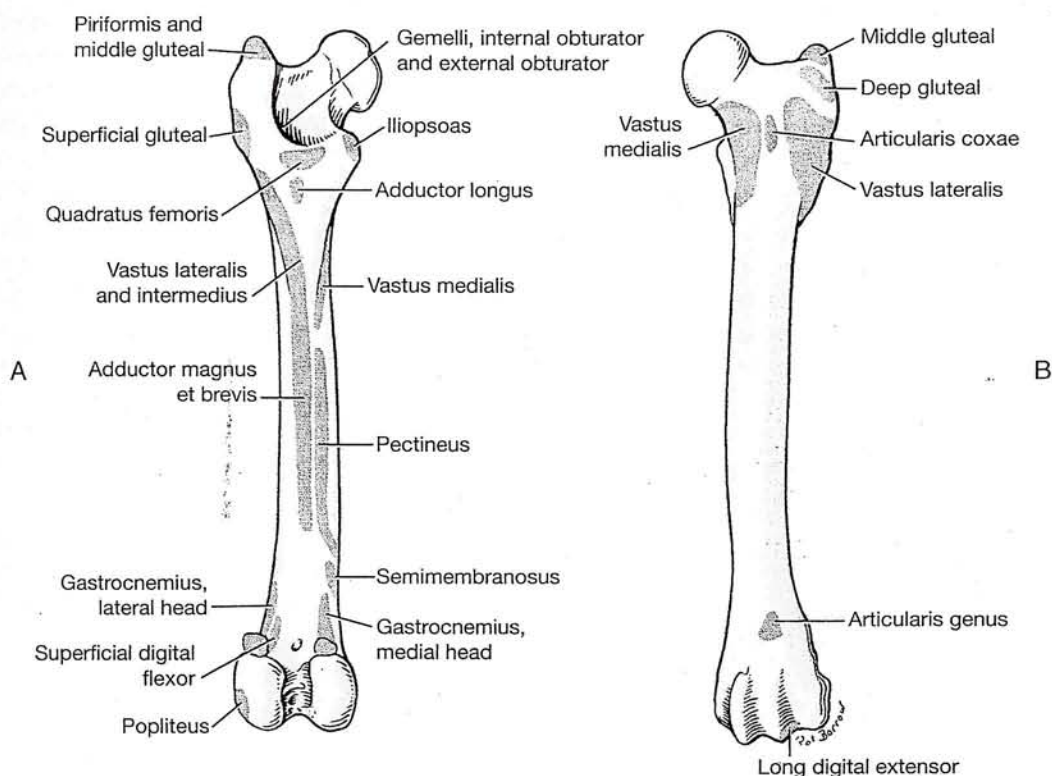


Fig. 2-50 A, Left femur with muscle attachments, caudal view. B, Left femur with muscle attachments, cranial view.

cranial border is hidden by the adductor. Follow the external obturator to its insertion.

ORIGIN: The ventral surface of the pubis and ischium.

INSERTION: The trochanteric fossa.

ACTION: To rotate the pelvic limb laterally.

INNERVATION: Obturator nerve.

Cranial Muscles of the Thigh

1. The **quadriceps femoris** (Figs. 2-42 through 2-47, 2-49, 2-50, 2-52, 2-57) is divided into four heads of origin, which are fused distally. It arises from the femur and the ilium and is inserted on the tibial tuberosity. The patella lies in the tendon of insertion. This muscle is the most powerful extensor of the stifle and is necessary for the animal to support its weight.

The **patella**, a sesamoid bone, is intercalated in the large tendon of insertion of the quadriceps. It articulates with the trochlea of the femur.

The **patellar ligament** extends from the patella to the tibial tuberosity. It is the distal end of the tendon of insertion of the quadriceps.

The **rectus femoris** (Figs. 2-42 through 2-44, 2-46, 2-47, 2-49) is the most cranial component of the quadriceps femoris and the only one to arise

from the ilium. Proximally, it is circular in transverse section and passes between the vastus medialis and the vastus lateralis. Uncover the rectus femoris near its origin. Transect and reflect the proximal part. The rectus arises from the ilium cranial to the acetabulum and inserts on the tibial tuberosity. It is a flexor of the hip as well as an extensor of the stifle.

