



Change in the air makes the owner of an old dog thoughtful. Fall is a quiet season, it brings warm sweaters, warm drinks, and cuddles on the couch under blankets. Summer adventures are over and we enjoy mild days before we hunker down in wait of what the winter will bring.

For many older dogs a bit of a nip in the air feels good after a hot summer spent seeking a cool place to hide. But for owners of old dogs thoughts of stiff joints and midnight bathroom outings, slippery surfaces, and navigating dark yards and city blocks on slow walks through the cold lay out a stream of new obstacles.

Winter can be one of the hardest seasons to get our old dogs through. It is true in our climate that many conversations about the end of an old dog's life include a discussion about "putting him through another winter". It's a primary concern for many senior dog owners. There are things we can do, as we prepare for the coming cold dark season to make this winter a comfortable winter for our old friends. See some tips on page 4.



After spending a week with the physios at the Canine Fitness Centre I can really appreciate how much you can learn about your patients from thoughtful palpation. The practice is centred on thorough manual evaluations and treatments as well as great client communication and relationship building. I was amazed at how much the canine patients allow you to do during a treatment and how satisfying it is to appreciate pain, then be able to resolve it with manual therapies. I am already using many of the manual techniques I learned in my own practice.

- Dr. Wendy Herlihy, DVM

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## Intervertebral Disc Herniation: Surgery? Euthanasia? There is a third option! Conservative Management!

Treatment of herniated discs has come a long way in both canine and human medicine. There was a time when advances in surgical techniques led to surgeries done almost routinely on the spine. For our dogs it has become do or die, in the sense that owners are often given two options: Surgery (which may be cost prohibitive) or euthanasia.

But there has been a shift in care of spinal conditions for people towards conservative treatment through prescribed intentional exercise and physical therapy, saving thousands of dollars in health care costs per person, and avoiding possibly unnecessary or ineffective surgery. These therapies also provide an effective, non-invasive, option number three for our dogs.

### Presentation

Presentation of Intervertebral Disc Herniation (IVDH) varies based on severity of herniation and the location of the injury. Early signs of mild IVDH may be missed or dismissed by the average pet owner. Mild ataxia of the hind limbs may be present in advance of a full loss of function. It is not unusual for a gradual onset of symptoms to be unnoticed until function declines or pain becomes obvious. In both that case, and the case of sudden traumatic injury, the diagnosis often comes to light during a visit to an emergency clinic with a dog in crisis. By this point there is often severe ataxia of the hind limbs, acute pain, loss of bowel or bladder control, and possibly loss of deep pain perception in the pelvic limbs.

### Diagnoses

Diagnostic imaging such as X-ray, CT, or MRI are used to provide insight into the exact area of the problem. The downside to this method of diagnosis is cost and access; as well as 'red-herring' findings that are not clinically relevant. A manual spinal assessment that involves palpation of the vertebrae to locate points of acute pain and examination of the symptoms such as effects on reflexes can be similarly effective at locating the lesion to provide a presumptive diagnosis. This can be confirmed by diagnostic imaging, but that imaging is not necessary for treatment to begin.

### Just say "No" to crate rest!

Did you know that they stopped recommending bedrest for back injuries in the 70s?



### Treatment & Prognosis

According to Levine et. al. (2007) dogs managed medically, without surgical intervention, have a 54% occurrence of full recovery without relapse, and a 30% occurrence of only mild relapse over a 3 year period for a success rate of 74% for nonsurgical intervention. The failure rate (euthanasia or the necessity for surgical intervention) was only 14%. The remaining 12% of dogs had moderate to severe relapses but did not require surgical intervention.

Jeffery et. al. (2016) found that surgical outcomes are not predicted by previously hypothesized factors such as age, duration of clinical signs, or severity of compression. The study also found there was no benefit to crate rest. Clinically we have observed that crate rest interferes with recovery, partially due to loss of muscle tone, and also potentially because of reduced blood flow to the site of the lesion.

Blood flow is a factor that does seem of primary importance to prognosis regardless of the type of intervention and perhaps blood flow should be investigated as part of the initial diagnostic process. Treatments that increase blood flow include acupuncture, PEMF, and laser therapy. Light exercise, stretching, and manual therapy also increase blood flow while opening the intervertebral space and reducing compression of the spinal cord or nerve roots.

Data also shows that the outcome of treatment is not reduced by a delay of surgical intervention. So in the 14% of dogs where conservative management remains unsuccessful, surgery could be a viable second attempt at treatment. It all boils down to the fact that conservative management works and should be an option.

Jeffery, N.D.; et al. *Factors associated with recovery from paraplegia in dogs with loss of pain perception in the pelvic limbs following intervertebral disk herniation.* JAVMA. 248:4. pp. 386-394. (2016)

Levine, J.M.; et al. *Evaluation of the Success of Medical Management of Presumptive Thoracolumbar Intervertebral Disk Herniation in Dogs.* Veterinary Surgery. 36. pp. 482-491 (2007).

## Case Study: Getting a down dog up: Recovery from a cervical disc herniation.

Lola, an 8 year old miniature dachshund, was a moderately active family pet with a good body condition score. Activities included free play and walks. She lived with other small and medium sized dogs in an active dog sports family.

### Mode of Injury:

No known specific event triggered Lola's problem. She had experienced less severe periods of back pain and discomfort in the past. The owner noted on the Wednesday "slow" movement in the left hind leg and failure to have a bowel movement that day. Thursday she had severely reduced mobility, was showing obvious signs of pain, and was falling while trying to walk. Saturday she had lost movement in her rear end entirely.

