The Back of the Thigh

Skin

Cutaneous Nerves

The **posterior cutaneous nerve of the thigh,** a branch of the sacral plexus, leaves the gluteal region by emerging from beneath the lower border of the gluteus maximus muscle (Fig. 10.1). It descends on the back of the thigh, and in the popliteal fossa it pierces the deep fascia and supplies the skin. It gives off numerous branches to the skin on the back of the thigh and the upper part of the leg (Fig. 10.1).

Superficial Veins

Many small veins curve around the medial and lateral aspects of the thigh and ultimately drain into the great saphenous vein (Fig. 10.19). Superficial veins from the lower part of the back of the thigh join the small saphenous vein in the popliteal fossa.

Lymph Vessels

Lymph from the skin and superficial fascia on the back of the thigh drains upward and forward into the vertical group of superficial inguinal lymph nodes (Fig. 10.4).

Contents of the Posterior Fascial Compartment of the Thigh

- **Muscles:** Biceps femoris, semitendinosus, semimembranosus, and a small part of the adductor magnus (hamstring muscles)
- **Blood supply:** Branches of the profunda femoris artery
- **Nerve supply:** Sciatic nerve

The muscles of the posterior fascial compartment are seen in Figure 10.31 and are described in Table 10.4.

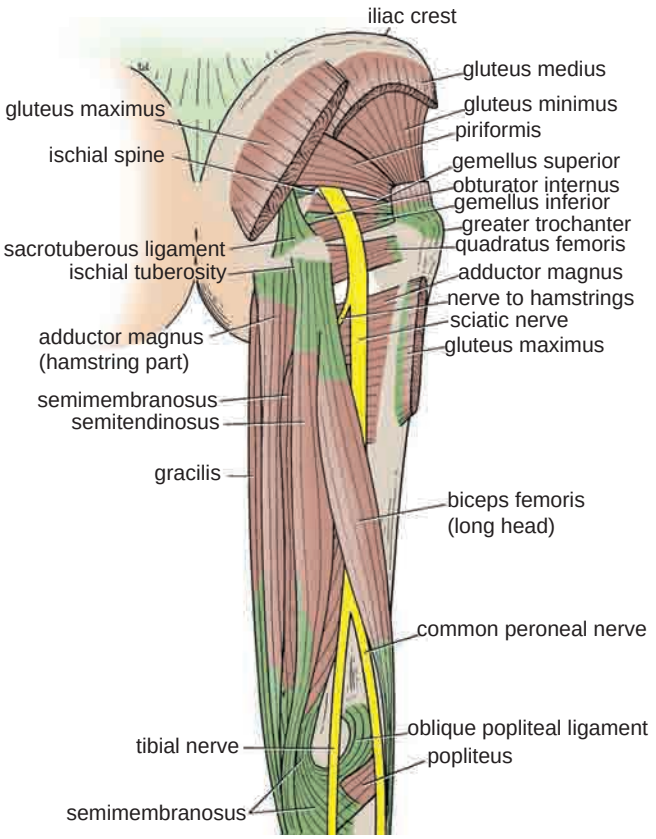

FIGURE 10.31 Structures in the posterior aspect of the right thigh.

Note the following:

- The biceps femoris muscle receives its nerve supply from the sciatic nerve, the long head from the tibial portion, and the short head from the common peroneal portion.
- The hamstring part of the adductor magnus muscle receives its nerve supply from the tibial portion of the sciatic nerve and the adductor part from the obturator nerve.
- The semimembranosus insertion sends a fibrous expansion upward and laterally, which reinforces the capsule on the back of the knee joint; the expansion is called the **oblique popliteal ligament.**

Blood Supply of the Posterior Compartment of the Thigh

The four perforating branches of the profunda femoris artery provide a rich blood supply to this compartment (Fig. 10.27). The profunda femoris vein drains the greater part of the blood from the compartment.

