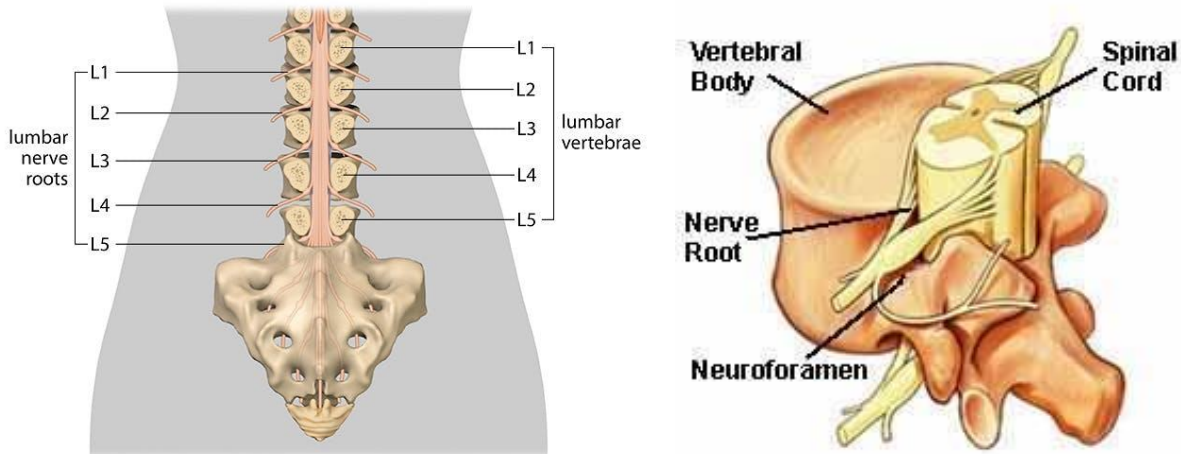


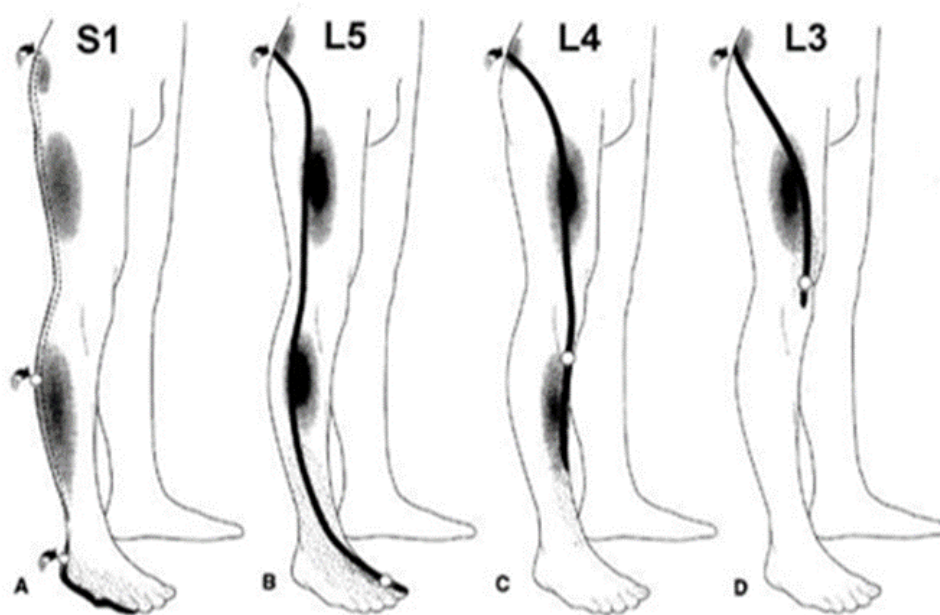
Lumbar nerve roots and nerve root pain:

There are five pairs (10 total) of lumbar nerve roots in the lumbar spine. After leaving from the bottom of the spinal cord around the L1 level the lumbar nerve roots descend in the spinal canal and exit the spine through little passageways on the side of the spine called the intervertebral neuroforamen. Each spinal nerve contains sensory fibers (skin sensation, pain messages) and motor fibers (nerve fibers that tell your muscles to move).



Under normal conditions the spinal nerves have plenty of room to descend and exit the spinal canal without difficulty. However, there are numerous spinal pathologies that can impede or interfere with the course of the spinal nerves. When one or more spinal nerves are entrapped or inflamed the resulting spinal pathology is called, “lumbar radiculopathy.” This condition is more commonly known as, “sciatica” and it can be very debilitating.

Lumbar radiculopathy can cause pain, changes in sensation (tingling, burning, numbness) and even weakness if the nerve is compressed. Most patients with lumbar radiculopathy will also have low back pain. The patient will complain of pain and sensory symptoms within the distribution of the affected nerve root. This distribution is called a dermatome.



The thick black line represents the sharp radiating radicular pain with a dermatomal pattern. The dotted lines indicate the location of the numbness or tingling sensations

Common lumbar diseases (pathologies) associated with lumbar radiculopathy include disc herniations, degenerative disc disease, tears of the annulus fibrosus, osteoarthritis of the facet joints compressing a nerve, abnormal spinal motion (spondylolisthesis) and narrowing of the spinal canal or intervertebral foramina (lumbar stenosis).

Treatment of lumbar radiculopathy typically includes rest, anti-inflammatories (NSAIDs), oral steroids (prednisone), analgesics (Tylenol), nerve pain medications (gabapentin, Lyrica, Cymbalta), chiropractic, physical therapy, and home exercise. If symptoms are severe a spinal injection called a lumbar epidural steroid injection may be offered to better control pain and improve function. Surgical management is indicated when pain is intolerable despite conservative treatments or if there is progression of weakness and sensory loss in the leg.