

form net-work (**subsartorial plexus**) with branches of the saphenous and obturator nerves. When the communicating branch from the obturator nerve is large and continued to the integument of the leg, the posterior branch of the medial cutaneous is small, and terminates in the plexus, occasionally giving off a few cutaneous filaments. The medial cutaneous nerve, before dividing, gives off a few filaments, which pierce the fascia lata, to supply the integument of the medial side of the thigh, accompanying the long saphenous vein. One of these filaments passes through the saphenous opening; a second becomes subcutaneous about the middle of the thigh; a third pierces the fascia at its lower third.

MUSCULAR BRANCHES (*rami musculares*).—The **nerve to the Pectineus** arises immediately below the inguinal ligament, and passes behind the femoral sheath to enter the anterior surface of the muscle; it is often duplicated. The **nerve to the Sartorius** arises in common with the intermediate cutaneous.

The posterior division of the femoral nerve gives off the saphenous nerve, and muscular and articular branches.

The **Saphenous Nerve** (*n. saphenus; long or internal saphenous nerve*) (Fig. S27) is the largest cutaneous branch of the femoral nerve. It approaches the femoral artery where this vessel passes beneath the Sartorius, and lies in front of it, behind the aponeurotic covering of the adductor canal, as far as the opening in the lower part of the Adductor magnus. Here it quits the artery, and emerges from behind the lower edge of the aponeurotic covering of the canal; it descends vertically along the medial side of the knee behind the Sartorius, pierces the fascia lata, between the tendons of the Sartorius and Gracilis, and becomes subcutaneous. The nerve then passes along the tibial side of the leg, accompanied by the great saphenous vein, descends behind the medial border of the tibia, and, at the lower third of the leg, divides into two branches: one continues its course along the margin of the tibia, and ends at the ankle; the other passes in front of the ankle, and is distributed to the skin on the medial side of the foot, as far as the ball of the great toe, communicating with the medial branch of the superficial peroneal nerve.

BRANCHES.—The saphenous nerve, about the middle of the thigh, gives off a branch which joins the subsartorial plexus.

At the medial side of the knee it gives off a large **infrapatellar branch**, which pierces the Sartorius and fascia lata, and is distributed to the skin in front of the patella. This nerve communicates above the knee with the anterior cutaneous branches of the femoral nerve; below the knee, with other branches of the saphenous; and, on the lateral side of the joint, with branches of the lateral femoral cutaneous nerve, forming a plexiform net-work, the **plexus patellæ**. The infrapatellar branch is occasionally small, and ends by joining the anterior cutaneous branches of the femoral, which supply its place in front of the knee.

Below the knee, the branches of the saphenous nerve are distributed to the skin of the front and medial side of the leg, communicating with the cutaneous branches of the femoral, or with filaments from the obturator nerve.

The **muscular branches** supply the four parts of the Quadriceps femoris. The branch to the Rectus femoris enters the upper part of the deep surface of the muscle, and supplies a filament to the hip-joint. The branch to the Vastus lateralis, of large size, accompanies the descending branch of the lateral femoral circumflex artery to the lower part of the muscle. It gives off an articular filament to the knee-joint. The branch to the Vastus medialis descends lateral to the femoral vessels in company with the saphenous nerve. It enters the muscle about its middle, and gives off a filament, which can usually be traced downward, on the surface of the muscle, to the knee-joint. The branches to the Vastus intermedius, two or three in number, enter the anterior surface of the muscle about the middle of the thigh; a filament from one of these descends through the muscle to the Articularis genu and the knee-joint. The **articular branch to the hip-joint** is derived from the nerve to the Rectus femoris.