### Initial Care:

When symptoms first appeared Lola's owner gave her the recommended dose of NSAIDS. As her condition deteriorated they sought care at the Canine Fitness Centre.

### Evaluation:

No new radiographs were taken at the time of this incident. But radiographs taken during a more mild episode eight months earlier showed increased lumbosacral opacity at L7-S1. These radiographs did not include the cervical spine.

At the Canine Fitness Centre a manual spinal assessment was completed. Palpation of C7 elicited a vocal pain response. There was no pain in the thoracic or lumbar spine. Pelvis was level with no tenderness. Reflexes were also tested and slow placing reflexes were noted in both hind legs, with the left more affected than the right. The left front placing reflex was also slow; right front placing reflex was normal.

Given this information a physical diagnosis of a lateralized disc at C7 was made.

### Objective for treatment:

Lola's owners simply wanted to relieve her pain and help her regain mobility.

#### Did you know?

"Mobilizations (not to be confused with chiropractic manipulations) are gentle oscillatory motions that help to mechanically move the joints but also have a proven neurophysiologic pain relieving effect in the region."

### Treatments:

Manual therapy included mobilizations of C7 and gentle neck traction. Laser therapy and acupuncture were included (pain control and increased blood flow). Treatments were recommended at twice weekly intervals during the initial stages.

### Owner education and home program:

Lola's owners were advised to control activity as her mobility improved, starting with supervised walking in the house using an assistive harness. She was not to have access to stairs or slippery surfaces. Home exercises were given that included neck traction and gentle reaching for a cookie to stretch the neck.

### Initial outcome:

At her second treatment (three days post initial), Lola was able to stand and had regained mobility in all her limbs. Her front placing reflex had returned to normal. There was still some ataxia in the rear and she required assistance to walk.

At her third visit, (six days post initial), Lola was walking independently, was slightly ataxic in the rear, and had only mild muscle spasming in the neck. Sit to stand exercises were added to her home program and the therapy interval was increased to two weeks.

Three weeks following onset Lola's behaviour had returned to normal. She could walk well without assistance but would not attempt stairs. Her hind legs occasionally crossed during tight turns. She would return for a checkup in a month.

At her checkup Lola had full control of her bladder and bowel and was walking normally. She refused to attempt to climb stairs, however she would go down stairs. Mild signs of ataxia remained, but she was pain free and fully functional. About 14 months after the initial episode Lola was seen for a check up. She now does stairs, and refusal to take them is an early sign of minor flare ups that are caught and treated before they become severe.

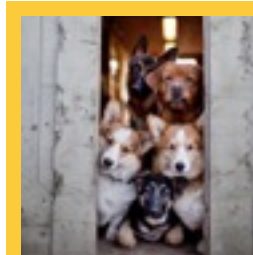
## Home Exercises for IVDH

The CFC recommends a variety of home exercises to address IVDH.

- Neck Traction



- Cookie Stretches



## **We Love Visitors!** Special Invitation to Veterinarians

Want to see us in action? Feel free to contact us to discuss shadowing our therapists for a few hours at our clinic. Email the front desk at [frontdesk@caninefitness.com](mailto:frontdesk@caninefitness.com).



## Tips for helping senior dogs with the coming cold, dark weather

"Old age should burn and rave at close of day"

-Dylan Thomas

Older dogs, like older people, will lose their night vision first. Navigating a dark backyard for bathroom breaks can be tricky. Straining to see can cause muscle aches and tripping on steps can cause injury. Use industrial reflective tape on the front and top edge of outdoor steps so a dog can see where the stairs are. Line pathways with lanterns. As well, consider adding a flashlight to the dog's collars so their path is lit up for them as they walk.



"Congratulations, we are halfway out of the dark"

-Steven Moffat

When the sun is out this time of year it sits at a much lower angle in the sky. You'll notice it when you are driving, an old dog will notice it while out for a walk. Be aware that the lower angle of the sun reduces visibility. Walk at the dog's pace, walk with your back to the sun when possible, and understand the reduced vision can make a dog nervous or confused.



"He was always cold, but the land of gold seemed to hold him like a spell"

-Robert Service

Good old Sam feeling the cold to the bone? Cold can make joints stiff and flare arthritis. Even if a dog handled the cold well as a youngster it may be time for winter boots and a jacket for going outside. Senior dogs lose muscle mass and are less active. This reduces the heat they generate for themselves on their walks. Hair can also become thinner as dogs age, leaving cold spots, especially in places where they've gone bald or matted (so keeping them well

groomed is also important). Inside, if you are wearing a sweater to stay cozy then a dog might appreciate some extra warmth too. Consider a heated dog bed such as the Thermotex heated bed, or body heat reflecting ceramic fabric mats such as the products by Back on Track. (Both available at the Canine Fitness Centre).

"Every Autumn now my thoughts return to snow."

-Charlie English

Snow shovelling becomes a bit more complicated. Clear a path for both the mail carrier and the dog as well. Clear decks and steps. Clear a path in the lawn to where you would prefer your old friend to do their business, and then clear a big patch there for them. By making it as easy as possible for a dog to access appropriate toilet areas you prevent accidents in the house, and elimination in areas you don't want the dog to use, such as back steps or on the deck under the BBQ. It also prevents injuries caused by wading through deep snow or slipping. It also makes spring clean up easier if you are able to find and scoop all winter! Bonus!

