

The **first lumbar dorsal spinal rami** pass posteriorly, medial to the medial intertransversarii muscles and divide into medial and lateral branches.

Medial branches of L1 to L4 dorsal rami pass across the superior aspect of their respective transverse processes and at the base of the transverse process pierce the dorsal leaf of the intertransverse ligament. Each nerve then passes along the bone at the junction of the root of the transverse process with the root of the superior articular process. They hook medially around the base of the superior articular process, where the mamillo-accessory ligament covers each nerve. They cross the lamina and divides into branches that supply the multifidus and interspinales muscles, interspinous ligaments and zygapophyseal joints.

Lateral branches (L1 to L5) are distributed mainly to the **iliocostalis lumborum** muscles. Those of L1, L2 and L3 may become cutaneous under the postero-lateral borders of iliocostalis lumborum. In this case they pierce the thoracolumbar fascia (posterior layer) and pass infero-laterally across the iliac crests to supply skin of buttock (from iliac crests to greater trochanters of the femur).

NB

The mamillo-accessory ligaments are collagen fibers, which bridge the tips of the ipsilateral/homolateral mamillary and accessory processes of each lumbar vertebra. They may ossify, converting the mamillo-accessory notches into bony foramina. The mamillo-accessory ligaments cover the medial branches of the lumbar dorsal rami as they pass through mamillo-accessory notches.

Supply

The medial branches supply the multifidus and interspinales muscles and the interspinous ligaments and the zygapophyseal joints; the lateral branches supply the erector spinae muscles and a strip of skin in the gluteal regions.