

WINTER
2013

NEWS

Canada's ONLY stand-alone rehab referral centre!



509 - 42nd Ave SE - Calgary

www.CANINEFITNESS.com

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The Canine Fitness Centre Ltd is a highly sought-after internship site...

What Vets are saying about learning with the Canine Fitness Centre therapists:

I've been working for years as a referral veterinarian performing second opinion lameness assessments, chiropractic assessments, sports medical exams on competition dogs etc., and I found my internship with The Canine Fitness Centre Ltd extremely helpful. They taught me a variety of techniques that have improved both my diagnostic

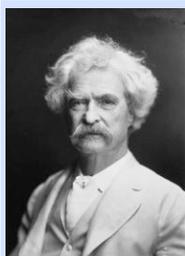
and therapeutic skills. It was information that would be extremely difficult, if not impossible, to find elsewhere.

I particularly like their science based approach; that everything they do is rooted in a strong understanding of the underlying anatomic and physiologic principals.

Sincerely,
David Lane, DVM
Pointseastwest.com
Whistler, BC

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“If you pick up a starving dog and make him prosperous he will not bite you. This is the principal difference between a dog and man.”

— [Mark Twain](#)

Did you know??

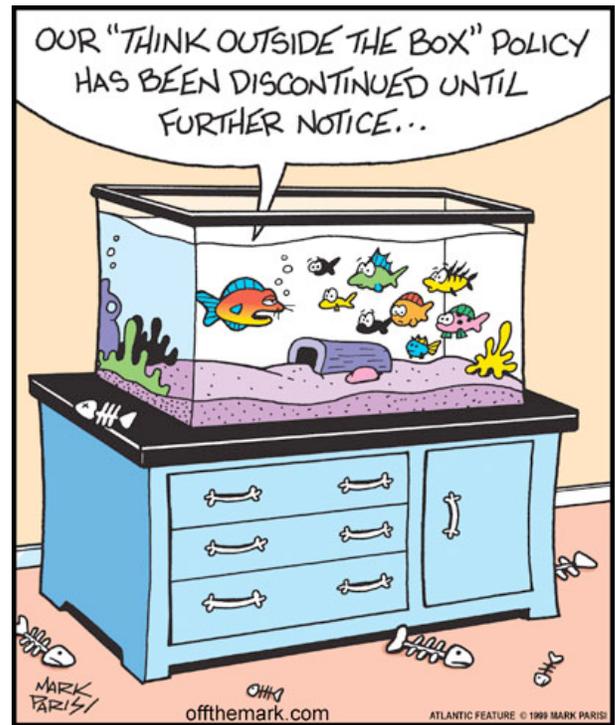
The Canine Fitness Centre now carries a selection of custom fitted full body and rear end harnesses to help owners to manage their neurologic or debilitated dog.



The Canine Fitness Centre now carries a full selection of custom fitted 'ready to build' / 'on demand' wheelchairs.



Which means that if your client has an immediate need for these resources, just have them call and we can schedule a fitting of their dog! There is no need for a referral or formal assessment for your clients to obtain these items. We just want to be of assistance with these cases!



Cool Research, and why it matters...

Krakauer JW, Carmichael, ST, Corbett D, Wittenberg GF. (2012) Getting neurorehabilitation right: What can be learned from animal models? *Neurorehabilitation and Neural Repair* 26(8): 923 - 931.

Animal models suggest that a month of heightened plasticity occurs in the brain after stroke, accompanied by most of the recovery from impairment. Dendritic spine morphogenesis, axonal sprouting, and neuronal growth factor induction occur both after stroke and as a result of behavioural experience (i.e. housing animals in enriched environments produced dendritic growth, new spine formation, and synaptogenesis). This occurs in both normal and brain damaged animals. Thus an enriched environment & rehabilitation may augment the brain's own intrinsic repair capacity.

