



## Monthly Update

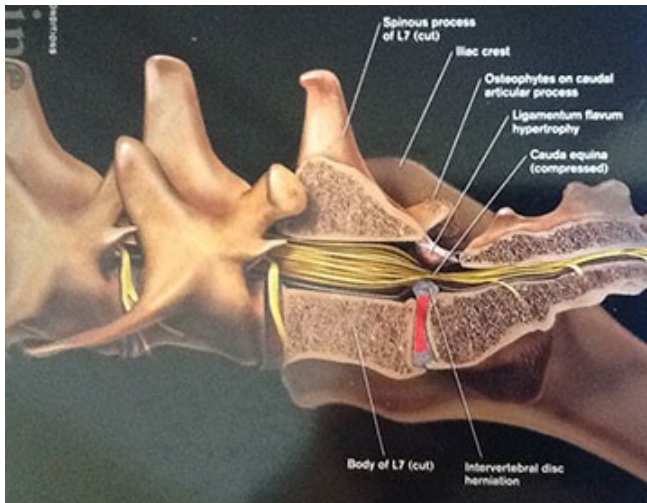
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October 2013

## Degenerative Lumbosacral Stenosis—Part 2: Treatment

William B. Henry, Jr. DVM, DACVS



### MEDICAL MANAGEMENT OF L/S DISEASE:

**INTERMITTENT LAMENESS:** My initial recommendations are based on the physical examination, neurologic exam, radiographic exam, presence or absence of muscle atrophy and obesity. Pre-treatment laboratory screening is important especially if the patient is obese. If the laboratory values are normal, including a T4 and FT4 then dietary weight management is instituted. Exercise restriction is recommended for 6 weeks. Only very short leash walks to relieve themselves and no running or jumping indoors or outdoors. If they have a history of intermittent lameness and only mild thigh muscle atrophy and no neurologic deficits I will prescribe an NSAID (Deramaxx 0.5 mgs. per pound) to be used for 24-48 hours if lameness occurs. I then recheck them in 6-8 weeks to see if the initial muscle atrophy is resolved. If the patient is completely normal, no muscle atrophy, normal weight, then the leash walks can be extended beginning at 1/4 to 1/2 mile and further lengthened to what ever the owner and dog can tolerate comfortably, generally this is in the 1-3 mile range. That is their life time exercise restriction, leash confinement and no running or jumping both indoors and outdoors. If there is intermittent exacerbation of pain it is usually responsive to 1-3 days of Deramaxx at 1.0 mgs. per pound sid. The patient is referred back to the RDVM for annual examinations for determination of muscle atrophy and for the presence of CP deficits.

**PERSISTENT LAMENESS:** The diagnostic work up is the same as for intermittent lameness as is the dietary management and exercise restrictions. If they have a history of persistent lameness prior to my examination and have moderate thigh muscle atrophy then I prescribe Deramaxx at a higher dose (0.75 mgs. per pound) for 4 weeks. I then recheck them [at 6-8 weeks](#) following the initial examination. If the muscle atrophy is resolved or nearly so, then they can begin short leash walks of 1/4 to 1/2 mile and increase it weekly at that rate until they find the length the dog or owner can tolerate, 1-3 or more miles. That exercise restriction must remain as the dogs exercise program going forward. In the following months or years if they have recurrent pain related to off leash running or jumping then they are given Deramaxx at a dose of 1.0 mgs. per pound for 2-4 days and generally they are normal again.

*Continued next page*

### CCVS Scan Hours

8:00 AM-6:00PM 7 days a week.  
1-800-457-4900

The breakdown of CT charges are as follows:

1. CT Scan, In patient \$905.00 (case already hospitalized at CCVS or referred to CCVS for work up and treatment and has a CT scan)
2. CT Scan, Additional image (if you add an additional scan site \$300.00)
3. CT Scan, Out patient \$985.00 \*\*(case sent to CCVS exclusively for a CT; this includes charges for doctor overseeing case, IV catheter, and fluids post CT).
4. CT "Met Check" \$590.00
5. CT STAT fee, \$50.00 (on top of whatever you are doing).

These charges cover the CT, the contrast, radiologists read, rapid infuser, sevo anesthesia, and technician fee if we need to call someone in for the CT. It does not cover injectable drugs, if needed for IV anesthesia; estimated additional cost \$50.00-\$75.00.

