

## LUMBOSACRAL DISEASE

Lumbosacral stenosis is a common cause of pain in older, large breed dogs. In some cases the patient may demonstrate intermittent non-weight bearing lameness in one pelvic limb, if the compression is asymmetric.



Patients suffering from LS disease generally present with either intense lower back pain or pain/lameness involving one rear leg (root signature sign). These patients often show moderate to severe pain upon attempting to stand from a laying position or lying down from a standing position. Pressure over the LS region or extension of the hips or lower back (lordosis test) will also cause discomfort. Some dogs can present for what appears to be an intermittent to continual lameness. Symptoms can result from a combination of several possible abnormalities which include: rupture of the LS disc space, instability of L7 in relationship to the sacrum, and/or soft tissue or bony proliferation in the L7 - S1 foramen causing nerve root pain.

It is important to rule out other common causes of pain and difficulty rising, including hip dysplasia, cruciate ligament disease, lumbosacral neoplasia, diskospondylitis, thoracolumbar Type II IVDD, and degenerative myelopathy. It is not uncommon for a dog to have more than one of these problems concurrently.

Diagnosis of LS disease requires MRI imaging. The DVSC currently recommends MRI studies (performed in both neutral as well as flexed positions) to identify if the patient has a disc rupture, compression of a nerve root, and/or instability. There are different forms of LS disease, and each one requires a different treatment or surgical technique.

Initially, medical management consists of anti-inflammatory medication, restricted exercise and rehab therapy.

Surgical options to manage LS disease include dorsal laminectomy to remove herniated disc, foramenotomy or facetectomy to relieve entrapped L7 nerve roots, or

distraction and fusion of the LS region.

There is more evidence and agreement amongst surgeons that instability of the LS space may play a large role in the pathogenesis of LS disease, requiring fusion of the LS disc space to eliminate pain. Fusion may be accomplished by dorsal laminectomy, bone graft, and a combination of facet screws, spinal plating, or spinal arch external fixator.

Intraoperative fluoroscopy allows accurate placement of orthopedic implants into the L7 - S1 facet and vertebral bodies. Generally the prognosis after surgery is favorable. However, these patients will require a quieter life style for the remainder of their lives.