



Monthly Update

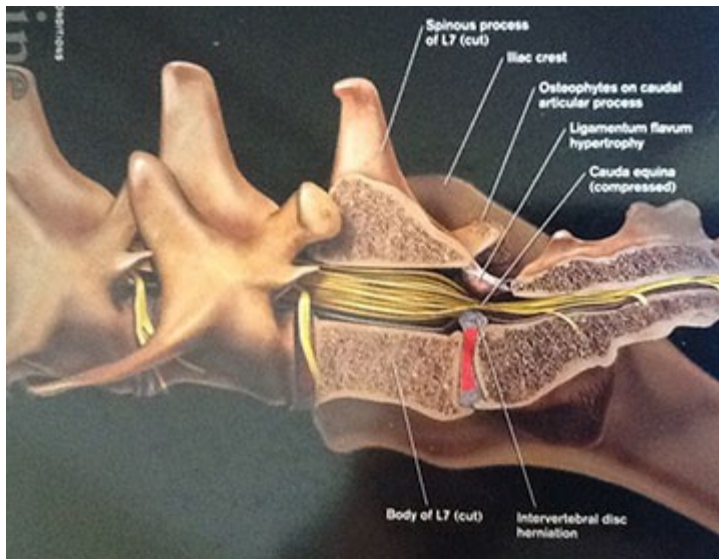
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Degenerative Lumbosacral Stenosis

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Degenerative Lumbosacral Stenosis (aka Lumbosacral Disease, Cauda Equina Disease, L7-S1 Instability) is the most commonly missed cause of hind leg pain and/or lameness/weakness in the middle to older aged dog.

Signalment: This disease occurs in medium to large breed dogs more commonly but it is occasionally seen in toy breeds as well. The presenting complaint by the owner can range from an acute non-weight bearing lameness following strenuous exercise to intermittent transient pain/lameness following or during mild to moderate exercise.

Owner Complaint Examples:

"I used to walk my dog two to three miles a day and now after one mile he sits down and does not want to go further."

"My dog will no longer jump in our car, or on our bed/couch, or will not climb stairs to go to bed."

"After playing ball my dog can hardly get up to walk across the room to eat his dinner that evening and in a day or two he is fine. During that 24-48 hour time period he never limped."

Often the client does not recognize the changes in their dogs past everyday life style therefore you must talk to them about their dogs past and current life style.

History Taking Questions:

"Is your house a singled dog household?"

"Are there any new dogs in the house?"

"What age are the other dogs in the house?" (Often they now have a younger dog who the older dog you are examining has been stimulated to keep up with its activity.)

"What type of exercise does your dog get on a daily basis? Weekly basis?"

"Always leash walked? How far? Has that distance changed?"

"Does your dog play ball, frisbee, run, swim, and/or play with friend's or neighbor's dogs?"

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

This months newsletter is a PowerPoint lecture I have given in the past: These lectures do not reach all of you. Since we frequently see these patients in our referral practices I decided to use it as a newsletter to give you a better visualization of what we look for to make the diagnosis, how we make the diagnosis, and lastly the treatment options we recommend. I have divided it into two parts because of its length. It is divided into **Part One: Diagnosis** and **Part Two: Treatment** (October Newsletter).

See **Attachment 1** and follow thru the slides and the additional description in the accompanying notes on the slides.

DIAGNOSTIC SCANS

Our Diagnostic Scans for the past two months have been of the brain. Since access to CT and MRI exams are now more available in referral veterinary practices, we are learning their application and validity in neurologic disease. Human medicine went thru the same learning time when these two diagnostic modalities became available. Because MRI is now primarily used in human neurologic disease we tend to assume the CT is less effective diagnostically for brain disease. We are often unaware of the differences in cost and scan times of CT vs. MRI. A recent article in the JAVMA is the first definitive comparison of the two diagnostic modalities. (Agreement between low-field MRI and CT for the detection of suspected intracranial lesions in dogs and cats. JAVMA, Vol 243, No. 3. August 1, 2013.)

In the interest of brevity I will give you verbatim quotes from this article. I would encourage you to read the entire article.

"Computed tomography and MRI are used in the detection of various intracranial lesions in humans and other animals. Each method has specific advantages and disadvantages in lesion characterization, but the method used is not chosen solely on the basis of a patient's neurologic history, general condition, and suspected lesion type. Indeed, equipment availability and economic considerations are also factors in that choice."

"In humans, comparative studies have shown that CT and MRI can be used in a complementary manner in the diagnosis of intracranial lesions. In veterinary medicine, CT and MRI have been extensively used for the detection of brain lesions."

"Images for the 30 patients with intracranial lesions visible by use of both MRI and CT were compared with respect to general lesion characteristics. A mass effect was seen in 27 (90%) of these patients with each modality ($\kappa = 1$), reflecting perfect agreement between MRI and CT. Four of 30 (13%) patients had multiple lesions and 24 (80%) had solitary lesions visible through both imaging modalities ($\kappa = 0.76$), reflecting substantial agreements. However, 16 lesions were interpreted as well-defined and 5 as ill-defined through both CT and MRI ($\kappa = 0.37$), reflecting fair agreement."

Tech Tip: Double Gloving: Sx Sepsis

"Double Gloving" for orthopedic surgery is something we have adhered to for over 30 years. Wearing a size larger than your regular glove initially seemed to be a reasonable choice, however we quickly learned they restricted blood flow to our fingers. We then went to gas sterilized exam room gloves and found them to be much more comfortable. In the last 10 years the commercial surgical gloves are of better quality, a little thicker, thus providing more protection. Now I double glove when handling K-wires, cerclage wire, and when doing open fracture reduction.

This Abstract was presented at a recent ACVS meeting. It is objective data that fortifies what we subjectively assumed for many years.

INVESTIGATION OF INCIDENCE AND RISK FACTORS FOR SURGICAL GLOVE PERFORATION IN SMALL ANIMAL VETERINARY SURGERY

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Introduction: To identify incidence and risk factors for surgical glove perforation in small animal surgery.

Materials and Methods: Observational cohort study conducted at a veterinary teaching hospital. 2132 surgical gloves worn over 363 surgical procedures. All gloves worn by operative team members were assessed for perforation at end-procedure using the water leak test. Information was recorded on putative risk factors by a surgical team member. Associations between risk factors and perforation were assessed using multivariable multi-level random-effects logistic regression models to control for hierarchical data structure.

Results: At least one glove perforation occurred in 26.2% of surgical procedures. Identified risk factors for glove perforation included increased surgical duration (surgery > 1 hour OR=1.79, 95%CI= 1.12-2.86), performing orthopedic procedures (OR=1.88; 95% CI=1.23-2.88), any procedure using powered instruments (OR=1.93; 95%CI=1.21-3.09) or surgical wire (OR=3.02; 95%CI=1.50-6.05), use of polyisoprene as a glove material (OR=1.59, 95%CI=1.05-2.39), and operative role as primary surgeon (OR=2.01; 95%CI=1.35-2.98). The ability of the wearer to detect perforations intra-operatively was poor, with a sensitivity of 30.8%.

Discussion/Conclusion: There is a high incidence of unrecognized glove perforations in small animal surgery. Double gloving should be considered when performing invasive procedures on small animals. Double gloving may be indicated for all procedures, particularly when surgical duration is over one hour in length, when orthopedic procedures are performed, or when powered instruments or surgical wire are used. Acknowledgments: Pet Trust Fund, Ontario Veterinary College, University of Guelph