### Visit Our Newsletter Archive

Read our September newsletter article - **Canine and Feline Coagulopathies - Part 1** - by visiting our newsletter archive! <http://archive.constantcontact.com/fs032/1109892572426/archive/1110184841979.html>

**ACUTE ONSET NON-WEIGHT BEARING LAMENESS:** The third presentation for L/S dogs is the acute onset lameness related to strenuous exercise. The diagnostic work up is the same as for intermittent lameness as well as the dietary management and exercise restrictions. When presented the owner often relates seeing the dog screaming in pain followed by holding the limb in deep flexion, completely non-weight bearing. On PE they often will not allow extension of the limb. Their knee is normal radiographically and stable on palpation. They may or may not have hip OA from CHD. However, CHD pain is seldom acute and completely non-weight bearing unless they dislocated their hip. These patients are given injectable steroids (dexamethasone [0.25-0.35](#) mg/ kg) followed by oral prednisone ( 0.6 mg/kg bid X 3, then 0.3 mg/kg bid X 3, then 0.15 mg/ kg bid X 3). I then recheck them in 1 and 2 weeks. If they are weight bearing at the 2 week examination I will begin Deramaxx at 0.5 mgs. per pound sid for 2 weeks. I will then examine them 4 to 6 weeks. They must undergo the same exercise restriction as the previously described for 6-8 weeks and following that period of time begin leash walks of increasing length of 1/4 to 1/2 mile as in the chronic onset cases. Deramaxx is prescribed to keep on hand for mild recurrent pain if the exercise restriction is exceeded.

#### **SURGICAL MANAGEMENT OF L/S DISEASE: STABILIZE or NOT to STABILIZE?**

For 30 plus years I have done L7-S1 dorsal decompressive laminectomies. Removal of the hypertrophied ligamentum flavum. Removal of any bulging annulus if either visually present or indicated from the pre-operative myelogram ie in almost all cases (CT was not available until the last 2 years). Removal of the nuclear material from within the annulus or if extruded from the annulus. Lastly, remove all dorsal lamina cranially, caudally, and laterally until the cauda equina was completely decompressed. No foraminotomies were done. The articular facets of L7 and S1 were not removed when decompressing the cauda equina. An autogenous vascular fat graft was place over the laminectomy. The dorsal fascia of the musculature was closed over the fat grafts leaving adequate unrestricted space for the grafts to maintain their vascular integrity. **NONE WERE STABILIZED DURING THAT 30 YEAR PERIOD OF TIME!!** The majority of the cases were house pets, however there were many working dogs as well (agility, police and competition attack dogs, field dogs, sled dogs, and herding dogs). All cases were followed post-operatively for 2-4 and sometimes 6 months until they were neurologically normal or nearly normal. None were re-operated. If they were working dogs unable to be either completely comfortably or neurologically normal they were retired, remaining active and pain free in a sedentary life style. Most of the working dogs that were 3-6 years of age at the time of surgery returned to working. Few of the working dogs 6 years and older were returned to their previous level of competition. The house pets improved significantly neurologically or became normal. None went on to become incontinent. I declined to operate on any incontinent dogs. Subjectively 85% of my cases improved significantly or became normal, as has been reported in the literature. Perhaps with stabilization we can improve on the recovery rate above 85% and more complete recovery rates. As you will see the quest to attain this goal is recent, based on the dates of the following ATTACHED ARTICLES.

**EDITOR'S NOTE:** Dr. Bagley is a very experienced neurosurgeon whose opinion I greatly respect. Based on his observations described in this ACVIM presentation L/S stabilization should be incorporated in the surgical treatment of L/S disease. This paper was given in 2006. Since that time there has been a gap in the literature as surgeons (ACVS and ACVIM) seek a consistent method of rigid stabilization. See attached to read How I Treat Lumbosacral Disease.

**EDITOR'S NOTE:** The following paper was given in 2009 by an ACVS surgeon at the ACVIM meeting. Neurosurgery is an ACVIM sub-specialty. It is a good review discussion and demonstrates the various methods of attempted stabilization in a difficult area to accomplish it. We have not yet found the universally accepted method. See attached to read Canine Lumbosacral Spinal Fusion Techniques.

**EDITOR'S NOTE:** The quest continues to find a stability solution or L/S instability in 2012. See attached to read Transarticular facet screw stabilization and dorsal laminectomy in 26 dogs with degenerative lumbosacral stenosis with instability.

See attached presentation and follow through the slides and the additional description in the accompanying notes on the slides.