The **vastus lateralis** (Figs. 2-43, 2-44, 2-47, 2-49, 2-50) lies lateral and caudal to the rectus femoris, to which it is fused distally. The vastus lateralis is partly separated from the vastus intermedius by a scantily developed intermuscular septum. Notice that the vastus lateralis arises from the proximal part of the lateral lip of the caudal rough surface of the femur. It is inserted with the rectus femoris on the tibial tuberosity.

The **vastus intermedius** (Figs. 2-47, 2-49, 2-50) lies directly on the smooth cranial surface of the femur and is quite intimately fused with the other two vasti. It arises with the vastus lateralis, which covers it, from the lateral side of the proximal end of the femur. It inserts on the tibial tuberosity with the other members of the group.

The **vastus medialis** (Figs. 2-42, 2-45 through 2-47, 2-50) arises from the medial side of the

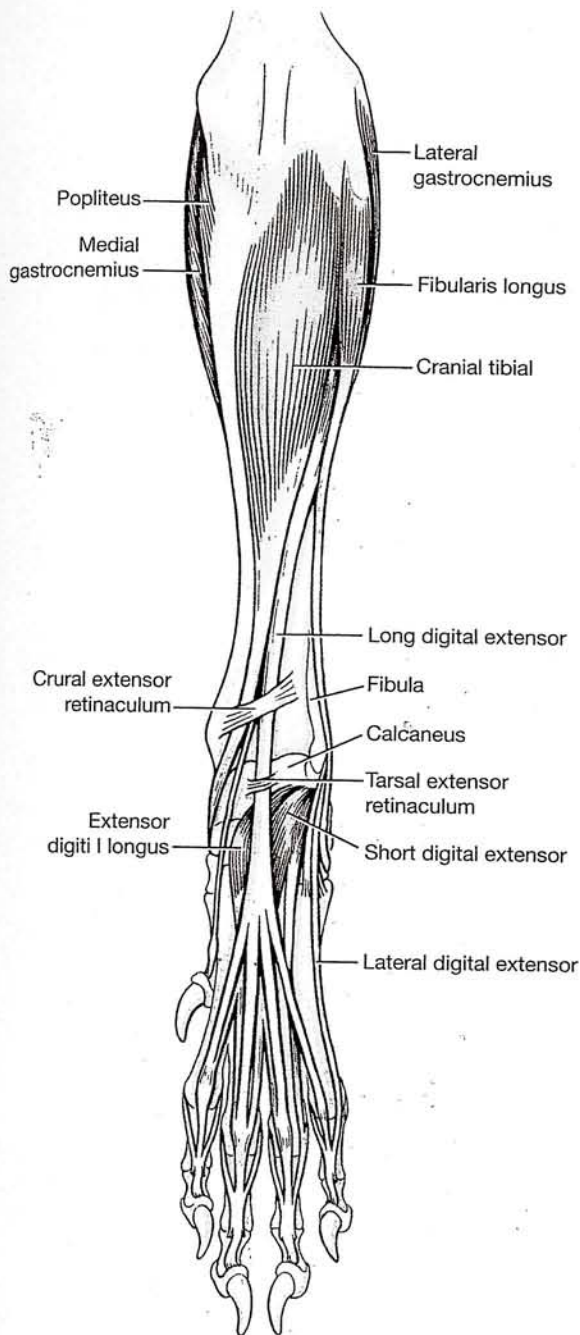


Fig. 2-53 Muscles of left pelvic limb, cranial view.

flexor between them. These muscles form the caudal bulge of the leg (calf) and contribute the major component of the **common calcanean tendon**.

The two heads of the gastrocnemius arise from the medial and lateral supracondylar tuberosities of the femur. In each tendon of origin there is a sesamoid bone that articulates with the caudodorsal aspect of the femoral condyle.