Early intervention (1 - 3 days after stroke) was associated with increased cell death but improved long-term behavioural outcomes... and may reflect a 'pruning effect' of dysfunctional neurons. However, studies have also found a period of GABA-mediated tonic inhibition in the first few days following a stroke thought to limit expansion of the infarct size. Consensus from animal data therefore, is that rehabilitation initiated AFTER 5 or more days following stroke has no adverse effects.

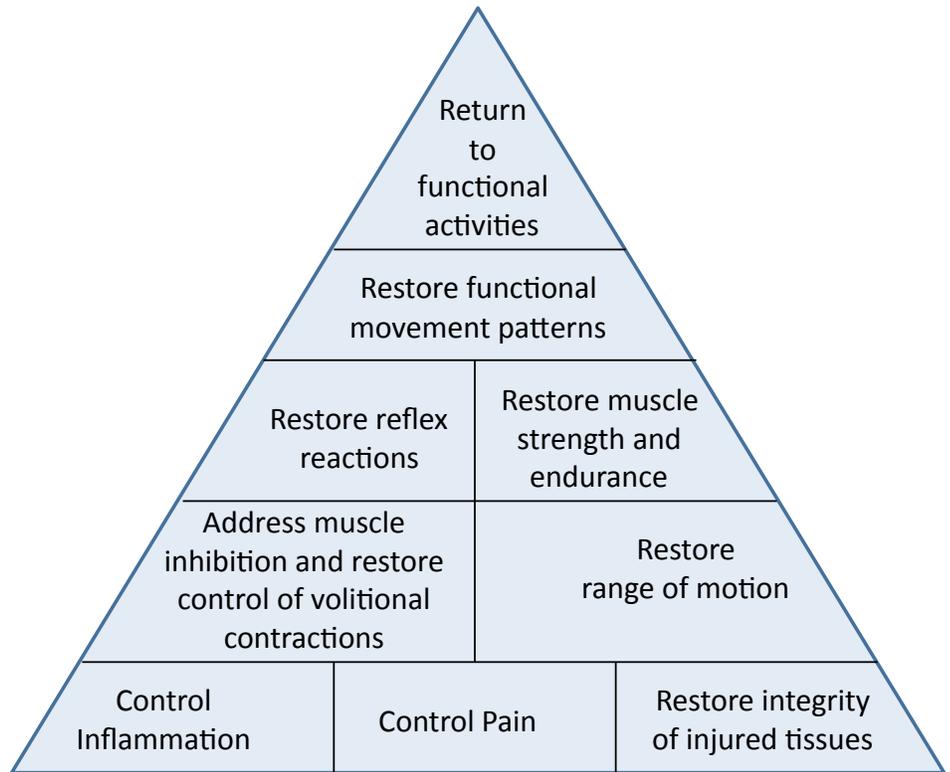
Interestingly, behavioural responses & recovery were not seen when rehabilitation was delayed by 30 days in animal models. The rationale for this effect is that at that point in time, growth-promotion gene changes have peaked and are beginning to decline. However patients can be trained to walk faster and build strength and fitness at any time after stroke, which may improve daily functioning.

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Clinical Relevance (neurorehab):

These findings, while specific to brain injury & stroke, could well have implications for animal spinal cord injury recovery as well. Seeing as rehabilitation and environmental stimulation have been found to augment spinal as well as brain growth, and are found concurrently in normal animals undergoing the same stimuli, is plausible and justifiable that early intervention is good in animal spinal cord lesions.

At the Canine Fitness Centre, we have found spinal cord injured dogs (post-operative and non-operative) to have a very extended recovery window. So, while I would agree that intensive therapy within the first month is valid - starting after the fifth day post-injury (mind you, pain management and inflammation control can be addressed by physio techniques in the first 5 days) - I would also advise that therapy go beyond 30 days and can also be justified from clinical experience.



