Lumbar Radiculopathy

**Situation:** Lumbar radiculopathy is a general diagnosis to describe pain from the irritation of nerves from the lower back. The nerves from the lumbar spine—or lower back—innervate or supply the buttocks, hips, thighs, legs and feet. When interference at the nerve root occurs from injury or irritation, symptoms will be experienced in one or all of these areas. Nerve root injuries or irritations can result from several tissues and conditions.

**Causes:** There are four primary causes of lumbar radiculopathy . . . disc herniation, degenerative disc disease, and degenerative joint disease.

- **Spinal Subluxation** is the chiropractic term that describes a condition when the flow of information through the nerves is interrupted or blocked due to a misalignment of the spinal cord within the spinal canal. When this occurs, many functions of the body can become compromised and painful, often leading to even more significant conditions.

- **Disc herniation** begins with small tears that create a fragile site within the disc wall. This weakness allows the thick fluid material of the nucleus to leak into the disc wall where sensitive nerve receptors are concentrated. This leaking can cause localized back pain, muscle ache, stiffness and spasms. If enough material leaks out, the disc can become deformed causing compression of spinal nerves or the spinal cord. This pressure can cause an array of symptoms including radiating pain, tingling, and loss of function on one or both sides of the body.

- **Degenerative disc disease** is a collapse of the intervertebral disc causing the bones of the spine or vertebrae to slide closer together and misalign. This misalignment causes compression of the nerve root producing localized pain and radiating pain from the lumbar spine.

- **Degenerative joint disease** starts when the facet joints of the spine become misaligned, stressed or damaged. This misalignment and damage causes the joint capsule that surrounds the facet joint to lose fluid. This loss of fluid allows the cartilage of the facet joint to rub painfully together. Over time the friction creates small bone spurs in and around the facet joint. Pain from degenerative joint disease can vary depending on how much damage has been done to the joint. Persistent stiffness, achiness and referral pains are common. In advanced cases referral pain may occur in the buttocks and hips.

**Symptoms:** Lumbar radiculopathy causes discomfort in several referral patterns, depending on which condition is involved and at what level of the spine. The nerve irritation can occur at any of the five levels (L1 through L5) of the lumbar spine, and including the top of the sacrum (S1). Here is a picture of the respective levels and where symptoms can be felt.

- Irritation at the L2 nerve root produces pain, tingling or weakness into the lower back, front of the thigh and hip.
• Irritation of L3 nerve root produces pain, tingling or weakness into the lower back, buttocks, front of the thigh and knee.
• Irritation of L4 nerve root produces pain, tingling or weakness in the lower back, buttocks, knee, and foot.
• Irritation of L5 nerve root produces pain, tingling or weakness over lower back, buttocks, hips, thighs, legs, and feet.
• Irritation of the S1 nerve root produces pain, tingling or weakness over lower back, hips, buttocks, thigh, leg, and outside of the foot.

Treatment: Treatment options can include chiropractic care, acupuncture, physical therapy, and massage therapy. Your chiropractor will help determine which treatments are appropriate for your specific condition. The doctor might also order special testing such as an x-ray or MRI.