

The **medial branch** (*ramus medialis; internal branch*), called from its size and distribution the **greater occipital nerve** (*n. occipitalis major; great occipital nerve*), ascends obliquely between the Obliquus inferior and the Semispinalis capitis, and pierces the latter muscle and the Trapezius near their attachments to the occipital bone (Fig. 801). It is then joined by a filament from the medial branch of the posterior division of the third cervical, and, ascending on the back of the head with the occipital artery, divides into branches which communicate with the lesser occipital nerve and supply the skin of the scalp as far forward as the vertex of the skull. It gives off muscular branches to the Semispinalis capitis, and occasionally a twig to the back of the auricula. The **lateral branch** (*ramus lateralis; external branch*) supplies filaments to the Splenius, Longus capitis, and Semispinalis capitis, and is often joined by the corresponding branch of the third cervical.

The **posterior division of the third cervical** is intermediate in size between those of the second and fourth. Its **medial branch** runs between the Semispinalis capitis and cervicis, and, piercing the Splenius and Trapezius, ends in the skin. While under the Trapezius it gives off a branch called the **third occipital nerve**, which pierces the Trapezius and ends in the skin of the lower part of the back of the head (Fig. 801). It lies medial to the greater occipital and communicates with it. The **lateral branch** often joins that of the second cervical.

The posterior division of the suboccipital, and the medial branches of the posterior division of the second and third cervical nerves are sometimes joined by communicating loops to form the *posterior cervical plexus* (Cruveilhier).

The **posterior divisions of the lower five cervical nerves** divide into medial and lateral branches. The **medial branches** of the fourth and fifth run between the Semispinales cervicis and capitis, and, having reached the spinous processes, pierce the Splenius and Trapezius to end in the skin (Fig. 801). Sometimes the branch of the fifth fails to reach the skin. Those of the lower three nerves are small, and end in the Semispinales cervicis and capitis, Multifidus, and Interspinales. The **lateral branches** of the lower five nerves supply the Iliocostalis cervicis, Longissimus cervicis, and Longissimus capitis.

The Thoracic Nerves (Nn. Thoracales).

The **medial branches** (*ramus medialis; internal branch*) of the **posterior divisions of the upper six thoracic nerves** run between the Semispinalis dorsi and Multifidus, which they supply; they then pierce the Rhomboidei and Trapezius, and reach the skin by the sides of the spinous processes (Fig. 801). The medial branches of the **lower six** are distributed chiefly to the Multifidus and Longissimus dorsi, occasionally they give off filaments to the skin near the middle line.

The **lateral branches** (*ramus lateralis; external branch*) increase in size from above downward. They run through or beneath the Longissimus dorsi to the interval between it and the Iliocostales, and supply these muscles; the lower five or six also give off cutaneous branches which pierce the Serratus posterior inferior and Latissimus dorsi in a line with the angles of the ribs (Fig. 801). The lateral branches of a variable number of the upper thoracic nerves also give filaments to the skin. The lateral branch of the twelfth thoracic, after sending a filament medialward along the iliac crest, passes downward to the skin of the buttock.

The medial cutaneous branches of the posterior divisions of the thoracic nerves descend for some distance close to the spinous processes before reaching the skin, while the lateral branches travel downward for a considerable distance—it may be as much as the breadth of four ribs—before they become superficial; the branch from the twelfth thoracic, for instance, reaches the skin only a little way above the iliac crest.¹