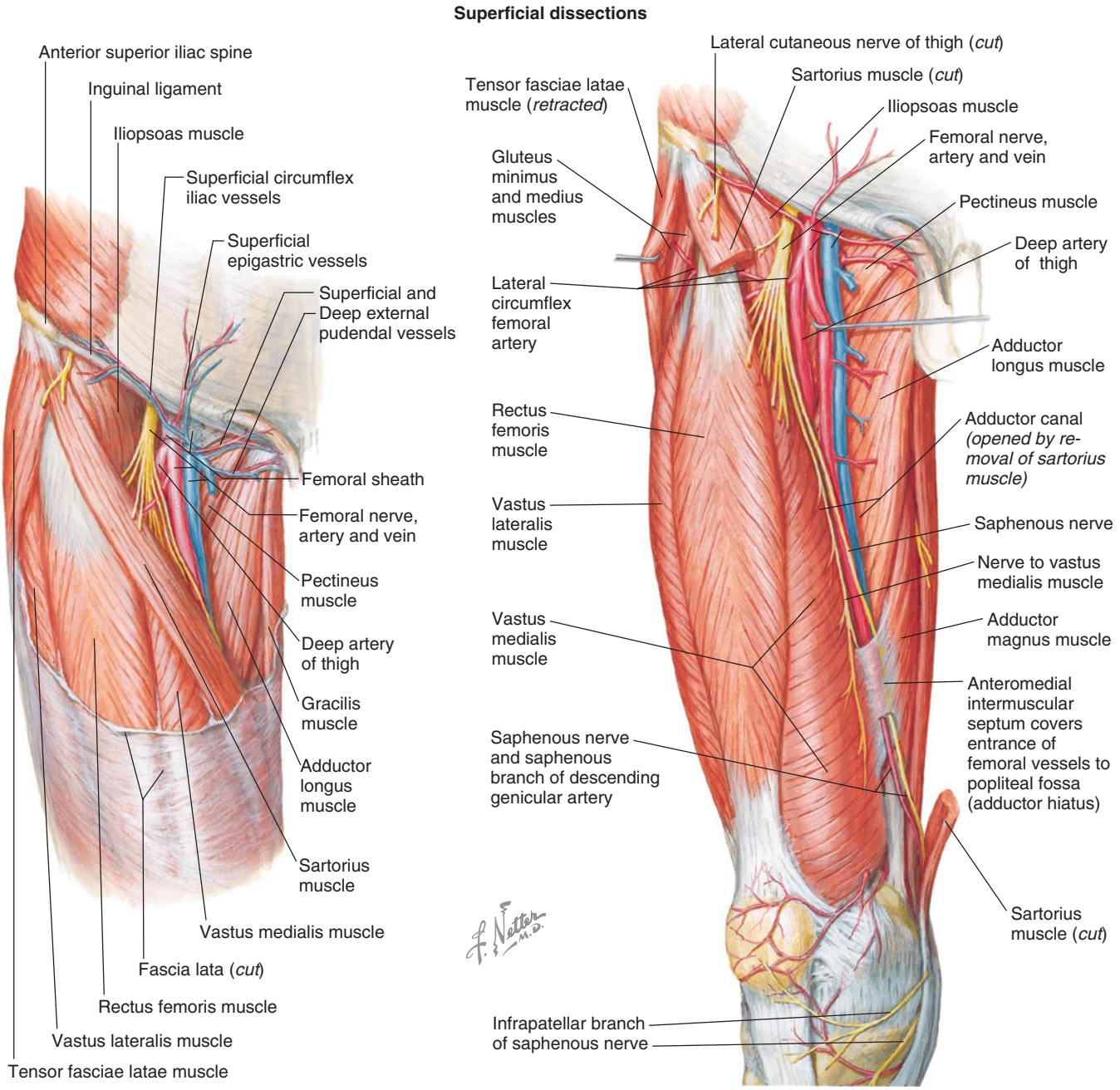


**Figure 13.1** Regional anatomy of the thigh. (Reprinted from Netter Anatomy Illustration Collection. ©Elsevier Inc. All Rights Reserved.)

laterally approximately two fingerbreadths below and parallel to the inguinal ligament and supplies the groin flap and superficial circumflex iliac artery perforator flap. The common femoral artery divides into the superficial and deep femoral arteries. The bifurcation typically occurs 5 cm distal to the inguinal ligament.

### EXPOSURE OF THE COMMON FEMORAL ARTERY

The common femoral artery (Fig. 13.2) can be palpated just distal to the inguinal ligament halfway between the anterior superior iliac spine and the symphysis pubis (see Fig. 13.5). The femoral vein is medial and the femoral nerve is lateral to the common femoral artery. The great saphenous vein drains into the medial surface of the femoral vein. In the femoral triangle, the vessel lies superficially below the fascia of the thigh and can be approached directly.