Identify the lateral and medial heads of the gastrocnemius and follow them to their union as a common tendon that inserts on the proximal dorsal surface of the tuber calcanei. The superficial digital flexor muscle, which is hidden proximally between the two heads of the gastrocnemius, emerges distally as a superficial tendon that passes over the medial surface of the gastrocnemial tendon, caps the tuber calcanei, and continues over the plantar surface of the paw. With a probe, separate the gastrocnemius from the superficial digital flexor by entering between their tendons. Proximally, bluntly separate the superficial digital flexor from the heads of the gastrocnemius.

The superficial digital flexor has a common origin with the lateral head of the gastrocnemius—the lateral supracondylar tuberosity of the femur—and is closely adherent to that head. Transect each head of the gastrocnemius and reflect them proximally to see their origin and the associated sesamoid bones.

ORIGIN: The medial and lateral supracondylar tuberosities of the femur.

INSERTION: The proximal dorsal surface of the tuber calcanei.

ACTION: To extend the tarsus and flex the stifle.

INNERVATION: Tibial nerve.

2. The **superficial digital flexor** (Figs. 2-42 through 2-46, 2-50, 2-54 through 2-57) is a spindle-shaped muscle that arises from the lateral supracondylar tuberosity of the femur with the lateral head of the gastrocnemius. Its deep surface is in apposition to the deep digital flexor and the popliteus, whereas its other surfaces are largely covered by the gastrocnemius. Proximal to the calcaneal process, its tendon passes from deep to superficial by crossing the medial surface of the gastrocnemius tendon. Farther distally the tendon widens, caps the tuber calcanei, attaches on each side, and continues distally. Make a sagittal incision through the superficial digital flexor tendon from the place where it gains the caudal side of the gastrocnemius to the tuber calcanei. Continue the incision distal to the tuber calcanei for an equal distance. Observe the large **calcaneal bursa** of the superficial digital flexor that lies under its tendon as it crosses the tuber calcanei. Notice the distinct medial and lateral attachments of the tendon on the tuber calcanei. Opposite the distal plantar surface of the tarsus, the tendon bifurcates; each of these branches in turn bifurcates, thus