Nerve Supply of the Posterior Compartment of the Thigh

Sciatic Nerve

The sciatic nerve, a branch of the sacral plexus (L4 and 5; S1, 2, and 3), leaves the gluteal region as it descends in the midline of the thigh (Fig. 10.31). It is overlapped posteriorly by the adjacent margins of the biceps femoris and semimembranosus muscles. It lies on the posterior aspect of the adductor magnus muscle. In the lower third of the thigh, it ends by dividing into the tibial and common

TABLE 10.4 Muscles of the Posterior Fascial Compartment of the Thigh

Muscle	Origin	Insertion	Nerve Supply	Nerve Root[a]	Action
Biceps femoris	Long head: ischial tuberosity	Head of fibula	Long head: tibial portion of sciatic nerve	L5; **S1,** 2	Flexes and laterally rotates leg at knee joint; long head also extends thigh at hip joint
	Short head: linea aspera, lateral supracondylar ridge of shaft of femur		Short head: common peroneal portion of sciatic nerve		
Semitendinosus	Ischial tuberosity	Upper part of medial surface of shaft of tibia	Tibial portion of sciatic nerve	**L5; S1,** 2	Flexes and medially rotates leg at knee joint; extends thigh at hip joint
Semimembranosus	Ischial tuberosity	Medial condyle of tibia	Tibial portion of sciatic nerve	**L5; S1,** 2	Flexes and medially rotates leg at knee joint; extends thigh at hip joint
Adductor magnus (hamstring portion)	Ischial tuberosity	Adductor tubercle of femur	Tibial portion of sciatic nerve	L2, **3, 4**	Extends thigh at hip joint

[a]The predominant nerve root supply is indicated by boldface type.

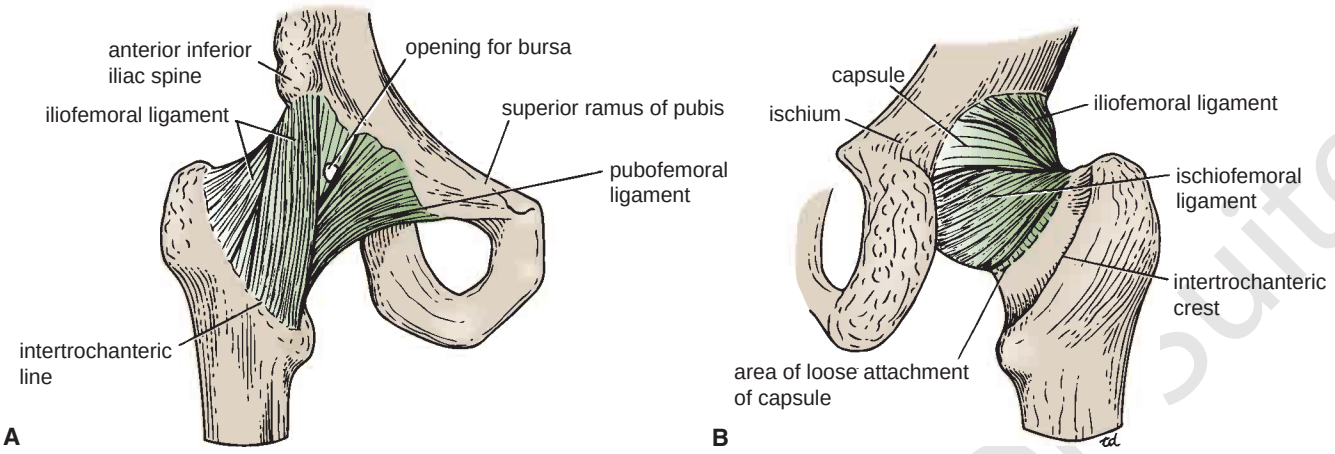

FIGURE 10.32 Anterior aspect **(A)** and posterior aspect **(B)** of the right hip joint.

peroneal nerves (Figs. 10.29 and 10.31). Occasionally, the sciatic nerve divides into its two terminal parts at a higher level—in the upper part of the thigh, the gluteal region, or even inside the pelvis.

Branches

- The **tibial nerve,** a terminal branch of the sciatic nerve (Figs. 10.17, 10.29, and 10.31), enters the popliteal fossa. Its further course is described on page 479.
- The **common peroneal nerve,** a terminal branch of the sciatic nerve (Figs. 10.29 and 10.31), enters the popliteal fossa on the lateral side of the tibial nerve. Its further course is described on page 479.
- **Muscular branches** to the long head of the biceps femoris, the semitendinosus, the semimembranosus, and the hamstring part of the adductor magnus. These branches arise from the tibial component of the sciatic nerve and run medially to supply the muscles (Figs. 10.29 and 10.31).