## DEEP FEMORAL ARTERY (PROFUNDA FEMORIS) (Fig. 13.2)

The lateral femoral circumflex artery is the largest branch of the deep femoral artery, arising from its lateral aspect. The vessel typically arises 1.5 cm distal to the origin of the deep femoral artery, although it branches directly from the common femoral artery in approximately 30% of patients (Fig. 13.3). It courses deep to the sartorius and rectus femoris and divides into ascending, transverse, and descending

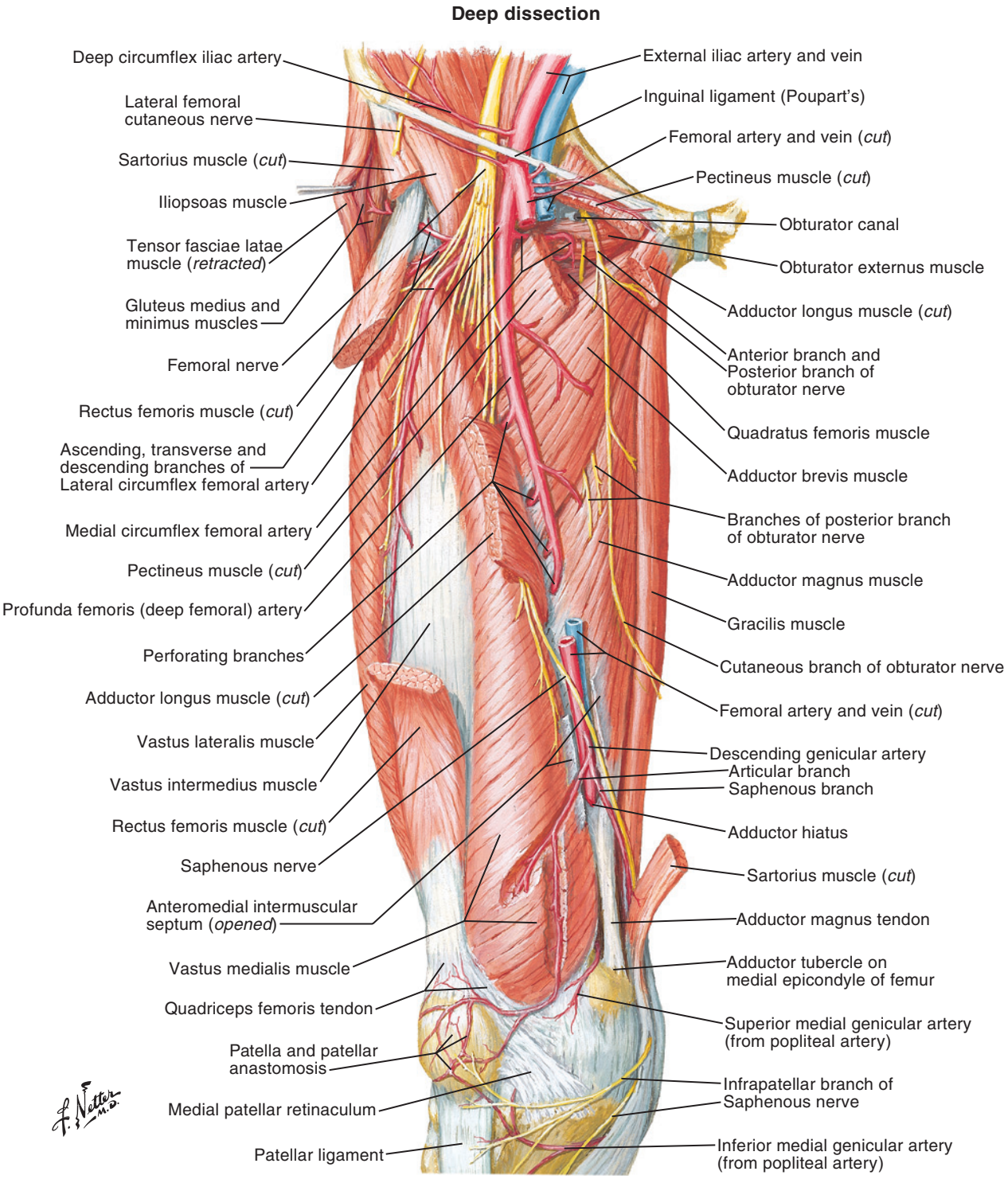


**Figure 13.2** Branching pattern of the deep femoral artery. (Reprinted from Netter Anatomy Illustration Collection. ©Elsevier Inc. All Rights Reserved.)

branches. The ascending branch can be identified in the interval between tensor fascia lata muscle and rectus femoris, and supplies the tensor fascia lata and gluteus muscles. The descending branch runs in the interval between the rectus femoris and vastus lateralis, and is the blood supply to the anterolateral thigh flap.[2] The rectus femoris branch is a direct branch from the descending branch of the lateral femoral circumflex artery. In 51% of patients, perforators from the rectus femoris branch pass between the rectus femoris and vastus medialis/sartorius to supply the anteromedial thigh flap.[3]

The medial femoral circumflex artery usually originates from the posteromedial aspect of the profunda femoris at the same level or close to the lateral femoral circumflex artery, but it may arise from the common femoral artery directly in 25% of patients. It divides into ascending and