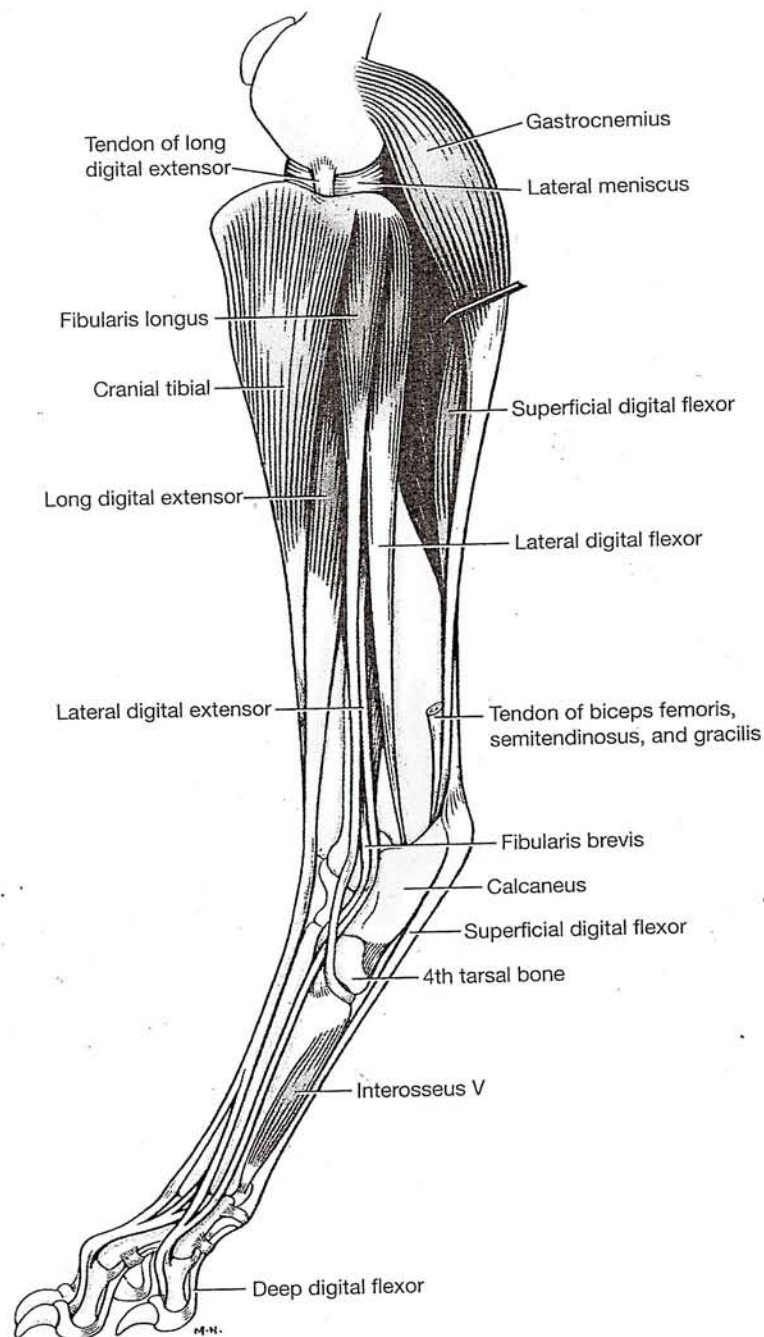


Fig. 2-54 Muscles of left pelvic limb, lateral view.

forming four tendons of nearly equal size. Each tendon is disposed in its digit as the corresponding tendon in the forepaw. They need not be dissected.

ORIGIN: The lateral supracondylar tuberosity of the femur.

INSERTION: The tuber calcanei and the bases of the middle phalanges of digits II, III, IV, and V.

ACTION: To flex the first two digital joints of the four principal digits; flex the stifle; extend the tarsus.

INNERVATION: Tibial nerve.

3. The **deep digital flexor** (Figs. 2-42 through 2-46, 2-52, 2-54 through 2-57) and the popliteus are the principal muscles yet to be dissected on the caudal surface of the leg. The separation

