The third lumbar dorsal nerve roots contain afferent somatic and visceral nerve fibers corresponding to the third lumbar spinal cord segment. They emerge as two or three rows of rootlets from the posterolateral sulci of the spinal cord. Rootlets of adjacent dorsal roots may communicate via thin branches.

The roots pass infero-laterally to their exit through the intervertebral foramina between the pedicles of L3 and L4. They are larger in diameter, obliquity and length than the dorsal roots above. They pass over the superior surfaces of the transverse processes of L4 to join with the third lumbar ventral roots to form the third lumbar spinal nerves. On each side, the third lumbar dorsal roots possess an ovoid spinal ganglion (dorsal root ganglion) proximal to where they join the third dorsal ventral roots. They are covered by a sleeve of pia mater, which is continuous with that of the spinal cord, and loosely invested by a prolongation of dura and arachnoid mater (the dural sleeve) almost as far as the spinal nerves.

Cauda Equina

The cauda equina is formed from the most caudal spinal roots. As the spinal cord terminates before the vertebral column, the lower spinal roots descend inferior to the cord, as a divergent sheath, to reach their corresponding foramina.