Rehabilitation pyramid (from Hertel, Deneger: A rehabilitation paradigm for restoring neuromuscular control following injury. Athl Ther Today, 3: 12 – 16; 1998)

“If you don't own a dog, at least one, there is not necessarily anything wrong with you, but there may be something wrong with your life.”

— Roger Caras

“A dog teaches a boy fidelity, perseverance, and to turn around three times before lying down.”

— Robert Benchley

Have a question about a case?

Do not hesitate to call and ask to speak to a therapist!! We'd be happy to answer your questions.

Rehabilitation has a role in EVERY stage of recovery

There are times when we hear from clients that their vet does not want to refer a dog for therapy 'too soon' because the dog is not ready for exercises. However, there is so much more to rehabilitation than just exercise... and even when exercise is to be prescribed, it is very specific and targeted.

The stages of rehabilitation

When a person (or an animal) presents to a physical therapist (animal rehabilitation therapist) for an assessment, the therapist assesses the patient, makes a physical diagnosis, and sets the treatment plan. The plan largely centers around the

degree of injury and stage of healing. In any acute injury, the bottom level of the pyramid is where rehabilitation therapy starts, and the therapies selected will address controlling inflammation & pain, and restoring integrity of the injured tissues.

As therapy progresses, and as the animal improves, then the next level of therapy goals is addressed - the restoration of range of motion, and active muscle contraction.

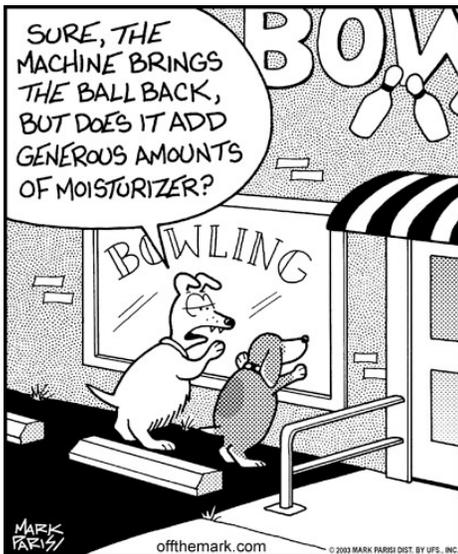
And only after these first two levels of the rehabilitation pyramid are addressed, does specific exercise come into play. Later into the rehabilitation period, the often neglected, but very important 'return to function' goal is also addressed.

INVITATION:

Come for a visit or to shadow for a few hours!

Are you interested in learning more about what we do at the Canine Fitness Centre? Then please give us a call and schedule a date to come in and shadow. We'd be happy to tour you around and have you sit in on some assessments or treatments - see what we do and get a better idea of how we could help your patients! We're professional, friendly, we don't bite, and we'll offer you a cup of tea!

"Be prepared not only for a great physical work-out but for mental gymnastics when you intern with the team of professionals at the Canine Fitness Centre. Thank-you all for the exceptional learning experience!"
Deborah Boyd MSc, DVM, CVAc, CAC, CCRT(pending) , Grey Bruce Pet Hospital, Owen Sound, Ontario



Geriatric Rehabilitation

Older dogs can benefit from rehabilitation services as much as (and in some cases more than) their younger counterparts. Geriatric rehab centers around two key elements: Function and Pain Management. But rest assure, every animal receives a full assessment, and if we find anything that concerns us at that time, or along the way, we'll send him/her back to you at the vet clinic! We are collaborative partners, not an alternative to vet medicine.

Now, each case is different. Some might be assessed to do well with

manual therapy (mobilizations to the spine or arthritic joints), others will do best with modalities (laser, pulsed electromagnetic field, microcurrent, acupuncture), and others may do well with a general low impact exercise program (such as walking in the underwater treadmill). Each case is different, and will be treated individually.

And if you have any concerns about the patient you are thinking of referring, just let us know. Communication is imperative to well rounded care and good inter-professional collaboration. We're here to help!



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