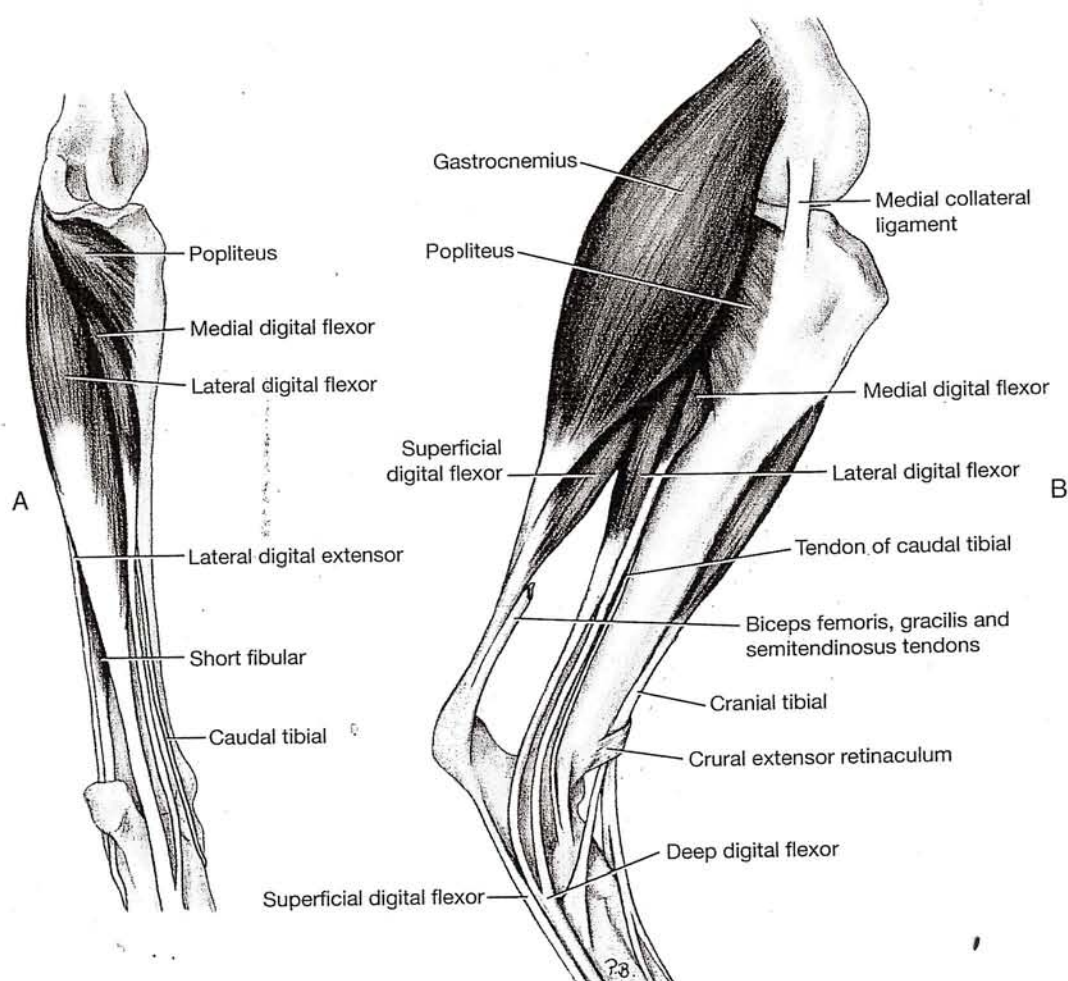


Fig. 2-55 A, Deep muscles of left crus, caudal view. B, Muscles of left crus, medial aspect.

(Continued)

between them runs distomedially. Transect the superficial digital flexor proximal to its tendon to expose these muscles. The two muscles that compose the deep digital flexor are now exposed.

The **lateral digital flexor** (formerly the flexor hallucis longus) (Figs. 2-44, 2-46, 2-52, 2-54, 2-56) arises from the caudolateral border of the proximal two thirds of the tibia, most of the proximal half of the fibula, and the adjacent interosseous membrane. Its tendon begins as a wide expanse on the caudal side of the muscle but condenses distally. Medial to the tuber calcanei, it is surrounded by the tarsal synovial sheath and bound in the groove over the sustentaculum tali of the calcaneus by the **flexor retinaculum**. At the level of the distal row of tarsal bones, observe the tendon of the lateral digital flexor joining that of the medial digital flexor to form a common tendon.

The courses, relations, and attachments of the tendons distal to the tarsus are similar to those of the deep flexor tendon of the forelimb. Their dissection is not necessary.

The **medial digital flexor** (Figs. 2-52, 2-55, 2-56) is smaller and lies between the lateral digital flexor and the popliteus. From the proximal end of the tibia, it runs distomedially. Its tendon lies on the caudomedial side of the tibia. At the distal row of tarsal bones, it unites with the tendon of the lateral digital flexor.

ORIGIN: The caudal aspect of the proximal two thirds of the tibia, the proximal half of the fibula, and the adjacent interosseous membrane.

INSERTION: The flexor tubercle on the plantar surface of the base of each of the distal phalanges.

ACTION: To flex the digits and extend the tarsus.

INNERVATION: Tibial nerve.

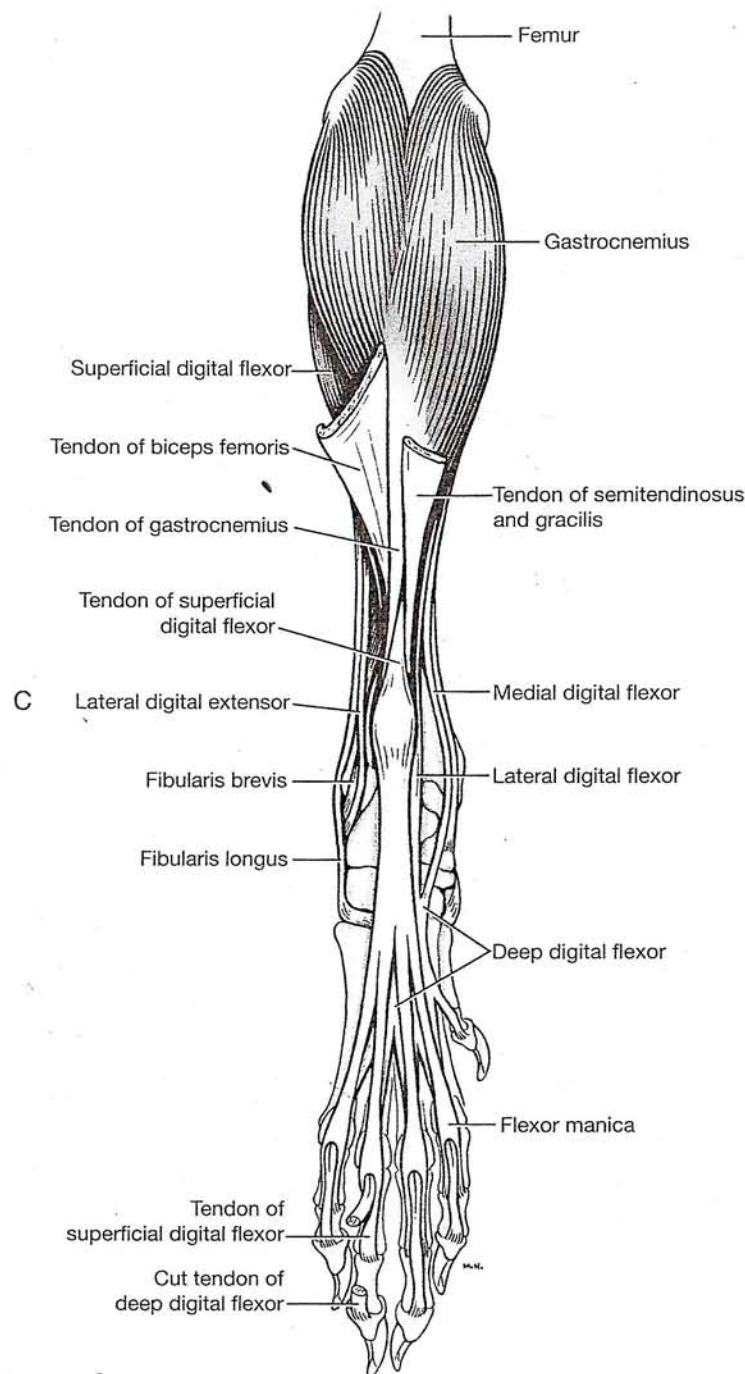


Fig. 2-55—cont'd C, Muscles of left pelvic limb, caudal view.

4. The **popliteus** (Figs. 2-44 through 2-46, 2-50, 2-52, 2-53, 2-56) is covered by the gastrocnemius and the superficial digital flexor and lies on the stifle joint capsule and caudal surface of the proximal tibia. It arises from the lateral epicondyle of the femur by a long tendon that should be isolated just cranial to the lateral collateral ligament of the stifle. It courses caudally,

medial to the lateral collateral ligament. At the junction of the tendon with the muscle, there is a **sesamoid** that articulates with the caudal aspect of the lateral condyle of the tibia. The muscle portion starts at the lateral tibial condyle and extends to the proximal third of the tibia on the medial side of the leg. Transect the popliteus at the tendomuscular junction and reflect it proximally to

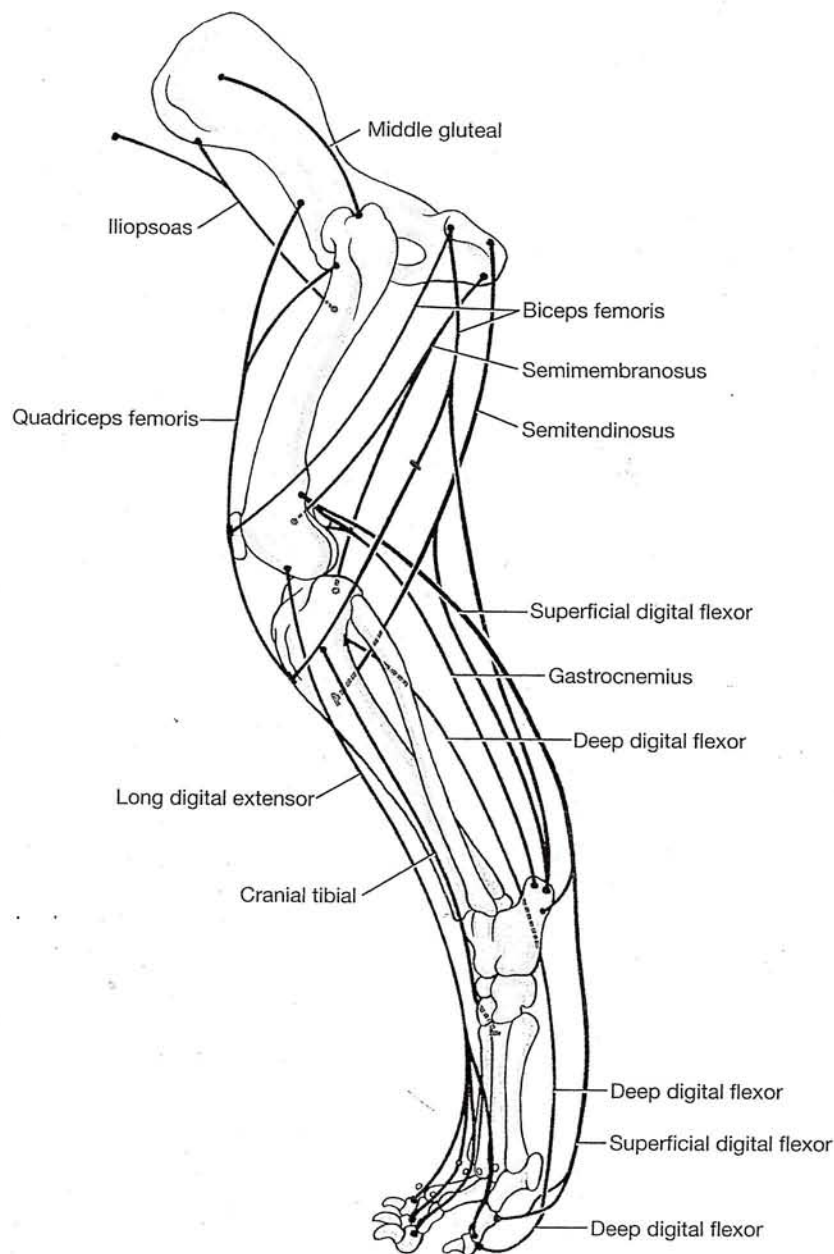


Fig. 2-57 Major flexors and extensors of pelvic limb.

sacral and first caudal vertebrae to the lateral angle of the ischiatic tuberosity. It serves as an origin for several muscles that have been dissected.

The **hip joint** (Figs. 2-58, 2-59) is a ball-and-socket joint whose main movements are flexion and extension. This joint can move in any direction, but the opposed action of the medial and lateral rotator muscles limits the movement to primarily flexion and extension. The joint capsule passes from the neck of the femur to a line peripheral to the acetabular lip. Transect the deep gluteal and iliopsoas muscles at their insertions. Cut the

hip joint capsule to expose the joint and associated ligaments. Consider the various muscles that may be encountered by surgical approaches to the hip from different directions.

The **ligament of the femoral head** (Fig. 2-59) is a thick band of collagenous tissue that extends from the acetabular fossa to the fovea capitis. At its acetabular attachment it may blend slightly with the transverse acetabular ligament. A synovial membrane covers it. Transect this ligament.

The **transverse acetabular ligament** (Fig. 2-59) is a small band that extends from one side